

SPIE Photonics West

2008
Exhibition
Guide

Biomedical Optics Exhibition: 19-20 January 2008

Photonics West Exhibition: 22-24 January 2008

San Jose Convention Center

San Jose, California USA



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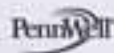


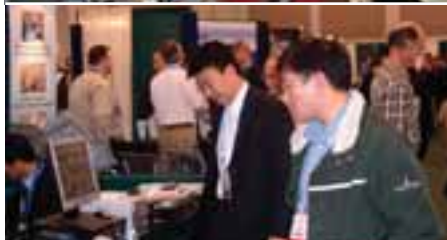
**International resource
for technology and
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PHOTONICS INDUSTRY**

Published since 1965 *Laser Focus World* is a global resource for engineers, researchers, scientists, and technical professionals providing comprehensive global coverage of optoelectronics technologies, applications and markets. Each month, *Laser Focus World* reports on and analyzes the latest developments and significant trends in both technology and business in the worldwide optoelectronics and photonics industry. *Laser Focus World* offers greater technical depth than any other publication in the field.

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SPIE Photonics West

The Global Shopping Center for Light-Driven Technologies

The world's largest exhibition on the entire spectrum of photon-based technologies! From lasers to optoelectronics manufacturing; from the latest microphotonics to the most cutting edge nanotechnology applications

Biomedical Optics Exhibition: 19–20 January 2008

Photonics West Exhibition: 22–24 January 2008

San Jose Convention Center

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Biomedical Optics Exhibition

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Photonics West is an industry event sponsored by

General Information

BiOS Exhibition Hours

San Jose Convention Center, Exhibition Hall 1

Saturday 19 January1:00 to 5:00 pm
Sunday 20 January10:00 am to 4:00 pm

Photonics West Exhibition Hours

San Jose Convention Center, Exhibition Halls 1-3,
Exhibit Foyer, and South Halls 1 & 2

Tuesday 22 January10:00 am to 5:00 pm
Wednesday 23 January10:00 am to 5:00 pm
Thursday 24 January10:00 am to 4:00 pm

Onsite Registration Hours

Street Level, San Jose Convention Center

Saturday 19 January7:15 am to 5:00 pm
Sunday 20 January7:15 am to 5:00 pm
Monday 21 January7:00 am to 5:00 pm
Tuesday 22 January7:30 am to 5:00 pm
Wednesday 23 January7:30 am to 5:00 pm
Thursday 24 January7:30 am to 4:00 pm

Multiple facilities in downtown San Jose are used for conferences and courses, so please allow yourself enough time to register, pick up your materials and possibly walk to a nearby facility before your meeting or course begins.

Food and Beverage Services

Coffee Breaks

Complimentary coffee will be served twice each day at approximately 10:00 am and 3:00 pm on the exhibition floor.

Refreshment Purchases

For attendee purchase of light refreshments, including continental breakfast, specialty carts will be set up in the Convention Center Foyer Saturday through Thursday.

Cash Lunches and Exhibition Concessions at Exhibition Halls 1-3, South Hall 2. A cash sandwich bar will be available in the foyer of the Convention Center Saturday through Thursday.

Visit the Exhibition Concessions located in the back of the exhibition halls on Tuesday-Thursday featuring Domestic and International Cuisine. They will serve hot and cold snacks, beverages, deli-type sandwiches, salads, hot entrees, and pastries and will be open during exhibition hours.

Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

Desserts

Saturday and Sunday

Served in the BiOS exhibition

Tuesday through Thursday

Served in the Photonics West Exhibition Halls and South Hall 1 & 2

Dessert snacks will be served from 3:00 to 3:30 pm. Complimentary tickets for the dessert snacks will be included in course and conference attendee registration packets.

Course and Workshop Registration

Courses and workshops are priced separately. Course-only registration includes your selected course(s), course notes, coffee breaks, and admittance to the exhibition. Course prices include California state tax. Prices increase \$50 USD after 4 January 2008. Conference attendees can add courses, priced separately. Conference registration is not required to attend courses.

Student Members Save 50% on Course Registration

Proof of full-time student status is required; please include your student ID number or proof of student status with your registration. Offer applies to undergraduate/graduate students who are enrolled full time and have not yet received a Ph.D.

Product Locator Kiosk

Convention Center Foyer

South Hall 1

Find your way around the Exhibition. Perform a product or key word search, review the Product Demonstrations, print out the results, and be on your way in no time! You'll find the 3-station kiosk in the foyer area, outside the entrances to Exhibition Halls 1 and 2 of the Convention Center and in South Hall 1 by Booth #6198.

Policies

Underage Persons on Exhibition Floor

For safety and insurance reasons, no persons under the age of 16 will be allowed in the exhibition area during move-in and move-out. During open exhibition hours, only children over the age of 12 accompanied by an adult will be allowed in the exhibition area.

Audio, Video, Digital Recording Policy

For security and courtesy reasons, photographing or videotaping individual booths and displays in the exhibit hall is allowed ONLY with explicit permission from on-site company representatives. Individuals not complying with this policy will be asked to surrender their film and to leave the exhibition hall.

Unauthorized Solicitation

Any manufacturer or supplier who is not an exhibitor and is observed to be soliciting business in the aisles, or in another company's booth, will be asked to leave immediately. Unauthorized solicitation in the Exhibition Hall is prohibited.

Unsecured Items

Personal belongings such as briefcases, backpacks, coats, book bags, etc. should not be left unattended in meeting rooms or public areas. These items will be subject to removal by security upon discovery.

olve 4.0
FullWAVE 6.0
BeamPROP 8.0
ModeSYS 4.6
FemSIM 3.0
GratingMOD 3.0
MOS
DiffractMOD 3.0
BandSolve 4.0
MOST 2.0
Artifex 4.4
MetroWAND 3.5
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BandSolve 4.0
LASERMOD 2.2
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Events

PHOTONICS WEST 2008,
SAN JOSE CONVENTION CENTER,
SAN JOSE, CALIFORNIA,
22-24 JANUARY

Visit us at
Booth 907

General Information

SPIE Onsite Services

SPIE Marketplace & Membership Services

Convention Center lower arcade

Open during Registration hours

The SPIE Marketplace is your source for the latest SPIE Press books, Proceedings, and Educational and Professional Development materials. Become a Member of SPIE, explore the Digital Library, and take home a souvenir.

Industry Resources Booth

The SPIE Industry Resources Booth #6143 provides the tools you need to move ideas and technology to market. Visit the booth for information on events, marketing opportunities, education, and training that SPIE can provide you to make your venture a success. Books from SPIE Publications will be available for purchase.

Press & Media Center

The Press & Media Center provides press conference facilities, refreshments, and press releases from exhibitors. Credentialed media are invited to communicate news via the provided telephone and high-speed internet connections. Registration and exhibition fees are waived for working journalists and editors. Preregister by e-mailing name, organization, title, address, e-mail, and phone number to media@spie.org.

Internet Pavilion

SPIE will have a complimentary Internet Pavilion at the Convention Center on Saturday through Thursday and one in South Hall 1 on Tuesday through Thursday where attendees can use provided workstations or hook up their laptop to an Ethernet connection to access the Internet.

Complimentary Wireless Internet Access

SPIE is pleased to provide complimentary wireless access to the Internet for all conference attendees bringing 802.11b wireless-enabled laptops or PDAs. Coverage locations and connection settings will be posted in the final program and onsite.

Business Services

SPIE Copy Center

Saturday through Thursday during registration hours San Diego Copy will provide a copy service during the week for symposium attendees. The rates are 5 cents per copy and \$1 per transparency (\$2.50 for color). The Copy Center will be located near registration.

SPIE Message Center

The SPIE Message Center telephone number is 408-271-6000. Messages will be taken during registration hours Saturday through Thursday. Please check the message board at the message center near SPIE registration daily to receive your messages.

Luggage/Package Storage and Coat Check

Convention Center – Street Level Arcade

Saturday through Thursday

Complimentary luggage/package and coat storage will be available to attendees.

Please note hours of operation posted onsite. If you intend to stay later than closing time, you will need to claim your checked items before it closes.

Attend the SPIEWorks Career Fair!



Exhibition Level, Convention Center, Almaden Concourse near the Hilton Hotel Entrance

Tuesday 22 January 11:00 am to 3:00 pm

Wednesday 23 January 11:00 am to 3:00 pm

Top employers are coming together to interview and hire engineers and scientists like you. The SPIEWorks Career Fair at Photonics West is a great place to:

- Get 'face to face' time with employers and interview on the spot
- Learn more about the jobs available in our industry
- Network!

Free Admission; Registration Required.

Whether you are looking for a better job, re-entering the workforce or just starting your career, the SPIEWorks Career Fair is the place to start!

In addition to the onsite recruitment activities listed above, SPIEWorks offers you online services to help you with your search for employment before, during, and after the conference. Visit spieworks.com to post your resume, view jobs, or sign-up for "Job Alerts."

Free Services for Employers

- Stop by the SPIEWorks booth in the Career Fair and gain access to our proprietary resume database at no charge.
- Post jobs for free. That's right, there's no charge to post jobs to the Photonics West Career Fair. Go to spieworks.com, create an account and sign-in to post jobs online. Your free job(s) will be live 21 – 27 January.

For information on future recruiting events contact Dave Baggenstos at +1 360 715 3705 or email sales@spieworks.com

Child Care Services

A few child sitting services available in San Jose are as follows.

1. **Bay Area 2nd MOM Inc.**, Hotel Nanny Service, Toll Free Phone: 1-888-926-3666, or (650) 858-2469, ext. 109. Fax: (650) 493-6598, Email: oncall@2ndmom.com or parentcounselor@2ndmom.com, Website: www.2ndmom.com

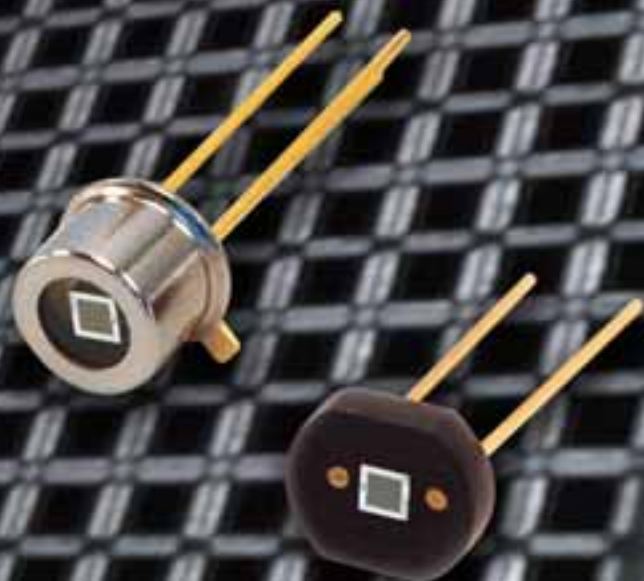
2. **Sitters Unlimited**: Toll Free Phone: (408) 452-0225, E-mail: info@bayareasittersunlimited.com or www.bayareasittersunlimited.com

Note: SPIE does not imply an endorsement or recommendation of these services. They are provided on an "information-only" basis for your further analysis and decision. Other services may be available.

Restaurant Reservations and Information Desk

The San Jose Convention and Visitors Bureau operates a Restaurant Reservations and Information Desk on the street level of the Convention Center near the main entrance. The desk will be open Saturday through Thursday during core hours of the convention. For more information visit <http://www.sanjose.or>

Count more photons.



Introducing the MPPC (Multi-Pixel Photon Counter). Only from Hamamatsu.

As the first commercially available product of its kind, the **S10362-11 series MPPC** is a new type of photon counting device whose signal output is generated from the sum of multiple APD pixels operating in Geiger mode.

Higher Gain

Essentially an opto-semiconductor device that delivers a new level of photon counting capability, the MPPC offers a gain of $10^5 - 10^6$ and a peak sensitivity at 400 nm.

Higher Sensitivity

With a large active area of 1×1 mm, the MPPC comes in 100-, 400-, or 1600-pixel counts. Each pixel has a quenching circuit, so simultaneous photon events can be counted separately and accurately. And with great signal-to-noise ratios in ultra-low light, the MPPC is ideal for:

- Positron emission tomography
- High-energy physics
- DNA sequencing
- Fluorescence measurement
- Environmental analysis

Cost-Effective, Compact Design

Small and compact, the MPPC is very easy to use and requires only several tens of volts to operate. Furthermore, it offers excellent time resolution, insensitivity to magnetic fields, and an optional, simple readout circuit operation module.

For more than five decades, Hamamatsu has been dedicated to developing smaller products with bigger impact. To learn more about our newest innovation in photon counting, please visit our website or call us directly.



The MPPC can output a pulse for every photoelectron detected. It also provides good differentiation of multiple photoelectron events.

Visit us at Photonics
West Booths 826 & 827

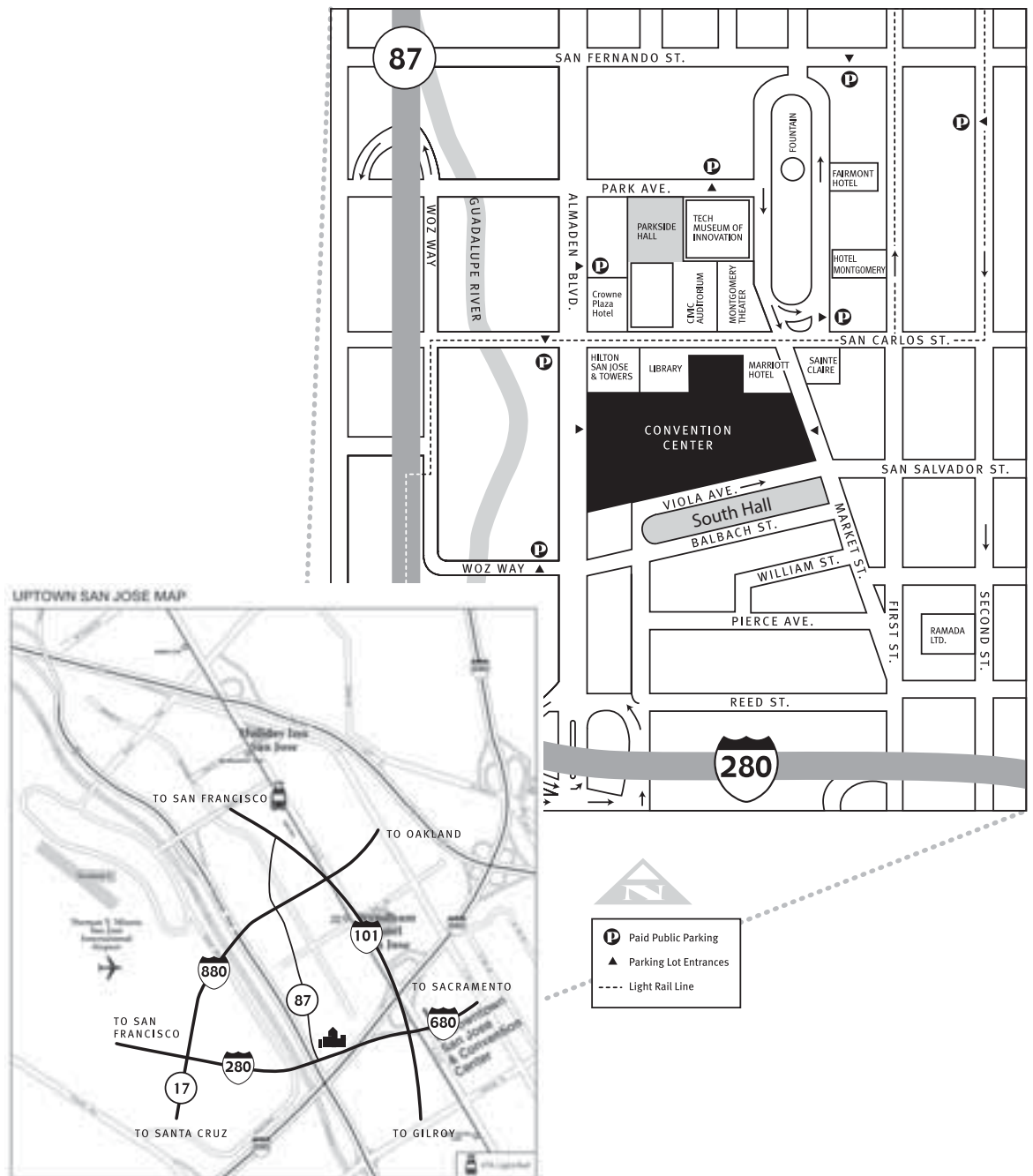
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For more information about our MPPC, visit us online at sales.hamamatsu.com/mppc
USA 800.524.0504 usa@hamamatsu.com Europe 00.800.800.800.88 europe@hamamatsu.com

General Information

Parking During Photonics West

LOCATION	RATES (SUBJECT TO CHANGE)	NOTES
<p>AT THE CONVENTION CENTER 150 W. San Carlos St.</p>	<p>Max \$16 per day. (\$1 for each 20 min to max \$16.)</p>	<p>There are approximately 650 spaces for the public to use.</p>
<p>ALTERNATE PARKING DOWNTOWN SAN JOSE - River Park Tower Garage, located on the corner of San Carlos and Woz Way, 333 W. San Carlos St.</p>	<p>\$1.25 per each 20 minutes, \$18 daily maximum. Rates and hours subject to change without notice. Click on link below for all alternate parking lots: www.sjdowntownparking.com</p>	<p>Approx. 1,000 spaces available each day of the event. Hrs of operation: Mon-Fri - 6:30 am to 12:00 midnight, Sat - 8:00 am to 12 midnight Sun - 8:00 am - may close at 10pm if event over</p>





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GERMANY

Product Demonstrations — Demo Area I — Hall 1

	Tuesday	Wednesday	Thursday
TIME	22 January	23 January	24 January
10:30 am	<p>Advances in High Power Semiconductor Lasers Paul Rudy, QPC Lasers, Inc.</p> <p>QPC Lasers, Inc. introduces new high brightness semiconductor lasers including 1.5W 1064nm BrightLase® single mode lasers for seeding fiber lasers and generating green light. Don't miss the green laser demonstration.</p>	<p>High power fibre coupled QWI modules Prof. John Marsh PhD, Intense Ltd.</p> <p>Intense uses Quantum Well Intermixing to revolutionise high power fibre coupled 8xx and 9xx nm modules in its new series of lasers, giving market leading powers in a range of single emitter diodes.</p>	<p>Semrock Optical Filters: Performance and Value Dr. Turan Erdogan, Semrock, Inc.</p> <p>Semrock's hard-coated optical filters set the standard for biotech & analytical instrumentation applications with an optimal balance of performance and value for fluorescence, Raman and laser systems.</p>
11:30 am	<p>Advanced Optical Systems - Design and Manufacturing Dr. Rainer Schuhmann, Berliner Glas KGaA</p> <p>The contribution of Optical System Design and sophisticated Manufacturing Processes for innovative optical solutions exemplified by customized systems and optical key components made by BERLINER GLAS.</p>	<p>Diffraction Optics for Beamshaping Thierry Berthou, Silios Technologies</p> <p>Presentation of diffractive optics for lasers' beamshaping and homogenizing, in particular SHG lasers homogenizers for Ti:S intense lasers pumping and ZnSe DOE for CO₂ lasers.</p>	<p>Application Solutions for the Nonlinear Spectroscopist Dr. Michael Karavitis, Newport Corp.</p> <p>A series of kit based solutions will be presented to help those working within the nonlinear spectroscopy field.</p>
12:30 pm	<p>Advances in Spectral Imaging Instrumentation David Bannon, Headwall Photonics</p> <p>A diverse set of applications are now enabled with recent advances in spectral imaging instrumentation. Advances presented include not only new functionality but new cost-effective market entry points.</p>	<p>Diode Pumped Ultrafast Lasers-Scientific to OEM Applications Dr. Heinz Huber, High Q Laser (US), Inc.</p> <p>Diode Pumped Ultrafast Lasers designed on passive modelocking SESAM technology and User Replaceable Diode Module moving from scientific to OEM applications like Medical Diagnostics, Nano Processing...</p>	<p>OEM Miniature Raman Systems Dave Goodwin, HORIBA Jobin Yvon, Inc.</p> <p>High sensitivity 532nm and 785nm Raman mini-systems with laser, probe and CCD spectrometer for desktop and hand-held OEM applications.</p>
1:30 pm	<p>3D CAD Environment - Simulation Tool for Optical Propagation Dan Herrmann, RSoft Design Group</p> <p>RSoft's advanced 3D CAD environment, that includes new 3D editing capabilities, a streamlined design process, and a refreshed look. A new simulation tool for optical propagation will also be introduced.</p>	<p>Programmable High Energy Lasers Michael LaHa, Continuum</p> <p>Continuum has introduced the Agilite programmable pulsewidth high-energy Nd:YAG laser. The system's technology will be discussed, including an overview of the pulse shaper module that provides selectable output in a 50ns to 50µs range.</p>	<p>QWI Enabled Single Mode Diodes Prof. John Marsh PhD, Intense Ltd.</p> <p>Quantum Well Intermixing enables Intense's new 6000 and 6100 single mode lasers to run at 200mW at 830 and 980 nm. 17 million operating hours show these high beam quality diodes' reliability.</p>
2:30 pm	<p>Amplified Piezo Actuators for Optics, Laser & Optronics Thomas Maillard, Cedrat Technologies</p> <p>Several outstanding Amplified piezo actuators (APA) based mechanisms will be presented for laser cavity tuning, optical delay line, microscanning and improving of IR camera resolution.</p>	<p>OEM Miniature CCD Spectrometers Dave Goodwin, HORIBA Jobin Yvon, Inc.</p> <p>High sensitivity OEM miniature spectrometers, with a variety of affordable CCD detectors, back-thinned and front-illuminated (eg the new SONY ILX-511B), with optional TE cooling.</p>	<p>Calcium Fluoride and Fused Silica for High Performance Laser Applications Stephan Strohm, SCHOTT North America, Inc.</p> <p>A short overview about new laser grades on Calcium Fluoride and how SCHOTT classifies the material and also how we specify Excimer grade Fused Silica.</p>

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- AspheroCheck® Software Package for accurate measurement of Centration errors of aspheric surfaces
- SmartAlign® Software Package for easy and errorless alignment and cementing of (not centred) optical

Further software features include:

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Product Demonstrations — Demo Area I — Hall 1

	Tuesday	Wednesday	Thursday
TIME	22 January	23 January	24 January
3:30 pm	<p>New Advancements in TracePro Illumination Design Software Jim Zambuto, Lambda Research Corporation</p> <p>Lambda Research will demonstrate the new developments in TracePro and TracePro Bridge for SolidWorks. Come see how TracePro assists users with their optical design and analysis challenges.</p>	<p>SC8000: Mega-Pixel Science-Grade Infrared Camera Dave Bursell, FLIR Systems, Inc.</p> <p>FLIR's mega-pixel SC8000 IR camera offers high resolution and speed with its 1024 x 1024 FPA. Also features Gigabit Ethernet, Camera Link Full, & USB interfaces for max. flexibility and performance.</p>	<p>Entrance into the IR Material Market Ed Hart, SCHOTT North America, Inc.</p> <p>SCHOTT is pleased to announce new offerings that will expand our material portfolio to span from the UV into IR.</p>
4:30 pm	<p>Labsphere Solutions for your Application Labsphere Experts, Labsphere, Inc.</p> <p>Explore with a specialized Labsphere Expert three new Labsphere solutions in three of our major product lines, Light Measurement, Reflective Materials and Coatings, and Image Calibration.</p>	<p>Aspheric Measurement in 2 Seconds Piotr Szwaykowski, ESDI</p> <p>The Intellium Asphere is a 100mm Fizeau interferometer which incorporates advanced sub-Nyquist sampling technologies to accurately characterize, in seconds not minutes, aspheric optical elements.</p>	

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Design, Analyze, Refine and Deliver

LightTools' illumination design software provides a complete design environment, where you can experiment, create and visualize designs, and launch superior products faster.

Design

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- CAD software interoperability
- Customization using Visual Basic® macros
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Analyze

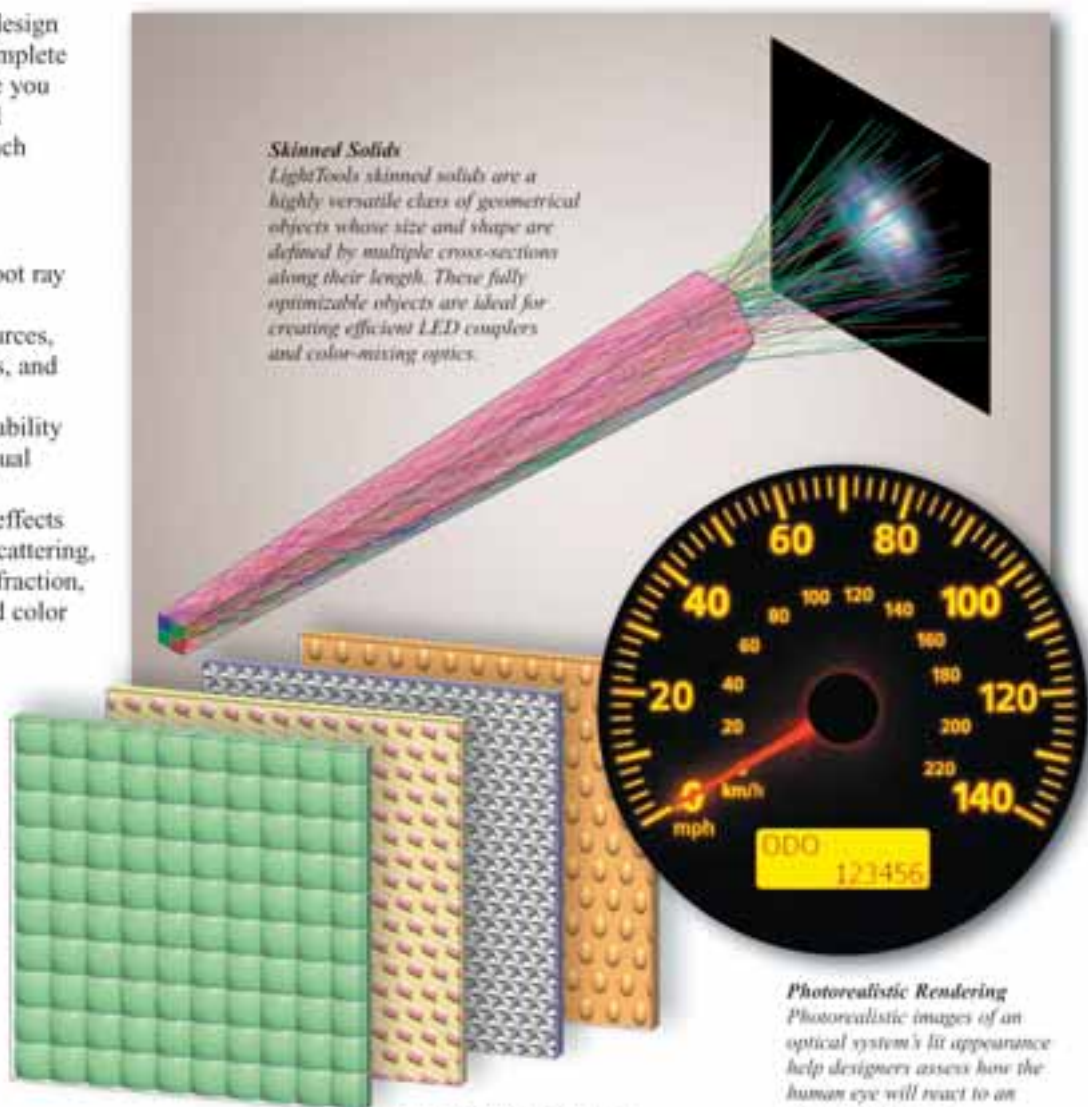
- Fast and reliable Monte Carlo ray trace capabilities
- Full suite of simulation and stray light analysis tools, including CIE colorimetric analysis
- Sobol sampling, the most sophisticated and accurate method for random ray generation

Optimize

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Deliver

- Deliver accurate designs every time



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OPTICAL
RESEARCH
ASSOCIATES

Product Demonstrations — Demo Area II — Hall 3

	Tuesday	Wednesday	Thursday
TIME	22 January	23 January	24 January
10:30 am	<p>High-brightness QCW Array Robert Walker, Lasertel, Inc.</p> <p>See how Lasertel's high-brightness QCW array packages consistently perform in extreme environments. The industry's first patented monolithic array design with outstanding reliability!</p>	<p>Multi-Pixel Photon Counter (MPPC) Earl Hergert, Hamamatsu Corp.</p> <p>Multi-Pixel Photon Counter (MPPC) is a new type of opto-semiconductor device for photon counting. It offers excellent detection efficiency, low voltage operation, and insensitivity to magnetic fields.</p>	<p>515nm CW DPSS Laser Elizabeth Illy, Cobolt AB</p> <p>Cobolt will present recent developments in CW DPSS lasers, including the new wavelength of 515nm, which can be considered the missing link for all solid state excitation in bio-analytical systems.</p>
11:30 am	<p>Reliable Power for Materials Processing Frank Gaebler, Coherent Inc.</p> <p>The Diamond™ E-400 is the first pulsed, sealed CO₂ laser to offer average power of 400 Watts in a fully integrated, compact package, including the RF power supply.</p>	<p>High Speed, High Sensitivity InGaAs SWIR Imaging Doug Malchow and Marc Hansen, Sensors Unlimited, Inc., part of Goodrich Corporation</p> <p>Doug Malchow and Marc Hansen will demo the new SU-LDH High Speed, Shortwave Infrared Digital Line Scan Cameras from SUI, discussing benefits of InGaAs SWIR imaging in a variety of high speed applications.</p>	<p>INNOSLAB Lasers: Their Unique Features and Applications Dr. Keming Du, EdgeWave GmbH</p> <p>Diode pumped, E/O-q-switched YLF, YAG, YVO4 lasers with line, square or circular shaped Gaussian or Top-Hat beam profiles for ablation, scribing, drilling, cutting, pumping of dye and Ti: Sapphire laser.</p>
12:30 pm	<p>Micro-Green Laser for Laser Projection Display Hally Huang, Photop Technologies, Inc.</p> <p>Photop has developed a series of 50~500mW micro-green laser aiming at laser projection display application based on the innovative micro-chip technology.</p>	<p>Transparently Combining AFM/SPM Systems with Micro Raman Prof. Aaron Lewis, Nanonics Imaging Ltd.</p> <p>Nanonics Imaging fully & transparently integrates SPM with Raman microspectroscopy. New imaging & chem. characterization possibilities, tip enhanced Raman Spectroscopy capabilities to be discussed.</p>	<p>iXFiber Portfolio Benoit Cadier, iXFiber</p> <p>A brief presentation of iXFiber company products and applications: Specialty fiber; Fiber Optics Components based on FBG technology; Sub-assembly.</p>
1:30 pm	<p>AvaSpec-2048x14 High Sensitivity Miniature Spectrometer Benno Oderkerk, Avantes, Inc.</p> <p>AvaSpec-2048x14 miniature spectrometer uses a back thinned CCD for excellent sensitivity in the UV and NIR. Included in all AvaSpecs are: USB2, RS232, & Wireless interfaces along with 16 bit A/D.</p>	<p>High power fiber laser sub-assemblies Thomas Nikolajsen, Crystal Fibre A/S</p> <p>The aeroLASE-350 is designed for laser manufacturers who wants to expand their product portfolio into fiber lasers. The aeroLASE is easy to integrate and offers long lifetime and high efficiency.</p>	<p>Fiber Optic Length Meter Omur Sezerman, OZ Optics Limited</p> <p>OZ Optics' Fiber Length precisely measure optical fiber lengths from 3 mm to 500 m, with 2mm resolution. It is ideal for applications requiring precise, repeatable measurements.</p>
2:30 pm	<p>High Performance Infrared Imaging for Demanding Applications Chris Alicandro, Electrophysics Corp.</p> <p>Electrophysics will demo the Titanium family of high performance infrared imaging and measurement systems. Featuring high sensitivity and fast frame rates, the Titanium is best for your applications.</p>	<p>High Speed Imaging - Photron's Fastcam SA-1 Andrew Bridges, Photron, Inc.</p> <p>Photron introduces the next generation of high speed cameras – new CMOS cameras are producing high speeds with shorter duration shutter times, and at light sensitivities never before seen.</p>	<p>Wyvern™: regeneratively amplified laser with 100kHz, 20µJ, sub-50fs pulses Dr. Sterling Backus, Kapteyn-Murnane Laboratories Inc.</p> <p>A complete compact single-box laser system. The short pulses, high repetition rate, and excellent spatial profile are exceptionally well-suited to applications in spectroscopy, imaging, pumping OPAs, white light generation and much more.</p>

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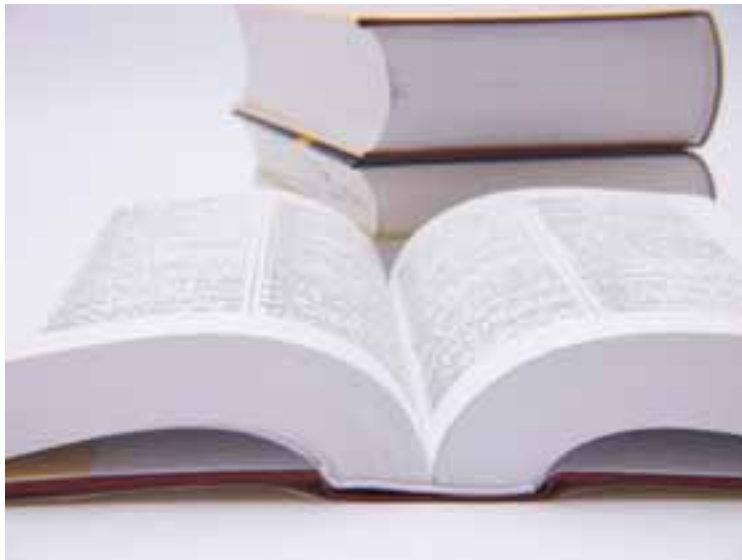
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Product Demonstrations — Demo Area II — Hall 3

	Tuesday 22 January	Wednesday 23 January	Thursday 24 January
TIME			
3:30 pm	<p>Laser Presentation: Phazzler/Dazzler Pascal Tournois, FASTLITE</p> <p>FASTLITE offers ultrafast pulse shaping systems (DAZZLER) and solutions, ultrafast pulse measurement systems (PHAZZLER), and ultrafast stabilization systems (STABBLER) for many application fields of interest to the scientific community.</p>	<p>KALEO: Lens Quality Diagnostic System Raphaël Serra, PHASICS SA</p> <p>KALEO measures simultaneously the aberrations and the MTF of your lenses. Based on an innovative wavefront sensing technology, it permits to characterize highly opened optics without any relay lens.</p>	
4:30 pm	<p>Latest Ultra-High Performance UV/Vis/NIR Spectrophotometer Bill Sweet, PerkinElmer</p> <p>See our latest ultra high performing UV/Vis/NIR spectrophotometer, available with a wide range of accessories to achieve the highest level of accuracy in the most demanding applications.</p>	<p>Chameleon. Ready To Image. David Armstrong, Coherent Inc.</p> <p>Multi-Photon Excitation microscopy knows no boundaries and your multi-photon laser shouldn't either. Whether it's deep-tissue imaging or fast tuning, the Chameleon gives you cutting-edge performance.</p>	

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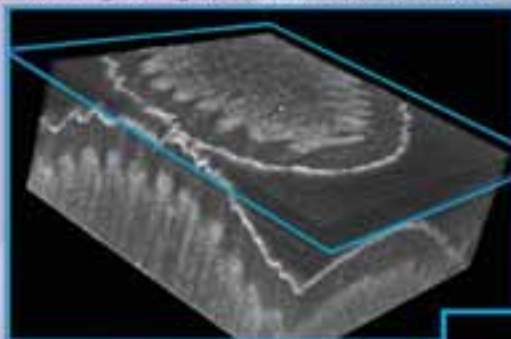
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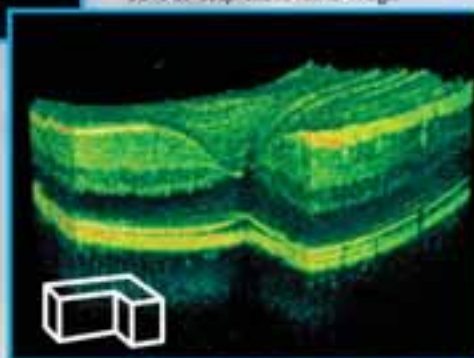
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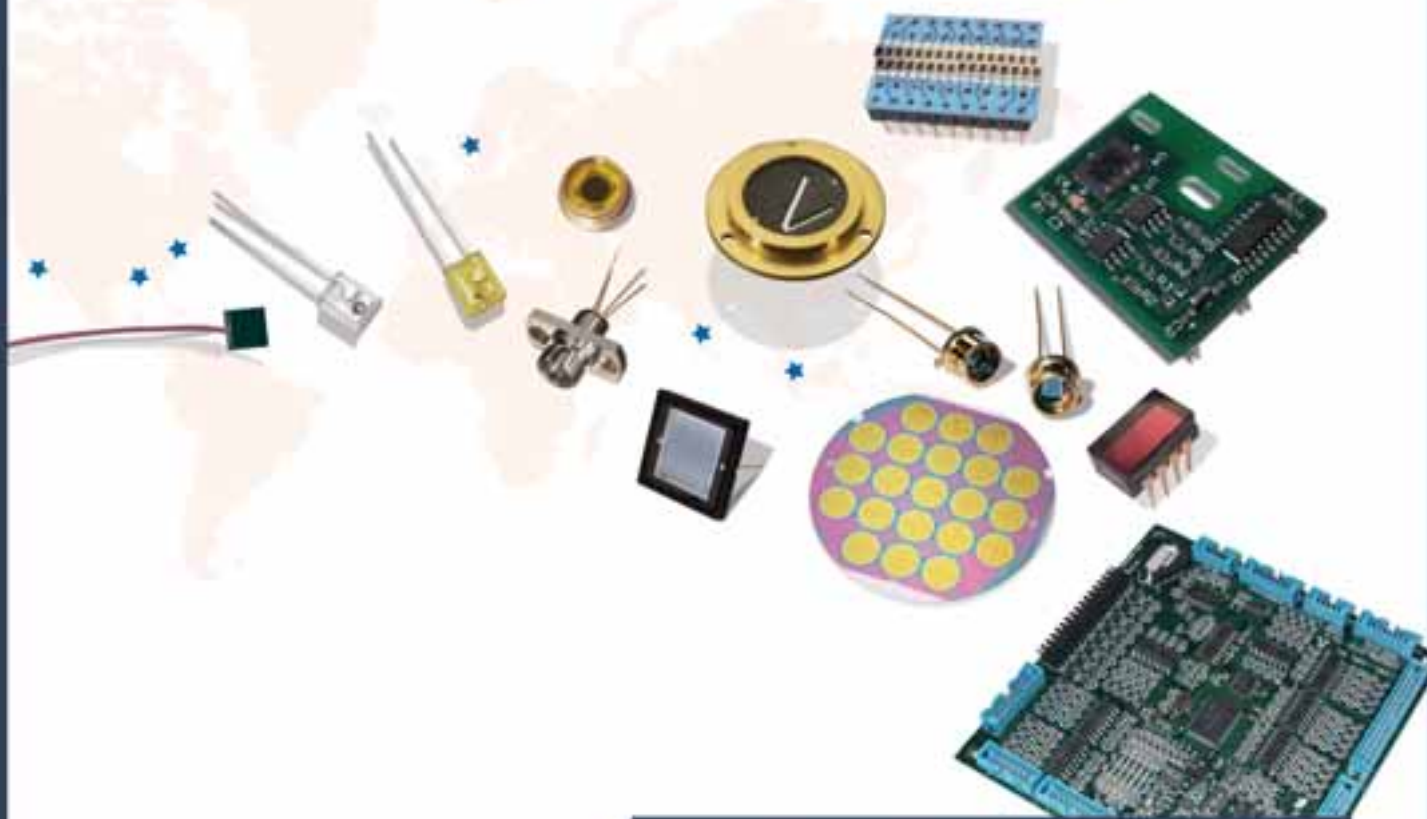
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Product Demonstrations — Demo Area III — South Hall 1

	Tuesday	Wednesday	Thursday
TIME	22 January	23 January	24 January
10:30 am	<p>New IK-HD1 High Definition 3CCD Camera Vince Giovinco & Gary Pitre, Toshiba Imaging Systems Division (Irvine, CA)</p> <p>Toshiba's IK-HD1 is the world's smallest HDTV Hi-Def Camera System- Demo of ultra-compact camera head and small, lightweight control unit plus applications discussion. Ideal for systems integrators.</p>	<p>High Power Fiber Laser Reflector Daniel Mailloux, Teraxion Inc.</p> <p>Teraxion's high performance, Telecom-grade Fiber Bragg Gratings are aiming the medium to high power Fiber Laser market. These FBG reflectors provide the ability for OEMs to make high quality and high performance Fiber Lasers systems.</p>	<p>SPMArray: Position Sensitive/ Multi-Anode High Gain APD Joseph O'Keeffe, SensL</p> <p>SensL's SPMArray, an arrayed Silicon Photomultiplier (SPM), is the first solid-state alternative to the analog multi-anode PMT and combines the benefits of silicon photodiodes with the performance of PMTs.</p>
11:30 am	<p>New Low Light Cameras Using Back-Thinned CMOS Dr. Bruce True, Intevac, Inc.</p> <p>New cameras using back-thinned sensors will be presented. The combination of high performance and low cost will enable demanding volume applications such as biometrics and surveillance.</p>	<p>Spectral Metal, Real World Applications Bob Crase, Deposition Sciences, Inc.</p> <p>Last year DSI debuted Spectral Metal. Over the past year this revolutionary product has been designed into many real world applications including Medical Imaging, LED Lighting and Solar Energy. These applications will be reviewed during this presentation.</p>	<p>The ReportR-The World's First Palm Sized Raman Instrument Dr. Keith Carron, Intevac</p> <p>Weighing less than 10 ounces the ReportR is the world's smallest spectroscopic system used for rapid identification of illicit drugs, explosives, plastics and industrial chemicals.</p>
12:30 pm	<p>Extremely Fast CCD Camera for High Throughput Dave Northup, Adimec</p> <p>The OPAL-camera is a new CCD, 1MP camera offering unprecedented combination of superior image quality with fast frame rates. We will display its use in fast machine vision.</p>	<p>High Power Laser Modules Offered In Small Form Factor Packages Gary Sousa, Sheaumann Inc.</p> <p>Sheaumann is dedicated to offering revolutionary high power, high brightness solutions. Their advanced fiber coupling technology and creative package designs allow them to meet the industry's needs.</p>	<p>Flourescence Free Raman Spectroscopy With the DiscoverR 1064 Dr. Keith Carron, Intevac</p> <p>The DiscoverR 1064 offers dispersive one-micron Raman spectroscopy with the advantages of rapid results and very high sensitivity from the MOSIR 950 near-infrared camera.</p>
1:30 pm	<p>Microspectrometer for Plastic Waste Selection Dr. Michael Scholles, Fraunhofer IPMS</p> <p>Fraunhofer IPMS will present the spectrometer themselves as well as demonstrate its capability to develop full featured, customer specific solutions that use the spectrometers as major components.</p>	<p>Solar Cell Simulation Ricardo Borges, Synopsys, Inc.</p> <p>Synopsys Sentaurus provides solar cell designers with all the necessary components for comprehensive solar cell simulation. Simulate process steps like oxidation, diffusion, etching and deposition.</p>	
2:30 pm	<p>Compact EC-QCLs for Molecular Detection and Imaging Eric Takeuchi, Daylight Solutions, Inc.</p> <p>Miniaturized, portable, broadly tuned external-cavity quantum cascade lasers are now a commercial reality. Daylight will present pulsed and cw performance and their application in mid-IR sensors.</p>	<p>What could YOU do with a motor this small? Dan Viggiano III, New Scale Technologies</p> <p>Learn how the disruptively small SQUIGGLE motor is transforming miniature optics. We explain the patented piezo technology and demo numerous applications, from endoscopes to phone cameras and more.</p>	



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Product Demonstrations — Demo Area III — South Hall 1

	Tuesday 22 January	Wednesday 23 January	Thursday 24 January
3:30 pm	<p>LED Illumination Extends from VIS to UV and IR Randall Wilcox, Lightspeed Technologies</p> <p>HPLS high intensity LED systems with continuous, modulated, and short pulsed illumination have expanded from VIS into UV and IR options. Applications range from fluorescence to high speed imaging.</p>	<p>A New Approach for Performing Acoustooptic Modulation Pete Wasilousky, Harris Corporation</p> <p>Demonstrate and describe the implementation of a new concept based on the use of RF phase modulation techniques for Performing Acoustooptic Intensity Modulation of an Optical Wavefront.</p>	
4:30 pm	<p>COMSOL Multiphysics Intro and Live Demo COMSOL, Inc.</p> <p>This demo brings designs to life within minutes using multiphysics simulations. Applications for multiphysics modeling exist in every field of engineering, including RF, microwave, and photonics.</p>	<p>Monolithic, Low Scatter 6061-T6 Aluminum Mirrors Stan Reggie, Engineered Surface Finishes</p> <p>Monolithic, low scatter aluminum mirrors with an isotropic surface and <math><20\text{\AA}</math> rms surface roughness on 6061-T6 Al alloy, providing a new alternative to SPDT Al, nickel plated Al, and Al on glass.</p>	



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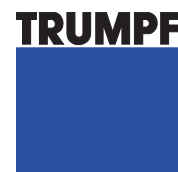


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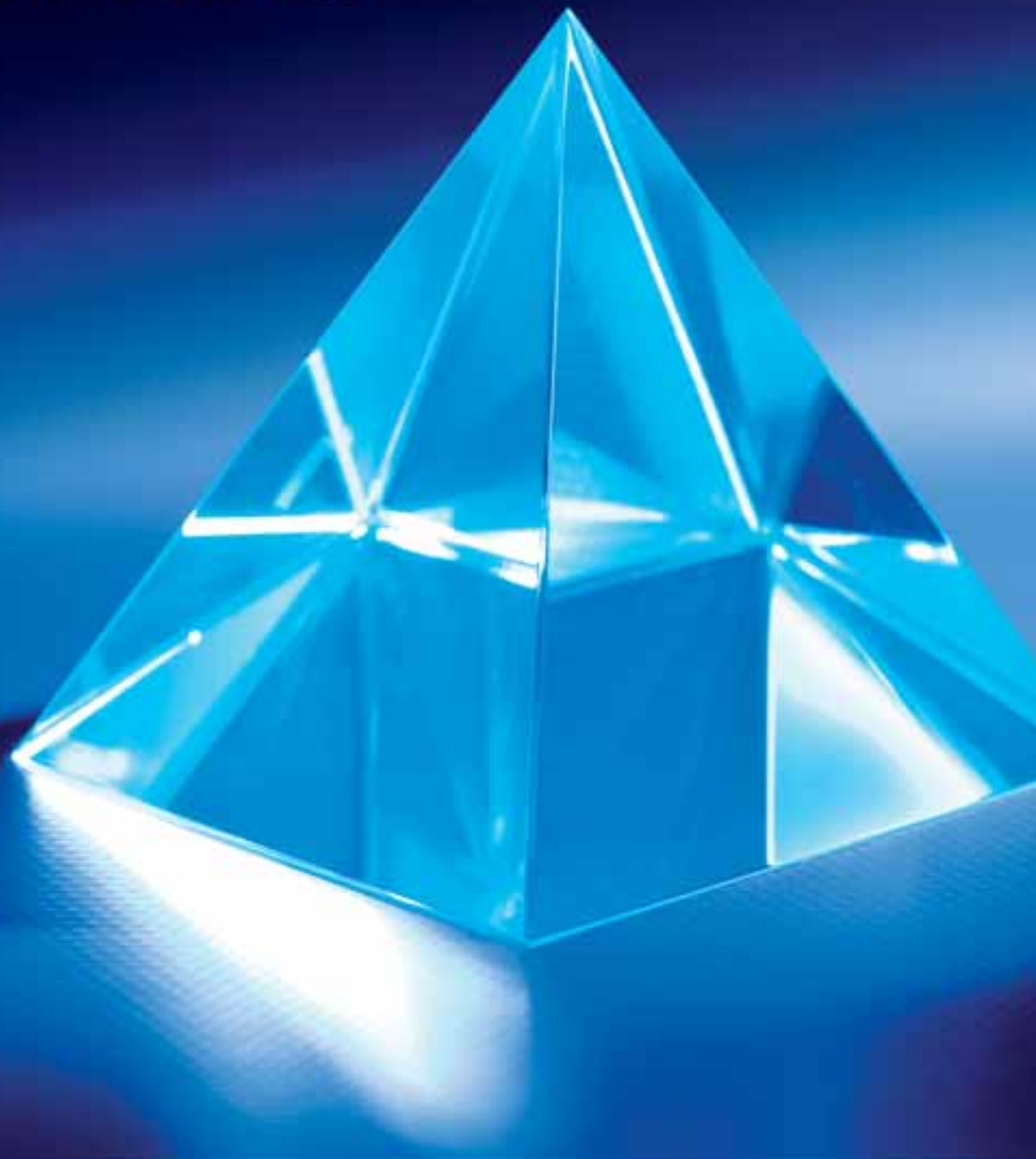
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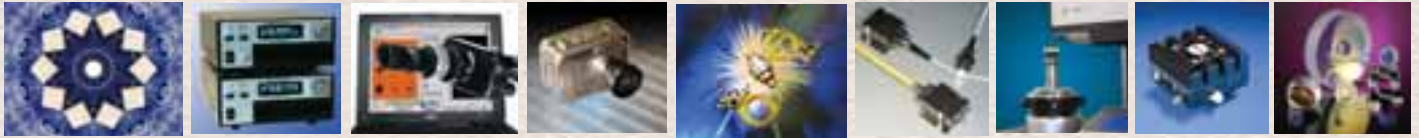


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Optical Components for Telecom Applications

Convention Center · A7/A8
Tuesday 22 January
10:15 to 10:50 am

Speaker: Daryl Inniss, VP and Practice Leader, Communications Components, Ovum RHK

Optical component suppliers are happily supplying system vendors engaged in the network build-out to support IP and video services. Come hear how growth is affecting carrier metro, long-haul and access networks, MSOs, and enterprise deployments. Component vendors should not miss this chance to learn about growing opportunities and the battle for market share. Daryl will share his business insight and perspectives gleaned from his current role as VP and Practice Leader, Communications Components, Ovum RHK and previous 15 years in the optoelectronics industry.



Daryl Inniss has over 15 years of experience in the optoelectronics industry. He is responsible for components research including industry food chain analysis, forecasting and analyzing market dynamics. Before joining Ovum RHK, Daryl worked for JDS Uniphase as Technical Manager for Raman Amplifier Development. Previously, he spent 11 years at Bell Laboratories/Lucent, conducting research on optical fibers, fiber lasers and high-power fiber amplifiers. Daryl was awarded a Ph.D. in Chemistry from UCLA and an AB in Chemistry from Princeton University.

OPTICS: The Foundation of Telco's Transition to Multimedia Provider

Convention Center · A7/A8
Tuesday 22 January
10:50 to 11:25 am

Speaker: Steve Rago, Principal Analyst, Broadband, Digital Home and IPTV, iSuppli

Telcos are in a transition from Voice service providers to multi-media service providers. The foundation for this transformation is Broadband communications with the emphasis on FTTx (Fiber To The Home/premises). The service all Telco's want to offer is IPTV (Internet Protocol television) including High Definition TV. IPTV with HDTV will require major injections of Optics in the Network.

Optical communications is undergoing resurgence, not only in the USA, but globally—and the driver is the transformation of the Telephone company. In this talk, Rago will discuss:

- The role optics will play and the resulting market opportunities.
- Which broadband access technologies are experiencing the fastest growth?
- What factors are promoting or inhibiting the growth of broadband?
- What's up with wireless broadband, i.e. WiMax?



Steve Rago is Principal Analyst where he leads the Broadband and Digital Home and IPTV Practices at iSuppli. Some of Rago latest reports include: "Broadband Landscape: Preparing for Next Generation Services", "Broadband Next Big Step, Fiber to the Home" and "Everybody's Doing the 'Telco TV'".

Steve Rago came to iSuppli with twenty plus years in the communications industry including fourteen years in semiconductors. Prior to joining iSuppli, Rago served as the Senior Marketing Manager for Agere Systems, where he was responsible for growing the DSL central-office IC businesses. He was previously the Business and Marketing Manager for the communications segment within Motorola Semiconductor. Rago has also served Fujitsu/GTE Business Systems, Harris Digital Telephone Systems, and ITT Courier data communications systems in a variety of product planning, marketing and engineering posts. Rago earned a BS in Mathematics at Maryville College and an MS in Mathematics at Farleigh Dickinson University, magna cum laude.

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Broadband Access Communication Technologies

Convention Center · A7/A8

Technical Workshop

Tuesday 22 January · 1:30 to 3:30 pm

Industry Forum

Wednesday 23 January · 3:30 to 5:30 pm

Organizing Chairs: Raj Jain, Washington Univ. in St. Louis; **Benjamin B. Dingel**, Nasfine Photonics, Inc.; **Katsutoshi Tsukamoto**, Osaka Univ. (Japan); **Shlomo Ovidia**, Entropic Communications

In order to satisfy the growing demand of end-customers for fast Internet access, new multimedia services, and rapid interactive applications, all telecommunications networks operators are under intense pressure to solve the "last-mile connection" problem. This problem is not only the need for (1) huge broadband in one direction but also for (2) high speed two-way connectivity, and (3) mobile access as opposed to traditional fixed access.

Major existing access technologies based on fiber (FTTH), cable modem (CATV), copper (xDSL), wireless (WLL), Radio-over-Fiber (RoF), and satellites (SAT) are rapidly evolving to partially answer these needs. New emerging access technologies such as 100G EPON, Power line transport (PL), and Radio-over-FSO, are actively being researched and developed since they offer huge broadband potential, affordable price, and mobility.

This program has the following opportunities to provide critical market information and to expand your knowledge of this hot technology. The Technical Workshop and Industry Forum will bring together experts, researchers, engineers and business leaders from both academia and industry to exchange ideas, share experiences, and report original works about all aspects of broadband access communication technologies. Round out the experience by taking a related short course(s) taught by qualified experts in the broadband access, optical communications and components fields.

Technical Workshop

Convention Center · A7/A8
Tuesday 22 January
1:30 to 3:30 pm

The Technical Workshop will cover technical breakthroughs, access evolution and trends, and challenges in different access technologies such as Optical-, Wireless-, RoF-, and Satellite-based technologies.

Industry Forum on Latest Developments in Broadband Access Communication Technologies

Convention Center · A7/A8
Wednesday 23 January
3:30 to 5:30 pm

The Industry Forum will highlight issues of general interest related to industry developments, economic issues, market dynamics, regulation and standards, deployment, or trends in broadband access technologies.

Register for these related courses

See Course Daily Schedule List on pages 39-45.

Courses are priced separately.

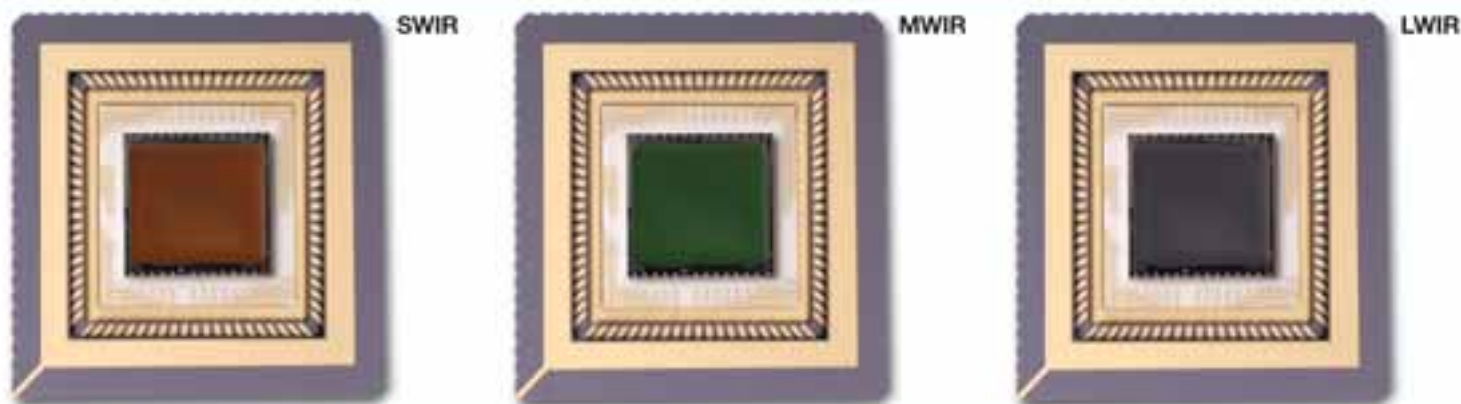
SC879 **Next Generation Wireless Technologies** (Raj Jain, Washington Univ. of St. Louis)

SC880 **Optical Communication Systems** (Chris Xu, Cornell Univ.)

SC881 **Semiconductor Optical Amplifiers: Design and Applications** (Niloy Dutta, Univ. of Connecticut)

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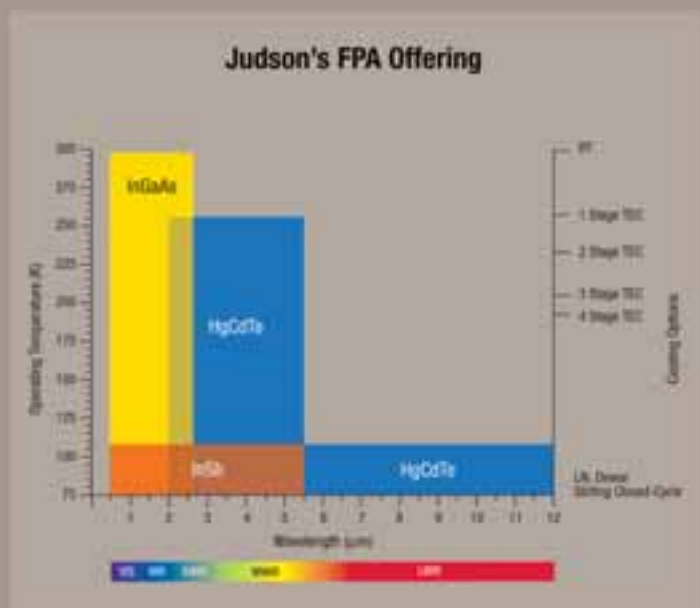
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Executive Panel Sessions

Come hear leaders in the industry discuss challenges and opportunities.

Free to all registered attendees!

Market Direction and Implications for the World of Photonics

Convention Center · A7/A8

Wednesday 23 January · 1:30 to 2:45 pm

Don't miss this FREE SESSION open to all exhibition visitors, exhibitors and technical conference attendees. Hear top executives with a global perspective share their views on the opportunities, challenges, innovations and new applications that are changing the market. This is key information for people developing and implementing technical and business strategy.

Executive Panel

In this lively discussion, visionary business leaders representing different aspects of the marketplace will share their insight regarding trends and opportunities in optics and photonics. With the extraordinary experience and resources these experienced executives in technology development, global sales, marketing and manufacturing, you are sure to learn new things about the direction of the industry and priorities for your business.

Moderator: Stephen J. Eglash,



President & CEO, Cyrium Technologies

Steve is President and CEO of Cyrium Technologies, a solar energy startup company developing high-efficiency solar cells for concentrator photovoltaic applications. Previously, he was a venture capitalist at Worldview Technology Partners where he emphasized investments in semiconductors, displays, lighting, and energy. Steve was also Vice President at SDL (JDSU) where he managed efforts in telecommunications, printing, optical amplifiers, and industrial lasers. He began his career as a research scientist at MIT Lincoln Laboratory.

Steve recently completed a special assignment with the National Renewable Energy Laboratory and the U.S. Department of Energy where he led a solar energy strategic planning project. Steve is a frequent speaker at conferences such as the Photonics Market Opportunities Forum at SPIE's Photonics West. He is the two-time chairman of the OSA's Executive Forum at the Optical Fiber Conference. Steve is also involved in humanitarian projects such as the Tech Museum Awards for Technology Benefiting Humanity and the Global Social Benefit Incubator at Santa Clara University.

Steve received a Ph.D. and M.S. from Stanford University and a B.S. from the University of California at Berkeley, all in Electrical Engineering

Panel Members:

Bookham	Steve Turley , Chief Commercial Officer
CVI/Melles Griot	Stuart Schoenmann , President and CEO
Edmund Optics	Robert Edmund , CEO and Chairman of the Board
Newport	Randy Heyler , Sr. Director, Strategic Marketing
Hamamatsu	Ken Kaufmann , New Technology Development Executive
TRUMPF	Holger Schlueter , Vice President, Laser Production and Development
Coherent	Mark Sobey , Senior Vice President, Specialty Laser Systems



China: Competitor, Customer or Conundrum?

Convention Center · A7/A8

Thursday 24 January · 9:15 to 9:45 am

Speakers:

Adonis Mak, Publisher, Laser Focus World China, Lightwave China and the FTTH China Conference

Jeremy Chang, Managing Director, Edmund Optics, China

Ignoring China is unwise, if not impossible in the realms of R&D and selling. This 30 minute presentation, directly following the Photonics West exhibitor breakfast—but open to all conference and exhibition attendees—will provide you with new insight and perspectives regarding market opportunity and manufacturing realities in China. Each presenter will talk for 15 minutes, followed by open-ended question and answer period until the Photonics West Exhibition Floor opens at 10:00 a.m.

Given the decades of first-hand experience and extensive travel throughout China these experienced business people bring to the forum, you're sure to learn something new to help clarify the question: Competitor, Customer or Conundrum?



Adonis Mak and his organization, ACT International, manages the day-to-day business operations of several publications including Laser Focus World China, Lightwave China, and Solid State Technology

China, in addition to the FTTH China conference series. He has writers, editors, and sales people working across China, and both Chinese and "Western" advertisers, giving him a perspective on what optics & photonics products are selling inside China.

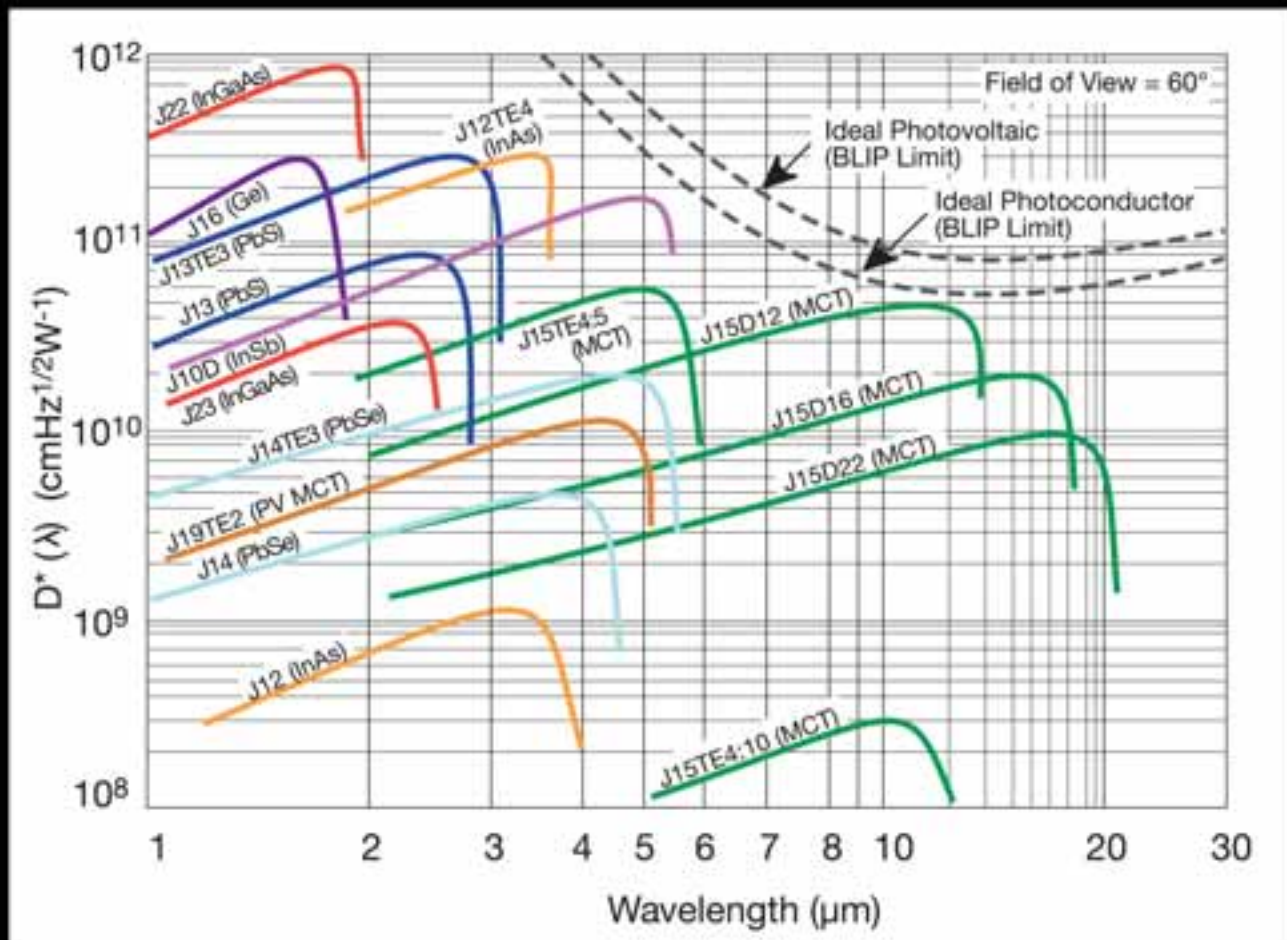


Jeremy Chang is Managing Director, Edmund Optics, China, where he manages optics manufacturing operations with teams in Shenzhen and Shanghai. An experienced executive, he has managed joint ventures among US, Hong Kong, and China companies and local government officials. Chang previously worked for Concord Camera Company as the director of new product & optical development (2001-2004) and for Kodak Haking Optical Company as the general manager (1994-2001).



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Workshops

Laser Safety Made Easy

WS866

NEW

Course level: Introductory
CEU .35 \$315 / \$365 USD
Monday 8:30 am to 12:30 pm

The course starts with a review of laser safety basics-Laser Hazard Classification (including new ANSI-IEC classification and an update of the latest version of ANSI Z136.1-2007 'Safe Use of Lasers'), biological effects, and eyewear issues. This is followed by a review of several laser accidents in research settings, with a focus on identifying and resolving problem areas. The course concludes with a discussion of effective methods to evaluate laser hazards, along with proven solutions to make one's time in the laser lab safer and easier.

LEARNING OUTCOMES

This course will enable you to:

- explain the basics of laser safety
- draw lessons learned from a number of incidents
- evaluate laser use situations and develop appropriate controls, both administrative and engineering

INTENDED AUDIENCE

This material is intended for anyone working in a laser lab, in particular those who have some responsibility to maintain a laser safe working environment.

INSTRUCTOR

Kenneth Barat is Certified Laser Safety Officer / Laser Safety Officer for Lawrence Berkeley National Laboratory.

Understanding Laser Beam Performance Specifications

WS847

Course level: Introductory
CEU .35 \$315 / \$365 USD
Monday 1:30 to 5:30 pm

This workshop will provide attendees with a basic understanding of laser beam performance specifications. Topics to be covered include Beam Pointing Stability, Polarization Ratio, RMS Noise, Peak-to-Peak Noise, Pulse Duration and Duty Cycle, Peak Power, Average Power, Pulse Repetition Rate, and M2. These specifications constitute the critical parameters that determine whether or not a laser, or laser system, will do the intended job.

LEARNING OUTCOMES

This course will enable you to:

- understand laser performance parameters/specifications for any type of laser/laser system
- select the right laser/laser system for any application with certainty
- intelligently engage your clients or customers using proper laser terminology
- build stronger relationships with clients/customers
- obtain the technical knowledge and confidence to enhance your job performance and rise above the competition, inside and outside your company

INTENDED AUDIENCE

Sales/marketing personnel will find the course quite beneficial to precisely grasp clients' requirements and specifications. Engineers, technicians and other support staff may also find this course useful as they strive to meet client needs as directed by sales/marketing.

INSTRUCTOR

Sydney Sukuta is currently a Laser Technology professor at San Jose City College. He also has industry experience working for some of the world's leading laser manufacturers in Silicon Valley.

COURSE PRICE INCLUDES two weeks of follow-up email and phone consultations.

Basic Optics for Non-Optics Personnel

WS609

Course level: Introductory
CEU .20 \$125 / \$175 USD
Wednesday 8:30 to 11:00 am

This course will provide the technical manager, sales engineering, marketing staff, or other non-optics personnel with a basic understanding of the terms, specifications, and measurements used in optical technology to facilitate effective communication with optics professionals on a functional level. Topics to be covered include basic concepts such as interference, diffraction, polarization and aberrations, definitions relating to color and optical quality, and an overview of the basic measures of optical performance such as MTF and wavefront error. The material will be presented with a minimal amount of math, rather emphasizing working concepts, definitions, rules of thumb, and visual interpretation of specifications. Specific applications will include defining basic imaging needs such as magnification and depth-of-field, understanding MTF curves and interferograms, and interpreting radiometric terms.

LEARNING OUTCOMES

This course will enable you to:

- read and understand optical system descriptions and papers
- ask the right questions about optical component performance
- describe basic optical specifications for lenses, filters, and other components
- select the right off-the-shelf lenses, filters, and beam directing optics
- interpret optical data such as interferogram, MTF and aberration reports

INTENDED AUDIENCE

This course is intended for the non-optical professional who needs to understand basic optics and interface with optics professionals.

INSTRUCTOR

Kevin Harding has been active in the optics industry for over 25 years, and has taught machine vision and optical inspection methods for over 20 years in over 70 workshops and tutorials, including engineering workshops on machine vision, metrology, NDT, and interferometry used by vendors and system houses to train their own engineers.

Registration is required.
See SPIE Cashier to Register.



Creating a New Technology Venture

WS867

NEW

Course level: Introductory
CEU .65 \$520 / \$620 USD
Wednesday 8:30 am to 5:30 pm

This course will explore the entrepreneurial process of creating a new technology venture. An entrepreneur must have the personality, the technical skills, and the business acumen to create a successful venture. Identifying and evaluating an opportunity which is aligned with the entrepreneur's skills and goals and provides a significant return to the venture's stakeholders is key to successfully launching a new technology venture. This course will place emphasis on identifying market problems, evaluating technical solutions, developing product concepts and business models, building an entrepreneurial team, developing a business plan, establishing goals and milestones, funding the venture, and launching and growing the venture. Key issues such as protecting intellectual property, acquiring technology through technology transfer, identifying disruptive vs. sustaining technologies, and crossing the chasm - moving from early adopters of the technology to the mass market, will also be examined.

LEARNING OUTCOMES

This course will enable you to:

- identify specific personality traits, skills, and goals necessary to become a successful entrepreneur
- identify and evaluate opportunities that can lead to the successful launch of a new technology venture
- describe intellectual property and understand its value in building and launching a successful new venture
- discuss business models that are used to successfully launch a technology venture
- describe the key elements of a successful business plan and investor presentation
- compare and evaluate funding sources for a new technology venture

INTENDED AUDIENCE

This course is designed for engineers, scientists, managers and executives interested in creating or joining a new technology venture.

INSTRUCTOR

Dennis Pape is President of AlphaLaunch, a consulting firm that provides technology assessment, market assessment, competitive assessment, business concept generation, and business plan and investor presentation development services.

Strategies and Tactics for High-Tech Sales Success

WS826

Course level: Introductory
CEU .35 \$315 / \$365 USD
Wednesday 1:30 to 5:30 pm

This course introduces proven strategies and tactics for high-tech sales success. Participants will gain a strong understanding and appreciation of the purchase process as seen through the eyes of their customers. Attendees will learn how to align their sales process with how their customers wish to make purchase decisions. The workshop is hands-on, with interactive exercises and worksheets that attendees will complete using their own products and services as a guide.

LEARNING OUTCOMES

This course will enable you to:

- use "Active Listening Skills" to develop rapport with your customers
- demonstrate your technical competence and understanding of the customer's needs
- gain access to key technical and financial decision makers
- maintain positive sales momentum throughout the sales cycle
- identify and delineate between qualified and unqualified prospects

INTENDED AUDIENCE

Anyone who is involved with the sales, marketing and support of highly technical products and services will benefit from this course. (This includes pre and post-sales engineers and customer support representatives.)

INSTRUCTOR

Greg Johnson is the founder of Honorable Selling Inc., a high-tech sales training and consulting business. He holds a BS in Physics and an MS in Geophysics and has over 19 years experience in sales, sales management and sales training within the high-tech and software industries.

COURSE PRICE INCLUDES a workbook containing worksheets, templates and sections from the instructor's upcoming sales-training book. While several exercises will be completed during the course, these additional resources will help attendees effectively utilize the techniques and tactics introduced during the course.

How to Start a Small High Tech Business Almost Anywhere

WS756

Course level: Introductory
CEU .35 \$315 / \$365 USD
Tuesday 1:30 to 5:30 pm

This course focuses on the elements that can minimize investment capital and the time needed to set up a viable and vibrant small business with growth potential. For individuals contemplating or engaged in starting a small business, understanding the process can literally be the difference between success and failure.

It is possible to set up such an entity within a large company, where one or a handful of individuals can grow new ideas and technology into high tech products that can have a significant impact on the competitiveness of the company.

The course provides an overview of the skills necessary to operate a successful high tech business within a large organization, and points out how these skills can form the basis for developing small high tech businesses as spin-offs or standalone entities. It also addresses the steps needed to start a small high tech business, even under less-than-ideal conditions.

Elements to be considered include: motivation; start up planning; types of organizations that can be operated; and the set up of structures that will greatly aid success. Crucial topics such as consulting, small business contracts, subcontracts, intellectual property, licensing, product development, long term planning, and mergers/acquisitions will be reviewed.

LEARNING OUTCOMES

This course will enable you to:

- identify specific skills that can have high payoff for individuals establishing high tech operations, and discuss ways to hone these skills
- describe the advantages and pitfalls associated with operating a small high tech business
- list the series of steps necessary for starting a small high tech business (i.e., decision to leave a job, vision for the new company, funding, the type of organization to be formed, a strategic and tactical plan, an operational plan, marketing)
- discuss intellectual property and how to minimize the cost of acquiring and developing an effective patent base, as well as how to offset some costs by licensing/joint ventures
- study examples of small companies that establish leverage to develop relationships with other organizations
- outline some of the issues that a small business may face during a merger or acquisition

INTENDED AUDIENCE

Engineers, scientists, technicians and managers in both large and small organizations can benefit from this course. People from large organizations will benefit from developing skills that can make their own organizations more cost effective and efficient, as well as understanding the advantages and disadvantages of having small businesses as partners.

INSTRUCTOR

Eric Udd is President of Columbia Gorge Research, LLC.

Workshops

Intellectual Property Issues in High-Tech Business

WS412

Course level: Introductory
CEU .35 \$315 / \$365 USD
Tuesday 8:30 am to 12:30 pm

Intellectual property (IP), in the form of copyrights, trademarks, trade secrets, ideas and patents, is of critical importance in high-tech business. In today's economy, IP is an asset that high-tech companies seek to leverage to add to their bottom line, whether through licensing or lawsuits. For many high-tech companies, IP represents their most valuable asset. Not surprisingly, the typical high-tech company's level of technical sophistication far outweighs its level of IP sophistication; yet both are needed to ultimately be successful in the high-tech marketplace. It is therefore imperative that employees of a high-tech company know the fundamentals of IP and understand their role in the IP-related aspects of a high-tech business. The aim of this course is to provide the audience with an overview of the numerous IP issues related to high-tech business. Topics covered include: the basic forms of IP, developing an IP strategy, IP licensing, litigation issues, IP insurance, IP management, directed development and generation of IP, and patent mapping.

LEARNING OUTCOMES

This course will enable you to:

- understand the basic forms of IP
- understand the role of IP in a company
- intelligently manage IP in a company
- develop an IP strategy that suits your business
- work intelligently with attorneys
- optimize the value of your company's IP
- properly generate, develop and leverage IP
- properly identify and document existing and future IP
- understand your role in your company's IP process.

INTENDED AUDIENCE

This course is designed for technicians, engineers, scientists, managers and executives involved in high-tech business.

INSTRUCTOR

Joseph Gortych is a registered patent attorney and is president of his own IP law and consulting firm based in Sarasota, Florida.

Essential Skills for Engineering Project Leaders

WS846

Course Level: Introductory
CEU .35 \$315 / \$365 USD
Wednesday 1:30 to 5:30 pm

This workshop teaches skills needed to lead technical projects, drive innovation, and influence others. Attendees learn the difference between leadership and management, and how to develop specific leadership skills that are important to technical professionals who lead projects or need assistance from others to get things done. Participants engage in exercises that assess their individual leadership abilities and provide guidance for further skill development.

INTENDED AUDIENCE

This material is intended for early-career technical professionals who can benefit from improving leadership skills.

INSTRUCTOR

Gary C. Hinkle is President and founder of Auxilium, Inc. His experience includes a broad variety of management and staff assignments with small, medium, and large companies involved in the development and manufacturing of high-tech products.

COURSE PRICE INCLUDES a comprehensive workbook and email/phone follow-up with the instructor after the workshop to assist with implementation.

The Craft of Scientific Presentations: A Workshop on Technical Presentations

WS667

Course level: Introductory
CEU .35 \$125 / \$175 USD
Wednesday 8:30 am to 12:30 pm

This course provides attendees with an overview of what distinguishes the best scientific presentations. The course introduces a new design for presentation slides that is both more memorable and persuasive from what is typically shown at conferences.

LEARNING OUTCOMES

This course will enable you to:

- account for the audience, purpose, and occasion in a presentation,
- logically structure the introduction, middle, and ending of a scientific presentation,
- create a memorable and persuasive set of presentation slides, and
- deliver a presentation with more confidence.

INTENDED AUDIENCE

This material is intended for anyone who needs to present scientific research. Those who either have not yet presented or have made several presentations will find this course valuable.

INSTRUCTOR

Michael Alley teaches writing and speaking to engineering students at Penn State.

COURSE PRICE INCLUDES the text *The Craft of Scientific Presentations* by the instructor. This workshop is free to SPIE Student Members. You must register to attend.

Registration is required.
See SPIE Cashier to Register.

The Craft of Scientific Writing: A Workshop on Technical Writing

WS668

Course level: Introductory
CEU .35 \$125 / \$175 USD
Wednesday 1:30 to 5:30 pm

This course provides an overview on writing a scientific paper. The course focuses on the structure, language, and illustration of scientific papers.

LEARNING OUTCOMES

This course will enable you to:

- account for the audience, purpose, and occasion in a scientific paper,
- logically structure the introduction, middle, and ending of a scientific paper,
- understand how to make your language clear, energetic, and fluid, and
- avoid the most common mechanical errors in scientific writing.

INTENDED AUDIENCE

This material is intended for anyone who needs to write about scientific research. Those who either have not yet written a paper or have written several papers will find this course valuable.

INSTRUCTOR

Michael Alley teaches writing and speaking to engineering students at Penn State.

COURSE PRICE INCLUDES the text *The Craft of Scientific Writing* by the instructor. This workshop is free to SPIE Student Members. You must register to attend.

Optimizing Your Resume

WS777

Course level: Introductory
CEU .20 \$100 / \$150 USD
Monday 1:30 to 3:30 pm

Today's job market pits you against hundreds, if not thousands, of candidates who have approximately the same credentials as you do. How do you stand out in the crowd? This workshop, which concentrates on students and recent graduates, will review a number of strategies, tips, and tools that you can use to increase the impact of your resume and cover letter. We'll examine ways to translate your educational experience into a format that is attractive to potential employers, and how to create tailored versions of your job search materials for multiple targets. The process of creating your resume will be discussed, with a focus on both layout/formatting and writing style. We'll also look at cover letters, lists of references, and other materials used in your job search.

LEARNING OUTCOMES

This course will enable you to:

- translate your educational and work experience into a focused and effective resume
- avoid common mistakes and misconceptions
- learn how HR and hiring managers typically review resumes
- tailor your resume and cover letter for multiple job targets
- choose an effective layout and format to ensure maximum impact

INTENDED AUDIENCE

This material is intended primarily for students, recent graduates, and early-career professionals who want to improve the quality and effectiveness of their job search materials.

INSTRUCTOR

John Cain is a former professional resume writer, and has written more than 500 resumes and cover letters for multiple industries and professions, focusing primarily on technical fields.



Hands-On Optics (HOO)— Making an Impact with Light: Terrific Telescopes Workshop

WS852

Course Level: Introductory
CEU: .3 \$60/ \$70 USD
Sunday 9:30 am to 12:30 pm

This workshop will train attendees on the use of Terrific Telescopes, a hands-on activity kit intended to engage and enrich the math/science learning experience for students in the middle grades. It was developed as part of HOO, a four year program funded by a \$1.7 million dollar grant from the U.S. National Science Foundation (NSF) to design and implement a science enrichment program for children ages 11 to 14 years old.

INTENDED AUDIENCE

Optics professionals, university students, and pre-college teachers.

INSTRUCTOR

Robert T. Sparks earned an M.S. in Physics from Michigan State University and is a Science Education Specialist at the National Optical Astronomy Observatory in Tucson, AZ.

New Product Tutorial

Crosslight Software Tutorial on Optoelectronic Device Simulation

PT001 • Thursday 1:30 to 5:30 pm

To register for the tutorial and receive a free Crosslight Software software training license, please e-mail your contact information to piprek@nusod.org. More information on the tutorial is available at: <http://www.nusod.org/crosslight08pw.html>.

The tutorial gives an introduction to high-end simulation tools for electronic and optoelectronic devices (APSYS, LASTIP, PICS3D by Crosslight Software Inc., see www.crosslight.com). These software packages combine electrical, thermal, optical, and quantum-mechanical models in two or three dimensions. They can be applied to a large variety of semiconductor devices such as laser diodes, light-emitting diodes, solar cells, photodetectors, modulators, amplifiers, and transistors. The tutorial explains and demonstrates the basic operation of these software tools. Model options and material parameters are discussed, and strategies for obtaining realistic simulation results are outlined. Deep insight into micro- and nano-scale physical processes is provided using realistic device examples.

INTENDED AUDIENCE

Students, device engineers, and researchers who are interested in using advanced simulation software for designing and analyzing modern optoelectronic devices.

INSTRUCTOR

Joachim Piprek has been using Crosslight Software tools for more than 10 years in design and analysis of practical devices. He has published three books on semiconductor device simulation, co-chairs the annual conference on Numerical Simulation of Optoelectronic Devices, and gives device simulation courses at universities and companies worldwide. Dr. Piprek is currently president of the NUSOD Institute (www.nusod.org).



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SPIE Foundation Courses



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Foundation courses provide an introduction to and overview of the technical area they address. They are an ideal entry point for understanding core concepts and tools if you're new to a field, looking to brush up your knowledge in a specific area, or want to take a closer look at a specialization you're considering pursuing. Courses are taught by instructors with deep knowledge and years of in-the-field experience, and offer the unique opportunity to learn from some of the most accomplished optics professionals in their respective industries.

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SPIE is an authorized provider of Continuing Education Units (CEUs) through IACET—The International Association of Continuing Education and Training. SPIE awards CEUs to participants who successfully attend courses, and complete and return the evaluation form within 30 days of the course presentation. SPIE maintains a record of all CEUs earned for each participant for seven years.

SPIE reserves the right to cancel a course due to insufficient advance registration.

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Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
19 January	20 January	21 January	22 January	23 January	24 January

Biomedical Spectroscopy, Microscopy, and Imaging

SC819 Multiphoton Microscopy (MM) - Basics, Technology Development, and Applications (Periasamy, So) 8:30 am to 5:30 pm, \$520 / \$620		SC859 Single Molecule Spectroscopy and Imaging (Koberling, Enderlein) 8:30 am to 12:30 pm, \$315 / \$365	SC868 Optical Design for Biomedical Imaging (Liang) 8:30 am to 12:30 pm, \$315 / \$365		
			SC865 Microscope Design (Seward) 1:30 to 5:30 pm, \$315 / \$365		

Clinical Technologies and Systems

SC312 Principles and Applications of Optical Coherence Tomography (Fujimoto) 1:30 to 5:30 pm, \$315 / \$365
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Communication Technologies

Registration is required.
See SPIE Cashier to Register.

SC879 Next Generation Wireless Technologies: High Throughput WiFi, WiMAX, and UWB (Jain) 8:30 am to 5:30 pm, \$520 / \$620
SC880 Optical Communication Systems (Xu) 8:30 am to 12:30 pm, \$315 / \$365
SC881 Semiconductor Optical Amplifiers- Design and Applications (Dutta) 1:30 to 5:30 pm, \$370 / \$420

MOEMS/MEMS Devices, Applications, and Reliability

SC660 Nanotribology and Nanomechanics (Bhushan) 8:30 am to 5:30 pm, \$610 / \$710
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Displays and Holography

SC821 Holographic Techniques for Advanced Photonic Systems (Kostuk) 8:30 am to 12:30 pm, \$315 / \$365	SC790 Liquid Crystals: From Fundamentals to Applications (Smalyukh) 8:30 am to 5:30 pm, \$520 / \$620
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Daily Course Schedule

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
19 January	20 January	21 January	22 January	23 January	24 January

Laser Communication and Propagation

SC188	Laser Beam Propagation for Applications in Laser Communications, Laser Radar, and Active Imaging (Phillips, Andrews) 8:30 am to 5:30 pm, \$640 / \$740
SC880 NEW	Optical Communication Systems (Xu) 8:30 am to 12:30 pm, \$315 / \$365

Laser Micro-/Nanoengineering and Applications

SC743	Micromachining with Femtosecond Lasers (Nolte, Schaffer) 1:30 to 5:30 pm, \$315 / \$365	SC689 FC	Introduction to MicroMachining Using Lasers (Schaeffer) 8:30 am to 12:30 pm, \$315 / \$365	SC699	Polymer Microfabrication (Becker) 8:30 am to 5:30 pm, \$520 / \$620
		SC869 NEW	Process Fundamentals of Industrial Laser Welding (Havrilla) 8:30 am to 5:30 pm, \$520 / \$620		

Laser Source Engineering

SC752 FC	Solid State Laser Technology (Hodgson) 8:30 am to 5:30 pm, \$630 / \$730	SC744	Ultrafast Fiber Lasers (Fermann) 8:30 am to 12:30 pm, \$315 / \$365	SC861 NEW	The Basics of Physics and Engineering of Lasers (Kalisky) 1:30 to 5:30 pm, \$315 / \$365	SC818	Laser Beam Quality (Paschotta) 8:30 am to 12:30 pm, \$315 / \$365	SC860 NEW	Resonator Design for Solid State Lasers (Paschotta) 8:30 am to 5:30 pm, \$520 / \$620
	SC748	High-Power Fiber Sources (Nilsson) 1:30 to 5:30 pm, \$315 / \$365				SC869 NEW	Process Fundamentals of Industrial Laser Welding (Havrilla) 8:30 am to 5:30 pm, \$520 / \$620		
	SC746	Introduction to Ultrafast Technology (Trebino) 1:30 to 5:30 pm, \$315 / \$365							

Legend for Education Products:

Price = SPIE Member / Non-Member
 SC000 = Course Number
 WS000 = Workshop Number
FC = Foundation Course

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
19 January	20 January	21 January	22 January	23 January	24 January
MOEMS-MEMS Micro/Nanofabrication					
		SC743 Micromachining with Femtosecond Lasers (Nolte, Schaffer) 1:30 to 5:30 pm, \$315 / \$365	SC689 Introduction to MicroMachining Using Lasers (Schaeffer) 8:30 am to 12:30 pm, \$315 / \$365 FC	SC386 Advanced Thermal Management Materials for Optoelectronic and MEMS/MOEMS Packaging (Zweben) 8:30 am to 5:30 pm, \$520 / \$620	
			SC532 Micro- and Nanofluidics-Technology and Applications (Gaertner) 1:30 to 5:30 pm, \$315 / \$365	SC699 Polymer Microfabrication (Becker) 8:30 am to 5:30 pm, \$520 / \$620	
Nano/Biophotonics					
	SC309 Fluorescent Markers: Usage and Optical System Optimization (Levi) 8:30 am to 12:30 pm, \$315 / \$365	SC463 Biophotonics (Prasad) 8:30 am to 5:30 pm, \$590 / \$690 FC		SC790 Liquid Crystals: From Fundamentals to Applications (Smalyukh) 8:30 am to 5:30 pm, \$520 / \$620 NEW	SC727 Nanoplasmonics (Stockman) 8:30 am to 5:30 pm, \$520 / \$620
	SC461 Bio-Optical Detection Systems (Levi) 1:30 to 5:30 pm, \$315 / \$365				
	SC742 Nano-Photonics: Physics and Techniques (Scherer) 1:30 to 5:30 pm, \$315 / \$365 FC				
Registration is required. See SPIE Cashier to Register.					
Nanotechnologies in Photonics					
				SC608 Photonic Crystals: A Crash Course, from Bandgaps to Fibers (Johnson) 8:30 am to 12:30 pm, \$315 / \$365	
Nonlinear Optics					
	SC047 Introduction to Nonlinear Optics (Fisher) 8:30 am to 5:30 pm, \$520 / \$620 FC			SC790 Liquid Crystals: From Fundamentals to Applications (Smalyukh) 8:30 am to 5:30 pm, \$520 / \$620 NEW	

Daily Course Schedule

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Optoelectronic Materials and Devices

		<p>SC864 NEW Introduction to Optical Simulation Using the Finite-Difference Frequency-Domain Method (<i>Rumpf</i>) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>SC880 NEW Optical Communication Systems (<i>Xu</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>	<p>SC228 Fiber Laser Sources and Amplifiers for Lightwave System Applications (<i>Digonnet</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC822 Principles of GaN-based Devices (<i>Piprek</i>) 8:30 am to 12:30 pm, \$425 / \$475</p>
				<p>SC790 NEW Liquid Crystals: From Fundamentals to Applications (<i>Smalyukh</i>) 8:30 am to 5:30 pm, \$520 / 620</p>	
				<p>SC547 FC Terahertz Wave Technology and Applications (<i>Zhang</i>) 1:30 to 5:30 pm, \$315 / \$365</p>	

Optics and Optical Engineering

<p>SC212 FC Modern Optical Testing (<i>Wyant</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>	<p>SC156 FC Basic Optics for Engineers (<i>Ducharme</i>) 8:30 am to 5:30 pm, \$555 / \$655</p>	<p>SC720 Cost-Conscious Tolerancing of Optical Systems (<i>Youngworth</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>	<p>SC552 Aspheric Optics: Design, Fabrication, and Test (<i>Fischer</i>) 8:30 am to 12:30 pm, \$390 / \$440</p>	<p>SC690 Geometrical Optics (<i>Greivenkamp</i>) 8:30 am to 5:30 pm, \$620 / \$720</p>
<p>SC402 FC Understanding Lasers, Fiber Optics, and Photonics Components (<i>Ezekiel</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC001 FC Optical System Design: Layout Principles and Practice (<i>Greivenkamp</i>) 8:30 am to 5:30 pm, \$620 / \$720</p>	<p>SC011 Design of Efficient Illumination Systems (<i>Cassarly</i>) 1:30 to 5:30 pm, \$315 / \$365</p>		<p>SC825 Imaging Performance Evaluation for Digital Cameras, Cell-phone Cameras and Scanners (<i>Burns, Williams</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>
	<p>SC702 FC Optics and Optical Quality of the Human Eye (<i>Roorda</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>			
	<p>SC206 FC Polarized Light: A Practical Hands-on Introduction (<i>Fisher</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>			
	<p>SC017 FC Principles of Fourier Optics and Diffraction (<i>Gaskill</i>) 8:30 am to 5:30 pm, \$625 / \$725</p>			
	<p>SC384 The Design of Plastic Optical Systems (<i>Schaub</i>) 8:30 am to 12:30 pm, \$265 / \$365, p. 235</p>			
	<p>SC321 FC Thin Film Optical Coatings (<i>Macleod</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>			
	<p>SC003 FC Practical Optical System Design - EXPANDED 2-Day Format (<i>Fischer</i>) 8:30 am to 5:30 pm, \$983 / \$1285</p>			

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Optomechanics					
	<p>SC220 Optical Alignment Mechanisms (<i>Guyer</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>		<p>SC781 Optomechanical Analysis (<i>Hatheway</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>		
			<p>SC015 Structural Adhesives for Optical Bonding (<i>Daly</i>) 1:30 to 5:30 pm, \$315 / \$365</p>		
			<p>SC010 Introduction to Optical Alignment Techniques—2 DAY COURSE (<i>Ruda</i>) 8:30 am to 5:30 pm, \$950 / \$1180</p>		
Photonic Integration					
	<p>SC817 Silicon Photonics (<i>Michel, Saini</i>) 1:30 to 5:30 pm, \$315 / \$365</p>				
Photonic Therapeutics and Diagnostics					
		<p>FC SC702 Optics and Optical Quality of the Human Eye (<i>Roorda</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>			
Semiconductor Lasers and LEDs					
	<p>SC877 Introduction to High Power Diode Laser Technology (<i>Roh</i>) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>FC SC052 Light-Emitting Diodes (<i>Schubert</i>) 8:30 am to 12:30 pm, \$375 / \$425</p>	<p>SC869 Process Fundamentals of Industrial Laser Welding (<i>Havrilla</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>FC SC448 Diode Lasers: How to Select the Best Laser for Your Application (<i>Linden</i>) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>SC822 Principles of GaN-based Devices (<i>Piprek</i>) 8:30 am to 12:30 pm, \$425 / \$475</p>
		<p>SC657 Accurate Measurement of LED Optical Properties (<i>Tirpak</i>) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>SC011 Design of Efficient Illumination Systems (<i>Cassarly</i>) 1:30 to 5:30 pm, \$315 / \$365</p>		
			<p>SC881 Semiconductor Optical Amplifiers-Design and Applications (<i>Dutta</i>) 1:30 to 5:30 pm, \$370 / \$420</p>		
			<p>SC053 Testing and Reliability of Semiconductor Lasers (<i>Wang</i>) 1:30 to 5:30 pm, \$315 / \$365</p>		
				<p>Registration is required. See SPIE Cashier to Register.</p>	

Daily Course Schedule

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Standards

SC863 NEW Understanding ISO-10110: The Optics Drawing Standard (Aikens) 8:30 am to 5:30 pm, \$695 / \$795	SC700 FC Understanding Scratch and Dig Specifications (Aikens) 8:30 am to 12:30 pm, \$365 / \$415
	SC862 NEW Updated US and International Laser Product Certification Requirements (Stoev) 8:30 am to 5:30 pm, \$520 / \$620

Tissue Optics, Laser-Tissue Engineering, and Tissue Engineering

SC824 Diffuse Light Transport in Tissue and Diffuse Tomography Reconstruction using MATLAB (Dehghani, Pogue) 8:30 am to 5:30 pm, \$520 / \$620	SC029 FC Tissue Optics (Jacques) 1:30 to 5:30 pm, \$315 / \$365	SC858 NEW Tissue Analysis using Optical Elastography (Kirkpatrick) 8:30 am to 12:30 pm, \$315 / \$365
SC768 Optoacoustic Systems for Medical Imaging: From Principles to Clinical Applications (Oraevsky) 1:30 to 5:30 pm, \$315 / \$365		

Industry Workshops: Basic Optics

WS866 NEW Laser Safety Made Easy (Barat) 8:30 am to 12:30 pm, \$315 / \$365	WS609 Basic Optics for Non-Optics Personnel (Harding) 8:30 to 11:00 am, \$80 / \$175
WS847 Understanding Laser Beam Performance Specifications (Sukuta) 1:30 to 5:30 pm, \$315 / \$365	

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Industry Workshops: Business & Intellectual Property

WS412 Intellectual Property Issues in High-Tech Business <i>(Gortych)</i> 8:30 am to 12:30 pm, \$315 / \$365	WS867 Creating a New Technology Venture <i>(Pape)</i> 8:30 am to 5:30 pm, \$520 / \$620 NEW
WS756 How to Start a Small High Tech Business Almost Anywhere <i>(Udd)</i> 1:30 to 5:30 pm, \$315 / \$365	WS826 Strategies and Tactics for High-Tech Sales Success <i>(Johnson)</i> 1:30 to 5:30 pm, \$315 / \$365

Professional Development

WS852 Hands-On Optics: Making an Impact with Light (HOO): Terrific Telescopes Work <i>(Sparks, Walker)</i> 9:30 am to 12:30 pm, \$60 / \$70	WS777 Optimizing Your Resume <i>(Cain)</i> 1:30 to 3:30 pm, \$100 / \$150	WS667 The Craft of Scientific Presentations: A Workshop on Technical Presentations <i>(Alley)</i> 8:30 am to 12:30 pm, \$125 / \$175
		WS846 Essential Skills for Engineering Project Leaders <i>(Hinkle)</i> 1:30 to 5:30 pm, \$315 / \$365
		WS668 The Craft of Scientific Writing: A Workshop on Technical Writing <i>(Alley)</i> 1:30 to 5:30 pm, \$125 / \$175

Registration is required.
See SPIE Cashier to Register.

Moving Technology to Market™

BIOS 2008

Part of SPIE Photonics West

BIOS Exhibition Hours

San Jose Convention Center, Exhibition Hall 1

Saturday 19 January 1:00 to 5:00 pm

Sunday 20 January 10:00 am to 4:00 pm



The BIOS Exhibition features the latest biomedical applications and technologies driving the diagnostics, treatments, and instrumentation of the future. Meet the vendors behind the leading-edge clinical diagnostics and therapeutics.

How to use this directory

Biomedical Optics exhibitors are listed in alphabetical order with details about products or services each is exhibiting. Companies are additionally cross-indexed by technology areas in the Product Index on pages 69–71.

Booth numbers are provided in the Exhibitor Directory, and may be cross-referenced with the map at right. The address of each exhibitor is also listed, making this Exhibition Guide an excellent reference tool to take back to your office and share with your colleagues.

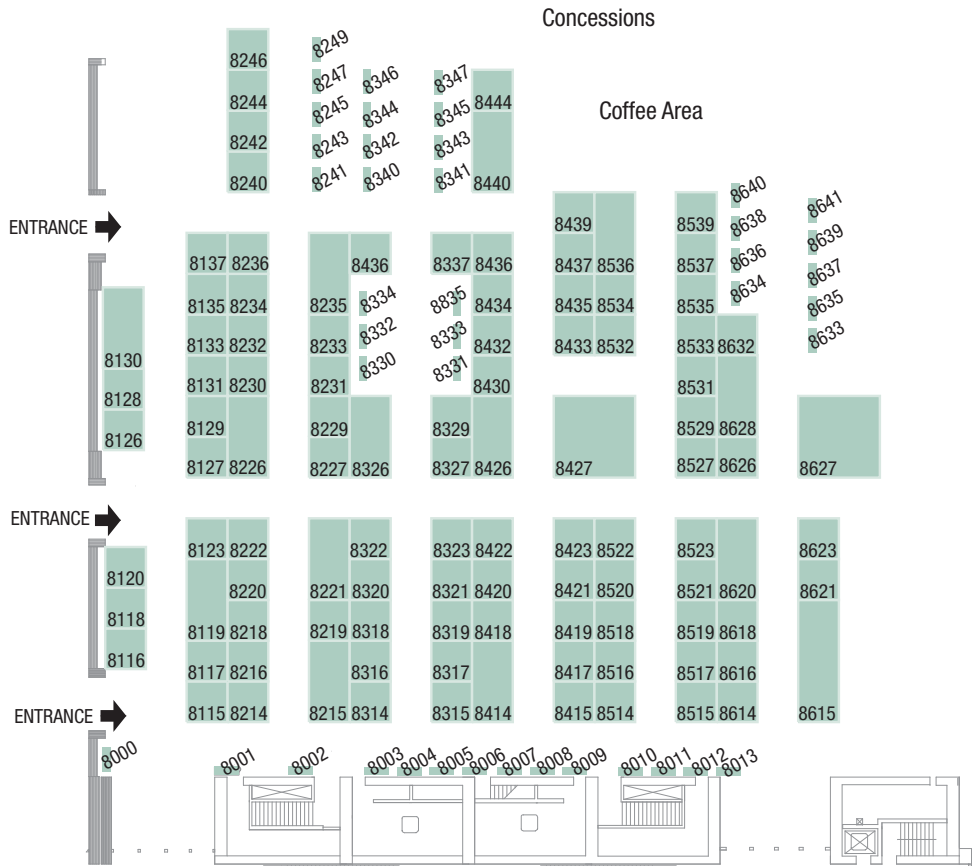
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#8346

318 Seaboard Ln, Franklin, TN, 37067
615/778-8812; fax 615/778-8816
svalle@3sae.com; www.3sae.com

3SAE Technologies, Inc. is a company with focus and expertise in developing and marketing new fiber optic tools and technologies for optical fiber fusion splicing and related applications. 3SAE holds multiple patents and awards related to optical fiber preparation and fiber optic stripping. The company provides OEM distribution for Fitel fusion splicers and Nyfors specialty fiber cleavers. Contact: Steve Valle, Vice President Global Sales.

4AD Enterprises, Inc.

#8317

19462 Jasper Hill Rd, Trabuco Canyon, CA, 92679
949/216-9012; fax 949/666-5837
bob@4adinc.com; www.4adinc.com

New Product: UFO Series: Femtosecond sources for multiphoton excitation & imaging, micro-machining: 1030-1080nm.

4AD sells and services high performance DPSS lasers and engineered materials. CW and pulsed, IR, visible and UV for biophotonics, solar cell processing, CARS, microscopy, interferometry, seeding, Ti:Sapphire pumping, MALDI-TOF MS. Up to 6 Watts average power, 1-100kHz operation, ps and ns pulse widths. Contact: Bob Tamosaitis, Sales Manager.

Aculight Corp.

#8539

SPIE CONSUMER

22121 20th Ave SE, Bothell, WA, 98021
425/482-1100; fax 425/482-1101
info@aculight.com; www.aculight.com

New Product: Capella Infrared Nerve Stimulator (Model R-1850)- Low-cost, flexible and reliable.

Aculight develops solutions to address applications that require unconventional wavelengths, linewidths, energies and other custom optical characteristics. We engineer lasers and light sources for Neurology, Dermatology, Ophthalmology, Urology, Otolaryngology, PDT and Spectroscopy. Aculight can provide semiconductor, solid state and fiber laser-based solutions. Contact: Mark Bendett, Director of Product Development, mark.bendett@aculight.com; Jonathan Wells, Biomedical Liaison/Senior Scientist, jonathan.wells@aculight.com.

AdvR, Inc.

#8317

2310 University Way Bldg 1-1, Bozeman, MT, 59715
406/522-0388; fax 406/522-0387
sales@advr-inc.com; www.adv-r.com

New Product: 488 and 532 nm Fiber in & out frequency conversion modules.

Develops and fabricates engineered photonic structures in KTP, SLT and other NLO materials, as well as laser and devices enabled by these structures. Concentrates on specialty conversion to visible wavelengths. Contact: Bob Tamosaitis, Sales Manager, bob@advr-inc.com.

Alpes Lasers

#8615

1-3 Max.-de-Meuron, Neuchatel, Switzerland, CH-2000
41 3277 99510; fax 41 3277 13619
info@alpeslasers.ch;

New Product: CW room temp Quantum Cascade Lasers devices now available on special order.

Manufacturer of Quantum Cascade Lasers - tunable infrared lasers in the 3.5 to 17 micron region operating on thermoelectric coolers (pulsed) or LN2 cooled (CW). Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

Alphion Corp.

196 Princeton Hightstown Rd Bldg 1A,
Princeton Junction, NJ, 08550
609/936-9001; fax 609/936-9002
cpeterson@alphion.com; www.alphion.com

American Society for Laser Medicine & Surgery, Inc.

2404 Stewart Ave Ste 240, Wausau, WI, 54401
715/845-9283; fax 715/848-2493
jane@aslms.org; www.aslms.org

The American Society for Laser Medicine and Surgery is the world's largest scientific organization dedicated to facilitating research, education and high standards of clinical care in the field of medical laser applications.

Amplitude Laser



One Broadway 14th Fl, Cambridge, MA, 02142
617/401-2195; fax 617/758-4101
rbraunschweig@amplitude-laser.com;
www.amplitude-systemes.com

New Product: High Power picosecond and femtosecond ultrafast fiber amplifier.

Amplitude Laser is the United States based subsidiary for Amplitude Systemes, pioneer in Ytterbium laser technology, manufactures advanced diode-pumped ultrafast lasers for scientific and industrial applications. Products include high energy oscillators (t-Pulse series) and amplifiers (s-Pulse series). Contact: Robert Braunschweig, United States Sales Manager; Eric Mottay, President & Chief Executive Officer, emottay@amplitude-sytemes.com. www.amplitude-laser.com.

Andor Technology



425 Sullivan Ave Ste 3, South Windsor, CT, 06074
860/290-9211; fax 860/290-9566
www.andor.com

Andor Technology provides digital cameras including TE cooled, hard vacuum sealed CCD, ICCD & EMCCD models with USB 2.0 connectivity & dedicated software; spectroscopy systems, accessories & software and spinning disk confocal imaging microscopy systems and software to the world's leading academic and research establishments. World-class sales, service & support for researchers and OEMs is made through our global distribution network, resource & product catalog and at www.andor.com. Contact: Chris Campillo, Regional Sales Engineer, c.campillo@andor.com; Tom Greis, Regional Sales Engineer (OEM), t.greis@andor.com.

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#8318

Asahi Spectra USA Inc.



23505 Crenshaw Blvd Ste 244, Torrance, CA, 90505
310/530-5855; fax 310/530-1739
info@asahi-spectra.com; www.asahi-spectra.com

New Product: IMS-5000 LED Profiler, Xenon light source 100W/300W, Solar simulator.

Asahi Spectra supplies high-end optical filters and instruments for biomedical optics, fluorescence microscopy, Raman research, any lasers, lithography, astronomy or solar industry. IMS-5000 LED profiler allows to measure a spectral performance, relative light intensity from the angles like a hemisphere and can show 16 figures including 2D and 3D images by the original software. Xenon light source 100W/300W can emit intensive light of specific wavelength with the original Mirror Unit and optical filters. They can be used as a solar simulator. Contact: Kiyotaka Ariyuki, Overseas Sales Department, ariyuki@asahi-spectra.co.jp; Kazuyoshi Nakazawa, Overseas Sales Department, nakazawa@asahi-spectra.co.jp.

#8010

#8245

Avo Photonics, Inc.



700 Business Center Dr Ste 125, Horsham, PA, 19044
215/441-0107; fax 215/441-9219
sales@avophotonics.com; www.avophotonics.com

New Product: Laser packaging, Vacuum sealed IR-imagers, Oxygen/pH sensors, Photometer, Fiber-coupled assemblies.

Avo Photonics provides advanced contract manufacturing services for photonic and microelectronic customers in the communications, military, aerospace, medical and industrial markets. With state-of-the-art equipment and design expertise for optical and RF products, we are able to support product development from concept through production. Contact: Mike Vinson, Vice President of Business Development, mvinson@avophotonics.com; Joseph Dallas, Chief Operating Officer, jdallas@avophotonics.com.

#8118

#8533

#8137



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19 Shea Way, Newark, DE, 19713
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info@bwtek.com; www.bwtek.com

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B&W Tek is a leader in developing and manufacturing biophotonic instrumentation. As a total solution provider, it serves Life Science and Biomedical communities by providing OED and OEM services. Products include high power and broadband SLD/SLED sources, diode-pumped solid-state lasers and high power diode/fiber lasers, UV/VIS/NIR/fluorescence/Raman spectrometers. ISO 9001 and ISO 13485 certified. For more information visit: www.bwtek.com. Contact: Meghana Kakade, Marketing Coordinator, megk@bwtek.com; Mie Mie Joe Strickler, mie@bwtek.com.

#8433

#8337

Biomedical Optics Exhibitor Directory

Barr Associates Inc.

#8244



2 Lyberty Way, Westford, MA, 01886
978/692-7513; fax 978/692-7413
barr@barrassociates.com; www.barrassociates.com

New Product: Custom optical filters (bandpass, edge, dichroic, notch) for fluorescence & Raman-based instruments.

Barr Associates, Inc. offers custom optical interference filters and coatings over the spectral range of 200nm to 40 microns, for use in a wide variety of applications including biotechnology, spectroscopy, semiconductor, environmental, color measurement, aerospace, defense, astronomy and telecommunications. Barr deploys a wide range of coating deposition technologies and manufacturing capacities to service companies across diverse markets. Contact: George Minott, Manager, Commercial Group, gminott@barrassociates.com; Boris Shnapir, Senior Applications/Design Engineer, bshnapir@barrassociates.com.

Becker & Hickl GmbH

#8615

Nahmitzer Damm 30, Berlin, Germany, D-12277
49 30 787 5632; fax 49 30 787 5732
b_and_h@boselec.com; www.becker-hickl.de

New Product: "Confocal Fluorescence Lifetime Imaging Microscope constructed by add ons to almost any microscope".

Time correlated Single Photon Counting (TCSPC) electronic modules providing PC based measurement solutions. Applications include Fluorescence Lifetime Imaging Microscopy (FLIM), Fluorescence Resonance Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS). Single photon counting detectors (MCP's, PMT's), Pulsed Diode Lasers, multichannel detector heads, routing devices for multichannel measurements, preamps, gated photon counters and multiscalers. Contact: John Devaney, Instrument Sales, jjd@boselec.com.

BioOptics World

#8344

98 Spit Brook Rd, Nashua, NJ, 03062
603/891-9231; fax 603/891-9290
katrinaf@pennwell.com; www.bioopticsworld.com

BioOptics World is an e-magazine, e-newsletter and website that tracks technology, application and business trends related to the use of optical technologies and instrumentation in the life sciences.

Biophotonics International

#8001

2 South St, Berkshire Common, Pittsfield, MA, 01201
413/499-0514; fax 413/442-3180
photonics@laurin.com; www.photonics.com/bio

Biophotonics International magazine is designed for people who are using photonic technology in medical or biotechnical products and procedures and for key researchers who are looking for new techniques and products to solve their problems. It is distributed free to those who use or apply photonics. Contact: Nancy Lamontagne, Editor, editorial@photonicsgroup.com; Jason Camboni, District Manager, advertising@photonicsgroup.com.

Bioptigen Inc.

#8618



104 T.W. Alexander Dr Bldg 2, Durham, NC, 27709
919/314-5500; fax 919/314-5501
info@bioptigen.com; www.bioptigen.com

New Product: A high-speed high-resolution imaging system for pre-clinical and industrial research applications.

Bioptigen's pioneering in vivo optical imaging technology allows life science researchers to see early-stage pathologies with unprecedented detail and clarity across a wide range of subject applications, including human, animal and inanimate. This sophisticated OCT system enables real-time non-invasive imaging of tissue microstructure at an unmatched level of precision and depth. These advances make it possible for researchers to open up new avenues of exploration and development. Contact: Eric Buckland, President & Chief Executive Officer, ebuckland@bioptigen.com; Sunita Sayeram, Applications Engineer & Imaging Specialist, ssayeram@bioptigen.com.

Bookham Inc.

#8636

2584 Junction Ave, San Jose, CA, 95134
408/383-1400
www.bookham.com

New Product: ZoroLight™ LED multiplexer, a high brightness illumination for medical & analytical applications.

The Bookham thin film coating division in Santa Rosa, California provides industry-leading optical filters for OEM applications produced using proprietary Advanced Energetic Deposition (AED) deposition technology. This hard-coating method delivers high-transmission and steep-slope filters to precision specifications in high volumes for biotech & analytical instrumentation applications. Contact: Ben Standish, Product Line Manager, Ben.Standish@bookham.com.



GENERAL REFRESHMENTS SPONSOR

Boston Electronics Corp.

#8615

91 Boylston St, Brookline, MA, 02445
617/566-3821; fax 617/731-0935
boselec@boselec.com; www.boselec.com

New Product: "Confocal Fluorescence Lifetime Imaging Microscope constructed by add ons to almost any microscope".

Products for optical signal detection and signal processing - Time Correlated Single Photon Counting electronics. Fluorescence Lifetime and Steady State Spectrometers, Quantum Cascade Lasers, Lock in amplifiers & optical choppers. UV and IR detectors. APD modules. Laser safety shutters. IR sources. Laser radar (LIDAR) receiver electronics. Contact: Fred Perry, President, fsp@boselec.com.

Breault Research Organization

#8422



6400 E Grant Rd Ste 350, Tucson, AZ, 85715
520/721-0500; fax 520/721-9630
info@breault.com; www.breault.com

New Product: ASAP lite, ASAP CAD+, ASAP OPTICAL+, ASAP Bio, ASAP Advanced.

BRO is an optical engineering firm of global reach and reputation. Industries serviced by BRO include: aerospace, automotive, biotechnology, consumer electronics, defense, medical, semiconductor and telecommunications sectors. BRO's Advanced Systems Analysis Program (ASAP®) is the leading program uniting geometrical and physical optics with optical and mechanical system modeling. BRO offers optics training, technical support and consulting services that are unsurpassed in the optics industry. Contact: Donna Hart, Global Sales Manager, dhart@breault.com; Wayne Hall, Chief Operations Officer, whall@breault.com.

LAUNCHING JANUARY 2008!

BioOptics WORLD

Advances in lasers, optics, and
imaging for the life sciences

BioOptics World is a global franchise that tracks technology, applications, and business trends related to the use of optical technologies and instrumentation in the life sciences. Comprising an eMagazine, eNewsletter, and website, BioOptics World is primarily intended for researchers and engineers involved in the design, development, and utilization of optical technologies for the study, diagnosis, and treatment of disease and disease processes. It is also designed for biologists, physicists, pathologists, forensic scientists, pharmaceutical companies, government agencies – that is, anyone interested in understanding how light interacts with the human body at the cellular, molecular, and tissue levels and what the implications of this might be for improving the diagnosis and treatment of disease.

Specific markets and applications covered in BioOptics World include molecular imaging, cancer diagnostics, spectroscopy, microscopy, cytometry, OTC, optical trapping, biosensing, microfluidics, cell biology, chemical analysis, genomics, proteomics, drug discovery, and tissue engineering. Key technologies and products covered in BioOptics World range from lasers, optics, and detectors to LEDs, fiber optics, image-processing software, and optical instrumentation.



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Calmar Optcom, Inc.

#8421



755 N Pastoria, Sunnyvale, CA, 94085
408/733-7800; fax 408/733-3800
contacts@calmaropt.com; www.calmaropt.com

New Product: Fiber Laser Based Chirped Pulse Amplification System (FLCPA): >3uJ, <0.5ps, 6~80KHz, 1550 & 1060nm.

Design, manufacture ultrashort pulse fiber laser systems and modules. Fiber laser based chirped pulse amplifier system >3mj pulse energy. Fully automatic tunable 0.4~45GHz 1~15ps actively mode-locked 1550, 1µm and 780nm; 10~100MHz, adjustable 0.1~20ps passively mode-locked 1550/1060/780nm bands, 640GHz Bit Rate Multipliers with tunable delay>200ps; Gain switched laser; Low dispersion, PM, high power EDFA and YDFA; Pulse picker; Pulse compressor; Gain Switched laser; Electrical pulse generator. Contact: Peter Hu, Dir. of Sales and Marketing, phu@calmaropt.com; Claire Chen, Vice President of Marketing, claire@calmaropt.com.

Cambridge Technology, Inc.

#8614

25 Hartwell Ave, Lexington, MA, 02421
781/541-1600; fax 781/541-1601
sales@camtech.com; www.camtech.com

New Product: PositionPro2 LabView-based Controller-Servo for galvo scan applications, built-in raster generation.

Cambridge Technology, the world's leading supplier of galvanometer solutions for industry and laser microscopy such as confocal microscopes, OCT, multi-photon microscopy, LSOs, etc. Our patented galvanometer technology and servo driver architectures provide high-speed, smooth, linear, low-jitter, constant velocity line sweeps enabling clear, crisp, accurate images from your application making Cambridge Technology the choice supplier among leading microscope companies and research institutes. Contact: David Freihofer, Director, Sales & Marketing, davidf@camtech.com.

Cascade Technologies Ltd.

#8615



Logie Court Unit A, Stirling, United Kingdom, FK9 4NF
44 1786 447721; fax 44 1786 475822
info@cascade-technologies.com;
www.cascade-technologies.com

New Product: Complete Quantum Cascade Laser System.

Quantum Cascade Laser System consisting of a pulsed QC laser driver capable of operating at high power and duty cycle. Peltier Cooling enables laser temperatures down to -45°C. Variable pulse lengths from 10ns to 10us allow the laser to be operated either in true pulsed or in quasi-CW regimes. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.



COFFEE/DESSERT BREAK SPONSOR

CeramOptec Industries, Inc.

#8226



515 Shaker Rd, East Longmeadow, MA, 01028
413/525-0600; fax 413/525-1112
salesengineering@ceramoptec.com; www.ceramoptec.com
CeramOptec Industries serves the medical and medical instrumentation markets with optical fiber, fiber bundles and assemblies. CeramOptec produces stock and custom silica / silica, PCS, hard polymer-clad silica, silver halide optical fibers, capillary tubing and low loss bundles and assemblies for UV, VIS, and IR transmission. Products for high (+380 degrees C) or low (-190 degrees C) temperature, low to high NA (0.12 to 0.53). Replacement fibers and assemblies for most medical laser systems. Contact: Cheryl Provost, Sales, cheryl.provost@ceramoptec.com; Kevin Bakhshpour, Director of Sales, kevinceramop@earthlink.net.

Chroma Technology Corp

#8432

10 Imtec Ln, Rockingham, VT, 05101
802/428-2500; fax 802/428-2525
www.chroma.com

Chroma Technology Corp. is an employee-owned company that specializes in the design and manufacture of precision optical filters and coatings. The most advanced coating techniques have been developed that provide the greatest accuracy in color separation, optical quality and signal purity economically for your OEM applications. We provide application engineering support, short cycle times and are as comfortable designing and manufacturing custom filters as we are our catalog items. Contact: Chris Conca, OEM Sales, cconca@chroma.com; Bill Chambers, OEM Sales, bchambers@chroma.com.

Chromis Fiberoptics Inc.

#8418

6 Powder Horn Rd, Warren, NJ, 07059
732/764-0900; fax 732/764-0933
info@chromisfiber.com; www.chromisfiber.com

CHROMODYNAMICS, Inc.

#8232

1195 Airport Rd #1, Lakewood, NJ, 08701
732/730-1877; fax 732/730-3547
info@chromodynamics.net; www.olinet.com

New Product: HSi-300 Hyperspectral Imaging System.

Chromodynamics, Inc. brings state-of-the-art optical imaging techniques to today's medical challenges. The company applies revolutionary spectral imaging tools based on acousto-optics to critical application areas, such as biological research, medical diagnostics and machine vision. Contact: Alex Fong, Vice President, Sales & Marketing, afong@olinet.com; Elliot Wachman, Vice President, Research & Development, ewachman@chromodynamics.net.

Coherent Inc.

#8214



5100 Patrick Henry Dr, Santa Clara, CA, 95054
408/764-4983; fax 408/764-4646
tech.sales@coherent.com; www.coherent.com

World's leading manufacturer of photonics-based products for a wide range of commercial and scientific applications. Industry's largest and most diverse selection of lasers, over 100 different standard models-plus crystals, precision optics and a wide range of laser test and measurement equipment. Highly reliable, high performance product lines include CO₂, continuous-wave, diode, diode module, diode-pumped solid-state, excimer, ion, tunable-dye, YAG, YLF, and ultrafast lasers. Contact: Aaron Johnson, Advanced Technical Sales.

Covega Corp.

#8229

10335 Guilford Rd, Jessup, MD, 20794
240/456-7100; fax 240/456-7200
info@covega.com; www.covega.com

New Product: Increased availability of 10G&40G Mod, SOA/SLD due to enhanced designs and streamlined production.

Covega Corporation has world-class proprietary technologies in InP and LiNbO₃ to produce high performance optical devices and modules at a low cost with a very small footprint. Covega is a leading provider of state-of-the-art opto-electronic components and subsystems with a wide customer base in the defense, medical, industrial, sensing, test & measurement and instrumentation. Covega's differentiator for superior product performance is based in the company's intellectual properties. Contact: Charles Bryan, Director of Product Management, cbryan@covega.com; Dan Petrescu, Chief Sales Officer, dpetrescu@covega.com.

CVI Melles Griot - Albuquerque

#8123



200 Dorado Pl SE, Albuquerque, NM, 87123
505/296-9541; fax 505/298-9908
sales@cvilaser.com; www.cvimellesgriot.com

CVI Melles Griot gets you what you need, when you need it. From the UV to the IR we offer unmatched breadth and flexibility in lasers, optical components and electro-optical assemblies. Our extensive catalog, along with our custom and build-to-print capabilities deliver solutions from prototype to high-volume, OEM quantities. Contact: Rich Drake, Sales Manager, West Coast, rdrake@cvimellesgriot.com; Chris Bridle, Sales Manager, Europe, cbridle@cvimellesgriot.com.

CVI Melles Griot - Carlsbad

#8123



2051 Palomar Airport Rd #200, Carlsbad, CA, 92011
800/645-2737; fax 760/438-5208
photonicsproducts@cvimellesgriot.com; www.cvimellesgriot.com

CVI Melles Griot gets you what you need, when you need it. From the UV to the IR we offer unmatched breadth and flexibility in lasers, optical components, and electro-optical assemblies. Our extensive catalog, along with our custom and build-to-print capabilities deliver solutions from prototype to high-volume, OEM quantities. Providing solutions for semiconductor, biotechnology, industrial, and basic research applications, CVI Melles Griot manufactures on three continents, and maintains sales and engineering centers in 11 countries worldwide. Contact: Lisa Tsufura, Marketing Manager, lasers@cvimellesgriot.com; Sherie Motakef, photonicsproducts@cvimellesgriot.com.

Dayoptics, Inc.

#8331

70 Unit A Pushang, Jinshan Industrial Zone, Fuzhou Fujian, China, 350008
340/410-9833; fax 718/690-7412
ussales@dayoptics.com; www.dayoptics.com

New Product: Different kinds of filter, such as color glass filter, bandpass filter, special filter etc.

Dayoptics manufactures crystals (Nd: YVO₄, Nd:YAG, Ti:Sapphire, BBO, LBO, KD*P, Cr:YAG, YVO₄, a-BBO, MgF₂) and optical components (Polarizer, Waveplate, Lens, Prism, Corner Cube, filter PBS) with technology of optical bonding and coating. E-O modulator, A-O Q Switch, DPSS green lasers are developed with great advantage base on the above products. High quality, on time delivery and customer satisfaction is what we pursue. Contact: Susan Zhang, Sales Manger, Sales@dayoptics.com; Bob Ruan, Sales Manger.

DenseLight Semiconductors Pte Ltd.

#8635

6 Changi North St 2, Singapore, Singapore, 498831
65 6415 4488; fax 65 6415 4468
info@denselight.com; www.denselight.com

DenseLight Semiconductors is a leading developer & manufacturer of InP-based optoelectronics devices & photonic solutions (integrating optoelectronics, fiber optics & electronics) for photonic-sensing (fiber optic, industrial monitoring, environmental, chemical, homeland-security), biomedical imaging, telecom/datacom transmission & tests. Current products are Superluminescent LEDs, ELED, Ultra Narrow Linewidth laser diodes, ASE Broadband Sources (CW/Modulated) & Tunable Single-Frequency Laser Module. Contact: Lye-Hing Chua, Vice President (Sales & Marketing), lhchua@denselight.com; Daniel Hung, Technical Sales Manager, dhung@denselight.com.

Edinburgh Instruments Ltd

#8615

2 Bain Sq, Kirkton Campus, Livingston, United Kingdom, EH54 7DQ
44 1506 425 300; fax 44 1506 425 320
sales@edinst.com; www.edinst.com

Picosecond fluorescence lifetime spectrometers based on Time Correlated Single Photon Counting (TCSPC). Nanosecond Laser Flash Photolysis in kinetic and spectral modes, steady state fluorimeters with anisotropy measurement, modular fluorescence and phosphorescence lifetime spectrometers, advanced deconvolution software and analysis tools. Contact: Bert Paul, Applications Engineer, bpaul@boselec.com.

Edmund Optics Inc.

#8527



101 E Gloucester Pike, Barrington, NJ, 08007-1380
856/547-3488; fax 856/573-6272
sales@edmundoptics.com; www.edmundoptics.com

New Product: Edmund Optics Hybrid Lens Technology merges benefits of aspheres and doublets at an affordable price.

Edmund Optics is a manufacturer, designer and distributor of optical and imaging components for medical instruments and biological research applications. Products include lenses, prisms, filters, mirrors, opto-mechanical equipment, lasers, imaging lenses, cameras, capture boards and imaging systems. Our comprehensive selection of optical components are available off-the-shelf for quick delivery or Edmund's engineers can help you design and manufacture custom components to meet your needs. Contact: Marisa Edmund, Vice President of Marketing & Communication, Medmund@edmundoptics.com; Allan Kreutzer, Vice President of Global Sales, Akreutzer@edmundoptics.com.

Electro Optics Magazine

#8241

27 Queen Sq, Bristol, United Kingdom, BS1 4ND
44 117 929 2505; fax 44 117 929 2506
drew.cameron@europascience.com;
www.europascience.com

Elforlight Ltd.

#8317

4-B Brunel Close, Drayton Fields, Daventry Northants, United Kingdom, NN11 8RB
44 1327 300069; fax 44 1327 300076
info@elforlight.com; www.elforlight.com

New Product: UFO series: Ultrafast 1 micron lasers for imaging, spectroscopy, uncaging. 100fsec, 100MHz, 250mW.

Elforlight is a UK manufacturer of high specification diode pumped solid-state lasers. 473, 488, 523, 532nm stable slm sources for fluorescence microscopy and imaging, Raman spectroscopy, cytometry. Solid-state UV lasers for MALDI, high repetition rates for MALDI imaging and high throughput applications. Short pulse lasers (IR, green, UV) for fluorescence lifetime imaging, FRET, etc. 1kHz, 1mJ green lasers for micro PIV. Dual pulse options. Contact: Keith Oakes, koakes@elforlight.com; Robert Tamosaitis, Bob@4adinc.com.

Elite Engineering Corp.

#8621

651 Via Alondra Ste 709, Camarillo, CA, 93012
805/987-6217
info@eliteeng.com; www.eliteeng.com

Providing full and semi-custom instrument and product solutions for a wide variety of applications. Specializing in robotic automation and 3D systems, we also include sensor processing systems, vision, motion control, electronic controllers, data acquisition and more. Fast turn prototypes and feasibility models. Off the shelf products: controllers and signal processing electronics. Contact: Robert Kay, President, E-info@eliteeng.com.

Biomedical Optics Exhibitor Directory

EXALOS AG

#8007

Wagistr 21, Schlieren, Switzerland, CH-8952
41 43 444 60 90; fax 41 43 444 60 99
info@exalos.com; www.exalos.com

EXALOS, an ISO 9001:2000 certified company, is developing and selling advanced Superluminescent Light Emitting Diodes (SLEDs) to the fiber optic gyroscope, medical imaging (OCT), fiber optic test equipment and sensor applications. EXALOS SLEDs operate with wavelengths from 700 to 1700 nm, optical bandwidth up to 190 nm and output power up to 50 mW. EXALOS provides customers with the optimum balance of price, time to market, performance and size for any given specification. Contact: Gene Covell, Director of Sales, covell@exalos.com.

FemtoLasers, Inc.

#8628



124 Mount Auburn St N Ste 200, Cambridge, MA, 02138
971/456-9920; fax 971/456-9922
infofli@femtolasers.com; www.femtolasers.com

Fianium Ltd.

#8222

20 Compass Point, Southampton Hampshire,
United Kingdom, SO31 4RA
44 2380 458 776; fax 44 2380 458 734
info@fianium.com; www.fianium.com



GENERAL REFRESHMENTS SPONSOR

Fiberguide Industries, Inc.

#8637

1 Bay St, Stirling, NJ, 07980-1529
908/647-6601; fax 908/647-8464
info@fiberguide.com; www.fiberguide.com

New Product: Line of Hard Clad Silica and Hard Clad Silica/Silica Fibers.

Design/engineer assemblies using not only our own silica fibers, but borosilicate glass, ESKA™ plastic optical fiber, fluoride, chalcogenide, erbium-doped and polarization maintaining fiber as well, with the widest range of endfittings/connectors and outer jackets. Design/manufacture 2D/V-Groove arrays; cables for SERCOS digital interface/VersaLink industrial automation; reflection/backscattering probes for measuring specular or diffuse reflection. FDA registered as Custom Device Manufacturer. Contact: Ron Atanesian, Eastern Regional Sales Manager, ratanesian@fiberguide.com; Patrick Fung, Technical Sales Manager, pfung@fiberguide.com.

Fibersense & Signals Inc.

#8330

4423 Fortran Ct Ste 111, San Jose, CA, 95134
408/941-1900; fax 408/941-1912
sales@fibersensefirst.com; www.fibersensefirst.com

New Product: Extended Range Multi-Wavelength Integrators™; Polymer Optical Fiber 3 wavelength Bidirectional WDMs.

Fiberoptic & photonic biomedical devices for multispectral & non-invasive diagnosis and imaging, raman spectroscopy, and PDT delivery. Multiwavelength Distributors™; MultiWave Integrator Probes™; FiberBeam™ High Power Beam Splitters; Low-loss 1xN Equi-Splitters; RGB FiberTune™ FiberWhite™ & FiberColor™ Compact Optical Sources; High Power Multiport Optical Switches; 6 port reflective stars for Flytebyte; custom products from large-core glass & polymer optical fibers and Fiber-fuse™ technologies. Contact: Don Davies, Engineering Manager, sales@fibersensefirst.com.

Fibertech Optica Inc.

#8135



330 Gage Ave Ste 11, Kitchener, ON, Canada, N2M 5C6
519/745-2763; fax 519/576-0885
jeffdup@fto.ca; www.fibertech-optica.com

Designer and manufacturer of specialty multimode all-silica, HCS, PCS, Hard Clad all-Silica fibers. Core diameters from 25µm to 2000µm. Also manufacturer of patchcords, pigtails, spot-to-line converters, bundles and reflectance probes, high power laser cables, vacuum feedthrough, linear and spaced v-groove arrays. Spectral bands coverage from deep UV to MIR. Capillaries, rods and tapers also available.

Frankfurt Laser Co.

#8130



An den 30 Morgen 13, Friedrichsdorf, Germany, 61381
49 6172 27978 0; fax 49 6172 27978 10
sales@frlaserco.com; www.frlaserco.com

New Product: Fiber coupled laser diodes 622nm-690nm single mode or multimode fiber in cooled package.

FLC supplies CW single mode and broad area laser diodes (visible 375nm-690nm, 3mW to 1.1W and IR 730nm-3800nm, 1mW to 10W), pulse IR laser diodes, superluminescent diodes in 680nm-1670nm wavelength range free space and fiber-coupled packages, high-power laser diode arrays with fiber output (2W-400W) CW and QCW, laser diode modules with high-quality glass optic, red, green, yellow and blue DPSS lasers, laser diode collimating and focusing optic, mid-IR 1.2µm-4.3µm LED lamps. Contact: V. Mazo, Sales Director, sales@frlaserco.com; Kim Kreim, Sales Manager, kim.kreim@frlaserco.com.

Fresnel Technologies, Inc.

#8115



101 W Morningside Dr, Fort Worth, TX, 76110
817/926-7474; fax 817/926-7146
info@fresneltech.com; www.fresneltech.com

Fresnel Technologies manufactures diamond machined and molded optics, as well as infrared-transmitting materials and optics made from them. Specialties include lens arrays for passive infrared applications, diffusers and microlens arrays and optics for gas monitoring at 3.4 microns. Design assistance, tooling and production services are available. We offer diamond machining for prototyping, tooling and production, including diamond machining of freeform optics. Contact: Nelson Claytor, President, nclaytor@fresneltech.com.

Fujikura Ltd.

#8126

3001 Oakmead Village Dr., Santa Clara, CA, 95051-0811
408/748-6991; fax 408/727-3415
sales@fujikura.com; www.fujikura.com

New Product: Economical image fiber: reduced cost coherent image bundles 50 to 1500 micron large core fibers.

Fujikura is a global manufacturer of optical fiber and electronics components. Products: Large core fibers, specialty singlemode fibers, laser fibers, fiber scopes, lensed fibers, coherent image fibers for endoscopy, fiber bundles, tapered fibers, capillary tubing, optical fusion splicers, test equipment, photonics components, pressure sensors. Manufactured in United States, Mexico, Japan, Thailand, China. Contact: Mingming Duan, Product Manager, Medical Fiber Optics, ming.ming.duan@aftele.com; Sean Foley, Market Development Manager, Research & Development Center, sean.foley@aftele.com.

Grintech GmbH

#8623



Schillerstr 1, Jena, Germany, 07745
49 3641 2276 0; fax 49 3641 2276 11
info@grintech.de; www.grintech.de

GRINTECH manufactures gradient index (GRIN) lenses and lens systems for applications in fiber optics, medical imaging, diode laser beam shaping and sensors technology. Contact: Anke Kraeplin, Marketing / Sales.

Hamamatsu Corp.

#8119



360 Foothill Rd, Bridgewater, NJ, 08807
908/231-0960; fax 908/231-1539
usa@hamamatsu.com; www.sales.hamamatsu.com

Hamamatsu Corporation is the North American subsidiary of Hamamatsu Photonics K.K. (Japan), a leading manufacturer of devices for the generation and measurement of infrared, visible, UV light and x-rays. These devices include photomultiplier tubes, photodiodes, image sensors, CCD cameras and light sources. Hamamatsu Photonics also offers specialized systems for semiconductor inspection, NDT and drug discovery. The company is dedicated to the advancement of photonics through extensive research. Contact: Adrienne Iguchi, Customer Support Engineer, aiguchi@hamamatsu.com; Chris DePalma, Marketing Engineer, cdepalma@hamamatsu.com.

Headwall Photonics, Inc.

#8002



601 River St, Fitchburg, MA, 01420
978/353-4100; fax 978/348-1860
information@headwallphotonics.com;
www.headwallphotonics.com

New Product: Hyperspec LC - a low cost solution for spectral imaging.

Designer and manufacturer of imaging spectrometers and high performance spectral instruments for OEMs and end-users. Core technology based holographic diffraction gratings. Instruments designed and manufactured to provide specific market differentiation to meet customer's application requirements in the lab or on the factory floor. Products: Hyperspectral sensors, Raman spectrometers, single and dual-beam spectrometers and original holographic gratings. Spectral ranges: UV through LWIR. Contact: Jay Zakrzewski, Business Development; David Bannon, Sales & Marketing.

Hellma USA, Inc.

#8522



80 Skyline Dr, Plainview, NY, 11803
516/939-0888
info@hellmausa.com; www.hellmausa.com

New Product: 4 Channel Zeiss MMS CCD Spectrometer.

Manufacturer of Hellma Optics, Photometer Cells, Fiber Optic Immersion Probes, Photometric Calibration Standards, Quartz Microplates. Cylindrical/Flat Optics, Beam Splitters and Mirrors for Laser and other applications. Supplier of Heraeus Light Sources including D2, HCL, PID, Spectral Line; Zeiss MMS/MCS Monolithic Miniature Spectrometer modules covering 190-2200nm in combination (16 bit S/N); Tec5 Interface electronics for display/readout of PDAs and CCDs. Custom designs of all products. Contact: Dan Fields, dfields@hellmausa.com; Eugene Friedmann, efriedmann@hellmausa.com.

High Q Laser (US), Inc.

#8127

118 Waltham St, Watertown, MA, 02472
617/924-1441; fax 617/924-5554
office@highq-us.com; www.highq-us.com

New Product: Ultra compact femtoREGEN™ UC OEM - an all-in-one femtosecond regenerative amplifier.

High Q Laser is a leading manufacturer of ultrafast all-diode-pumped, solid state pico- and femtosecond oscillators and regenerative amplifiers. All lasers are based on direct diode-pumping and semiconductor saturable absorber mirror (SESAM) modelocking. High Q Laser systems are compact and modular - operation and installation is easy. Sealed-off technology leads to long life times and reliability - saving time and budget. High Q Laser is the exclusive distributor of APE products in the United States America. Contact: Ted Naugler, Sales Manager, ted.naugler@highq-us.com.

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Biomedical Optics Exhibitor Directory

id Quantique SA

#8615

Chemin de la Marbrerie 3, Carouge/Geneva, Switzerland, CH-1277
41 22 301 83 71; fax 41 22 301 83 79
info@idquantique.com; www.idquantique.com

New Product: 280-900 Si APD Photon Counter for TCSPC.

The latest single photon counters from id Quantique exhibit best-in-class timing resolution and low dead time in a compact and easy-to-use module. Based on a reliable silicon avalanche photodiode sensitive in the visible and near IR spectral range, the module is able to detect weak spectral signals down to the single photon level. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

IMRA America, Inc.

#8626

1044 Woodridge Ave, Ann Arbor, MI, 48105
734/930-2560; fax 734/930-9957
lasers@imra.com; www.imra.com

IMRA is a world-leading manufacturer of compact, easy-to-use ultrashort-pulsed fiber lasers. IMRA's pioneering ultrafast technology includes Femtolite Series oscillators and FCPA μ Jewel Series amplified lasers. Maintenance-free solutions for turnkey use in nonlinear microscopy, biomedical imaging and biological ablation applications. IMRA provides lasers suitable for OEM use and easy to incorporate in lab setups. Contact: Kiyomi Monro, Director Business Development, Marketing & Sales; Phyllis McLaughlin, Administrative Coordinator.

Incom, Inc.

#8321



294 Southbridge Rd, Charlton, MA, 01507
508/765-9151; fax 508/765-0041
sales@incomusa.com; www.incomusa.com

Manufacturer of fused fiber optic faceplates, tapers and light conduits. These products have made critical contributions to many markets including genetic, medical, dental, drug research, military homeland security. Participated in designing and development of large format tapers for X-ray crystallography, microwell arrays for genome sequencing, tapers and faceplates for medical and dental X-ray, microcapillary arrays for homeland security filtration systems, inverters for military night vision. Contact: Jeff Solrai, Product Development Manager, jbs@incomusa.com; Allan Narris, Sales Engineer, aln@incomusa.com.

Infrared Fiber Systems, Inc.

#8430

2301-A Broadburch Dr, Silver Spring, MD, 20904
301/622-9546; fax 301/622-7135
info@infraredfibersystems.com; www.infraredfibersystems.com

New Product: Athermal windows for high energy lasers.

IFS manufactures infrared fibers for Er: Yag laser power delivery (Germanium Oxide glass) and sensor applications (Zirconium Fluoride glass). Fibers can be cabled or bundled and custom configurations are available. IFS also manufactures handheld infrared AOTF spectrometers and produces athermal windows and domes for high power lasers. Contact: Ken Levin, Vice President.

Innolume GmbH

#8434

Konrad-Adenauer-Allee 11, Dortmund, Germany, 44263
49 231 47730 200; fax 49 231 47730 250
info@innolume.com; www.innolume.com

New Product: 1050nm / 1060nm SOAs, 1320nm High Brightness Laser; Singlemode, high power lasers.

Innolume manufactures quantum-dot based diode light sources (lasers, gain chips, SOAs, SLDs) in the operational range of about 1050nm - 1320nm. Having all capabilities in-house we manufacture customized solutions cost efficiently and in a flexible way. Contact: Guido Vogel, Business Development Manager.

Innovative Photonic Solutions

#8000

4260 US Rte 1 Ste 3, Monmouth Junction, NJ, 08852
732/355-9301; fax 732/355-9300
srudder@innovativephotonics.com;
sswww.innovativephotonics.com

New Product: The I0785MU0350M-NL is an ultra-stable, narrow linewidth Raman source laser with > 350 mW output.

IPS specializes in the manufacture of high performance spectrum stabilized lasers for use in Raman spectroscopy, fiber laser pumping & seeding & remote sensing applications. Our technology enables us to lock the laser to any wavelength without complex feedback mechanisms. Products include multi-mode and single frequency lasers & span the 630 nm - 2400 nm wavelength range. Lasers are available in 14-Pin BF packages or in turn-key modules with integral laser and temperature control electronics. Contact: Scott Rudder, Vice President Marketing & Sales; John Connolly, President & Chief Executive Officer, jconnolly@innovativephotonics.com.

InPhenix Inc.

#8005

250 N Mines Rd, Livermore, CA, 94551
925/606-8809; fax 925/606-8810
info@inphenix.com; www.inphenix.com

InPhenix Corporation is a leading developer and manufacturer of Indium-Phosphide (InP) and Gallium Arsenide (GaAs) based active optoelectronic chips, devices and modules for the telecom, datacom, defense, biomedical and industrial markets. InPhenix's products include Semiconductor Optical Amplifiers (SOAs), Superluminescent Light Emitting Diodes (SLEDs), Fabry-Perot Lasers and Photodetectors. Contact: Kenneth Chang, Sales Manager, kchang@inphenix.com; Steve Vitkovsky, Sales Manager, svitkovsky@inphenix.com.

Instrument Design & Technology Magazine

#8633

7355 E Orchard Rd Ste 100, Greenwood Village, CO, 80111
780/528-3770; fax 780/528-3771
softpub@infowebcom.com; www.infowebcom.com

Instrument Design & Technology serves manufacturers of instruments, test, measurement and monitoring equipment in North America. To subscribe, or for more information visit: <http://www.instrumentdesignandtechnology.com/>. Contact: Jessi Carter, jessic@infowebcom.com.

Intevac, Inc.

#8640



3560 Bassett St, Santa Clara, CA, 95054
408/986-9888; fax 408/654-9869
sales@mosir950.com; www.intevac.com

New Product: MicroVista is the world's first back-thinned CMOS sensor and imaging system.

Intevac, Inc. designs, manufactures and markets sensors, cameras and integrated spectroscopy solutions for low-light imaging and spectroscopy using patented and exclusive CCD and CMOS technology. Affordable, high-performance monochromators are available for integration with Intevac detectors for spectroscopy applications. Powerful and user-friendly application software available including LabView, MatLab and Image-Pro Plus. Contact: Scott Ireland, tel. 585-256-3119, Director of Sales, sireland@intevac.com; Les Toak, Director of Business Development, ltack@intevac.com.

IRphotonics

#8342

627 Rue McCaffrey, St Laurent, QC, Canada, H4N 1T3
514/345-6982; fax 514/684-0288
corporate@irphotonics.com; www.irphotonics.com

New Product: High Power Delivery Fiber for Er:YAG lasers with high proof strength and improved transmission.

IRphotonics is a leading manufacturer of specialty fiber. We manufacture mid infrared (MIR) optical fibers and materials that can be customized for specific wavelengths and applications that include homeland security, aerospace, process analytics, medical and telecommunications among others. Using our enhanced patented ZBLAN (Fluoride Fiber) manufacturing technology as well as our unique chemical compositions, IRphotonics Inc. will lead the industry in providing quality glass and fiber at the lowest cost. Contact: Antoine Kasprzak, Director of Business Development, akasprzak@irphotonics.com; Jean-Sebastien Tasse, Director of Marketing, jstasse@irphotonics.com.

ISS, Inc.

#8319

1602 Newton Dr, Champaign, IL, 61822
217/359-8681; fax 217/359-7879
iss@iss.com; www.iss.com

ISS is a leader in frequency-domain spectroscopy lifetime instrumentation and fluorescence correlation spectroscopy data analysis and applications. The fluorescence product line includes high sensitivity spectrofluorometers and fluorescence microscopes for time-resolved fluorescence, lifetime imaging (FLIM), fluorescence resonance energy transfer (FRET) and fluorescence correlation spectroscopy (FCS). Contact: Samantha Redes, Sales & Marketing Coordinator, samantha.redes@iss.com.

JDSU

#8320



430 McCarthy Blvd, Milpitas, CA, 95035
408/546-4473; fax 408/546-5087
info@jdsu.com; www.jdsu.com

New Product: Laser Line Rejection, Fluorescence, Linear Variable Filters. Custom zero order retarders.

Designer, developer and manufacturer of high performance optical coatings and custom waveplates for Raman spectroscopy, optical coherence tomography, confocal microscopy and genomic sequencing. Leveraging decades of experience in coating design, deposition methods and metrology to meet most demanding requirements. Contact: Nada O'Brien, Product Line Manager, nada.obrien@jdsu.com; Markus Bilger, markus.bilger@jdsu.com.

JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Microoptics

#8343

Goeschwitzer Str 25, Jena, Germany, 07745
49 3641 65 2757; fax 49 3641 65 3842
microoptics@jenoptik.com; www.jenoptik-los.com

JENOPTIK Microoptics Business Unit develops and manufactures customized assemblies and optical modules for a variety of applications in industry, semiconductor fabrication, ophthalmology and the security & defense sector. Flexibility of design, manufacturing know-how and a special base of in-house technologies are the assets to warrant our product offering to be consistently extended by new solutions which are even smarter and more complex. Contact: Nadine Dietmann, Inside Sales.

JENOPTIK Laserdiode GmbH

#8227

Goeschwitzer Str 29, Jena, Germany, 07745
49 3641 654300; fax 49 3641 654392
jold@jenoptik.com; www.jold.com

New Product: Passively cooled QCW diode laser stack with ready for uses in the aerospace industry among others.

JENOPTIK Laserdiode GmbH is the diode laser manufacturer in the Jenoptik group. For years the company's main focus is centered on quality with its slogan "Quality First" which has governed its thinking and acting for many years. Therefore, today the company is the acknowledged quality leader in development, manufacturing and global distribution of high-power diode lasers. Its products are renowned in the market for their long lifetime and high reliability. Contact: Detlev Wolff, Manager Sales & Marketing, detlev.wolff@jenoptik.com; Ingolf Michler, Regional Sales Manager, ingolf.michler@jenoptik.com.

Koheras A/S

#8436

Blokken 84, Birkerød, Denmark, 3460
45 4348 3900; fax 45 4348 3901
enquiry@koheras.com; www.koheras.com

Kyosemi Opto America Corp.

#8639

3003 Bunker Hill Ln Ste 102, Santa Clara, CA, 95054
408/492-1486; fax 408/492-9843
siwashita@kyosemi-opto.com; www.kyosemi-opto.com

New Product: UV LED and PD; Shelar - Spherically shaped Photo-Voltaic Cell; InGaAs NIR Sensor.

Kyosemi has over 25 years experience designing and manufacturing components for Optical Sensing, Control Sensing, Optical Communication and Photo-Voltaic Energy using Silicon and Compound Semiconductor materials. Product line-up includes: UV LED and Photo-Detectors, InGaAs NIR PD, SiAPD, InGaAs APD, PD Arrays (Si, GaAs and InGaAs), Mini-Can (World smallest TOCAN package), VCSEL, Parallel Beam LED, Pin-Point LED, Multi-wavelength LED, SMD Package options. Contact: Steve Iwashita, Vice President Sales and Marketing, info@kyosemi-opto.com.

Lambda Research Corp.

#8117



25 Porter Rd, Littleton, MA, 01460-1434
978/486-0766; fax 978/486-0755
sales@lambdare.com; www.lambdare.com

New Product: Stop by to demo the latest releases of TracePro®, TracePro Bridge™ and OSLO® optical software.

Lambda Research develops optical design software: TracePro, for modeling and analyzing the propagation and scattering of light in biological systems, TracePro Bridge™ for SolidWorks, for 3D MCAD interoperability and OSLO® for optical design of imaging systems. TracePro®, capable to simulate fluorescence, addresses design challenges in fluorescence based bio-optical systems in applications including biosensing, In-vitro and in-vivo medical diagnostics, spectroscopy, flow cytometry and microscopy. Contact: Jim Zambuto, Principal Optical Engineer, jzambuto@lambdare.com; Barbara Calt, Director of Sales, bcalt@lambdare.com.

Biomedical Optics Exhibitor Directory

Lambert Instruments

#8319

Turfweg 4, Leutingewolde, Netherlands, NL-9313 TH
31 50 5018461; fax 31 50 5010034
info@lambert-instruments.com; www.lambert-instruments.com

New Product: The LIFA-P system for Fluorescence and Phosphorescence Lifetime Imaging Microscopy, from ps to ms.

Lambert Instruments specializes in imaging products for the scientific and industrial market with most applications in the biomedical area. The products allow low-light-level, time resolved and high-speed imaging over a wide spectral range. Standard products include a FLIM system for fast lifetime imaging on any widefield fluorescence microscope, intensified high-speed cameras, Image Intensifier camera attachments, Intensified CCD cameras and Cooled CCD cameras. Contact: Ria Oosterveld-Hut, Export Manager, Ria@lambert-instruments.com; Bert van Geest, Managing Director, lkveest@lambert-instruments.com.

L-A-Omega, Inc.

#8634

20 Central St, Arlington, MA, 02476-4809
339/368-0041; fax 781/641-9867
info@laomega.com; www.laomega.com

New Product: Spectroscopy lens for Kodak telecentric F2.8 CCD sensors with 7.4µm pixel and microlens array.

L-A-Omega strives to provide a unique blend of art and science to the development of optical instruments. The science of a mathematical model is applied to the art of production towards minimum cost and maximum quality. L-A-Omega is now developing excitation and collection systems for fluorescent applications with its new spectroscopy lens as the foundation. Maximum collection without contrast reduction translates to lasting value in fluorescent applications. Contact: George Seward, Optical Engineer, gseward@laomega.com.

Laservision USA

#8616

595 Phalen Blvd, Saint Paul, MN, 55130
800/393-5565; fax 651/357-1830
info@lasersafety.com; www.lasersafety.com

LASERVISION•USA is your leading source for laser protective equipment. We are the market leader in design, manufacturing and distribution of safety solutions for all laser applications. Our laser safety solutions include eyewear, barrier and curtain systems, viewing windows, signs and labels and safety training. Contact: Tom Poole, Sales Manager, tom.poole@lasersafety.com; Jeremy Erickson, Sales, jeremy.erickson@lasersafety.com.

Light Age, Inc.

#8129

500 Apgar Dr, Somerset, NJ, 08873
732/563-0600; fax 732/563-1571
sales@lightage.com; www.lightage.com

New Product: Portable and powerful Q-Clear™ Laser FDA cleared for removal of tattoos and pigmented lesions.

Light Age is the leading supplier of alexandrite laser systems worldwide for almost every application from laser hair removal to atmospheric lidar. It develops, manufactures and markets solid-state laser systems for aesthetic procedures and medical device Research and Development. Standard laser products, FDA Approved, include our new ultra compact Q-Clear™ for treatment of age spots, pigmented lesions & tattoos, the Epicare™ for hair removal and Ta2 Eraser™ for tattoo removal. Contact: Myla Papariello, National Sales Director, myla@lightage.com; Mirna Gonzalez, Marketing Manager.

Lightwaves2020, Inc.

#8520

1323 Great Mall Dr, Milpitas, CA, 95035
408/503-8888; fax 408/503-8988
sales@lightwaves2020.com; www.lightwaves2020.com

New Product: Fluorescence filters, Raman filters, Laser line filters, Dichroic filters, Polarization controllers.

Lightwaves2020 is an innovative technology company specializing in fiber optics for optical monitoring, test and measurement of wavelength, power and polarization. It designs and manufactures high performance optical thin film products for applications from biomedical imaging, raman spectroscopy, lasers and optical instrumentation. Contact: James Pang, Director of Sales/Marketing, jpang@lightwaves2020.com; David Gong, Sales Account Manager, dgong@lightwaves2020.com.

LINOS Photonics, Inc.

#8341

SPIE

459 Fortune Blvd, Milford, MA, 01757-1723
508/478-6200; fax 508/478-5980
info@linos-photonics.com; www.linos-photonics.com

Custom designs. Linos has produced a diffraction-limited 50mm focal length scan lens at 488nm for a custom micro array reader and a 6.7mm focal length lens that required a high N/A and had to be low in weight. We designed the incorporation of a cooled CCD camera, optics, a high-power light source, fluorescent filters and filter wheels. Linos can also re-design an existing lens design. Our engineers were able to reduce the size, weight and cost and still be able to meet demanding requirements. Contact: Dennis Chepulis, Business Division Manager, Dennis.Chepulis@linos.com; Frank Guse, Business Unit Manager, Bio Photonics, Frank.Guse@linos.de.

Mad City Labs, Inc.

#8235

2524 Todd Drive, Madison, WI, 53713
608/298-0855; fax 608/298-9525
sales@madcitylabs.com; www.madcitylabs.com

New Product: Nano-F200, closed loop 200 micron piezo objective lens positioner for microscopy and inspection.

Mad City Labs designs and manufactures high precision, piezo based nanopositioning devices for research and industry. As leaders in innovative design, our products incorporate true flexure guided (decoupled) motion, proprietary PicoQ sensor technology and closed loop control. Our PicoQ sensors outperform traditional capacitive sensors with extremely low drift and superior stability. System attributes include picometer resolution, high speeds, real time position sensing. Contact: Dale Baldwin, Technical Sales; Shannon Ghorbani, Technical Sales, mclgen@madcitylabs.com.

Medical Laser Report

#8641

98 Spit Brook Rd, Nashua, NH, 03062
603/891-0123; fax 603/891-0574

Megaopto Co., Ltd.

#8249

2-17-5 Maruyamadai, Wako Saitama, Japan, 351-0112
81 48 469 3377; fax 81 48 469 3332
megasales@megaopto.co.jp; www.megaopto.co.jp

Melles Griot - See CVI Melles Griot

#8123

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Photonics Industry & Technology in Canada



Visit the Canada Pavilion (booth #6098) and meet great Canadian companies and the Canadian Photonics Fabrication Centre offering a variety of products and prototyping services and leading technologies. The Canada Pavilion also represents the major photonics clusters nationally, Canadian Photonics Consortium, and provincially, the Quebec Photonic Network and the Ontario Photonics Industry Network.

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Canadian Photonics Consortium
Consortium photonique du Canada
www.photonics.ca

Biomedical Optics Exhibitor Directory

MEMS Optical Inc.

#8343



205 Import Cir, Huntsville, AL, 35806
256/859-1886; fax 256/858-0581
info@memsoptical.com; www.memsoptical.com

MEMS Optical, Inc. is a leading supplier and manufacturer of high performance refractive and diffractive microoptics and MEMS devices. MEMS Optical provides solutions to diverse markets such as fiber optic communications, military and aerospace, industrial and semiconductor equipment and biomedical industries. MEMS Optical continues to develop and improve microoptics applications through the use of grayscale technology and other proprietary processes.

MICOS USA

#8532



15375 Barranca Pkwy Ste G-101, Irvine, CA, 92618
949/480-0538; fax 949/480-0538
info@micosusa.com; www.micosusa.com

MICOS serves the high-precision positioning market including industry and research with an emphasis on laser and micro-wave technology, communications, semi-conductor technology and micro-manipulation. We offer a wide range of precision positioners and control electronics as well as complete system integration services. Additionally, MICOS is known as the premier supplier for vacuum, clean room and extreme temperature applications. Contact: Manfred Schneider, mschneider@micosusa.com.

Micro Care Corp.

#8220



595 John Downey Dr, New Brittan, CT, 06051
860/827-0626; fax 860/827-8105
techsupport@microcare.com; www.microcare.com

New Product: Precision Optical Cleaner - a nonflammable solvent replacement for alcohol and acetone.

MicroCare is the world leader in critical cleaning, including photonics, optical devices and fiber optics. Our high-performance, non-aqueous cleaners are perfect for lenses and other photonics. These dense solvents dissolve oils and lift away buffing compounds. They instantly remove water from surfaces without energy-wasting heat or air knives. Nonflammable, they out-perform IPA and acetone, are safe for coatings, protect your people and the environment and are easy to ship, store and handle. Contact: Tech Support.

Micro Laser Systems, Inc.

#8514



12841 Western Ave Ste H, Garden Grove, CA, 92841
714/898-6001; fax 714/897-0979
sales@microlaser.com; www.microlaser.com

New Product: Fermion III Series 100-500mW Turnkey Fiber Coupled Lasers.

We're a manufacturer of Diffraction Limited Free Space and Fiber Coupled Diode Laser Systems. Most lasers have single longitudinal mode with high stability or are DFB type with even narrower linewidths. Wavelengths range from 375nm to 1600nm. Accessories include beam expanders, focusing optics, fiber collimators, singlemode and PM fiber splitters and wavelength combiners complement. Semi-custom and custom lasers and fiber systems are routinely manufactured for OEM users. Contact: Norma Adachi, Marketing, norma@microlaser.com.

Mindrum Precision, Inc.

#8230



10000 Fourth St, Rancho Cucamonga, CA, 91730
909/989-1728; fax 909/987-3709
sales@mindrum.com; www.mindrum.com

Specializing in Complex Shapes in glass, quartz, ceramic and exotic materials. We also work with metals and plastics. Prototype and production quantities, engineering services available. Precision polishing, lapping (including double-sided), grinding, redrawing, I.D./O.D., small diameter drilling of holes, laser engraving, class 1000 clean room, chemical etching, manufacturer of flow cells. Manufacture and distribute of Eye Safe Laser Range Finders. All products and services provided are Made in the USA. Currently building a new expanded facility in Houston, TX. Visit us at our web site, www.mindrum.com. Contact: Todd Van Son, Sales Manager. Linda Kondris, Technical Sales. Adam Pohl, Manager of Laser Systems.

MPA Crystal Corp.

#8437

1032 Irving St #968, San Francisco, CA, 94122
415/681-2185; fax 415/681-0787
mpa@mpa-crystal.com; www.mpa-crystal.com

New Product: Sapphire optics, Crystal quartz, Optical glass, Fused silica, Silicon, Germanium and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specs. Also provides optics made of Crystal quartz, Optical glass, Fused silica, Silicon and Germanium. Coating is available as well. Products include Windows, Substrates, Lenses, Prisms, Rods, Spheres, Cylinders and more. Contact: Pauline Liang, Chief Executive Officer.

MPB Communications Inc.

#8321



147 Hymus Blvd, Pointe-Claire, QC, Canada, H9R 1E9
514/694-8751; fax 514/694-6869
info@mpbc.ca; www.mpbcommunications.com

New Product: 1 WATT ORANGE! New! High-Power 592 nm Orange Fiber Laser.

Since 1977, MPBC has been manufacturing high-performance photonic products for the military, telecommunications, industrial and research markets. MPB Communications Inc. will be exhibiting Visible Fiber Lasers that output 1 or 2 W in the yellow, green and orange regions; Compact Excimer lasers; Low power consumption and small size Yb lasers and EDFAs; High Power EYDFAs and Yb Lasers; high-power EFAs, C- and L- Band Erbium Broadband Sources, CombSources, FBGs, Mode-Locked Fiber Lasers, etc. Contact: Claudette Linton, Account Executive, claudette.linton@mpbc.ca; Kim Boumansour, Account Executive, kim.boumansour@mpbc.ca.

Multiwave Photonics

#8340

Rua Eng Frederico Ulrich 2650, Moreira da Maia, Portugal, 4470-605
351 22 9408260; fax 351 22 9408261
jsalcedo@multiwavephotonics.com;
www.multiwavephotonics.com

National Aperture, Inc.

#8246

16 Northwestern Dr, Salem, NH, 03079
603/893-7393; fax 603/893-7857
sales@nationalaperture.com; www.nationalaperture.com

New Product: New Product: NAI announces the release of the MM-3M-F-LS-NM nanometer stage w/ 15-25nm resolution.

National Aperture, Inc. provides a complete line of state-of-the-art pinhole, air slit, high-power slit and pinholes, target apertures, etc. in standard and exotic materials. We accept custom-designed aperture configurations. We also manufacture precision manual and motorized micro-positioning linear and rotary stages for both standard and vacuum-compatible working environments, motion control systems and software. www.NationalAperture.com. Contact: Kevin M. Yonge, Sales Manager - Motion Systems, kyonge@NAIMotion.com; Paul Ziarnowski, Sales Manager - Aperture Systems, pziar@NationalAperture.com.

Newport Corp.

#8426

1791 Deere Ave, Irvine, CA, 92606
949/863-3144; fax 949/253-1680
sales@newport.com; www.newport.com

At Newport we believe that the best way to enhance life and fuel discovery is to support experts, by being experts. As a global company, we draw upon expertise from around the world to deliver knowledge and solutions that manage and measure light. Combined with the expertise from Spectra-Physics Lasers, Oriel Instruments, Richardson Gratings and Corion Fluorescence Filters, we partner with scientists, engineers and OEMs to provide them with solutions that help make a world of difference. Contact: Gary Spiegel, Vice President Sales and Services, gary.spiegel@newport.com.

Nikon Instruments Inc.

#8515

1300 Walt Whitman Rd, Melville, NY, 11747
631/547-8500; fax 631/547-8652
microscopysales@nikon.net; www.nikonusa.com

New Product: A1, Nikon's new fully automated point scanning confocal, fast x-y galvos, 15 MHz resonance scanner.

Nikon Instruments Inc. is exhibiting the newest advanced live cell imaging technologies including the new Ti Perfect Focus Inverted Research Microscope with constant, dynamic focus correction for longterm time lapse experiments, fully integrated with the advanced A1 confocal dual scanner system. New AZ100 "Multi-Zoom" hybrid macro-scope with NIS-Elements advanced imaging software, bridging the gap between micro and macro imaging with a total system solution.

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COFFEE BREAK SPONSOR

NoIR LaserShields

#8439

6155 Pontiac Trl, South Lyon, MI, 48178
800/521-9746; fax 734/769-1708
david.bothner@noirlaser.com; www.noirlaser.com

New Product: Introducing the #38 LaserShield frame--the most universal ever.

CE-certified LaserShields are made in the USA and offer the highest levels of protection, visibility and comfort for the world of laser applications. NoIR specializes in custom frequency absorption and all Lasershield filters are available in a variety of adjustable and universal frame styles, all with a lifetime warranty. NoIR announces certified LaserShields for femtosecond pulses, plus several new multi-line alignment filters and the new Ultra High Visible Light Transmittance Filters. Contact: David Bothner, Marketing Director; Mary Klinke, International Sales, mary.klinke@noirlaser.com.

Novacam Technologies Inc.

#8345

277 Lakeshore Rd Ste 04, Pointe-Claire, QC, Canada, H9S 4L2
514/694-4002; fax 514/630-6420
info@novacam.com; www.novacam.com

New Product: Microcam-4D SS-OCT Swept Source Optical Coherence Tomography System used for real-time imaging.

Novacam Technologies is manufacturer of OCT-Optical Coherence Tomography detectors for cross section imaging of the tissue for biomedical applications and fiber-based profilometers based on low coherence interferometry with precision of less than 1 micron μm . Profilometers are used for surface mapping and inspection, roughness measurements, process control, multi-layer film thickness, deposition testing, metrology and profilometry in inhospitable environments and restricted spaces. Contact: Bartulovic Vuk, President, sales@novacam.com.

Nutfield Technology, Inc.

#8003

49 Range Rd, Windham, NH, 03087
603/893-6200; fax 603/893-6214
www.nutfieldtech.com

Ocean Optics, Inc.

#8536

SPIE GROUP
830 Douglas Ave, Dunedin, FL, 34698-5761
727/733-2447; fax 727/733-3962
info@oceanoptics.com; www.oceanoptics.com

Omega Optical, Inc.

#8215

Delta Campus, 21 Omega Drive, Brattleboro, VT, 05301
802/254-2690; fax 802/254-3937
sales@omegafilters.com; www.omegafilters.com

Omega Optical offers standard and custom optical filters. The extensive range of products includes bandpass, longpass/shortpass, rejection bands, dichroic beamsplitters/mirrors, neutral density, laser line, analytical, astronomy & fluorescence filters. Omega Optical adds in Dual Magnetron Reactive Sputtering coating capability to satisfy requirements for high-performance surface coatings. Contact: Ruth Gorham-Houle, Vice President of Business Development, rgorham@omegafilters.com.

Ophir-Spiricon

#8247

60 W 1000 N, Logan, UT, 84321
435/753-3729; fax 435/753-5231
sales@ophir-spiricon.com; www.ophir-spiricon.com

OPOTEK, Inc.

#8521

2233 Faraday Ave Ste E, Carlsbad, CA, 92008
760/929-0770; fax 760/929-8782
opotek@opotek.com; www.opotek.com

Biomedical Optics Exhibitor Directory

Optek Systems

#8347

111 Smith Hines Rd Ste C, Greenville, SC, 29607
864/272-2640; fax 864/272-2630
osi@opteksystems.com; www.opteksystems.com

New Product: OpTek features a laser processing facility in North America. Outsource your Research & Development thru to production.

OpTek Systems provides precision laser materials processing. Featuring sub-contract machining services, process development and fully automated laser machining centers for volume production. Applicable to fiber optics, biophotonics, medical device, opto-electronics, micro-electronics, semiconductor, automotive as well as universities and researchers. Visible to UV lasers facilitate micromachining of most materials including metals, glass, polymers, plastics, ceramics and quartz. Contact: Andrew Webb, Vice President Sales, andy.webb@opteksystems.com; Gideon Foster-Turner, Head of Business Development, gideon.ft@opteksystems.com.

OphUS

#8218

PO Box 70056, Sunnyvale, CA, 94086
408/343-0197; fax 408/343-0197
pw2008@oph.us; www.oph.us

New Product: THz spectroscopy system and testing. THz detectors, tunable lasers & sensors. Data storage systems.

OphUS develops Terahertz Technologies for bio-medical diagnostics, chemical sensing, water quality, nanomaterials & semiconductor characterization. Laser technologies measurements. OphUS-Silicon Valley company offers ADVANCED LAB TESTING for local biotech companies, medical centers: FIR -THz spectroscopy & imaging, proteins-DNA spectroscopy & nanostructure analysis, water quality testing. Customized IT service: real time data acquisition & analysis, biometric security access & storage. Contact: Galina Chebotareva, President.

Optical Comb, Inc.

#8534

Tokyo Tech Yokohama Venture Plaza W103 4259-3,
Nagatsuta-cho, Midori-ku Yokohama, Japan, 226-8510
81 45 982 2213; fax 81 45 982 2215
info@optocomb.com; www.optocomb.com

New Product: High Speed Swept Source, Pico-second Optical Pulse Source.

Optical Comb manufactures a programmable high speed swept source which is applicable to optical spectroscopy, fiber sensing and especially to Optical Coherence Tomography in medical field. By using this light source it can reduce process time of rescaling to frequency-domain. Also manufactures a pico-second optical pulse source with tunable repetition rate and high output peak power which is applicable to a light source for two-photon-absorption, bio imaging, testing and various applications. Contact: Shuko Kogiso, Manager, kogiso@optocomb.com; Shigenori Matsui, General Manager, smatsui@optocomb.com.

OPTICS 1, Inc.

#8221

3050 Hillcrest Dr Ste 100, Westlake Village, CA, 91362
805/373-9340; fax 805/373-8966
info@optics1.com; www.optics1.com

OPTICS 1, Inc.'s uniquely experienced staff has the broad background to design, develop, prototype and manufacture precision electro-optical systems for commercial and government applications. We leverage our expertise in end-to-end system design within the disciplines of optics, electronics, mechanics and software to deliver state-of-the-art integrated systems.

optics.org - Optics & Laser Europe

#8632

Dirac House, Temple Back, Bristol, United Kingdom, BS1 6BE
44 117 930 1281; fax 44 117 929 4318
custserv@iop.org; www.iop.org

IOP Publishing, a not for profit company wholly owned by the Institute of Physics, is one of the largest and most dynamic publishers of physics information in the world. Our publishing activity, which dates back to 1874, includes a wide range of journals, magazines and community websites. We partner more than a dozen international organizations and have a global network of offices located in Bristol, Philadelphia, Washington DC, Munich, St Petersburg, Moscow, Beijing and Tokyo. Contact: Fiona Walker, Exhibitions Manager, fiona.walker@iop.org; Cadi Jones, Advertising Manager, cadi.jones@iop.org.

OptoElectronic Components (OEC)

#8243

 SPIE

28 Des Lilas St., Kirkland, QC, Canada, H9J 4A7
514/694-0336; fax 514/694-8535

sales@optoecomponents.com; www.optoecomponents.com

New Product: Photon Counting Energy Discriminating X-Ray Detectors.

Supplier of single photon counting detector modules with 30ps timing resolution from Micro Photon Devices, TCSPC electronics and software from PicoQuant, EM-CCD and intensified CCD with near Photon Counting capabilities from Photonic Science and Photon Counting Energy Discriminating X-Ray detectors from Gamma Medica-Ideas. Contact: Nick Bertone, President; Natalie Raymond, Marketing, Natalie.Raymond@optoecomponents.com.

OXXIUS

#8322

4 Rue Louis de Broglie, Lannion, France, F-22300
33 2 96 48 70 28; fax 33 2 96 48 21 90
info@oxxius.com; www.oxxius.com

New Product: High power, ultra-stable single-frequency & low noise DPSS lasers (473, 532, 561 nm).

Oxxius manufactures ultra compact, extremely stable Diode Pumped Solid-State (SLIM) and Diode Laser (Oxxius Violet) modules in the visible and ultraviolet wavelength range (at 561, 532, 473, 445, 405 and 375nm). The patented Alignment-free Monolithic Resonator technology assures stable, noise-free single-frequency operation with unmatched efficiency. These features of the SLIM-series ensure superior performance in biomedical, analytical, interferometric or sensing applications. Contact: Bruno Acklin, US Business Unit, General Manager, backlin@oxxius.com; Bruno Lefèvre, Europe & Asia Sales Director, blefevre@oxxius.com.

OZ Optics Ltd.

#8013

 SPIE

219 Westbrook Rd, Carp, ON, Canada, K0A 1L0
613/831-0981; fax 613/836-5089

sales@ozoptics.com; www.ozoptics.com

New Product: High Power/Temperature Fiber Optic Connectors with shutters and Inline Optical Tap/Monitors.

Distributed Temperature and Strain Sensors, Fiber Length Meter, High Power Patchcords, Isolators, Collimators/Focusers, PM/SM/MM Fused Fiber Couplers, Polarization Maintaining Patchcords/Connectors/Splitters, Polarization Rotators/Controllers/Analyzers, Polarizers, Polarizing Splitters/Combiners, RGB Combiners, Tapered Fibers, Turnkey Laser Diode Sources, U-Bracket, V-Grooves, Vacuum Feedthroughs, Directional Taps/Power Monitors, Extinction Ratio Meter, Hermetically Sealable Patchcords. Contact: Omur Sezerman, Chief Executive Officer and President, sales@ozoptics.com.



Arizona where optical technology breakthroughs happen.

Exhibiting Sponsors

Breault Research Organization, Inc.

Tucson, Arizona
Booth #422
www.breault.com

ESDI

Tucson, Arizona
Booth #414
www.engsynthesis.com

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ASML
Doctor Optics, Inc.
Finetech USA
Lincoln Laser Corporation
NP Photonics, Inc.
University of Arizona

Biomedical Optics Exhibitor Directory

Paradigm Lasers, Inc.

#8333



1620 N Mamer Rd Ste C-100, Spokane Valley, WA, 99216
509/232-2040; fax 509/232-1947
sales@paradigmlasers.com; www.paradigmlasers.com

New Product: Paradigm will be unveiling its latest innovation. You have got to see this!

Paradigm Lasers, Inc. designs, develops and manufactures, diode pumped, solid-state, laser solutions, from pump modules and drive electronics to fully integrated systems, incorporating our unique, patented, radial pumping technology. Our modular designs with scalable power, high brightness technology are certain to meet your laser requirements. Additional products include the PolaScope, an intuitive tool for measuring & displaying polarization and Night Sun night vision products. Contact: Judy Irwin, Vice President, judi@paradigmlasers.com; Tim Irwin, President, timi@paradigmlasers.com.

Pavilion Integration Corp.

#8011



2380 Qume Dr Ste F, San Jose, CA, 95131
408/453-8801; fax 408/453-8802
info@pavilionintegration.com; www.pavilionintegration.com

Photon Engineering, LLC

#8516



440 S Williams Blvd Ste 106, Tucson, AZ, 85711
520/733-9557; fax 520/733-9609
info@photonengr.com; www.photonengr.com

New Product: FRED 6.100 now models fluorescence and tissue scatter for medical applications.

FRED 6.100 is the premier proven optical engineering software to visualize and solve today's leading edge medical and optical engineering problems. FRED is an easy to use 3D virtual prototyping CAD environment that reduces time and costs to develop and prototype New Products and find problems and revise older products. Import or create any CAD model and then propagate incoherent rays or coherent beams reflecting, refracting, scattering, diffracting or absorbing light in any biological medium. Contact: Carolyn Johnson, Sales Manager, sales@photonengr.com.

Photonic Products Ltd.

#8326



Pierce Williams, Sparrow Ln, Hatfield Broad Oak Herts,
United Kingdom, CM22 7BA
44 1279 717170; fax 44 1279 717171
sales@photonic-products.com; www.photonic-products.com

New Product: 532nm green TEC laser module gives stability & wavelength precision for biomedical & laboratory use.

Photonic Products is an ISO9001:2000 certified UK manufacturer of laser modules, laser diode assemblies, electro-optical subassemblies and precision machined components which deliver performance and manufacturing efficiencies to OEM companies in biomedical, medical and scientific markets. Photonic Products is an authorized distributor of premium quality laser diodes and optical lenses from Sanyo, Sony, Opnext and Panasonic. Photonic Products is a StockerYale (NASDAQ: STKR) company. Contact: David Stephen, Sales Manager, USA, salesusa@photonic-products.com; Gary Polio, Sales Manager, Eastern USA and Eastern Canada, salesusa@photonic-products.com.

Photonics.com/Photonics Directory

#8440

2 South St, PO Box 4949, Pittsfield, MA, 02102-4949
413/499-0514; fax 413/442-3180
Directory@laurin.com; www.photonics.com

Photonics.com is the only complete on-line source of photonics information developed by the leading photonics publisher for over 50 years. This Web site includes daily news, New Products and feature articles. Fully searchable, it provides access to the contents of the award-winning *Photonics Spectra* and *The Photonics Directory*. Additional features are the *Photonics Dictionary*, an industry employment center and event calendar. Contact: Susanna Rogers, Regional Sales Manager, sue.rogers@laurin.com.

Photron USA, Inc.

#8120



9520 Padgett St Ste 110, San Diego, CA, 92126-4446
858/684-3555; fax 858/684-3558
image@photron.com; www.photron.com

New Product: Fastcam SA1: Mega pixel at 5K fps with superb sensitivity. Fastcam MH4: 2K fps tiny hi-G camera heads.

Photron offers the widest and most innovative range of high speed cameras available. Systems include: Fastcam SA1: Superb sensitivity and 12-bit image quality, with mega pixel resolution to over 5,000 fps (frames per second). Fastcam MH4: Four sub-compact CMOS camera heads connect to a single processor 10m away, with battery backup built in. FocusScope SV-200: Uses a Gen III ii to image biofluorescence at speeds as high as 2,000 fps. A wide range of PC based and stand alone slow motion systems. Contact: Andrew Bridges, Director Sales/Marketing.

PI (Physik Instrumente) LP

#8627



16 Albert St, Auburn, MA, 01501
508/832-3456; fax 508/832-0506
info@pi-usa.us; www.pi-usa.us

Global leader in Nanopositioning Systems & Engineered Piezo Actuation Solutions for OEM & Research. Products: Hexapod 6D Alignment Systems; Piezo Nanopositioning Stages (Closed-Loop); Scanners for SPM, AFM, SNOM; Piezo Actuators; Ceramic Linear Motors, Piezo Drivers & Digital Controllers, Advanced Multi-axis Micropositioning Systems; Advanced Motion Controllers; Ultrafast Steering Mirrors/Active Optics; MicroMotion Robots for automated 3D to 6D photonics alignment; NanoAutomation Solutions. Contact: James Gareau, Director of Sales East Region, jimg@pi-usa.us; David Steinberg, Director of Sales West Region, davids@pi-usa.us.

PicoQuant GmbH

#8427

61 Union St, Westfield, MA, 01085
413/562-6161; fax 413/562-6167
sales-usa@picoquant.com; www.picoquant.com

PicoQuant is the leading supplier of picosecond pulsed diode lasers & intensity modulated diode lasers up to the GHz range and instrumentation for time-correlated single photon counting (TCSPC). Based on these technologies, PicoQuant builds systems for fluorescence lifetime measurements in sensitive analysis down to the single molecule for applications that include FLIM, FCS, FRET or anisotropy. United States Contact: Alain Bourdon, Sales Director, arb@als-sales.com.

Piezosystem Jena, Inc.

#8004

54 Hopedale St, Hopedale, MA, 01747
508/634-6688; fax 508/634-6868
usa@piezोजना.com; www.piezोजना.com

New Product: nanoMIPOS400 CAP Maximum motion 450 μ m Integrated passive damping system and high resonant frequency.

A world leading company in development, design and engineering of piezo electrical actuator based positioning systems specializing in flexure stages with an innovative push-pull design capable of handling highly dynamic applications under high load conditions. Optical group develops fiber multiplexers for spectroscopy applications. Contact: Jim Litynski, President, jim@piezोजना.com; Peter Viglas, Sales Engineer, peter@piezोजना.com.

Point Source

#8116



Ensign Way, Mitchell Point, Hamble Southampton, United Kingdom, SO31 4RF
800/898-6504; fax 44 2380 744 501
sales@point-source.com; www.point-source.com

New Product: iFLEX-Viper: a compact multi-line laser source with a modular singlemode fiber delivery system.

Point Source designs and manufactures high performance fiber optic laser delivery systems and lasers for a wide range of commercial applications. We offer a personalized service, producing fully customized products to fit your exact fit, form and functional requirements. We excel in product performance and reliability. That's why our solutions are chosen by the world's leading instrument manufacturers for the most demanding applications in biotechnology and semi-conductor manufacturing. Contact: Fiona Evans, Field Sales Engineer - USA, fiona.evans@point-source.com; Anne Short, Field Sales Engineer - Europe, anne.short@point-source.com.

PolarOnyx, Inc.

#8529



470 Lakeside Dr Ste F, Sunnyvale, CA, 94085
408/245-9588; fax 408/245-9587
jianliu@polaronyx.com; www.polaronyx.com

New Product: Low cost high power supercontinuum fiber laser.

World leading company in high energy/power ultrashort (fs, ps, ns) and super continuum fiber lasers. Its features of fiber delivery, stability, turn-key and maintenance-free operation are excellent for micro surgery, spectroscopy and biomedical applications. Wavelength ranges from VIS to IR. Contact: Jian Liu, President; Lihmei Yang, Manager Product Sales & Support, lihmeiyang@polaronyx.com.

Polymicro Technologies LLC

#8323



18019 N 25th Ave, Phoenix, AZ, 85023-1200
602/375-4100; fax 602/375-4110
sales@polymicro.com; www.polymicro.com

Manufactures multimode, step-index fused silica fibers with polyimide, acrylate, silicone and custom buffers; solarization-resistant optical fibers; hollow silica waveguides; f/o cables and assemblies; high strength/temperature flexible fused silica capillaries; square capillaries; light guiding capillaries; precision silica and quartz rod/tubing pieces; custom shaped rod and tubing; multilumen tubing; telecom ferrules/sleeves. Contact: Gary Edwards, North American Sales Manager, edwardsg@polymicro.com.

Power Technology, Inc.

#8523



PO Box 191117, Little Rock, AR, 72219-1117
501/407-0712; fax 501/407-0036
sales@powertechnology.com; www.powertechnology.com

Precision Optics Corp.

#8638



22 E Broadway, Gardner, MA, 01440
978/630-1800; fax 978/630-1487
info@poci.com; www.poci.com

For 25 years, Precision Optics Corporation has provided cutting edge optics for medical and industrial applications. POC is a leading provider of custom optics solutions including high resolution micro lenses and prisms, advanced thin film coatings, micro endoscopes, small diameter fiberscopes and illumination assemblies. POCI designs, develops and manufactures optical systems with rapid prototyping all under one roof. FDA registered, ISO 9001 certified. Products are approved for CE marking. Contact: Brian Spies, Director of Marketing, bspies@poci.com.

Princeton Instruments

#8423



3660 Quakerbridge Rd, Trenton, NJ, 08619-1208
609/587-9797; fax 609/587-1970
moreinfo@piacton.com; www.piacton.com

Princeton Instruments designs and manufactures high-performance camera, spectrograph and optics solutions for the scientific research, industrial imaging and OEM markets. Continuous innovation in Research & Development and manufacturing process, coupled with a customer driven paradigm ensures our customers are always at the forefront of technology and reliability while pushing their boundaries of discovery.

Professional Growth Technologies

#8009

258 Harvard St #357, Brookline, MA, 02446
866/423-6822; fax 617/730-8913
www.pgtconsultants.com

New Product: Qlaser 14 laser diodes, 8 led multiple wavelengths & freq's. Deep penetration for organs and glands.

Professional Growth Technologies provides cold laser sales, educational seminars and in-office consulting promoting wellness and health with cold laser energy. Dr. Herbert Yolin is founder and chief consultant committed to promoting "How to have a life without drugs and surgery using energy medicine and nutrition." The lasers the company represents are run by sophisticated software with the ability to alter modes as technology advances. 2 and 5 year warranties are available. Contact: Herbert Yolin, DDS, hyolin@comcast.net.

QPC Lasers, Inc.

#8006



15632 Roxford St, Sylmar, CA, 91342
818/986-0000; fax 818/833-1564
info@qpclasers.com; www.qpclasers.com

New Product: BrightLase® Fiber-Coupled 808, 976 & 1064nm Mini Modules are compact, low cost Medical/Ind sources.

QPC Lasers, Inc. is a world leader in the commercialization of a new generation of high brightness high power semiconductor lasers for industrial, defense and medical markets. Founded in 2000, QPC is vertically integrated from epitaxy through packaging and performs all critical fabrication processes at its facility in Sylmar, California. Contact: Mayer Engel, Director of Worldwide Sales, engel@QPCLasers.com; Tom Steele, Market Development Manager, tsteele@QPCLasers.com.

Biomedical Optics Exhibitor Directory

Reynard Corporation

#8236

1020 Calle Sombra, San Clemente, CA, 92673-6227
949/366-8866; fax 949/498-9528
sales@reynardcorp.com; www.reynardcorp.com

New Product: Customizable Bullseye™ Apodizing Filters eliminate undesirable intensity variations.

Reynard Corp. provides custom & stock optical components & thin film coatings from 0.2µm to 25µm (UV to far IR). In-house services include glass & mechanical fabrication, photolithography and component sub-assembly. We continually strive to advance technological development in markets which include military, space, commercial, telecommunication, medical and general R&D, through research partnerships, commercial development programs, SBIR programs and internal research and development. Contact: Beth Kinchyk, Sales Manager, beth@reynardcorp.com; Ed McCartney, Sales Executive, ed.mccartney@reynardcorp.com.

Santec USA Corp.

#8008

433 Hackensack Ave, Hackensack, NJ, 07601
201/488-5505; fax 201/488-7702
info@santec.com; www.santec.com

New Product: Santec developed a new optical tunable filter with both wavelength and bandwidth tuning.

Santec is a leading manufacturer of Optical Components, Tunable Lasers and Optical Light Sources and Optical Test and Measurement Products. Optical Components include Variable Attenuators, Tap Photodetectors, Wavelength Lockers, WDM filters, Mux/Demux products, etc. Test and Measurement Products include Benchtop Tunable Lasers, Tunable Filters, Ultra-Wide Band Sources and more. Contact: Max Chang, Sales Engineer, max@santec.com; Jonathan Evans, Sales Engineer, jonathan@santec.com.

Semrock, Inc.

#8327

3625 Buffalo Rd Ste 6, Rochester, NY, 14624
585/594-7000; fax 585/594-3898
filters@semrock.com; www.semrock.com

New Product: Superb selection of hard-coated fluorescence, Raman & laser optical filters in stock.

Semrock manufactures advanced hard-coated optical filters that set the standard for biotech and analytical instrumentation. These include the highly acclaimed BrightLine fluorescence filters, high-performance filters for Raman spectroscopy and unique laser system optics. Semrock's innovative products are built on the latest optical coating technology. Founded in September 2000, Semrock is based in Rochester, New York and has offices across the country. Visit Semrock at www.semrock.com. Contact: CUSTOMER SERVICE, orders@semrock.com.

SensL

#8414



Lee House, Riverview Business Park, Blackrock Cork, Ireland
353 21 4350442; fax 353 21 4350447
info@sensl.com; www.sensl.com

New Product: The HRMTime is a portable USB timing module ideal for all high-resolution timing measurements.

SensL provides a range of solid-state low light sensing, photon counting, and imaging products. SensL's Silicon Photomultiplier (SPM) is an excellent alternative to glass PMT detectors. SensL's products are ideal for applications such as biodiagnostics, medical analysis, radiation detection, cell imaging, LIDAR, and environmental protection. Contact: Joseph O'Keefe, Chief Commercial Officer, jokeeffe@SensL.com.

Sensors Unlimited, Inc., part of Goodrich Corporation

#8336



Bldg 12, 3490 US Rte 1, Princeton, NJ, 08540-5914
609/520-0610; fax 609/520-1663
su_info@goodrich.com; www.sensorsinc.com

Sensors Unlimited, Inc., part of Goodrich Corporation, manufactures a complete line of shortwave infrared (SWIR) imaging and detection products for defense and commercial applications. Our innovative InGaAs-based product offerings include fast framing and high resolution cameras, linescan imagers, focal plane arrays and more. Our imaging products feature easy-integration, use standard glass optics and require no cooling. Consult Sensors Unlimited to learn how SWIR products can meet your imaging needs at sui_sales@goodrich.com. Contact: Bob Struthers, Director, Sales & Marketing, sui_sales@goodrich.com; Johanna Soyars, Sales & Marketing Assistant.

Sensovation

#8329

Ludwigshafenerstr 29, Stockach, Germany, 78333
49 7771 87390; fax 49 7771 873939
info@sensovation.com; www.sensovation.com

New Product: LumiSens - OEM Fluorescence Microscope for biochip or microarray detection in diagnostics & Biotech.

Sensovation is focused on the development and production of high performance CCD-cameras and miniaturized electro-optical modules for fluorescence and other low light level detection. Our product line includes a range of cooled, high sensitivity and high throughput cameras for spectroscopy as well as for high resolution imaging applications. The cameras and miniaturized measurement modules are used for Biotechnology, Diagnostics, Point of Care (POC) and Medical Technology applications.

Spectra-Physics/A Division of Newport Corporation

#8426

1335 Terra Bella Ave, Mountain View, CA, 94043
650/961-2550; fax 650/968-5215
sales@newport.com; www.newport.com

Stanford Computer Optics, Inc.

#8012



780 Cragmont Ave, Berkeley, CA, 94708
510/527-3516; fax 510/558-9582
info@stanfordcomputeroptics.com;
www.stanfordcomputeroptics.com

New Product: XXRapidFrame multiple framing system, gating time 0.2ns-DC, 3/6 or 4/8 channels, 100Gfps, USB.

Analog or digital intensified CCD cameras. High-speed, ultra-fast gated (0.2ns), intensified cameras with nanoLux sensitivity and high rep rate (200kHz continuous, 3.3MHz or 300ns burst). Video imaging spectroscopy software for complex data acquisition, time-resolved spectroscopy and pixel-by-pixel image analysis using SCO 4Picos/4QuikE/XXRapidFrame. Sensitivity of 1count/1photoelectron/pixel w/0.2ns gate time. MCP and diode image intensifiers and low-light cameras.

Stanford Photonics, Inc.

#8531

1032 Elwell Ct Ste 104, Palo Alto, CA, 94303
650/969-5991; fax 650/969-5993
info@stanfordphotonics.com; www.stanfordphotonics.com

New Product: SPI's -Z TM cooled ICCD's: The new standard for photon limited/low light life science imaging.

Stanford Photonics, Inc. designs and manufactures digital CCD and Image Intensified (ICCD) cameras for photon-limited life science imaging applications. Mega-pixel resolution and frame rates of 30 to 1000 frames per second are supported by SPI's proprietary image acquisition and RAID-based streaming software. SPI also provides advanced platforms/integrated systems for TIRF, single molecule and single photon/ultra low light luciferase and bioluminescence imaging. Contact: Steve Herlick, Sales Engineer, sherlick@stanfordphotonics.com.

StockerYale Inc.

#8326

275 Kesmark, Montreal, QC, Canada, H9B 3J1
514/685-1005; fax 514/685-3307
lasers@stockeryale.com; www.stockeryale.com

New Product: The Lasiris™ PureBeam is a fiber-coupled laser with polarization maintaining fiber for bio-detection.

StockerYale Inc. is a leading developer of high-quality illumination and optical products. We manufacture Lasiris structured light lasers, LED modules and fluorescent illumination products, as well as specialty optical fibers, phase masks and diffractive optic technologies for industry leading OEMs. Our products serve a wide range of markets including machine vision, industrial inspection, telecommunications, sensors, aerospace and medical. Contact: Sales.

SUPERLUM

#8444

Unit 2G, Eastlink Business Park, Carrigtwohill, Co. Cork, Ireland
353 21 4533666; fax 353 21 4533026
sales@superlum.ie; www.superlumdiodes.com

SUPERLUM is the leader in developing and manufacturing of broadband light sources: Superluminescent Diodes for cutting edge OCT technologies, fiber-optic gyros and other fiber-optic sensors; broadband SOA and gain modules with extreme outstanding parameters; widely tunable lasers/swept sources and many many more. Contact: Natalie Tuchapsky, Sales Executive; Vladimir Shidlovsky, Sales Director, support@superlum.ie.

Sutter Instrument Co.

#8219

One Digital Dr, Novato, CA, 94949
415/883-0128; fax 408/883-0572
info@sutter.com; www.sutter.com

Sutter Instrument is a leading manufacturer of precision electromechanical instrumentation for science and industry. Imaging products include optical filter wheels, high-speed filter switchers, xenon light source, stepper-motor controlled SmartShutter and a motorized XY translator. Our P-2000 is the premier NSOM fiber tip puller. With over 30 years of motor control and CNC machining experience, we are able to design and deliver versatile, robust optical products at affordable prices. Contact: Alex Cooper, Director, Sales & Marketing, alex@sutter.com; Jack Belgum, Senior Vice President, Research & Development, jack@sutter.com.

Swamp Optics, LLC

#8316


6300 Powers Ferry Rd Ste 600-345, Atlanta, GA, 30339
404/547-9267; fax 866/855-4518
linda.trebino@swampoptics.com; www.swampoptics.com

New Product: Pulse Compressor Alignment-Free as detailed in Laser Focus 07-06 & Optics Express 14-10101-2006.

Swamp Optics offers compact, convenient devices for measuring ultrashort laser pulses in real time and which yield the most complete measurements ever and include the beam spatial profile and spatio-temporal distortions. Awards include an R&D100 award and a Circle of Excellence award. Swamp Optics also offers custom devices for nearly every pulse-measurement problem and its recently introduced compact pulse compressors are automatically free of distortions and very inexpensive. Contact: Linda Trebino, Co-Founder and Member.

tec5USA

#8522

 80 Skyline Dr, Plainview, NY, 11803
516/653-2000; fax 516/939-0555
info@tec5USA.com; www.tec5USA.com

New Product: New fast and sensitive multi-channel miniature spectrometer.

High-quality products for spectroscopy, light sources, light guides, immersion probes, spectrometer modules, operating electronics. Spectrometer systems for multiple applications in lab or process, e.g. concentration, filter transmission, color, thin film thickness. Optical instrumentation as remote control biomass detection systems. Various software support. Custom designed components and systems. Detector array electronics, CCD electronics, spectrometer, light guides, spectrometer systems. Contact: Gert Noll, General Manager, gert.noll@tec5usa.com; Arek Betlej, Technical Sales, arek.betlej@tec5usa.com.


Texas Instruments DLP

#8417

7839 Chruchill Way, MS 3900, Dallas, TX, 7521
www.dmddiscovery.com

Thorlabs, Inc.

#8314

 435 Rt 206, Newton, NJ, 07860
973/300-3000; fax 973/300-3600
sales@thorlabs.com; www.thorlabs.com

New Product: ASOM (Adaptive Scanning Optical Microscope) removes major limitations of traditional microscopy.

Thorlabs designs, develops and manufactures building blocks for the Photonics industry including opto-mechanic, motion control, nano-positioning, fiber alignment, fiber and optical components, laser diodes, tunable lasers and vibration isolation systems. In addition to core photonics building blocks, we now provide system level solutions including complete OCT and imaging systems, like confocal and adaptive scanning microscopes.

★ **METER BOARD SPONSOR**

Time Bandwidth, Inc.

#8427

61 Union St, Westfield, MA, 01085
413/564-0610; fax 413/564-0611
www.tbwp.com

Time-Bandwidth Products AG manufactures passively mode-locked tunable and fixed 1 pico and femtosecond DPSS lasers using out patented SESAM® technology. Wavelengths from 262nm to 1550nm are available at different rep rates and power levels to match your application in research or for industrial applications. United States Contact: Alain Bourdon, Vice President of Sales & Marketing, www.tbwp.com - alain.bourdon@tbwp.com.

Biomedical Optics Exhibitor Directory



METER BOARD SPONSOR

Toptica Photonics, Inc.

#8427

61 Union St, Westfield, MA, 01085-2477
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.toptica-usa.com

New Product: Highest power biophotonics lasers.

TOPTICA is the world leader in diode laser and femto-fiber technology for industrial and scientific markets. Offering the highest powers and best beam quality. TOPTICA offers the widest range of single mode tunable light in the 205 to 3000 nm spectral region. Contact: Mark Tolbert, President & Chief Executive Officer.

Varian, Inc.

#8620



3120 Hansen Way, Palo Alto, CA, 94304
800/926-3000
custcare@varianinc.com; www.varianinc.com

Varian, Inc. will be displaying recent advances in Ultraviolet through Mid Infrared spectroscopy products. The Cary 50 is ideally suited to measure samples by a variety of fiber optic probes. Also on display will be FT-IR microscopy and imaging instrumentation. Visit with our applications specialist to discuss your measurement needs. Contact: Jim Steensrud, UV Product Specialist, jim.steensrud@varianinc.com.

VIGO System, Ltd.

#8615

3 Swietlikow Str, Warszawa, Poland, PL-01-389
48 22 666 1410; fax 48 22 665 2155
info@vigo.com.pl; www.vigo.com.pl

Manufacturer of stock and custom MCT IR detectors both TE cooled and uncooled with single and multiple elements. Fast detectors for laser diagnostics. Sensitive detectors for analytical instruments. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

wzw-optics AG

#8315

Wegenstr 18, Balgach, Switzerland, 9436
41 71 722 12 14; fax 41 71 722 12 40
optics@wzw.ch; www.wzw.ch

Since 1965 WZWOPTICAG have been producing precision optics for customers all over the world. We are constantly upgrading our manufacturing capabilities with new technologies for the manufacture of high end optics and opto-mechanical parts. WZWOPTICAG recently installed a new Magnetorheological Finishing System (MRF). Our Company is the solution for all your fast proto-typing high end optical requirements. Contact: David Varrie, Sales & Marketing Manager, david@wzw.ch.

XenICs

#8415

Ambachtenlaan 44, Leuven, Belgium, 3001
32 16 38 99 00; fax 32 16 38 99 01
sales@xenics.com; www.xenics.com

New Product: Cheetah: High Speed InGaAs camera; Resolution 640x512 pixels; Full frame rate 1730fps.

XenICs is Europe's only designer and manufacturer of InGaAs focal plane arrays. In addition we design and manufacture a range of advanced infrared cameras based on InGaAs, HgCdTe (MCT), InSb and other detector technologies. Contact: Luc De Brouckere, Sales representative North America, ldb@xenics.com; Raf Vandersmissen, Technical sales engineer, rvn@xenics.com.

Abrasives, Chemicals & Process Materials

Micro Care Corp.

Astronomy

Andor Technology
CeramOptec Industries, Inc.
Chroma Technology Corp
Polymicro Technologies LLC
Princeton Instruments
Stanford Computer Optics, Inc.

Cameras and CCD Components

Andor Technology
CHROMODYNAMICS, Inc.
Edmund Optics Inc.
Elite Engineering Corp.
Hamamatsu Corp.
Incom, Inc.
Intevac, Inc.
Lambert Instruments
L-A-Omega, Inc.
Nikon Instruments Inc.
Photron USA, Inc.
Princeton Instruments
Sensors Unlimited, Inc., part of
Goodrich Corporation
Sensovation
Stanford Computer Optics, Inc.
Stanford Photonics, Inc.
tec5USA
Thorlabs, Inc.
XenICs

Chemical & Biological Sensing

Alpes Lasers
Amplitude Laser
Becker & Hickl GmbH
CeramOptec Industries, Inc.
CHROMODYNAMICS, Inc.
Edinburgh Instruments Ltd
Elforlight Ltd.
Headwall Photonics, Inc.
id Quantique SA
Innovative Photonic Solutions
Intevac, Inc.
Polymicro Technologies LLC
QPC Lasers, Inc.
Sensovation
Stanford Computer Optics, Inc.

Clinical, Chemical and Biological Instrumentation

AcuLight Corp.
Alpes Lasers
Asahi Spectra USA Inc.
Avo Photonics, Inc.
Becker & Hickl GmbH
Bioptigen Inc.
Boston Electronics Corp.

Cascade Technologies Ltd.
CHROMODYNAMICS, Inc.
Edinburgh Instruments Ltd
Headwall Photonics, Inc.
L-A-Omega, Inc.
Nikon Instruments Inc.
OPTICS 1, Inc.
Photon Engineering, LLC
Polymicro Technologies LLC
Professional Growth Technologies
Sensovation
Sutter Instrument Co.

Communications

Fibersense & Signals Inc.
Grintech GmbH
InPhenix Inc.
MPB Communications Inc.
Santec USA Corp.
Swamp Optics, LLC

Displays

JDSU
OPTICS 1, Inc.
QPC Lasers, Inc.

Distributor or Reseller

Frankfurt Laser Co.
High Q Laser (US), Inc.

Electron-Beam Lithography

JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit
Microoptics
MEMS Optical Inc.

Electronic Imaging Components, Equipment, Systems

Bioptigen Inc.
Bookham Inc.
Boston Electronics Corp.
Cambridge Technology, Inc.
Elite Engineering Corp.
Hamamatsu Corp.
Intevac, Inc.
Lambert Instruments
L-A-Omega, Inc.
Nikon Instruments Inc.
OPTICS 1, Inc.
SensL
Sensors Unlimited, Inc., part of
Goodrich Corporation
Stanford Computer Optics, Inc.
Stanford Photonics, Inc.
StockerYale Inc.
Swamp Optics, LLC

Electronics, Signal Analysis Equipment

Becker & Hickl GmbH
Boston Electronics Corp.
Elite Engineering Corp.
tec5USA

EUV Lithography

JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit
Microoptics

Fiber Optic Components, Equipment, Systems

3SAE Technologies, Inc.
AcuLight Corp.
Avo Photonics, Inc.
Bookham Inc.
Calmar Optcom, Inc.
CeramOptec Industries, Inc.
Covega Corp.
EXALOS AG
Fiberguide Industries, Inc.
Fibersense & Signals Inc.
Fujikura Ltd.
Grintech GmbH
Hellma International, Inc.
id Quantique SA
Incom, Inc.
Innolume GmbH
IRphotonics
Light Age, Inc.
Lightwaves2020, Inc.
MEMS Optical Inc.
Micro Laser Systems, Inc.
MPA Crystal Corp.
MPB Communications Inc.
Optek Systems
Optical Comb, Inc.
OZ Optics Ltd.
PI (Physik Instrumente) LP
Piezosystem Jena, Inc.
Point Source
PolarOnyx, Inc.
Polymicro Technologies LLC
Precision Optics Corp.
QPC Lasers, Inc.
SUPERLUM
tec5USA

Finished Optics, Filters, & Coatings, Optical Fabrication Equipment

Asahi Spectra USA Inc.
Barr Associates Inc.
Bookham Inc.
Chroma Technology Corp
DenseLight Semiconductors Pte
Ltd.
Edmund Optics Inc.
Fresnel Technologies, Inc.
IRphotonics

Lightwaves2020, Inc.
MPA Crystal Corp.
Newport Corp.
Omega Optical, Inc.
Precision Optics Corp.
Princeton Instruments
Reynard Corporation
Thorlabs, Inc.

High Speed Imaging and Sensing

Andor Technology
CHROMODYNAMICS, Inc.
Elforlight Ltd.
Headwall Photonics, Inc.
Intevac, Inc.
Lambert Instruments
Novacam Technologies Inc.
Optical Comb, Inc.
OptoElectronic Components (OEC)
Photron USA, Inc.
PI (Physik Instrumente) LP
Princeton Instruments
Santec USA Corp.
Sensors Unlimited, Inc., part of
Goodrich Corporation
Stanford Computer Optics, Inc.
Stanford Photonics, Inc.
Sutter Instrument Co.
XenICs

Illumination Engineering

Bookham Inc.
Fibersense & Signals Inc.
Incom, Inc.
InPhenix Inc.
Lambda Research Corp.
L-A-Omega, Inc.
Photon Engineering, LLC
Point Source
Infrared Sources, Detectors,
Systems
Alpes Lasers
Andor Technology
B&W Tek, Inc.
Bioptigen Inc.
Boston Electronics Corp.
Cascade Technologies Ltd.
Covega Corp.
Edinburgh Instruments Ltd
EXALOS AG
Frankfurt Laser Co.
Hamamatsu Corp.
id Quantique SA
Innovative Photonic Solutions
InPhenix Inc.
Intevac, Inc.
JDSU
Kyosemi Opto America Corp.
Light Age, Inc.
Optical Comb, Inc.
OptoElectronic Components (OEC)
Paradigm Lasers, Inc.

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PolarOnyx, Inc.
QPC Lasers, Inc.
Reynard Corporation
Sensors Unlimited, Inc., part of
Goodrich Corporation
StockerYale Inc.
Swamp Optics, LLC
tec5USA
VIGO System, Ltd.
XenICs

Lasers and Other Light Sources, Laser Accessories, Laser Systems

4AD Enterprises, Inc.
Aculight Corp.
AdvR, Inc.
Alpes Lasers
Amplitude Laser
Asahi Spectra USA Inc.
Avo Photonics, Inc.
B&W Tek, Inc.
Becker & Hickl GmbH
Bookham Inc.
Boston Electronics Corp.
Calmar Optcom, Inc.
Cambridge Technology, Inc.
Cascade Technologies Ltd.
CeramOptec Industries, Inc.
Coherent Inc.
Covega Corp.
DenseLight Semiconductors Pte
Ltd.
Elforlight Ltd.
EXALOS AG
Fiberguide Industries, Inc.
Fibersense & Signals Inc.
Frankfurt Laser Co.
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High Q Laser (US), Inc.
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JENOPTIK Laserdiode GmbH
Kyosemi Opto America Corp.
Laservision USA
Lightwaves2020, Inc.
Micro Laser Systems, Inc.
MPB Communications Inc.
National Aperture, Inc.
Newport Corp.
NoIR LaserShields
Optek Systems
Optical Comb, Inc.
OXXIUS
OZ Optics Ltd.
Paradigm Lasers, Inc.
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Photonic Products Ltd.
PicoQuant GmbH

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Professional Growth Technologies
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Swamp Optics, LLC
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Time Bandwidth, Inc.
Toptica Photonics, Inc.

Law Enforcement Technologies

Innovative Photonic Solutions
Paradigm Lasers, Inc.

Life Sciences

Amplitude Laser
B&W Tek, Inc.
Chroma Technology Corp
CHROMODYNAMICS, Inc.
Edinburgh Instruments Ltd
Elforlight Ltd.
Fresnel Technologies, Inc.
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id Quantique SA
Incom, Inc.
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LINOS Photonics, Inc.
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National Aperture, Inc.
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Novacam Technologies Inc.
Optical Comb, Inc.
OPTICS 1, Inc.
Photron USA, Inc.
Point Source
Stanford Photonics, Inc.
Toptica Photonics, Inc.

Metrology, Inspection and Process Control

Amplitude Laser
Elforlight Ltd.
Innovative Photonic Solutions
Mad City Labs, Inc.
Novacam Technologies Inc.
StockerYale Inc.
tec5USA
Toptica Photonics, Inc.
wzw-optics AG

Nanotechnology

Amplitude Laser
Light Age, Inc.
Mad City Labs, Inc.
National Aperture, Inc.
Photron USA, Inc.

PI (Physik Instrumente) LP
Piezosystem Jena, Inc.
Princeton Instruments

Optical Components

3SAE Technologies, Inc.
APPLIED IMAGE Group
Avo Photonics, Inc.
Barr Associates Inc.
Cambridge Technology, Inc.
Chroma Technology Corp
Covega Corp.
Dayoptics, Inc.
DenseLight Semiconductors Pte
Ltd.
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EXALOS AG
Fresnel Technologies, Inc.
Grintech GmbH
Headwall Photonics, Inc.
Hellma International, Inc.
Incom, Inc.
Innolume GmbH
IRphotonics
ISS, Inc.
JDSU
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GmbH - Business Unit
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Light Age, Inc.
Lightwaves2020, Inc.
LINOS Photonics, Inc.
MEMS Optical Inc.
Micro Laser Systems, Inc.
MPA Crystal Corp.
Nikon Instruments Inc.
Omega Optical, Inc.
OptoElectronic Components (OEC)
OZ Optics Ltd.
Photonic Products Ltd.
Precision Optics Corp.
Reynard Corporation
SensL
Sutter Instrument Co.
tec5USA
wzw-optics AG

Optical Detectors

Barr Associates Inc.
Becker & Hickl GmbH
Hamamatsu Corp.
Hellma International, Inc.
id Quantique SA
InPhenix Inc.
Kyosemi Opto America Corp.
Lambert Instruments
OptoElectronic Components (OEC)
Paradigm Lasers, Inc.
SensL
Sensovation
SUPERLUM
tec5USA
VIGO System, Ltd.

Optical Fibers

CeramOptec Industries, Inc.
Fiberguide Industries, Inc.
Fujikura Ltd.
IRphotonics
Micro Laser Systems, Inc.
Point Source
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Thorlabs, Inc.

Optical Materials and Substrates

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AdvR, Inc.
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Fresnel Technologies, Inc.
IRphotonics
MPA Crystal Corp.
wzw-optics AG

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B&W Tek, Inc.
Biophtec Inc.
Calmar Optcom, Inc.
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Novacam Technologies Inc.
OPTICS 1, Inc.
OZ Optics Ltd.
PI (Physik Instrumente) LP
PolarOnyx, Inc.
Santec USA Corp.
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JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit
Microoptics
Light Age, Inc.
MEMS Optical Inc.
Optek Systems
Toptica Photonics, Inc.

Optics Manufacturing

Barr Associates Inc.
Chroma Technology Corp
Dayoptics, Inc.
Edmund Optics Inc.
Fresnel Technologies, Inc.
Hellma International, Inc.
JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit
Microoptics

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 MPA Crystal Corp.
 Newport Corp.
 Omega Optical, Inc.
 Photonic Products Ltd.
 Precision Optics Corp.
 Reynard Corporation
 wzv-optics AG

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 Fujikura Ltd.
 Micro Laser Systems, Inc.
 MPB Communications Inc.
 National Aperture, Inc.
 Newport Corp.
 Novacam Technologies Inc.
 Paradigm Lasers, Inc.
 PolarOnyx, Inc.
 SensL
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 Thorlabs, Inc.

Positioning Equipment

Cambridge Technology, Inc.
 Edmund Optics Inc.
 Mad City Labs, Inc.
 National Aperture, Inc.
 Newport Corp.
 Optek Systems
 PI (Physik Instrumente) LP
 Piezosystem Jena, Inc.
 StockerYale Inc.
 Sutter Instrument Co.
 Thorlabs, Inc.

Sensor & Sensor Systems

3SAE Technologies, Inc.
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 OZ Optics Ltd.
 Photron USA, Inc.
 Santec USA Corp.
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How to use this directory

Photonics West exhibitors are listed in alphabetical order with details about products or services each is exhibiting. Companies are additionally cross-indexed by technology areas in the Product Index on pages 224–236, to allow you to quickly shop for products for your engineering and business needs.

Booth numbers are provided in the Exhibitor Directory, and may be cross-referenced with the maps on pp. 74–77. The address of each exhibitor is also listed, making this Exhibition Guide an excellent reference tool.

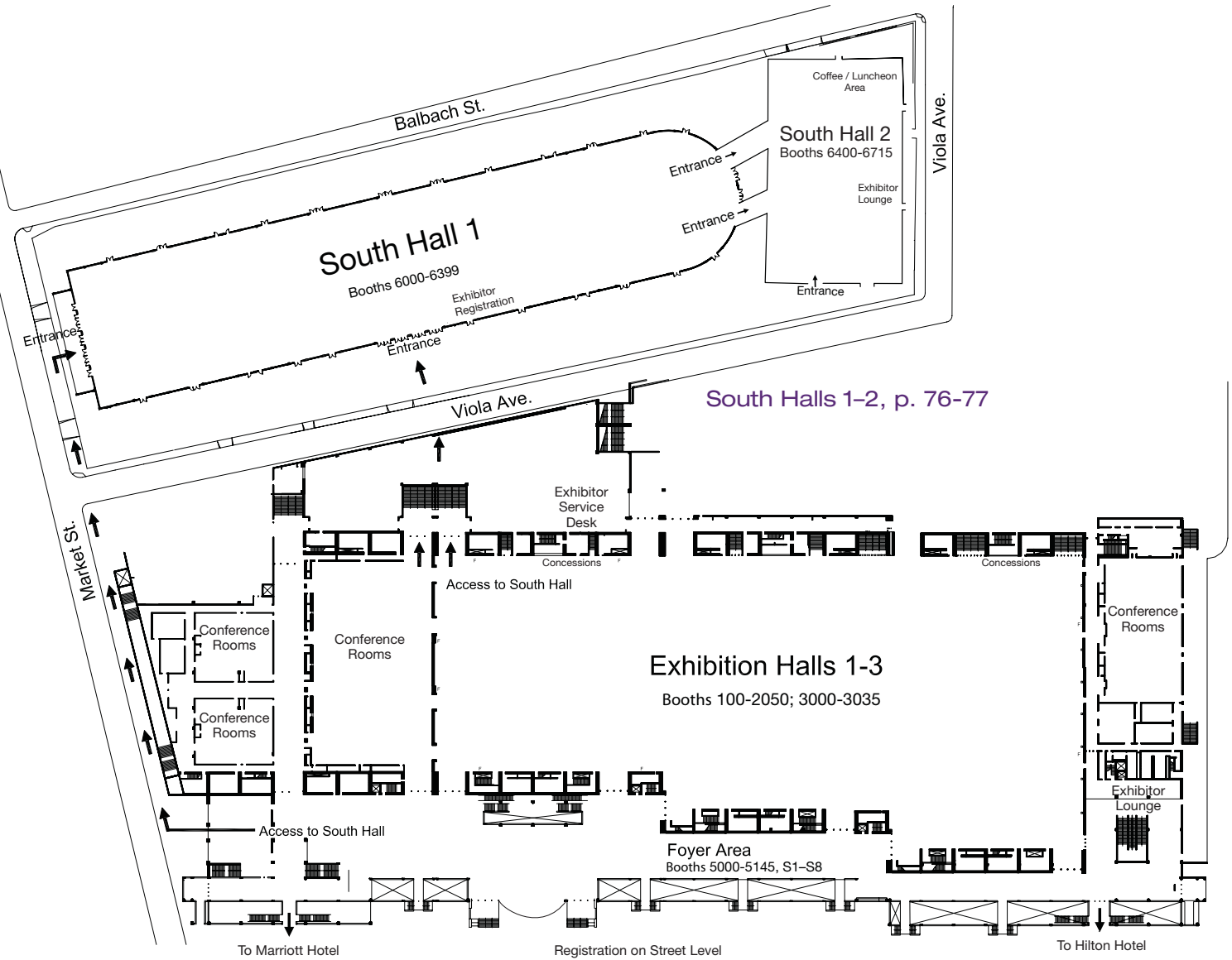
Exhibitor List as of 29 November 2007

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Access to the South Halls for Guests with Disabilities

Use the elevators to reach the first floor of the Convention Center. Proceed to the South Market Street exit. Turn right and proceed half a block through the traffic light. The entrance to South Hall is on the right hand side.

San Jose Convention Center



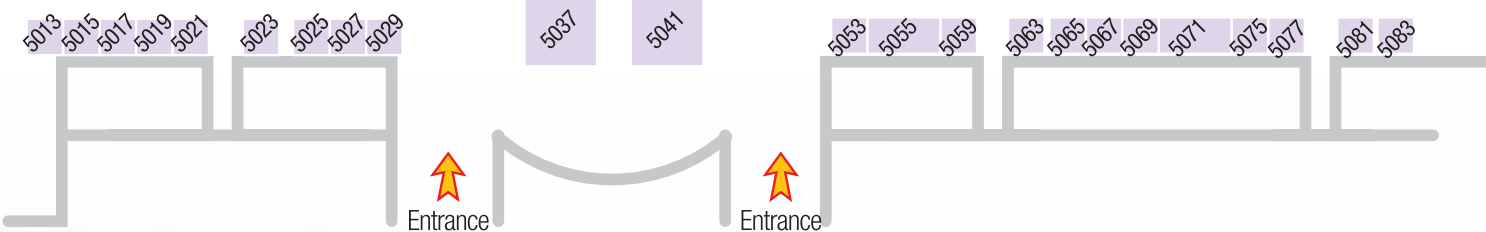
Hall 1



S1-S4 S5-S8



Foyer Area

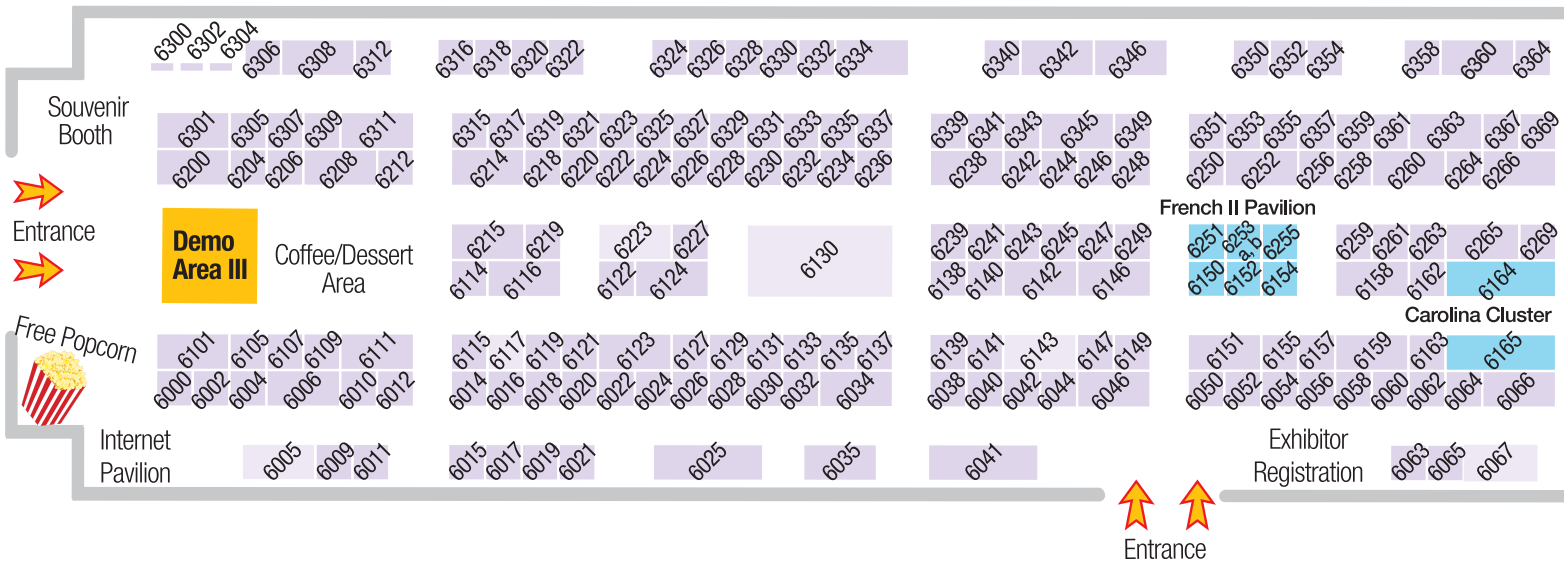


Registration Downstairs



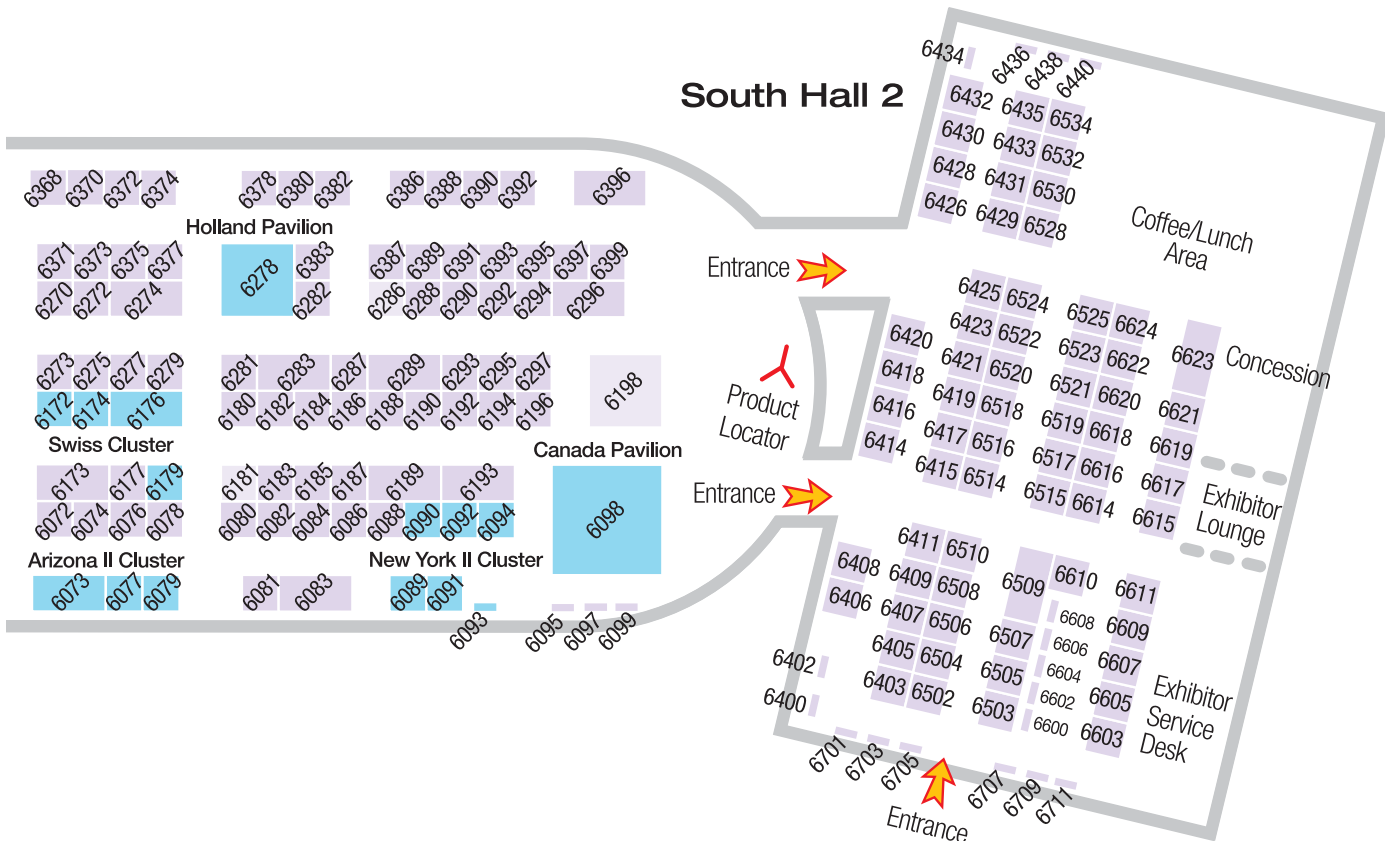
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#6407

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3SAE Technologies, Inc. is a company with focus and expertise in developing and marketing new fiber optic tools and technologies for optical fiber fusion splicing and related applications. 3SAE holds multiple patents and awards related to optical fiber preparation and fiber optic stripping. The company provides OEM distribution for Fitel fusion splicers and Nyfors specialty fiber cleavers. Contact: Steve Valle, Vice President Global Sales.

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sales@4dtechnology.com; www.4dtechnology.com

New Product: FizCam 3000 vibration-insensitive, on-axis HeNe Fizeau interferometer for optical surface metrology.

4D Technology designs and manufactures dynamic laser interferometers for accurate, non-contact metrology of optical quality surfaces, even in the presence of vibration and air turbulence. 4D combines expertise in metrology, optical/mechanical design, software development and manufacturing to develop innovative products for applications including general optics, large satellite and terrestrial astronomy optics, flat panel displays and data storage. Contact: Chip Ragan, Director North American Sales, chip.ragan@4dtechnology.com.

A Glass Technology Enterprise Corp.

#6515

Bldg 2D, 105 Leavesley Rd, Gilroy, CA, 95020
408/846-1596; fax 408/846-5682
agtec@sbcglobal.net; www.agtec.org

Abet Technologies

#6327



168 Old Gate Ln, Milford, CT, 06460
203/540-9990; fax 203/301-0059
sales@abet-technologies.com; www.abet-technologies.com

New Product: 550 Watt and 1000 Watt horizontal output solar simulators.

Abet Technologies designs and manufacturers stock, custom and OEM arc lamp light sources, ASTM and IEC compliant solar simulators with up to 10 x 10 inch illuminated areas for photovoltaic, cosmetic and pharmaceutical applications and advanced FPGA based single channel detection systems for UV, VIS and IR, with built in lock-in amplifier and TE cooler models available. Contact: Allen Smith, President, asmith@abet-technologies.com.

Abrisa Industrial Glass, Inc.

#6506

200 S Hallock Dr, Santa Paula, CA, 93060
805/525-4902; fax 805/525-8604
salesinfo@abrisa.com; www.abrisa.com

Access Laser Co.

#3004, 3005



5603 47th Ave NE Unit B, Marysville, WA, 98270
360/651-6141; fax 360/ 657-4841
yzhang@accesslaserco.com; www.accesslaserco.com

New Product: Portable, battery operated CO2 laser.

RF excited CO2 and CO lasers for spectral analyzer. Line selectable, power stabilized, and external modulated versions available. Contact: Yong Zhang, President and Chief Scientist.

Accina

#6177



1 Innovation Way Ste 100, Newark, DE, 19711
302/894-1151; fax 302/894-9021
www.ymtonline.com

A Superior R&D and OEM Optical Component Supplier. Laser Crystals; Scintillation Arrays; Plano Lenses; Prisms; Filters; Mirrors; Cylindrical Lenses; Moulded Aspheric Lenses; Optical Packaging. Various sizes and materials are available. Highest quality and service at the best prices, guaranteed. Two major product lines for Accina: Detectors and Sensors; Optical Components. Two major business interests for Accina: Aviation/Aerospace; Biotechnology; Microscopy; Military/Tactical; Semiconductor Processing; Test & Measurement.

AccuCoat, Inc.

#338

111 Humboldt St, Rochester, NY, 14609
585/288-2330; fax 585/288-2331
alan@accucoatinc.com; www.accucoatinc.com

AccuCoat Inc. is a supplier of thin film coatings on polymer, metal and glass components. Producing a wide variety of antireflective, beamsplitter, hot & cold mirror, filter and metallic coatings as well as custom coatings to meet your dynamic applications. Experienced in handling prototype thru OEM volumes. Coatings available from the UV to the IR on sizes up to 24". Over 60 years combined engineering experience can provide custom designed solutions. Contact: Alan Parsons, Sales Engineer.

Accumold

#6215

1711 SE Oralabor Rd, Ankeny, IA, 50021
515/964-5741; fax 515/964-5742
micromolding@accu-mold.com; www.accu-mold.com

New Product: Custom molded Multi-Channel Micro-Optic Lens Arrays with Micron tolerances; Ultra Precision Micro-Molder - Micro-Mold® - Small Mold - Lead Frame / Insert Mold.

Accumold® is a high-tech manufacturer of precision micro, small and lead frame injection molded plastic components. Utilizing processes developed from our Micro-Mold® technology, we design, build and produce unique molds and parts efficiently for markets that include Micro Electronics, Automotive, Fiber/Optics, Medical and Military/Aerospace Applications. Contact: Aaron Johnson, Sales & Marketing, ajohnson@accu-mold.com; Rick Brown, Optics Tooling Expert, rbrown@accu-mold.com.

Accuratus Corp.

35 Howard St, Phillipsburg, NJ, 08865
908/213-7070; fax 908/213-7069
info@accuratus.com; www.accuratus.com

New Product: Accuflect U6 added to our Accuflect B6 and Accuflect G6 light reflecting ceramic product family.

Over 30 years supplying a diverse range of ceramic and glass products to the photonics industry. Featuring high performance diffuse light reflectors for laser pumping and IPL sources, fiberoptic preform fabrication, custom ferrules, thermal management components, optical supports, apertures, crystal nests, precision waveguides, large and small electrical insulators. Contact: Bruce Cunningham, Marketing Manager, bruce@accuratus.com; Larry Treusch, Engineering Manager, larry@accuratus.com.

Active Optics - Night N Ltd.

Sudostroitelnaya Str 18, Bld. 5, Moscow, Russia, 115407
7 499 618 8171; fax 7 499 618 8171
kud@activeoptics.ru; www.activeoptics.ru

New Product: Low-cost tiny bimorph deformable mirror for laser beam shaping and control.

Active Optics Ltd. (former Night N (opt) Ltd.) mainly designs and produces complex adaptive systems to be used to control and shape high power laser beams. We are also applying our technique for the astronomical and medical purposes. The basements for the development of our adaptive optical systems are bimorph mirrors, in particular, multi element bimorph correctors with electronic control block. Our products include Shack-Hartmann Wavefront Sensor, Fizeau Interferometer and M2-Sensor. Contact: Alexis Kudryashov, adopt@nightn.ru.

Aculight Corp.

SPIE Member
22121 20th Ave SE, Bothell, WA, 98021
425/482-1100; fax 425/482-1101
info@aculight.com; www.aculight.com

Aculight is a leader in quality, innovative and cost-effective laser systems for customers in the national defense, aerospace and medical markets. Aculight develops and manufactures lasers with outputs from UV to IR. Offering both off-the-shelf and custom-designed products, Aculight's technology portfolio includes fiber lasers, DPSS lasers, mid-IR lasers, nonlinear optics and OPOs. The company provides value at every level of the product cycle, from research to flexible contract manufacturing. Contact: Andrew Brown, Director of Business Development, andrew.brown@aculight.com; Barton Jenson, Project Manager, barton.jenson@aculight.com.

ADE Inc.

1430 E 130th St, Chicago, IL, 60633-2399
773/646-3400; fax 773/646-3919
info@ade-usa.com; www.ade-usa.com

New Product: Crystalair™ Compression Packs for the protection of valuable surface sensitive products.

For over 25 years, ADE has been committed to design, develop and efficiently produce protective packages and packaging materials that do one thing - reduce your Total Packaging Costs. This effort starts with an assurance that after your products have traveled in our packages and are unpacked by your customer, they will be in the condition that you intend them to be in - thus controlling damage costs due to shipping, the single largest factor in Total Packaging Costs. Contact: Michael Marino, Sales Representative, mmarino@ade-usa.com; Jason Lofgren, Sales Representative, jlofgren@ade-usa.com.

#6423



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Adimec

SPIE Member

245 North St, Stoneham, MA, 02180
781/279-0770; fax 781/279-0571
salesus@adimec.com; www.adimec.com

New Product: Adimec-4050m, Fast Megapixel Cameras, Superior performance megapixel cameras with fast frame rates.

Adimec has specialized in development and manufacturing of high-performance cameras and partnering with major OEMs around the world since 1992. The company has the distinction of serving in three different markets: machine vision, medical and military imaging. Adimec's mission is to serve leading OEMs around the world who value quality and reliability as essential to their success. Contact: Katie Janson, Marketing & Sales Associate, kjanson@adimec.com; Gretchen Alper, Marketing & Key Account Manager, galper@adimec.com.

#6151

Advanced Fibreoptic Engineering

16 Thorney Leys Business Pk, Witney Oxon,
United Kingdom, OX28 4GE
44 1993 709030; fax 44 1933 779293
sales@adfen.com; www.adfen.com/msie_index.html

New Product: Harsh environment active components & and high performing Thin Film Coatings.

AFE & AFETC are a UK Group providing the highest spec Active Fiber Components. Contact: Trevor Carroll, Sales Director, trevor.carroll@adfen.com; Stephen Day, Development Manager, stephen.day@adfen.com.

#6620

Advanced Imaging Magazine

3030 Salt Creek Ln Ste 200, Arlington Heights, NY, 60005
631/845-2700; fax 920/568-2282
www.advancedimagingpro.com

Advanced Imaging is dedicated to providing the latest information on imaging hardware, software and peripherals to qualified professionals, worldwide, for all forms of electronic/digital imaging and image-processing.

Whether an image is captured, displayed, manipulated, output, stored or transmitted, *Advanced Imaging* details how available imaging tools, products and techniques are being used by people actually at work. Our goal is to demonstrate to Imaging Professionals how various technologies can be integrated to provide a full range of working solutions to all industry segments commercial, industrial, government, medical, military, research and scientific.

#6372

Advanced Microoptic Systems GmbH

Lebacher Str 6a, Saarbruecken, Germany, D-66113
49 681 400 0030; fax 49 681 400 0032
leleko@amus.de; www.amus.de

New Product: Flat Top homogenizers, multi-spot generators, Shack-Hartmann test arrays, collimators.

Design, development and fabrication of high-quality refractive microoptic components (single lenses or lens arrays) and systems. 1D- and 2-D-arrays in fused silica, optical glass and polymers. 1-side and 2-side performance, monolithic units and assemblies. Any type of lenslet arrangement. Contact: Vladimir Leleko, Sales Manager.

#6234

#5050

Photonics West Exhibitor Directory

Advanced Photonix Inc.

#121

2925 Boardwalk, Ann Arbor, MI, 48104
734/864-5600; fax 734/998-3474
sales@advancedphotonix.com; www.advancedphotonix.com

Advanced Photonix, Inc. is engaged in the development and manufacture of custom optoelectronic solutions, serving global original equipment manufacturer (OEM) markets. Within the silicon-based custom photodiode assemblies, its product families range from custom light-detection assemblies, including its patented Avalanche Photodiode technology to LED assemblies. API supports the customer from the initial concept and design phase of the product, through to full-scale production and test.

Advanced Reproductions Corp.

#5103

100 Flagship Dr, N Andover, MA, 01845
978/685-2911; fax 978/685-1771
sales@advancerepro.com; www.advancerepro.com

Advanced Thin Films

#1704

105 S Sunset St Ste F, Longmont, CO, 80501
720/494-4194; fax 720/652-9948
info@atfilms.com; www.atfilms.com

New Product: Ultra-low loss IBS coatings for many applications, including mirrors, filters and high LDT optics.

Advanced Thin Films specializes in high quality custom optics and ion beam sputtered optical coatings. We supply edge filters, mirrors and crystal coatings for OEM applications. Our products provide superb optical performance in the wavelength range of 250 nm to 3.5 microns. ATFilms' IBS coatings excel in difficult spectral and environmental applications. We are owned and managed by a team of engineers with 70 years of experience in IBS coatings. Contact: Rob Patterson, Vice President of Sales, rob@atfilms.com; Scot Davidson, Sales Engineer, scot@atfilms.com.

AdvR, Inc.

#5095


2310 University Way Bldg 1-1, Bozeman, MT, 59715
406/522-0388; fax 406/522-0387
sales@advr-inc.com; www.adv-r-inc.com

New Product: 488 and 532 Fiber in and out, frequency conversion modules.

Develops and manufactures engineered photonic structures in KTP, SLT and other NLO materials, as well as laser and devices enabled by these structures. Concentrates on specialty frequency conversion to visible wavelengths. Contact: Bob Tamosaitis, Sales Manager, bob@advr-inc.com.

Aerotech, Inc.


#1335


101 Zeta Dr, Pittsburgh, PA, 15238-2897
412/963-7470; fax 412/963-7459
sales@aerotech.com; www.aerotech.com

Aerotech manufactures automated photonics positioning systems for 24/7 industrial applications, including the highest performance system available, the FiberMax, as well as the FiberAlign, FiberCouple, FiberPlane, FiberGrate and FiberGlide. Aerotech also manufactures ANT series nano-translators, air-bearing stages, gantries, linear/rotary/lift stages, goniometers, optical mounts/gimbals, linear and rotary motors, amplifiers/drives and software-based and stand-alone motion controllers. Contact: Tom Markel, Product Manager, Positioning Systems Division, tmarkel@aerotech.com.

AF Optical Co.

#1133


45268 Industrial Dr, Fremont, CA, 94538
510/623-9716; fax 510/623-9726
sales@afoptical.com; www.afoptical.com

New Product: New optical/AFM wafer inspection system. New Optoform components and accessories.

Manufacturer of AFM/Optical Microscopes for Wafer Inspection and Magnetic Disc Media. Manufacturer of Optoform, the world's most advanced optical Erector set for rapid prototyping of interferometers, microscopes, collimators, telescopes, fiber optics, educational setups, with applications based catalog and interactive website. Contact: Ali Afshari.

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Agilent Technologies, Inc.

#1037


Precision Optics, 5301 Stevens Creek Blvd, Santa Clara, CA, 95051-7204
408/553-7487; fax 408/553-2372
optics@agilent.com; www.agilent.com

New Product: Complex monolithic optics (CMOs) - the latest high-precision optical design technology.

Agilent delivers high-precision optical components, optomechanical assemblies and complex monolithic optics (CMOs) for UV to IR applications in aerospace/defense, display, nanomeasurement, homeland security and biotech instrumentation markets. We combine experienced craftsmanship with deterministic manufacturing process control for volume production. The company delivers cutting-edge metrology and design, plus fabrication and thin-film coatings in a vertically integrated factory. Contact: Wayne Pantley, National Sales Manager, wayne_pantley@agilent.com; Bruce Gally, Sales Manager, bruce_gally@agilent.com.

AgilOptics, Inc.

#5019


1717 Louisiana NE Ste 202, Albuquerque, NM, 87110
505/268-4742; fax 505/268-4741
www.agiloptics.com

New Product: Clarifi™ a complete closed-loop AO system using deformable mirrors to correct aberrated laser beams.

AgilOptics, Inc. provides a lightweight, compact, independent adaptive optics system which removes optical distortions while correcting the image focus in real time. Our design team can develop systems and provide integration services tailored to the specific needs of the customer. The superior reliability of our units actively removes optical distortions with deformable membrane mirrors at an affordable cost. Our compact solutions for imaging systems can fit into most budgets. Contact: Dawn Dyson, Business Development Manager, ddyson@agiloptics.com; Dennis Mansell, Sales Development Manager, dmansell@agiloptics.com.

AIM Specialty Materials

#5091

25 Kenney Dr, Cranston, RI, 02920
401/463-5605; fax 401/463-0203
info@aimspecialty.com; www.aimspecialty.com

Air-Vac Engineering Co., Inc.

#6109

30 Progress Ave, Seymour, CT, 06483
203/888-9900; fax 203/888-1145
howard.lasto@air-vac-eng.com; www.air-vac-eng.com

HIGH POWER

IR, GREEN, UV, & DEEP UV LASERS



DS & DM SERIES

Features

- Nano or Pico Second Pulse Width
- IR 1064/1053nm - 5W to 400W
- Green 532/527nm - 5W to 150W
- UV 355/351nm - 3W to 40W
- Deep UV 266/263nm - 1W to 10W
- TEM₀₀ Beam with $M^2 < 1.1$ or Multimode
- Pulse Rates from Single Shot to 80 MHz
- Patented Harmonic Generation Technology
- Choice of Nd:YLF, Nd:YAG, and Nd:YVO₄ Lasers

AIR-COOLED

IR, GREEN, UV, & DEEP UV LASERS



DC SERIES

Features

- Nano or Pico Second Pulse Width
- IR 1064/1053nm - 200mW to 10W
- Green 532/527nm - 200mW to 8W
- UV 355/351nm - 75mW to 3W
- Deep UV 266/263nm - 20mW to 0.5W
- TEM₀₀ Beam with $M^2 < 1.1$
- Pulse Rates from Single Shot to 80 MHz
- Patented Harmonic Generation Technology
- Choice of Nd:YLF, Nd:YAG, and Nd:YVO₄ Lasers

TUNABLE LASERS



OPO

Features

- Wavelength Range: 1.5 μ m to 2.0 μ m (signal)
2.2 μ m to 3.4 μ m (idler)
- Eye Safe Laser Wavelengths
- Output Power up to 2 Watts
- Patented OPO Generation Technology
- Highest Conversion Efficiency OPO
- Compact, Rugged Design
- Pulse Rates from Single Shot to 10kHz



TI:SAPPHIRE

Features

- Narrow Bandwidth 1 to 3 GHz, SLM Option
- mJ Level Energy/Pulse, Tuning from 700nm to 1000nm, Harmonic from 193nm to 500nm
- High Repetition Rate up to 10kHz
- Wavelength Scanning (100MHz/step)
- Multipass Amplifier to Watts Level UV Output
- TEM₀₀ Beam with $M^2 < 1.1$
- Compact Single Box Design



Photonics Industries

International, Inc.

Photonics West Exhibitor Directory

Aistana Inc.

#6304

681 Garland Ave Ste 74, Sunnyvale, CA, 94086
408/329-7911; fax 866/628-8556
szhong@aistana.com; www.aistana.com

New Product: SM & PM 1064nm high power WDM, Coupler, Isolator, hybrid Isolator/WDM.

Aistana specializes in high precision optical and fiber-optic components. From prototype and specialty quantities to large volume OEM production, our products are manufactured with strict attention to your specifications and delivery requirements. Contact: Shelley Zhong, Regional Director of Business Development; Peter Ji, Vice President, peterji@aistana.com.

AJ Industries

#6190

PO Box 1301, Carmel Valley, CA, 93924
917/679-0490; fax 831/659-8236
repko@ajisso.com; www.ajisso.com

New Product: Model6000 incorporates Active Vibration Cancellation technology to ensure rock-steady operation.

AJ Industries specializes in micro-assembly of high precision devices requiring part alignment accuracies of down to one micron and is a proven supplier of automated manufacturing systems to semiconductor & optical manufacturers. Our MicroMachines consist of robotic manipulators with integrated machine vision and force sensing as well as various joining or bonding technologies and AJI's proprietary Stealth Singulation® technologies for laser-based dicing of glass. Contact: Jim Repko, President.

Alfalight, Inc.

#443



1832 Wright St, Madison, WI, 53704
608/240-4800; fax 608/240-4801
sales@alfalight.com; www.alfalight.com

Alfalight, Inc. is a manufacturer of highly efficient and reliable high-power diode lasers for industrial, defense and telecommunications markets worldwide. The company's lasers provide industry-leading efficiency, reliability, power and brightness. Alfalight's current high-power diode laser product line includes free-space and fiber-coupled single emitters as well as fiber-coupled multi-emitter pump modules. For more information, visit www.alfalight.com.

AllMotion

#6269

5501 Del Oro Ct, San Jose, CA, 95124
408/460-1345; fax 408/358-4781
info@allmotion.com; www.allmotion.com

New Product: EZSV10 1.5 AMP DC brush servo driver provides intelligent motion control and rapid implementation.

AllMotion Inc. develops and manufactures miniature high-performance stepper and servo drives for the medical, scientific, optical and general automation markets. Its mission is to create superior, ultra-compact motion control solutions that reduce costs and readily integrate into OEM instrumentation designs across a wide range of industries. R&D efforts are centered on core competencies of small form factor components that deliver precise positioning control and ease of use. Contact: David Goodin, President; Arjuna Karunaratne, Chief Technology Officer.



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

ALLVIA, Inc.

#6701

657 N Pastoria Ave, Sunnyvale, CA, 94085
408/212-3200; fax 408/720-3334
info@allvia.com; www.allvia.com

ALLVIA provides wafer via etching & plating foundry services to MEMS and Semiconductor Industries for advanced vertical interconnects and System-in-Package (SiP) solutions. With a full line of in-house processing equipment, ALLVIA offers services for prototyping as well as volume production runs. Contact: Nagesh Vodrahalli, Vice President Technology & Manufacturing, nagesh_vk@allvia.com; Chih-Yang Li, Manager, Design & Modeling, cyli@allvia.com.

Alpes Lasers

#615

1-3 Max.-de-Meuron, Neuchatel, Switzerland, CH-2000
41 3272 99510; fax 41 3272 13619
info@alpslasers.ch; www.alpslasers.ch

New Product: CW room temp Quantum Cascade Lasers devices now available on special order.

Manufacturer of Quantum Cascade Lasers - tunable infrared lasers in the 3.5 to 17 micron region operating on thermoelectric coolers (pulsed) or LN2 cooled (CW). Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

ALPhA - Route des Lasers®

#1408

37 ave du Général de Larminat, Bordeaux, France, 33001
33 5 57 57 84 94; fax 33 5 56 24 06 39
gabrielle.marre@2adi.aquitaine.fr; www.alpha-routedeslasers.com

ALPhA, governing structure of the "Route des Lasers" Aquitaine Competitive Cluster, is dedicated to: Fostering the cooperation of businesses, research laboratories and training organizations; Conducting innovative and structuring projects in a broadly competitive sectors where knowledge and networking are decisive; Promote the cluster, generate investors attraction and develop national and international networking.

Alphion Corp.

#6435

196 Princeton Hightstown Rd Bldg 1A, Princeton Junction, NJ, 08550
609/936-9001; fax 609/936-9002
cpeterson@alphion.com; www.alphion.com

Alpine Research Optics/ Saint-Gobain Crystals

#537



6810 Winchester Cir, Boulder, CO, 80301
303/444-3420; fax 303/444-1686
sales@arocorp.com; www.arocorp.com

Altos Photonics Inc.

#1933

201 S Wallace Ste B2C, Bozeman, MT, 59715
406/581-4662; fax 909/363-8637
sales@altosphotonics.com; www.altosphotonics.com

Altos Photonics offers femtosecond, mode locked and Q-switched lasers and tunable systems for research and industrial customers. Additional products include non-linear crystals (BBO, KTP, ZGP, KYW, KGW, etc), optical mounts, USB-controlled stages and other related products. Altos Photonics sells and services products from EKSPLA, EKSM, Light Conversion & Standa. Contact: Lucian Hand, President of Altos Photonics, lucian@altosphotonics.com.

Ametek Precitech, Inc.

#1145



44 Blackbrook Rd, Keene, NH, 03431
603/357-2511; fax 603/358-6174
sales@precitech.com; www.precitech.com

AMETEK® Precitech, Inc. the leaders in ultra-precision machine & metrology systems located in Keene, New Hampshire USA. Precitech has a complete line of ultra-precision single point & multi-axis diamond turning, grinding, grooving & milling machines for rotationally symmetric & freeform applications in non-ferrous & ferrous materials. Brands include: Nanoform®, Freeform®, Optoform®, Planoform®, series of Drum Roll Lathes. We have solutions such as servo machining with our Fast Tool & Slow Tool technologies. Contact: Chris Stroshine, North American Sales Manager, cstroshine@precitech.com; Kirk Rogers, North American Sales, krogers@precitech.com.



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America Fujikura Ltd.

#6371



PO Box 3127, Spartanburg, SC, 29304
864/433-5409; fax 864/433-5363
sales@afitele.com; www.afitele.com

AFL Telecommunications is a global leader providing fiber optic products, equipment and engineering services to the telecommunications industry. AFL serves a diverse mix of industry segments that include service providers, OEMs, government and defense, oil and gas, biomedical, as well as premise networking and utility. AFL's product line consists of optical connectivity, fusion splicers and test equipment as well as fiber management systems, closures, fiber optic cable and accessories. Contact: Michael Hetrick, National Sales Manager, michael.hetrick@afitele.com; Corie Culp, Marketing Manager, corie.culp@afitele.com.

Amplification Technologies, Inc.

#6192

1404 Coney Island Ave, Brooklyn, NY, 11230
718/951-8021; fax 718/951-8030
www.amplificationtechnologies.com



METER BOARD SPONSOR

AMPLITUDE SYSTEMES

#715

6 Allee du doyen Georges Brus, Pessac, France, 33600
33 5 56 46 4060; fax 33 5 56 46 0694
info@amplitude-systemes.com; www.amplitude-systemes.com

New Product: PHOENIX: High Power ultrafast fiber amplifier. Picosecond and femtosecond high average power lasers.

Amplitude Systemes, pioneer in Ytterbium laser technology, manufactures advanced diode-pumped ultrafast lasers for scientific and industrial applications. Products include high energy oscillators (t-Pulse series) and amplifiers (s-Pulse series), as well as high average power picosecond and femtosecond fiber lasers. Contact: Vincent Rouffiange, Sales and Marketing, vrouffiange@amplitude-systemes.com; Robert Braunschweig, Amplitude Laser, North America, rbraunschweig@amplitude-laser.com.

Amplitude Technologies

#6154

2-4 Rue du bois Chaland, Lisses, France, 91029
33 1 69 11 27 90; fax 33 1 64 97 58 17
info@amplitude-technologies.com;
www.amplitude-technologies.com

New Product: Pulsar: 200TW class amplifiers; X-treme: Lasers for the attosecond; Propulse+: >2J pump lasers.

Amplitude mission is to produce ultra-intense femtosecond systems with the best performances, from the point of view of pulse duration, temporal contrast and spatial beam quality. Our engagement in performances continues after the delivery and our collaboration with the customer guarantee laser specification over the whole life-span of the laser. Our state-of-the-art performances consists in the shortest pulses (<20fs) with the highest temporal contrast (>10 orders) and the highest energy. Contact: Federico Canova, Ph.D, Sales and Marketing Manager, fcanova@amplitude-technologies.com; Clément Bony, Sales Engineer, cbony@amplitude-technologies.com.

Analog Modules, Inc.

#633

126 Baywood Ave, Longwood, FL, 32750-3426
407/339-4355; fax 407/834-3806
ami@analogmodules.com; www.analogmodules.com

Founded in 1979, Analog Modules is an ISO 9001 certified company located in Longwood, (Orlando) Florida where 65 full-time employees are involved in design, development and manufacturing. AMI produces a wide range of stand-alone and OEM analog electronic products primarily for the laser and electro-optics industries. These products serve applications in medical, military, scientific and industrial markets. Contact: Kelly Pacy, Vice President Sales, kpacy@analogmodules.com; Bruce Soileau, Product Manager, bsoileau@analogmodules.com.

Anchor Optics, a division of Edmund Optics

#6220

101 E Gloucester Pike, Barrington, NJ, 08007
856/573-6865; fax 856/546-1965
sales@anchoroptycs.com; www.anchoroptycs.com

New Product: Commercial Grade Achromat, Condenser Lens, Concave Spherical Mirror, Elliptical Mirror, Beamsplitter.

Anchor Optics, a division of Edmund Optics, is the preferred provider for Affordable Quality Optics. With over 5,000 products and over 5,000,000 in stock ready for immediate delivery, Anchor Optics is the optics alternative for industry, research and education. Contact: Kirsten Bjork, Sales and Marketing Manager.

Andor Technology

#1107



425 Sullivan Ave Ste 3, South Windsor, CT, 06074
860/290-9211; fax 860/290-9566
info@andor.com; www.andor.com

Serving high end & mid range markets, Andor Technology, committed to environmental responsibility, designs & manufactures imaging & spectroscopy cameras used by leading academic and research establishments across the scientific disciplines including Physics, Chemistry, Biology & Astronomy. Andor provides world-class sales, service & support for researchers & OEMs via our global distribution network, our technical resource & product catalog, Scientific Digital Camera Solutions and www.andor.com. Contact: Chris Campillo, Regional Sales Engineer, c.campillo@andor.com; Tom Greis, Regional Sales Engineer (OEM), t.greis@andor.com.

Photonics West Exhibitor Directory

Andover Corp.

4 Commercial Dr, Salem, NH, 03079-2800
603/893-6888; fax 603/893-6508
info@andovercorp.com; www.andovercorp.com

New Product: IR long pass and IR bandpass filters in the 2-15µm range, and sputtered coatings for lasers.

Manufacturer of high-quality optical filters and coatings, as well as precision polishing and fabrication services. Wavelength range spans UV to IR. Andover is an ISO 9001:2000 registered company. Contact: Phil Clark, Technical Sales; Rob Pursel, Thin Film Engineer, rpursel@andovercorp.com.

Anson Optical Products Co., Ltd.

#3033

Rm 901 91F Cheung Tat Ctr, 18 Cheung Lee St, Chaiwan, Hong Kong China
852 2757 0168; fax 852 2796 2568
info@ansonoptical.com.hk; www.ansonoptical.com.hk

Anson Optical Products Co Ltd., as one of the trusted name of optics and are specialized in plastic optical components from optics design, prototype making, tooling fabrication, precision molding to assembly. Our experienced work team features states-of-art molding technology and have capability for supplying custom-designed molded diffractive, aspherical, cylindrical, fresnel surfaces components, modules and mirrors. Contact: Raymond Law, Marketing Manager, raymond@ansonoptical.com.hk; Monica Chan, admin@ansonoptical.com.hk.

Anteryon BV

#133

RU-p Rm 118, Zwaanstr 2a, Eindhoven, The Netherlands, NL-5600 CA
31 40 25 61 500; fax 31 40 25 61 518
info@anteryon.com; www.anteryon.com

Anteryon is a leading optical interface solution provider offering micro-optics and integrated optical/mechanical sub assembly design and development, manufacturing and supply to innovative companies. With a strong development team and an expanding patent portfolio, Anteryon offers a strong customer service based on product innovation in diffractive and refractive optics, optical and mechanical packaging integration with sensors and light sources and submicron glass and ceramic based substrates. Contact: Richard van Densen, Business Developer; Doeke Oostra.

AOC Technologies, Inc.

#6378

6690 Amador Plaza Rd #110, Dublin, CA, 94568
925/875-0808; fax 925/875-0878
www.aotech.com

New Product: Passive, Active fiber optical components; Sub-modules; Design for OEM; Sub-systems.

We provide Passive and Active fiber optical components and sub-modules; specialize in design for OEM of optical components and sub-systems to expand optical bandwidth and enhancing network performance. With combined 30 years of experience in Fiber Optic industry and global manufacturing facility, AOC have the capability to provide contract manufacturing services for complex Opto-Electronic assemblies, Vertical Integration and Full Turn Key solutions. Contact: Gordon Gu, President, gordongu@aotech.com; Neil Santos, Vice President Sales & Marketing, neilsantos@aotech.com.

#319

APE - Angewandte Physik und Elektronik GmbH

#127

Plauener Str 163-165 Haus N, Berlin, Germany, 13053
49 30 98601130; fax 49 30 986 97 885
ape@ape-berlin.de; www.ape-berlin.com

New Product: LX Spider: Compact solution for spectral and temporal phase measurement of femtosecond laser pulses.

APE GmbH develops and manufactures measurement devices and other accessories for ultrafast laser systems. The company is one of the international market leaders in ultrafast diagnostics and offers precision, quality and service from autocorrelator to wavelength measurement, from acoustooptics to synchronously pumped optical parametric oscillators (OPOs). APE instruments are in use in scientific institutions and research centres all over the world. Contact: Edlef Büttner, Managing Director, edlef_buettner@ape-berlin.de; Jan Popien, Managing Director, jan_popien@ape-berlin.de.

Apogee Instruments, Inc.

#2007

1020 Sundown Way Ste 150, Roseville, CA, 95661
916/218-7450; fax 916/218-7451
team@ccd.com; www.ccd.com

New Product: Low-cost Ascent Series cooled CCD cameras with programmable-speed 16-bit digitization to 20 MHz.

Apogee Instruments manufactures high performance thermoelectrically cooled CCD imaging systems for a wide range of scientific applications, including fluorescence/bright field microscopy, astronomy, radiometry, spectroscopy, NDT, retinology. Single users to large-scale OEM contracts. Sensors to 4096x4096. Low-cost Ascent Series cameras feature 16-bit digitization with programmable speed and high speed USB2 interface (dual channel to 20 MHz). Pricing and data sheets at <http://www.ccd.com>. Contact: Gary McAnally, Vice President Marketing & Sales.

Apollo Instruments, Inc.

#1142



55 Peters Canyon Rd, Irvine, CA, 92606
949/756-3111; fax 949/756-9166
contact@apolloinstruments.com; www.apolloinstruments.com

New Product: 200W Fiber Laser System, direct diode laser device with YAG beam quality.

Manufactures and supplies high-power brightness fiber-coupled or collimated laser diode systems (up to 1kW) and fiber lasers with superior beam quality for applications such as material processing and laser-pumping. Also specializes in research and development areas including optical system design for industrial and medical applications. Contact: Peter Wang, Sales Manager.

Apollo Optical Systems, Inc.

#6380



330 Clay Rd, Rochester, NY, 14623
585/272-6170; fax 585/272-6177
<http://www.apollooptical.com/>

Manufacturer of custom precision optical components specializing in Single Point Diamond Turning and injection molded polymer optics in prototype and production volumes. In-house capabilities include SPDT, extensive metrology, injection molding, optical/mechanical design and engineering. AOS specializes in design and manufacturing of diffractive and refractive optics. Contact: Daniel McGarry, President, McGarry@ApolloOptical.com; Claude Tribastone, President, Manufacturing, Tribastone@ApolloOptical.com.

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8-18 for complete time, schedules, and locations.

APPLIED IMAGE Group

#1507



1653 E Main St, Rochester, NY, 14609
585/482-0300; fax 585/288-5989
info@appliedimage.com; www.appliedimage.com

"Your Single Source Photonics Solution Provider" dedicated to innovative OPTO-IMAGING Products & Services. Providing custom and "off the shelf" linear scales, test targets, reticules, encoders, image analysis standards, sinusoidal arrays, photo masks, ronchi rulings & other imaged components on various substrate materials for today's complex photonics needs. Now offering Imatest software with Applied targets for analyzing image quality. APPLIED IMAGE, where image concepts become reality. Contact: imaging@appliedimage.com.

Applied Laser Engineering Ltd.

#6318

Molesey Business Center, Central Ave, West Molesey Surrey, United Kingdom, KT8 2QZ
44 208 941 1101; fax 44 208 783 1348
sales@appliedlaser.com; www.appliedlaser.com

Applied Laser Engineering manufactures high resolution, direct laser engraving machinery utilizing multiple CO₂ and/or Yag laser beams. Machines range from 0.6m-6m roller length capability and up to 1m diameter. ALE's expertise lies in large format, high resolution, in the round engraving, marking, texturing or surface treatment machinery. Typical applications include printing, embossing, micro machining, coating and security applications. Contact: Ed Birch, Engineering Director, ed.birch@appliedlaser.co.uk; Phil Limberger, Financial Director, ratty@appliedlaser.co.uk.

Applied Optronics

#126

111 Corporate Blvd Bldg J, South Plainsfield, NJ, 07080
908/753-6300; fax 908/753-4041
sales@applied-optronics.com; www.applied-optronics.com

Custom manufacturer of high-powered pulsed and CW diode lasers, multi-element diode laser modules, bars and arrays from 630nm to 2.3 microns. Provides virtually any package configuration including customer sub-assemblies. Extensive experience in a broad spectrum of laser applications in military, medical and industrial markets. Expertise in system level engineering, electronics, optical modeling and design. Founded in 1991, all manufacturing performed onsite in South Plainfield, NJ. Contact: Ernie Sirkin, Director of Sales & Engineering, ernie.sirkin@applied-optronics.com; Robert Sellers, General Manager, bob.sellers@applied-optronics.com.

Applied Photon Technology, Inc.

#6520

3346 Arden Rd, Hayward, CA, 94545
510/780-9500; fax 510/780-1798
info@appliedphoton.com; www.appliedphoton.com

Applied Photon Technology, Inc. has grown to become a primary source of linear flash and arc lamps for many of the leading manufacturers of laser and electro-optical systems for the medical, industrial and scientific markets. Contact: Barry Smith, Vice President of Marketing and Sales, barrysmith@appliedphoton.com; David Collins, Product Manager, dcollins@appliedphoton.com.

Applied Surface Technologies

#5088

15 Hawthorne Dr, New Providence, NJ, 07974
908/464-6675; fax 908/464-7475
co2clean@co2clean.com; www.co2clean.com

New Product: The K6-10DG dual gas CO₂ Snow Jet comes with concentric CO₂ Snow and dry nitrogen flows.

We demonstrate precision cleaning using the CO₂ Snow Jet, a safe and nondestructive process for removing contamination. This surface cleaning process is a simple, yet novel, process that can remove particles of all sizes, (from visible to 0.03 micron) and organic residues. CO₂ Snow cleans wafers, metals, ceramics, polymers, optical and laser parts and many other applications. We will demonstrate manual and semi-automated units for R&D or manufacturing cleaning applications. Bring samples Contact: Robert Sherman, President, roberts@co2clean.com.

APS Optics

#3034

42257 Troyer Ave, Fremont, CA, 94539
510/656-9295; fax 510/353-1109
apsoptics@usa.net; www.apsoptics.com

New Product: Metal substrates; complicated multielements lenses; optics from crystals; reticles and scales.

Established in 1993 (in January 2008 - 15 years anniversary) company specializes in the design and manufacturing of advanced and highly precision optical components and systems from prototypes to production. Contact: Arkadiy Farberov, General Manager; Sofiya Zalan, Production Manager, sofiyaz@yahoo.com.

ARC Technologies

#6603

4459 White Bear Pkwy, White Bear Lake, MN, 55110
651/789-9000; fax 651/789-9199
info@arcnano.com; www.arcnano.com

Archer OpTx, Inc.

#3021, 3022



3402 Enterprise Dr, Rowlett, TX, 75088
972/463-8001; fax 972/463-8311
sales@archeroptx.com; www.archeroptx.com

New Product: PerfectLens™ - ultra precision molded glass aspheres and acylinders from 0.05mm to 55mm OD.

PerfectLens - ultra precision molded glass lenses from 0.5mm to 55mm - aspheric or acylindrical - BIG-SMALL-PRECISE - enhanced performance lenses with guaranteed 0.05 waves RMS wavefront error with production typically at 0.02 - 0.03 waves, best in the world, best surface roughness and lens-to-lens uniformity, 24 RoHS compliant low CTE glasses for custom designs, optical design team at your assistance. OpTaliX optical design software. Contact: Kevin Mitchell, Director of Sales, Kevin.Mitchell@ArcherOpTx.com; Colby Freeman, Inside Sales Manager, ColbyCFreeman@ArcherOpTx.com.

Arctic Photonics Oy

#2039

Jorvas Hitech Center, Hirsalantie 11, Jorvas, Finland, 02420
636/272-7227; fax 636/272-3909
joe@rpmclasers.com; www.rpmclasers.com

Arden Photonics Ltd.

#5132



iBIC Holt Ct S, Aston Science Park, Birmingham, United Kingdom, B7 4EJ
44 121 260 6410; fax 44 121 333 3399
info@ardenphotonics.com; www.ardenphotonics.com

New Product: BQM30 laser beam profiler for one-shot measurement of beam quality.

Arden Photonics designs and manufactures innovative test and measurement instrumentation for the international photonics community. Our expertise includes: Laser beam profiling including M² monitoring; Modal profiling of multimode optical fibers - measuring Encircled Flux, Mode Power Distribution; Wavefront sensing for optical and surface metrology; Interferometry. We can also provide specialist capabilities and advice in the area of advanced fiber and component measurements. Contact: David Robinson, david@ardenphotonics.com; Hui Yang, Applications Engineer, h.yang@ardenphotonics.com.

Photonics West Exhibitor Directory

Arges GmbH

#6123

Kirchplatz 4, Nabburg, Germany, 92507
49 9433 24160; fax 49 9433 241618
info@arges.de; www.arges.de

New Product: The new Fiber Elephant 50, dedicated for fiber lasers, includes new features for heavy duty use.

ARGES is a manufacturer for the OEM laser component market. We develop and produce innovative laser scanning systems as well as customer specific OEM subsystems for industry, medicine, science and research. Besides from the component business ARGES also offers services in application and process development, job-shop, consulting, custom design and training for ARGES products. Contact: Juliane Hoesl, Sales & Marketing, hoesl@arges.de.

Argus International, Ltd.

#6418

108 Whispering Pines Dr. Ste 110, Scotts Valley, CA, 95066
831/461-4700; fax 831/461-4701
info@argusinternational.com; www.argusinternational.com

New Product: 6-60mm DC Auto Iris Lens.

Argus International, Ltd. serves a variety of industries including scientific and educational institutions and various government agencies. We have a wide range of capabilities, such as: large variety of lenses, prisms, mirrors, filters, windows, wedges, interferometer flats and full spectrum of laser optics. Argus can satisfy virtually any optical needs, from standard off-the-shelf components, to highly specialized custom assemblies. Contact: Brian Morrise, International Marketing Manager, brian@argusinternational.com; Joanna Davidson, Procurement Manager, joanna@argusinternational.com.

Argyle International Inc.

#518



254 Wall St, Princeton, NJ, 08540
609/924-9484; fax 609/924-2679
info@argyloptics.com; www.argyloptics.com

New Product: Argyle International now offers custom LightPipes, glass and fused silica, coated or lenses.

Lenses, Prisms, Windows, Assemblies, coatings, VIS, IR, UV, Custom Optics - A United States corporation, Argyle International manufactures optical components at our own factory in China. For 15 years Argyle has lead the way in highest quality at excellent prices. We handle all jobs from Prototype to Production. We offer great service, delivery, quality. See us at www.ArgyleOptics.com. Contact: Arthur Gillman, President, agillman@argyloptics.com; Lian Shentu, lshentu@argyloptics.com.

Arima Lasers Corp.

#6614

5F No 349 Sec 2, Renhe Rd Dasi, Taoyuan, Taiwan, 335
886 3 3806 608; fax 886 3 3072 610
hcyen@arimalasers.com; www.arimalasers.com

New Product: 1) 3.3mm TO package LD; 2) APC driver inside LD. 3) High power Infrared LD, 4. High power LD.

Arima Lasers Corporation (ALC) was founded in August 2007 in Taoyuan, Taiwan. We aim ourselves to be a high quality LD. Focusing on the high-end optoelectronic market, we understand the only way to stay "TWO" steps ahead in this highly competitive field is by offering cutting edge technology through well-established quality assurance system and good customer service to our customers.

Arroyo Instruments

#6196



373 Front St Ste B, Grover Beach, CA, 93433
805/481-6684; fax 805/481-6628
sales@arroyoinstruments.com; www.arroyoinstruments.com

New Product: New 2 to 8A LaserSource laser diode drivers and 60W or 120W TECSource temperature controllers.

Arroyo Instruments' is a supplier of leading edge laser diode drivers, temperature controllers and laser diode fixtures. Our LaserSource offers high stability and low noise performance, currents to 8A and up and unique features not found elsewhere. Our TECSource temperature controllers feature 0.004°C stability and up to 120W of power. Both products offer a bright VFD display and RS232 and USB interfaces. We also offer c-mount, HHL, TO-3, butterfly, DIL, mini-DIL and TO-can fixtures. Contact: Paul Corr, President.

Asahi Spectra USA Inc.

#6032



23505 Crenshaw Blvd Ste 244, Torrance, CA, 90505
310/530-5855; fax 310/530-1739
info@asahi-spectra.com; www.asahi-spectra.com

New Product: IMS-5000 LED Profiler, Xenon light source 100W/300W, Solar simulator.

Asahi Spectra supplies high-end optical filters and instruments for biomedical optics, fluorescence microscopy, Raman research, any lasers, lithography, astronomy or solar industry. IMS-5000 LED profiler allows to measure a spectral performance, relative light intensity from the angles like a hemisphere and can show 16 figures including 2D and 3D images by the original software. Xenon light source 100W/300W can emit intensive light of specific wavelength with the original Mirror Unit and optical filters. They can be used as a solar simulator. Contact: Kiyotaka Ariyuki, Overseas Sales Department, ariyuki@asahi-spectra.co.jp; Kazuyoshi Nakazawa, Overseas Sales Department, nakazawa@asahi-spectra.co.jp.

ASKION GmbH

#1801

Keplerstr 17-19, Gera, Germany, 07549
49 365 7375 200; fax 49 365 7353 402
info@askion.com; www.askion.com

ASKION - your reliable outsourcing partner to realize your new device conception starting with the feasibility and ending with a serial product. We offer from one hand: System design, optoelectronics, mechatronics and control, test and measurement equipment; Prototyping and ramp up production up to small and medium size series; Quality management EN ISO 9001 and EN ISO 13485. Benefit from our long-term experience and competencies. Contact: Egon Pfeifer, Managing Director Marketing & Sales, Egon.Pfeifer@askion.com; Katrin Schröter, Assistant Marketing & Sales, Katrin.Schroeter@askion.com.

ASML Optics

#420



3900 Lakeside Dr, Richmond, CA, 92867
510/222-2310; fax 480/222-2357
information@asml.com; www.asml.com

ASML Optics is a manufacturer of extreme precision optical components and systems for a broad range of commercial applications, serving customers worldwide. Provides Design-to-Image™ solutions including optical and mechanical design, optical fabrication and coating, assembly and system qualification and distinct customer benefits with Asphere Advantage™ technology and PerfectWave™ metrology. Contact: Mark Bigelow, Vice President Sales, mark.bigelow@asml.com; Juan Ivaldi, Manager Strategic Business, juan.ivaldi@asml.com.



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**CAMERA
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**Introducing the first member
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1/2" state of the art CCD imager.**

OPAL-1000 camera

High Speed:

1 Megapixel resolution at 120 fps

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Superior dynamic range of 63 dB

Unrivalled Image Quality:

Excellent linearity over full dynamic range

Unique Accuracy and Repeatability: Proprietary electronics & Advanced sensors

There are many cameras but few rare gems. Would you want anything less than the best for your high-end systems? Increase your system throughput, detection capabilities, and up-time with the Adimec OPAL-1000 camera.

For maximum image quality, speed, and reliability in demanding applications - Choose Adimec

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(+31) 40-2353920
(+81) 3-5968-8377
(+65) 6334-1236

Adimec
www.adimec.com

Photonics West Exhibitor Directory

asphericon GmbH

#1801



Wildenbruchstr 15, Jena, Germany, 07745
49 3641 675 600; fax 49 3641 675 606
info@asphericon.com; www.asphericon.com

New Product: CNC machined aspherical cylinder optics on customized basis.

asphericon is an acknowledged specialist for aspheric optics such as lenses, mirrors, axicons and cylinder. Based on its CNC grinding and polishing proprietary technologies, in combination with standardized tools and advanced tactile and interferometric measurement systems, asphericon offers a complete range of custom and off-the-shelf precision components. Contact: Alexander Zschaebitz, Managing Director, a.zschaebitz@asphericon.com; Jean-Luc Nogues, Domestic Sales Manager, sales@asphericon.com.

Astron

#6278

PO Box 2, Dwingelo, The Netherlands, 7990 AA
31 521 595 100; fax 31 521 595 101
www.astron.nl

New Product: Extreme lightweighting cryogenic optics; Near IR spectrometer; Photonic signal processing systems; Optical and Radio systems for research in astronomy.

We develop and deploy large phased-array based radio telescopes e.g. the new low-frequency radio telescope LOFAR. For the higher frequency systems, microwave photonic signal processing subsystems are developed. Design of spectroscopic systems operating in the near and thermal infrared, for use on large space and ground-based optical-IR telescopes using a patented technology to optimize the stiffness-to-weight ratio of optical components Contact: R.G.B. Halfwerk, Technology Transfer Officer, halfwerk@astron.nl; R. Navarro, Manager Optical Design Competence Center, navarro@astron.nl.

AT-Fachverlag GmbH

#6325

Saarlandstr 28, Fellbach, Germany, 70734
49 711 952 9510; fax 49 711 952 95199
at@at-fachverlag.de; www.photonik.de

New Product: Photonik international issues are English specials of the German-language magazine Photonik.

Photonik is a German-language trade journal published 6 times a year, covering the high-tech areas of optical technologies (opto-electronics, laser technology, image processing, optical communication, optical metrology, etc.). In this area, Photonik provides the highest circulation in the German-speaking market place. Photonik publishes technical articles, reports on new products and business news. The magazine is targeted at development engineers and industrial users of such products. Contact: Johannes Kuppe, Chief Editor, kuppe@at-fachverlag.de; Norbert Schoene, Marketing Manager, schoene@at-fachverlag.de.

ATLAS PCF Ltd.

#5129

12 Savvinskaya nab (stroenie 11), Moscow, Russia, 119435
7 495 795 3787; fax 7 495 795 3786
atlas2000@mail.ru; www.atlas-pcf.ru

New Product: World Largest Optical regular sapphire crystals: 80 kg and diameter 300 mm. Sapphire wafers 8"-10".

Optical sapphire manufacturer, ranked in TOP 5 of sapphire factories in the world. Monthly capacity: 4000 kgs of grown boules or 50000 pcs of optical items, wafers (LED and SOS), windows. Contact: Andrey Ivanov, Sales Director.

ATP, Applied Thin-Film Products

#6204

3439 Edison Way, Fremont, CA, 94538
510/661-4287; fax 510/661-4250
atp@thinfilm.com; www.thinfilm.com

APPLIED THIN-FILM PRODUCTS offers Thin-Film foundry services. Metalizations range from Pre-Deposited Au/Sn, to films that include Nickel, Platinum and Palladium. Materials offered are Aluminum Nitride, Beryllium Oxide, Quartz and Alumina. Circuit features can include coplanar structures, intergrated resistors, conductive plated thru vias, solid filled vias, Soldermasks and double sided patterning. Contact: Franco Pietroforte, Vice President, franco@thinfilm.com; Ryan Nguyen, Sales Engineer, rnguyen@thinfilm.com.

Auxora Inc.

#6241

4750 Littlejohn St, Baldwin Park, CA, 91104
626/939-7500; fax 626/960-0248
sales@auxora.com; www.auxora.com

Avantes, Inc.

#1703



9769 W 119th Dr, Broomfield, CO, 80021
303/928-2348; fax 303/442-0815
infousa@avantes.com; www.avantes.com

New Product: AvaSpec-2048x14 Spectrometer-high sensitivity back thinned CCD, 200-1100 nm range, wireless & USB2.

Avantes manufactures portable spectrometer systems, light sources, fiberoptic cables & probes and accessories for UV/VIS/NIR measurement from 200-2,500 nm. Systems include choice of various detector arrays and communication options including USB, USB2, Wireless and RS232. Avantes welcomes custom engineering questions and OEM inquiries. Avantes has thousands of spectrometers in the field and experienced specialists to help find your Solutions in Spectroscopy®. Contact: Greg Neece, President, gregn@avantes.com; Damon Lenski, Sales Manager, damonl@avantes.com.

Avensys/ITF Labs.

#5114



400 Montpellier Blvd, Montreal, QC, Canada, H4N 2G7
514/748-4848; fax 514/428-8999
info@avensys.com; www.avensys.com

ITF Labs spearheads the development of ultra-reliable fiber-optic systems including high-power fused components, optical sensors and instrumentation and fiber laser components. Its sister company, Avensys Tech, designs, manufactures and markets high reliability optical components and modules for the telecom market and high power devices and sub-assemblies for the industrial market. Contact: Christian Lafrance, Director - Business Development, clafrance@avensys.com; Elisa Proctor, Sales Representative, eproctor@avensys.com.

Avo Photonics, Inc.

#6330



700 Business Center Dr Ste 125, Horsham, PA, 19044
215/441-0107; fax 215/441-9219
sales@avophotonics.com; www.avophotonics.com

Axcel Photonics Inc.

#5017

45 Bartlett St, Marlborough, MA, 01752
508/481-9200; fax 508/481-9261
sales@axcelphotonics.com; www.axcelphotonics.com

New Product: AXCELS 9XXnm product line features 8W/100um on our C4 submount and 6.5W from 100um fiber.

AXCEL Photonics, Inc. is specialized in the development, manufacturing and marketing of high power diode lasers. Our product lines include both single mode and multi-mode lasers for solid state laser pumping. Applications are medical, imaging, homeland security and spectroscopy. The lasers are available as chips, chips on submounts and packaged modules. Axcel's unique fabrication technology boosts the world-class performance, quality and fast delivery. Contact: James McGuirk, Sales Manager, jmcguirk@axcelphotonics.com; Tom Yang, Sales Director, tyang@axcelphotonics.com.

AXT, Inc.

#6369

4281 Technology Dr, Fremont, CA, 94538
510/438-4700; fax 510/353-0668
sales@axt.com; www.axt.com

Ayase America, Inc.

#6266



3080 Olcott St Ste 210D, Santa Clara, CA, 95054
408/988-5277; fax 408/988-5278
info@ayaseamerica.com; www.ayaseamerica.com

New Product: LD: 635nm 10mW, 660nm 150mW, 780nm 90mW, 850nm 50mW. LD module: APC laser module, line generator.

Ayase has 3 locations worldwide in Japan, USA and Germany. Since 1999, we have been providing our customers with high-quality laser diodes, laser diode modules, optics, motors and OEM optical sub-assemblies. We serve a wide range of customers in industries such as barcode scanner, gun sight, machine vision, biomedical, particle counter, laser leveler, optical sensor, etc. Contact: Jeff Hsu, Manager of Sales & Marketing, jhsu@ayaseamerica.com; Greg Mulligan, Senior Sales Associate, gmulligan@ayaseamerica.com.

Azure Photonics Co.

#6352



3rd Fl Bldg 18 Juyuanzhou Industrial Zone, No 618 Jinshan Blvd, Fuzhou Fujian, China, 350002
86 591 83850581; fax 86 591 83850580
marcoshen@azurephotonics.com; www.azurephotonics.com

B&W Tek, Inc.

#220

19 Shea Way, Newark, DE, 19713
302/368-7824; fax 302/368-7830
info@bwtek.com; www.bwtek.com

New Product: BRC641E Miniature Back-thinned CCD Spectrometer with plug-and-play USB interface.

B&W Tek is a leader in developing and manufacturing biophotonic instrumentation. As a total solution provider, it serves Life Science and Biomedical communities by providing OED and OEM services. Products include high power and broadband SLD/SLED sources, diode-pumped solid-state lasers and high power diode/fiber lasers, UV/VIS/NIR/fluorescence/Raman spectrometers. ISO 9001 and ISO 13485 certified. For more information visit: www.bwtek.com. Contact: Meghana Kakade, Marketing Coordinator, megk@bwtek.com; Mie Mie Joe Strickler, Mie@bwtek.com.

Baden-Wuerttemberg International

#1801

Agency for International Economic and Scientific Cooperation, Willi-Bleicher-Strasse 19, Baden-Wuerttemberg, Germany, 70174
49 711 22787 0; fax 49 711 22787 22
info@bw-i.de; www.bw-invest.de

Baden-Wuerttemberg International is the economic development agency of the state of Baden-Wuerttemberg. Our goal is to promote our location worldwide. Therefore, our work here at Baden-Wuerttemberg International includes a wide range of tasks: facilitating international cooperation between companies through market development efforts in key world markets; marketing Baden-Wuerttemberg as a location for business, science, research, and universities; helping foreign companies establish facilities in Baden-Wuerttemberg; and the transfer of information and technical knowledge.

Bandwidth Semiconductor, LLC

#6115

25 Sagamore Park Dr, Hudson, NH, 03051
603/595-8900; fax 603/595-0975
sales@bandwidthsemi.com; www.bandwidthsemi.com

Barr Associates Inc., Thin Films

#244



2 Lyberty Way, Westford, MA, 01886
978/692-7513; fax 978/692-7443
barr@barrassociates.com; www.barrassociates.com

New Product: Custom optical filters - UV to Far IR, narrowband, wideband, edge, notch, dichroic, reflector, AR.

Barr Associates, Inc. offers custom optical interference filters and coatings over the spectral range of 200nm to 40 microns, for use in a wide variety of applications including biotechnology, spectroscopy, semiconductor, environmental, color measurement, aerospace, defense, astronomy and telecommunications. Barr deploys a wide range of coating deposition technologies and manufacturing capacities to service companies across diverse markets. Contact: George Minott, Manager, Commercial Group, gminott@barrassociates.com; Ali Smajkiewicz, Chief Executive Officer, asmajkiewicz@barrassociates.com.

Basler Vision Technologies

#5112

855 Springdale Dr Ste 160, Exton, PA, 19341
610/280-0171; fax 610/280-7608
vc.sales.usa@baslerweb.com; www.basler-vc.com

New Product: Basler Introduces a New Pioneer Five Megapixel GigE Vision Camera.

Basler Vision Technologies designs and manufactures digital cameras for industrial and scientific users. We have a broad portfolio of high speed and/or high resolution area scan and line scan cameras featuring firewire, GigE and camera link interface options. Contact: Marko Vogt, Regional Sales Representative, marko.vogt@baslerweb.com; Gerry O'Hara, Technical Support Manager, gerry.ohara@baslerweb.com.



Product Locator Kiosk

Find your way around the Exhibition. Perform a product or key word search, review the Product Demonstrations, print out the results, and be on your way in no time! You'll find the 3-station kiosk in the foyer area, outside the entrances to Exhibition Halls 1 and 2 of the Convention Center and in South Hall by Booth #6198.

Photonics West Exhibitor Directory

Beamtech Optronics Co. Ltd.

#5034

5320 Lackner Crescent, Richmond, BC, Canada, V7E 5Z9
604/725-1817; fax 604/277-9070
beamtech@shaw.ca; www.beamtech-laser.com

New Product: Dawa Compact Q-Switch Nd: YAG laser, from IR to UV, used for OEM & scientific research applications.

Specializing in beam quality control technology for solid-state lasers, Beamtech offers DPSS and flashlamp pumped laser systems for scientific research and OEM in both medical and industrial areas. Since 1997, Beamtech has successfully installed over 2500 laser systems worldwide. Our advances in VRM, single mode and SGM super multimode beam quality technologies give Beamtech world class leadership in pulsed lamp pumped and CW diode pumped lasers with excellent beam quality. Contact: Xiaonian Fan, Director, International Marketing, fxn@beamtech-laser.com; Fang Zhang, President, fang@beamtech-laser.com.

Becker & Hickl GmbH

#615

Nahmitzer Damm 30, Berlin, Germany, D-12277
49 30 787 5632; fax 49 30 787 5734
b_and_h@boselec.com; www.becker-hickl.de

New Product: "Confocal Fluorescence Lifetime Imaging Microscope constructed by add ons to almost any microscope".

Time correlated Single Photon Counting (TCSPC) electronic modules providing PC based measurement solutions. Applications include Fluorescence Lifetime Imaging Microscopy (FLIM), Fluorescence Resonance Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS). Single photon counting detectors (MCP's, PMT's), Pulsed Diode Lasers, multichannel detector heads, routing devices for multichannel measurements, preamps, gated photon counters and multiscalers. Contact: John Devaney, Instrument Sales, jjd@boselec.com.

Befort Wetzlar OHG

#1801

Braunfelser Str 26-30, Wetzlar, Germany, 35578
49 6441 9241 0; fax 49 6441 9241 33
info@befort-optic.com; www.befort-optic.com

Beijing Bodian Optical Tech. Co., Ltd.

#6617

No 2 Tuanjihu N Rd, Chaoyang District, Beijing, China, 100026
86 10 6582 3854; fax 86 10 6582 7907
bdoptic@126.com; www.bd-optic.com.cn

Beijing Century Sunny Technology Co., Ltd.

#6105

No 65 Jiancai W Rd, Xi Sanqi Haidian, Beijing, China, 100096
86 10 829 37456; fax 86 10 829 30969
century-sunny@263.net; www.century-sunny.com

New Product: Cyclone controller for USB slot enables real-time and precise positioning, direct and user friendly.

BCST is devoted to the development, manufacturing and after sales serves of galvanometer scanning system, control board & software. With years of experience in this area, BCST stands out with its state-of-the-art technology and excellent services. Currently, BCST has 7 types of scanners and PCI/USB control board and software available, great performance/price ratio has made BCST well received in the international market. Contact: Wang Jiguang, Vice President, info@century-sunny.com.

Beijing Guojing Infrared Optical Technology Co., Ltd.

#1938, 1939

No. 2 Xin Jie Kou Wai St, Beijing, China, 100088
86 10 6204 1586; fax 86 10 8224 0025
wjx.guojing@gmail.com; www.guojing-tech.com

Beijing Guojing Co., LTD. is a subordinate limited company of general research institute for nonferrous metals and a high-tech enterprise of Beijing Zhongguancun Science Park. Guojing engages in research, production, sales, import and export. The main products of Guojing include germanium crystal, zinc sulfide, zinc selenide, germanium tetrachloride, etc. These products are widely used for infrared optics, photocommunication and other applications. Guojing's customers spread all over the world. Contact: Wan Jiaxin, Sales Executive.

Berliner Glas KGaA

#935

Waldkraiburgerstr 5, Berlin, Germany, 12347
49 30 609050; fax 49 30 60905 100
info@berlinerglas.de; www.berlinerglas.com

BERLINER GLAS is one of Europe's leading suppliers of precision thin film coated optical components, optomechanical and electro-optical assemblies and systems. We analyze, design, develop, manufacture and measure all from one source. In addition, the company offers high resolution display panels and develops custom wafer level packaging products for MEMS and MOEMS. Contact: Fred Doss, Sales Manager Precision Optics, fdoss@berlinerglas.com; Armin Althaus, Photonics Sales and Marketing Management Board, photonics@berlinerglas.de.

Berliner Glas US

#935



117 Underwood Rd, Williamsburg, VA, 23185
757/229-9368; fax 757/229-5213
fdoss@berlinerglasus.com; www.berlinerglas.com

New Product: Customized Assemblies and Systems.

Berliner Glas US, BERLINER GLAS GROUP Company, offers a broad variety of precision thin film coated optical key-components, optical assemblies and optical systems from design to production. Services: whole process chain including clean room environment and individual measurement set-ups. Additional support: housing technology for MEMS and innovative display front panels for various applications. Markets: Semiconductor, Life Science, Medical, Industrial Sensors, Information Technology. Contact: Fred Doss, Sales Manager Precision Optics; Martin Wenzler, President Berliner Glas US, mwenzler@berlinerglasus.com.

Bid Service

#3028

225 Willowbrook Rd, Freehold, NJ, 07728
732/863-9500; fax 732/863-1255
bobm@bidservice.com; www.bidservice.com

Bid Service buys and sells high quality, refurbished equipment used in the semiconductor industry: wafer fab, assembly, and test. We also offer added value, through system upgrades and custom applications. All equipment is fully serviced by our in-house technical staff and is backed by our 30 day return policy. Free catalog is available upon request. Contact: Robert Murphy, Sales Manager; Roger Shupe, General Manager, roger@bidservice.com.

Big Sky Laser Technologies

#527

See listing Quantel USA

QUANTEL is a leader in the design and manufacturing of advanced flash-lamp pumped Nd:YAG lasers, diode-pumped solid-state lasers, intense pulsed light instruments, ultra-sound diagnostic products, and fiber-laser solutions for a variety of industrial, scientific, medical, military, and aerospace applications. QUANTEL also offers laser damage testing services. The USA subsidiary of QUANTEL was previously named Big Sky Laser Technologies and is now QUANTEL USA. Contact: Neal Montgomery, Inside Sales, nmontgomery@quantelusa.com.

SPIE Photonics West



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San Jose, California, USA

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Photonics West Exhibitor Directory

Biophotonic Solutions, Inc.

#6523

3590 Breezy Point Dr, Okemos, MI, 48864
517/203-8518

pastirk@biophotonicsolutions.com; www.biophotonicsolutions.com

New Product: MIIPS technology for femtosecond pulse characterization/optimization available through Coherent Inc.

BioPhotonic Solutions Inc. (BSI) is a R&D corporation, recognized for its leading technology in femtosecond laser pulse shaping. BSI's automated femtosecond pulse optimization technology (MIIPS) covers a range of applications: imaging, sensing and micromachining. The technology eliminates phase distortions, ensuring optimum results every time. If your application requires femtosecond pulses, let us optimize it. Contact: Igor Pastirk, Chief Technical Officer; Marcos Dantus, Chief Executive Officer, dantus@biophotonicsolutions.com.

Blue Hill Optical Technologies

#6252

362 University Ave, Westwood, MA, 02090
781/255-1064; fax 781/255-1065

info@bluehilloptical.com; www.bluehilloptical.com

Blue Hill is a premium distributor of high quality lasers, optics and optical products for industry and research applications. We sell and support CW and pulsed DPSS diode lasers, fiber lasers, gas lasers, scanning products, scan optics, beam expanders & beam analysis products and spectrometers. Visit with application questions and see what's new! Blue Hill, home of Light That Works™. Contact: Phil Barrows, pbarrows@bluehilloptical.com.

Blue Ridge Optics LLC

#5137



118 Center St, Bedford, VA, 24523
540/586-8526; fax 540/586-8527

walter@blueridgeoptics.com; www.blueridgeoptics.com

New Product: Blue Ridge Optics now offers High Performance (IAD) coatings that are environmentally stable.

Manufacturer of precision Thin Film Coatings and Optical components 0.248 to 5 microns including antireflection, reflectors, beamsplitters, high and low extinction polarizers, multi-bandwidth coatings. Specializing in custom durable high laser damage coatings and quick turn around prototype development runs. Dedicated to technology and quality through an ongoing emphasis on Research and Development, as well as investments in equipment to produce high quality, cost-effective products. Contact: Walter Siehien, Chief Executive Officer.

Blue Sky Research

#514

1537 Centre Pointe Dr, Milpitas, CA, 95035
408/941-6068; fax 408/941-6069

sales@blueskyresearch.com; www.blueskyresearch.com

New Product: FiberMAX 532, new fiber coupled green laser components using BSR's high stability packaging.

Blue Sky Research manufactures high performance laser diodes and laser modules incorporating our unique VPS microlens technology, including lasers from 375nm to 980nm. Products include: FiberMAX fiber coupled lasers, VPSL circulator components, Chromalase™ II, Fiberdrive™, FiberTEC™ series of integrated laser modules include free-space beam collimated, focused or fiber pigtailed laser diodes with integrated laser driver circuits and temperature control. Contact: Sales Team sales@blueskyresearch.com; Cara, Account Executive, cara@blueskyresearch.com.

BMV Optical Technologies Inc.

#6098

26 Concourse Gate Unit 4, Ottawa, ON, Canada, K2E 7S4
613/228-2442; fax 613/228-4003

info@bmvoptical.com; www.bmvoptical.com

BMV Optical Technologies is a manufacturer of precision optics for R&D, telecom and laser based applications. Services include optical design, fabrication of spherical, cylindrical and ultra flat surfaces as well as thin film coatings. Products include lenses and lens systems, precision flats, laser windows, wedges, etalons, waveplates, beam splitters and sapphire optics. BMV produces UV, VIS and IR coatings such as anti-reflection, beam splitting, beam combining, dielectric and metal films. Contact: Tom Millen, President, tmillen@bmvoptical.com; Terry Vineham, Vice President, tvineham@bmvoptical.com.

Bolt Systems, Inc.

#3009

3535 Ross Ave Ste 100, San Jose, CA, 95124
408/448-8860

sales@photonicsstraining.com; www.photonicsstraining.com



CONFERENCE BAG INSERT SPONSOR

Bookham, Inc.

#1207

Binzstr 17, Zurich Office, Zurich, Switzerland, 8048
41 44 455 8585; fax 41 44 455 8586

highpower@bookham.com; www.bookham.com

New Product: Very High Brightness 9xxnm Bar: 80W from a 3.2mm emitting Area; High Efficiency 808nm Products.

Bookham's world-class Swiss facility has been producing industry leading laser diodes for more than 20 years. Proprietary core technologies like the E2 mirror passivation process deliver both highest brightness and outstanding reliability. Our products, from single emitters to bars and arrays, are designed for the most demanding applications in industrial, medical, printing, display and defense. Contact: Michael Cutler, United States Sales Manager, michael.cutler@bookham.com; Gunnar Stolze, Director Sales, gunnar.stolze@bookham.com.

Bordeaux Region Development Agency - B.R.A.

#1408

2 Place de la Bourse - BP 78, Bordeaux, France, 33025
33 557 140 643; fax 33 557 140 630

sgarcia@bra-bordeaux.org; www.locateinbordeaux.com

Appointed by all the local governments, the Bordeaux Region development Agency - BRA is a one stop shop for foreign investments in the Bordeaux area. The BRA accompanies the investor throughout the entire setting-up process and facilitates the newcomer's introduction into local culture.

Bossa Nova Technologies

#715

606 Venice Blvd Ste B, Venice, CA, 90291
310 577 8114; fax 310 943 3280

info@bossanovatech.com; www.bossanovatech.com

New Product: SALSA Stokes polarization camera images orientation and degree of polarization at video rate.

Bossa Nova Technologies manufactures polarization cameras and laser ultrasonic receivers for remote sensing, visual appearance measurement, inspection and non-destructive testing applications. Our linear stokes camera images polarization orientation and degree at video rate. Our laser receivers provide sub-Angstrom sensitivity on any material. Our instruments are used across many fields, from fundamental research to cosmetic product evaluation, steel, glass, composite inspection and defense. Contact: Philippe Clemenceau, Director of Sales, pclemenceau@bossanovatech.com.



GENERAL REFRESHMENTS SPONSOR

Boston Electronics Corp.

#615

91 Boylston St, Brookline, MA, 02445
617/566-3821; fax 617/731-0935
boselec@boselec.com; www.boselec.com

New Product: "Confocal Fluorescence Lifetime Imaging Microscope constructed by add ons to almost any microscope".

Products for optical signal detection and signal processing--- Time Correlated Single Photon Counting electronics. Fluorescence Lifetime and Steady State Spectrometers, Quantum Cascade Lasers, Lock in amplifiers & optical choppers. UV and IR detectors. APD modules. Laser safety shutters. IR sources. Laser radar (LIDAR) receiver electronics. Contact: John Devaney, Instr. Sales, jjd@boselec.com.

Boston Micromachines Corp.

#6227

108 Water St Ste 2A, Watertown, MA, 02472
617/926-4178; fax 617/926-7996
info@bostonmicromachines.com;
www.bostonmicromachines.com

New Product: Multi-DM: The new 140 actuator deformable mirror has enhanced stroke: 6µm.

Boston Micromachines Corp. designs and manufactures micromachined deformable mirrors for advanced optical control. These miniature, precision light-shapers empower the world's top researchers to make breakthroughs in astronomy, microscopy, laser control and high resolution eye imaging. Leading the industry in micro-electro mechanical systems (MEMS) deformable mirror development, BMC is committed to driving medical discovery and supporting national defense. Contact: Steven Menn, Director of Product Marketing, smenn@bostonmicromachines.com.

Boulder Nonlinear Systems, Inc.

#1705

450 Courtney Way Unit 107, Lafayette, CO, 80026
303/604-0077; fax 303/604-0066
info@bnonlinear.com; www.bnonlinear.com

Boulder Nonlinear Systems, Inc. (BNS) is an innovative technology company specializing in dynamic liquid crystal polarization control solutions for both laser-based and imaging systems. Company strengths in scientific research and development are leveraged into OEM and standard product offerings targeted for astronomy, biomedical, defense, microscopy, optical computing, optical storage and telecommunications applications. Products include: Optical Shutters, Polarization Rotators, Variable Waveplates, Beam Attenuators and High Resolution Spatial Light Modulators.

Breault Research Organization

#422



6400 E Grant Rd Ste 350, Tucson, AZ, 85715-3862
800/882-5085; fax 520/721-9630
info@breault.com; www.breault.com

New Product: ASAP lite, ASAP CAD+, ASAP OPTICAL+, ASAP Bio, ASAP Advanced.

BRO is an optical engineering firm of global reach and reputation. Industries serviced by BRO include: aerospace, automotive, biotechnology, consumer electronics, defense, medical, semiconductor and telecommunications sectors. BRO's Advanced Systems Analysis Program (ASAP®) is the leading program uniting geometrical and physical optics with optical and mechanical system modeling. BRO offers optics training, technical support and consulting services that are unsurpassed in the optics industry. Contact: Donna Hart, Global Sales Manager, dhart@breault.com; Wayne Hall, Chief Operations Officer, whall@breault.com.

Brighten Optics Ltd.

#1505



#150-11880 Hammersmith Way, Richmond, BC, Canada, V7A 5C8
604/241-9586; fax 604/729-6283
sales@brightenoptics.com; www.brightenoptics.com

New Product: New this year are Brighten's high-power DPSS green and blue lasers.

Brighten Optics has been offering off-the-shelf and customized optical components and lasers at unbeatable prices for over a decade. Our expertise and high quality products are trusted by companies working in many industries. Brighten combines advanced optical technology, automated fabrication equipment and comprehensive custom coating facilities with a dedicated team of professionals to provide high-end optical components and customized services at excellent prices. Contact: Ben Chen, President, ben@brightenoptics.com; Sherry Wang, Sales Engineer, sherry@brightenoptics.com.

Brimrose Corp. of America

#1536

19 Loveton Circle, Hunt Valley Loveton Center,
Sparks, MD, 21152-9201
410/472-7070; fax 410/472-7960
office@brimrose.com; www.brimrose.com

New Product: The newest product is a Laser Vibrometer measuring amplitude and frequency of vibrations.

Broad selection of free space and/or fiber-pigtailed Acousto-Optic devices including AO Tunable Filters, Frequency Shifters, Modulators, Deflectors, Q-Switches, Mode-Lockers & Cavity Dumpers; Recirculating Loop Systems, Optical Switches, Fiber collimators and Focusers. Our Systems include AOTF Imaging subsystems, Imaging & NIR Spectrometers, DPSS Green and 1064nm laser series. Brimrose is a small business; optical technology based manufacturing company with a 27-year history. Contact: Jolanta Rosemeier, Manager AO Division, jsoos@brimrose.com; Daniel Zheng, Sales Representative, zyang@brimrose.com.

Bristol Instruments, Inc.

#6094

7647 Main St Fishers Ste 101, Victor, NY, 14564
585/924-2620
info@bristol-inst.com; www.bristol-inst.com

Bristol Instruments offers laser wavelength meters that provide the reliable accuracy required for the most demanding applications. Systems are available to measure absolute wavelength of pulsed and CW lasers with an accuracy as high as +/- 0.0001 nm. Systems are offered for operation within the wavelength range of 350 nm to 5.0 µm. Bristol Instruments also provides accessories, repair services and FREE technical support for old Burleigh products such as the RC Fabry-Perot interferometer. Contact: Walter Hersom, Sales Manager, whersom@bristol-inst.com; Brian Samoriski, President, bsamoriski@bristol-inst.com.

Brooks Automation Inc.

#6509

15 Elizabeth Dr, Chelmsford, MA, 01824
978/262-2400; fax 978/262-2500
barbara.culhane@brooks.com; www.brooks.com



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

Photonics West Exhibitor Directory



PLASMA SCREEN SPONSOR

Brush Ceramic Products

#6079

6100 S Tucson Blvd, Tucson, AZ, 85706
520/746-0251; fax 520/294-8906
sales@brushceramics.com; www.brushceramics.com

New Product: BWTF, 250 Watt BeO substrates polishable to less than 1 uin CLA - ideal for thin film applications.

Be cool with BeO ceramic. Brush Ceramic Products is the leading manufacturer of Beryllium Oxide Ceramics. BeO ceramics in laser technology enables optoelectronics to operate at higher temperatures in small, highly reliable packages. BeO provides thermal conductivity second only to diamond among electrically insulating materials, dissipating nearly 300W/mK at room temperature. BeO's thermal conductivity is ten times greater than Al₂O₃ ceramics and double AlN. Standard or custom configurations. Contact: Krista Lynch, Sales & Marketing Representative, klynch@brushceramics.com; Lee Vandermark, Sales & Marketing Manager, Lee_Vandermark@brushceramics.com.

Brush Wellman Inc.

#6273

14710 W Portage River S Rd, Elmore, OH, 43416-4173
419/862-4171; fax 419/862-4174
john_hochberger@beminc.com; www.berylliumproducts.com

Brush Wellman Beryllium Products is the premier integrated global producer of beryllium-based metals and metal matrix composites. We provide high-performance metals and metal-matrix composites for mission-critical photonics engineering applications. Contact: John Hochberger, Sales Manager.

Brysen Optical

#2018

27700A SW Pky Ave, Wilsonville, OR, 97070
503/498-3880; fax 503/498-3703
info@brysenoptical.com; www.brysenoptical.com

New Product: IR/Visible optical coatings, lenses, windows and assemblies.

Brysen Optical, now operating within FLIR Government Systems as FLIR Precision Optics, built a 33-year reputation based upon the dependability and quality of its specialized IR and Visible coatings on Germanium, Zinc Selenide, BK70 and a variety of other optical substrates. FLIR Systems is the world's leading manufacturer of infrared optical systems and is a committed supplier of optics technology and components to the electro-optics industry. Contact: Kip Nix, kip.nix@flir.com.

BWT Beijing Ltd.

#2037

Fengtai District, 5th No 4 A Hangfeng Rd, Beijing, China, 100070
86 10 83681051; fax 86 10 83681077
sales@bwt-bj.com; http://www.bwt-bj.com

New Product: 1. Laser diode module with aiming beam - One fiber Two wavelength. 2. Detachable output LD module.

A manufacturer which specially dedicates in packaging of fiber pigtailed semiconductor lasers and detectors. 1. 808nm/980nm High Power Laser Diode Module. Output Port: Fiber output, Detachable output; Package: 4Pin, HHL, 14Pin, with aiming beam, Module; Output Power: 2W~30W; 2. 635nm~690nm High Power Laser Diode Module HHL Package, Fiber Output, Fiber Output Power: 350mW; 3. Laser Diode System. Contact: Jack Chen, Vice President, xiaohua.chen@bwt-bj.com; Hellen Wang.

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8-18 for complete time, schedules, and locations.

C2C Link Corp.

#6098

Unit 202, 151 York Blvd, Hamilton, Canada, L8R 3M2
905/528-6556; fax 905/528-9891
sales@c2clink.com; www.c2clink.com

New Product: PPLN and MgO doped PPLN crystals and waveguides.

C2C Link is specialized in design and manufacturing standard and customized low-cost high-performance periodically poled Lithium Niobate (PPLN). Our proprietary crystal poling technique enables us to make high quality nonlinear chips on large substrates of congruent LiNbO₃ substrates with and without MgO doping, with high yield and thus low cost. PPLN chips are disruptive in a wide range of applications including laser displays, bio-medical instrumentation, sensing, telecommunications. Contact: Ye Hu, Director.

Cal Sensors, Inc.

#5067

5460 Skylane Blvd., Santa Rosa, CA, 94503
707/545-4181; fax 707/545-5113
info@calsensors.com; www.calsensors.com

For 20 years, Cal Sensors has been a worldwide supplier of infrared detectors and emitters. We offer lead sulfide and lead selenide single element and 256 element array detectors from stock or manufactured to your custom requirements. Stop by our booth to see the 256 element array in operation or to discuss our NEW HIGHER POWER EMITTERS that are now offered along with our standard pulsable or steady-state IR emitters. Contact: Patricia Elias, Manager, Sales & Marketing, patti@calsensors.com; Sean Busa, Sales Associate, sean@calsensors.com

Calmar Optcom, Inc.

#6293



755 N Pastoria Ave, Sunnyvale, CA, 94085
408/733-7800; fax 408/733-3800
contacts@calmaropt.com; www.calmaropt.com

New Product: Fiber Laser Based Chirped Pulse Amplification System (FLCPA): pulse energy>3mJ, pulsewidth<0.5ps.

Design, manufacture ultrashort pulse fiber laser systems and modules. Fiber laser based chirped pulse amplifier system >3mJ pulse energy. Fully automatic tunable 0.4~45GHz 1~15ps actively mode-locked 1550, 1um and 780nm; 10~100MHz, adjustable 0.1~20ps passively mode-locked 1550/1060/780nm bands, 640GHz Bit Rate Multipliers with tunable delay>200ps; Gain switched laser; Low dispersion, PM, high power EDFA and YDFA; Pulse picker; Pulse compressor; Gain Switched laser; Electrical pulse generator. Contact: Peter Hu, Director of Sales and marketing, phu@calmaropt.com; Tony Lin, Chief Technical Officer, tony@calmaropt.com.

Cambridge Technology, Inc.

#614

25 Hartwell Ave, Lexington, MA, 02421
781/541-1600; fax 781/541-1601
sales@camtech.com; www.camtech.com

New Product: EC1000 Single-board Stand-alone Real-time Embedded Control Subsystem for Galvanometer Laser Systems.

Cambridge Technology Inc. is the market leader in closed-loop, galvanometer based optical scanning components, servos and controllers providing superior performance in a wide variety of applications including laser marking, engraving, drilling, machining, biomedical, ophthalmology, DNA sequencing, confocal microscopy, laser entertainment and projection and any application where laser beam steering is required. Contact: David Freihofer, Director, Sales & Marketing, davidf@camtech.com; Red Aylward, President, aylward@camtech.com.



mirrors in motion

positioning and focusing laser beams



SCANLAB AG
Siemensstr. 2a
82178 Puchheim · Germany
Tel. +49(89)800 746-0 · Fax +49(89)800 746-199
info@scanlab.de · www.scanlab.de

SCANLAB America, Inc.
2020 Calamos Court · Suite 250
Naperville, IL 60563 · USA
Tel. +1(630)799-1553 · Fax +1(630)799-1551
info@scanlab-america.com
www.scanlab-america.com

SCANLAB stands for successful scan solutions and high-performance galvanometer scanners. By precisely moving mirrors and optics, our products position and guide the laser beam in three dimensions.

From galvanometer scanners to complex scan solutions, from marking, cutting and drilling to welding – SCANLAB products prove their worth across a diverse range of applications in industry, medical and biomedical technology.

SCANLAB's leading position is confirmed by more than 10,000 installed scan solutions every year. Gain a lead over your competitors! If you are looking for dynamic, precise and reliable scan solutions, then just ask us.

We will be pleased to discuss how our products can be used in your applications.

**Please visit us at booth #234, Hall 1
(Convention Center).**



Photonics West Exhibitor Directory

Canadian Institute for Photonic Innovations (CIPI) #6098

Pavilion Rm d'optique-photonique, 2375 rue de la Terrasse Rm 2111, Québec, QC, Canada, G1V 0A6
418/656-3013; fax 418/656-2995
cipi@cipi.ulaval.ca; www.cipi.ulaval.ca

The mission of the Canadian Institute for Photonic Innovations is to bring university researchers together with public sector and industrial partners in a network with state-of-the-art facilities in order to stimulate innovations in photonics and promote their exploitation to generate wealth and enhance the quality of life for Canadians. Contact: Robert Corriveau, President and Chief Executive Officer, Robert.corriveau@cipi.ulaval.ca; Marouchka-M. Brisebois, Communications Coordinator, Marouchka.brisebois@cipi.ulaval.ca.

Canadian Photonics Consortium - Canada Pavilion Organizer #6098

200-2625 Queensview Dt, Ottawa, ON, Canada, K2B 8K2
613/828-6274; fax 613/726-3440
cpc@cipi.ulaval.ca; http://www.photonics.ca/

The Canadian Photonics Consortium is the representative voice of the entire Canadian Photonics community. Our members include companies - large and small; academic institutions and consortia; as well as government laboratories and agencies - both federal and provincial. We bring together business, academic and government leaders. CPC's vision is to establish Canada as the place for business success in optics and photonics. Contact: Michael Scott, Executive Director, michael_scott@rogers.com; Jacques Labelle, Chairman, jacques@photoniquequebec.ca.

Canadian Photonics Fabrication Centre (CPFC) #6098

1200 Montreal Rd M-50, Ottawa, ON, Canada, K1A 0R6
613/993-6040; fax 613/952-5710
info@cpfc.ca; http://cpfc-ccfdp.nrc-cnrc.gc.ca/

New Product: Pure-play Photonics Foundry for Prototyping Services and Small Volume Production.

CPFC's mission is to facilitate commercialization of photonic devices in III-V and silicon materials by providing a world class, industrial grade foundry that bridges the gap from innovation to product. Services range from feasibility studies to complete custom solutions. CPFC facilitates innovation in all areas of photonics applications including telecommunications, health, energy, the environment, defence and security. http://cpfc-ccfdp.nrc-cnrc.gc.ca. Contact: Sadiq Hasnain, Head, Business Development, sadiq.hasnain@nrc-cnrc.gc.ca; Kanu Sikka, Business Development Officer, kanu.sikka@nrc-cnrc.gc.ca.

Canon USA, Inc. #6081



3300 N First St, San Jose, CA, 95134
408/468-2227; fax 408/468-2219
encoder@cusa.canon.com; www.cusa.canon.com

New Product: Canon's New G10 and G15 Scanning Systems with new electronics to handle two axis applications.

Canon manufactures high resolution rotary and linear encoders, low cost non contact Laser Doppler Velocity Sensors and other encoder components. Canon's ongoing Research and Development has achieved outstanding control precision by incorporating its high level control technology throughout their product offering. Contact: Ron Travis, Sales, rtravis@cusa.canon.com.

Carl Hanser Verlag GmbH & Co. KG #3035

Kollbergerstr 22, Muenchen, Germany, 81679
49 89 99830 0; fax 49 89 984809
info@hanser.de; www.hanser.de

Carl Zeiss #6232



One Zeiss Dr, Thornwood, NY, 10594
800/233-2343; fax 914/681-7445
micro@zeiss.com; www.zeiss.com/micro

New Product: ZEISS ZF Lenses are high-quality, prime lenses for industrial cameras using the F-Mount.

Carl Zeiss is a leading international company, operating in the optical and opto-electronic industry. The business groups are generally ranked first or second in the markets of medical and research solutions, industrial solutions and lifestyle products. They offer products and services for biomedical research and medical technology, system solutions for the semiconductor, automotive and mechanical engineering industries, as well as high-quality consumer goods such as camera lenses and binoculars. Contact: Richard Schleuning, National Sales Manager, International Sales Americas, photo@zeiss.com.



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Carolinas MicroOptics Triangle #6164, 6165

Grigg Rm 235/Univ of N Carolina Charlotte, 9201 University City Blvd, Charlotte, NC, 28223
704/687-8106; fax 704/687-8241
cmot@uncc.edu; www.carolinasmicroopticstriangle.org

New Product: Unique Corporate Affiliate Program - One document for access to three universities.

The Carolina MicroOptics Triangle is a collaboration of three universities - Clemson, UNC Charlotte and Western Carolina. CMOT provides a vertically integrated set of optical capabilities to serve a broad market. CMOT has one of the largest concentrations of optical capabilities in the country which are used for collaborative grants, research and corporate affiliate programs. Contact: Scott Williams, Research Operations Manager, scotwill@uncc.edu; Mike Fiddy, Center Director, mafiddy@uncc.edu.

Carolinas Photonics Consortium #6164, 6165

Grigg Rm 235/Univ of N Carolina Charlotte, 9201 University City Blvd, Charlotte, NC, 28223
864/325-4700
jcon@charter.net; www.carolinaspotonics.com

New Product: CPC - Largest Research/Commercialization Capability in a Unique, Five University Collaboration.

The Carolinas Photonics Consortium (CPC) is a collaboration of five universities - Clemson, Duke, NC State, UNC Charlotte and Western Carolina. CPC has over \$300M of photonics-based investments and has core capabilities serving broad photonics applications. CPC is focused on commercializing the research from the five campuses. The Carolinas Photonics Consortium provides a link between campus research, industrial needs and regional economic development. Contact: Jeff Conley, Director, jcon@charter.net.

Cascade Technologies Ltd.



Logie Court, Unit A, Stirling, United Kingdom, FK9 4NF
44 1786 447721; fax 44 1786 475822
info@cascade-technologies.com;
www.cascade-technologies.com

New Product: Complete Quantum Cascade Laser System.

Quantum Cascade Laser System consisting of a pulsed QC laser driver capable of operating at high power and duty cycle. Peltier Cooling enables laser temperatures down to -45 deg. C. Variable pulse lengths from 10ns to 10us allow the laser to be operated either in true pulsed or in quasi-CW regimes. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

Casix, Inc.

PO Box 1103, Fuzhou Fujian, China, 350014
86 591 8362 1246; fax 86 591 8362 1248
marketing@casix.com; www.casix.com

CASIX founded in September 1992, is a wholly owned subsidiary of Fabrinet which is a renowned international company. By striking to the spirit of "safety, unity, struggle, innovation and excellence" as well as international advanced management philosophies, CASIX is pursuing excellence throughout its operation and ensures that our products satisfy the needs of our customers and the target markets. Contact: Hongbai Lao, Vice President of Sale and Marketing, hongbai.lao@casix.com; Rose Chen, Business Development and Marketing Manager, rose.chen@casix.com.

CDGM Glass Co Ltd

No 6 Jianshenanzhi Rd, Chengdu Sichuan, China, 610051
86 28 843 325 31; fax 86 28 843 982 08
export@cdgmgd.com; www.cdgmgd.com

New Product: Optical glass as strip, gob & block, Lens/prism pressings & finished components, ball lenses.

CDGM is the largest manufacturer of optical glass in China. Supplier of over 200 types of optical glass including lanthanum glass, environmentally glass and low softening point glass. Lens/prism pressing blanks, finished components and ball lenses are available. Contact: Wan Xin, Deputy General Manager of Sales Company, wanxin@cdgmgd.com; Li Xiaolu, Sales Manager, gmgd1@cdgmgd.com.

Cedova B.V.

High Tech Campus, Eindhoven, The Netherlands, 5656 AE
31 40 2512824
info@cedova.com; www.cedova.com

New Product: New foundry service: Growth and processing of GaN related material.

Cedova is a pure play foundry and a leading edge supplier of foundry services to the optoelectronic industry. Our speciality is the growth, re-growth and processing of InP/GaAs/GaN based III-V semiconductor compounds. Contact: Huub Ambrosius, Vice President Business Development, huub.ambrosius@cedova.com; John Reid, Chief Executive Officer, john.reid@cedova.com.

CEDRAT Technologies

15 Chemin de Malacher, Inovallee, Meylan, France, F-38246
33 4 7690 5045; fax 33 4 7690 1609
actuator@cedrat.com; www.cedrat.com

New Product: Piezo microscanning stage for increasing resolution of IR & visible camera detector.

Provider of Mechatronic products and services for industrial and scientific applications such like Air & Space, Optics, Optronics, Machining, Automotive and Photonics. Contact: Thomas Maillard, Technical sales Engineer.

#615

Centellax Inc.

451 Aviation Blvd Ste 101, Santa Rosa, CA, 95403
707/568-5900; fax 707/568-7647

New Product: Centellax wideband signal generator w/high-UI jitter injection. Operates at 500MHz-13.5GHz.

Centellax delivers low-cost, high-performance test instruments, test accessories and electrical components for high speed communications and signal integrity applications worldwide. Contact: Will Sitch, Director of Sales, wsitch@centellax.com; Renee Timmons, Marketing Manager, rtimmons@centellax.com.

#6395

CERAC, Inc.

407 N 13th St, Milwaukee, WI, 53233
414/289-9800; fax 414/289-9805
www.cerac.com

New Product: New materials for solar applications.

CERAC (subsidiary of Williams Adv. Mat.) is a global manufacturer of inorganic chemicals and thin-film materials for photovoltaics, precision optics, aerospace and many other rapidly advancing markets. CERAC is developing new products for thin-film solar cell applications. We supply materials for the entire cell assembly, including transparent conducting oxides, positive, negative junction materials, antireflective (AR) layers, conducting interconnects (Ag) and protective barrier film materials. Contact: Nora Biersack, Marketing Coordinator, nora_biersack@beminc.com.

#1242



POPCORN STATION SPONSOR

CeramOptec Industries, Inc.



515 Shaker Rd, East Longmeadow, MA, 01028
413/525-0600; fax 413/525-1112
salesengineering@ceramoptec.com; www.ceramoptec.com

CeramOptec Industries serves the scientific, medical and industrial markets with optical fiber, fiber bundles, assemblies and spectroscopic fiber accessories. CeramOptec produces stock and custom silica / silica, PCS, HPCS, silver halide optical fibers, capillary tubing and low loss bundles and assemblies for UV, VIS and IR transmission. Products for extreme temperature, low to high NA (0.12 to 0.53). Replacement bundles and assemblies for most spectrometer systems and UV curing systems. Contact: Cheryl Provost, Sales, cheryl.provost@ceramoptec.com; Kevin Bakhshpour, Director of Sales, kevinceramoptec@earthlink.net.

#226

Chang Chun Bo Xin Photoelectric Co., Ltd.

1388th Hong Qi St, Chao Yang Zone, Chang Chu City Ji Lin Province, China, 130012
86 431 8596 012; fax 86 431 8596 1722
sales@bxoptic.com; www.bxoptic.com

New Product: Industrial Lenses, Mirrors, Lenses, Prisms, Waveplates, Beamsplitters, Filters, Windows, Coatings.

Chang Chun Bo Xin Photoelectric Co., Ltd. is a leading manufacturer company of optical products. Bo Xin is supported by Electro-optical College, which has a stronger technology strength. Bo Xin is outfitted with spherical and aspherical polishing equipments and coating equipments, as well as interferometer etc. inspection system. We offer all kinds of optical lenses, including spherical lenses, industrial lenses, prisms, windows, cylindrical lenses, etc. Contact: Tom Xu, Assistant Manager, tom@bxoptic.com; Jack Hu, General Manager, jack@bxoptic.com.

#1938, 1939

Photonics West Exhibitor Directory

Changchun New Industries Optoelectronics Tech. Co., Ltd. #3008

No 668 Chuangxin Rd, High-tech Zone, Changchun, China, 130012
86 431 870 18678; fax 86 431 870 20258
cniding@vip.163.com; www.cnilaser.com

New Product: RGB laser, SLM laser, low noise laser, Q-switched, laser pointers & portable laser modules to 400mW.

CNI is the largest manufacturer and supplier of DPSS lasers in China. CNI produces CW, modulated and Q-switched laser modules at 430nm, 457nm, 473nm, 532nm, 556nm, 593.5nm, 671nm, 946nm, 1047nm, 1053nm, 1064nm, 1319nm, 1342nm. Low noise, single frequency laser modules are available. CNI is ISO-9001, FDA, CE and JQA certified. Contact: Tian-Hong Liu, Sales Manager.

China Daheng Group, Inc. #544



PO Box 8618 #A9 Shangdi Xinxliu, Haidian District, Beijing, China, 100085
86 10 8278 2668; fax 86 10 8278 2669
cdhcgds@public3.bta.net.cn; www.cdhcorp.com

China Daheng Group, Inc. is a Chinese leading company in Optics. It has a wide coverage of products to meet the varieties of market demands. Daheng Optics not only supplies comprehensive catalogue optics, precision positioning mechanical components, but also offers custom-designed/OEM products, including optical coatings, CCD/CMOS cameras and vision products, optical modules and systems. It is capable of lens design, quick prototyping and engineering manufacture. Contact: Feijun Song, Executive Vice President, Chief Technology Officer and General Manager; Lei Yu, Deputy General Manager, Daheng Optics; Bin Zhang, International Sales Manager.

China Opto-Electro Industries, Co., Ltd. #1938, 1939

3rd Bldg, 10/F No. 81 Zi Zhuyuan Rd, Haidian District Beijing, China, 100089
86 10 8882 9906; fax 86 10 8882 9912
axy@oec.com.cn; www.oec.com.cn

New Product: D120-300mm high precision lens, Halfball lens, Mini prism, FS window, Sapphire window.

Founded in 1987 and headquartered in Beijing, China Opto-Electro Industries Co., Ltd., the earliest and the largest leading optical company group in China, has made remarkable contributions to the development of China's optical industry for twenty years. OEC supplies a wide range of portfolio encompassing Optical Materials, Optical Components, Optical Instruments, and Electronic Instruments which are in the applications of Optical Communication, Display, Digital Camera, IR-optics, Laser, etc. Contact: Cindy Ann, Director; Jacky Zhang, Sales Manger, Jackyzhang@oec.com.cn.

Chroma Technology Corp #432

10 Imtec Ln, Rockingham, VT, 05101
802/428-2500; fax 802/428-2525
www.chroma.com

Chroma Technology Corp. is an employee-owned company that specializes in the design and manufacture of precision optical filters and coatings. Our filters have been developed for myriad applications from 220-2600nm. For each of these applications we provide the greatest accuracy in color separation, optical quality and signal purity. We provide application engineering support, short cycle times and are as comfortable designing and manufacturing custom filters as we are our catalog items. Contact: Mark Kfoury, OEM Sales, mkfoury@chroma.com; Bill Chambers, OEM Sales, bchambers@chroma.com.

Chromodynamics #1113

A Gooch and Housego Co, 1195 Airport Rd #1, Lakewood, NJ, 08701

732/730-1877; fax 732/730-3547

info@chromodynamics.net; www.chromodynamics.net

New Product: HSi-300 Hyperspectral Imaging System

Chromodynamics, Inc. brings state-of-the-art optical imaging techniques to today's medical challenges. The company applies revolutionary spectral imaging tools based on acousto-optics to critical application areas, such as biological research, medical diagnostics and machine vision. Contact: Elliot Wachman, Vice-President, Research & Development, EWachman@chromodynamics.net.

CIEC Overseas Exhibition Co., Ltd. #1938, 1939

No 6 E Beisanhuan Rd 5th Fl, Chaoyang, Beijing, China, 100028

86 10 84600566; fax 86 10 84600779

liangying@ciec.com.cn; www.ciec-overseas.com

CIEC Overseas Exhibition Co., Ltd. (CIEC Overseas) is a wholly owned subsidiary of CIEC Group. It was established in 1993 with the objective of introducing international trade fairs to Chinese companies and organizing Chinese companies participate in the exhibitions. With rich experience in providing professional group participation services, CIEC Overseas enjoys great prestige among Chinese manufacturers and exporters. Contact: Zhang Hui, Project Manager, zhzhui@ciec.com.cn; Liang Ying, Deputy Manager.

CLASER Photonics Inc. #6415

No 635 Huocheng Jiading, Shanghai, China, 201821

86 21 695 28256; fax 82 21 695 28257

sales@clasers.com; www.clasers.com

New Product: Er:Glass, Nd:Glass, Bonding crystals, Large BBO, Lager a-BBO, Green laser core, blue laser core.

CLASER focus in high precise crystals and optical components for laser application. The large dimension BBO, GTRKTP and diffusion bonding crystals are available. The New products of Er:Glass and Nd:Glass is developed by us too. The high damage coating and special optics can be provided by us. Contact: Hovey Song, Vice President, sales engineer.

Clemson University - COMSET #6164, 6165

91 Technology Rd, Anderson, SC, 29625

864/656-1660; fax 864/656-1099

http://comset.clemson.edu

The Center for Optical Materials Science and Engineering Technologies (COMSET) is an internationally recognized program at Clemson University focused on cutting edge research, education and technology transfer on materials for optical fiber and related photonic technologies. COMSET is an academic resource for passive and active optical fiber materials research. COMSET operates a fully functional and readily reconfigurable Heathway fiber draw tower and an SG Controls MCV D lathe. Contact: Paul Foy, Director, Optical Fiber Laboratories; John Ballato, Director, COMSET, jballat@clemson.edu.



SPIE Works

spieworks.com

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Exhibition Level, Convention Center
Almaden Concourse near the Hilton
Hotel Entrance

Tuesday 22 January

11:00 am to 3:00 pm

Wednesday 23 January

11:00 am to 3:00 pm



Photonics West Exhibitor Directory

Cleveland Crystals, Inc.

#1013, 1113



A Gooch & Housego PLC, 676 Alpha Dr, Highland Heights, OH, 44143
216/486-6100; fax 440/461-1538
sales@clevelandcrystals.com; www.clevelandcrystals.com

New Product: Cleveland Crystals, NEOS, Gooch & Housego UK and SIFAM are now called Gooch & Housego.

Gooch & Housego is a new company, which has Gooch & Housego is a new company, which has integrated the five former businesses of Gooch & Housego UK Ltd, Cleveland Crystal Inc, NEOS, Landwehr Electronic GmbH (LE) and SIFAM. The combined product portfolio offers a broad range of optical components which act as enabling technologies for photonics-based systems in industries such as laser, automotive, aerospace, environmental sensing, imaging, energy research, scientific and medical. Contact: Brent Gross, Vice President Sales and Marketing, bgross@clevelandcrystals.com; Laurie Meagher, Customer Service, lmeagher@clevelandcrystals.com.

CMPC Surface Finishes

#6060

39 W Official Rd, Addison, IL, 60101
630/543-6682; fax 630/543-4013
info@surfacefinishes.com; www.surfacefinishes.com

New Product: Low scatter aluminum mirrors.

Since 1949, Surface Finishes has been a leader in precision lapping, grinding and optical polishing techniques specializing in flat, cylindrical, perpendicular and parallel surfaces with extremely demanding geometry. These capabilities produce Angstrom level tolerances on components such as: Mirrors for optical imaging and scanning, air bearings, vacuum chucks, optical disc molds, large area reference surfaces and custom gauging. Free engineering advice for your most challenging applications. Contact: David Patterson, Account Manager, david_patterson@cabotcmp.com.

Coastal Connections

#6350

2368 Eastman Ave Unit 12, Ventura, CA, 93003
805/644-5051; fax 805/644-5355
andy@coastalcon.com; www.coastalcon.com

New Product: 488nm PM cables; Coastal Mini LC; E-2000 APC Connectors; PHD Termini.

Coastal Connections is a leading provider of custom fiber optic cables and pigtails. In our California facility, we engineer and develop solutions for all wavelengths with 3-1000um core fibers and all fiber optic connectors and termini. We offer single-mode, multimode, polarization maintaining, high power and reference cables, as well as fiber bundles with 2 to 37 fibers in a single connector. Our products serve a vast range of industries including medical, industrial, telecom and military. Contact: Andy Devine, President; Tim Aphayaraj, Product Specialist, tim@coastalcon.com.

Coastal Optical Systems, Inc.

#145



16490 Innovation Dr, Jupiter, FL, 33478-6428
561/881-7400; fax 561/881-1947
sales@coastalopt.com; www.coastalopt.com

New Product: UV-NIR color corrected (310 nm - 1100 nm) lens for forensics, science and law enforcement.

Coastal Optical Systems (www.coastalopt.com) specializes in rapid design and manufacture of custom precision lens assemblies and sensor integration for biomedical, inspection & metrology, defense, 3D entertainment and space. Design, optical fabrication, assembly, system alignment and optical testing are performed in-house in West Palm Beach, FL. Coastal distributes JENOPTIK's VarioCAM® infrared camera, JENfizar® interferometer accessories and JENmetar™ machine vision lenses in the US. Contact: Ray Malcom, Vice President Sales & Marketing, ray.malcom@coastalopt.com; Gabriela Lieske, Inside Sales, gabriela.lieske@coastalopt.com.



EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

Cobolt AB

#1733, 6252

Vretenvägen 13, Solna, Sweden, SE-171 54
46 8 545 912 30; fax 46 8 545 912 31
info@cobolt.se; www.cobolt.se

New Product: Diode pumped solid state laser at 515nm. The Fandango provides 25mW at 515nm.

Cobolt AB, Stockholm, Sweden, supplies diode-pumped solid-state lasers (DPSSLs) in the visible. Based on proprietary PPKTP technology, the Cobolt lasers combine high power and wavelength flexibility with low noise and compact size. The powerful laser products from Cobolt in the blue-yellow range are CW single-frequency lasers with excellent beam quality and up to 150 mW output power. Available wavelengths are 561, 532, 515, 491 and 473 nm. Contact: Philip Crowley, Sales, Phil@markettechinc.net; Hakan Karlsson, Vice President Sales, hakan.karlsson@cobolt.se.

CODIXX AG

#1827

Steinfeldstr 3, Barleben, Germany, 39179
49 39203 9630; fax 49 39203 96333
hayes@laser-components.com; www.laser-components.com

New Product: CODIXX introduces colorPol® polarizer wavelength capability from 340nm to new 5,000nm (IR) region.

CODIXX produces dichroic glass polarizers for the UV, VIS and IR range (340nm up to 5,000nm), well known under the brand name colorPol®. The products have outstanding characteristics like high acceptance angle of 0 degrees ±20 degrees, transmittance up to 98%, high contrast ratios of 70dB and a wide operating temperature range from <-50 deg C to +400 deg C; also available with low wavefront distortion. Contact: Gary Hayes, General Manager; Kevin King, Sales Engineer, kking@laser-components.com.



STAIRWAY STRIPS; EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

Coherent Inc.

#1517, 1716



5100 Patrick Henry Dr, Santa Clara, CA, 95054
408/764-4983; fax 408/764-4646
tech.sales@coherent.com; www.coherent.com

World's leading manufacturer of photonics-based products for a wide range of commercial and scientific applications. Industry's largest and most diverse selection of lasers-over 100 different standard models-plus crystals, precision optics and a wide range of laser test and measurement equipment. Highly reliable, high performance product lines include CO2, continuous-wave, diode, diode module, diode-pumped solid-state, excimer, ion, tunable-dye, YAG, YLF and ultrafast lasers. Contact: Aaron Johnson, Advanced Technical Sales.



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Cohu, Inc.

#6074

Electronics Div, 3912 Calle Fortunada, San Diego, CA, 92123-1827
858/277-6700; fax 858/277-0221
info@cohu.com; www.cohu.com/cctv

New Product: Cohu will exhibit analog and digital cameras for machine vision and security/surveillance.

Cohu has manufactured high performance, high reliability CCTV cameras and systems for 50 years. Contact: Tim Jones, Products Manager, sales@cohu.com; Alan Black, Sales Manager, ablack@cohu.com..

Coining, Inc.

#6621

280 Midland Ave, Saddle Brook, NJ, 07663
201/791-4020; fax 201/791-1637
ggordon@coininginc.com; www.coininginc.com

College of Optics and Photonics

#639

Univ. of Central Florida, 4000 Central Florida Blvd,
Orlando, FL, 32816

407/823-6800; fax 407/823-6880

info@creol.ucf.edu; www.optics.ucf.edu

CREOL & FPCE, The College of Optics & Photonics at the University of Central Florida is an internationally recognized academic and research institution, offering MS and PhD degrees in Optics and serving as a scientific and technical resource to industry. The College has 42 faculty, 54 research scientists and 160 graduate students conducting research into all aspects of optics and photonics. Research expenditures exceed \$20M annually, with over 25% of the funding from industrial partners. Contact: Jim Pearson, Director, Research and Administration, jpearson@creol.ucf.edu; Eric Van Stryland, Dean & Director, diretor@creol.ucf.edu.



GENERAL REFRESHMENTS SPONSOR

Collimated Holes, Inc.

#1839

460 Division St, Campbell, CA, 95008-6923
408/374-5080; fax 408/374-0670

chi_2000@pacbell.net; www.collimatedholes.com

Collimated Holes, Inc. produces unusual structures of glass for biotechnology, telecom, scientific, industrial and medical applications: Fused fiber structures, single and multi-channel capillaries, drawn or etched holes, matrix arrays for coupling and isolation, geometry converters and fused fiber optic scintillating screens for x-ray detection. Contact: Matt Fate, Sales Engineer; Richard Mead, President.

Colorado Photonics Industry Association #1706

Advance Colorado Center, 1625 Broadway Ste 950,
Denver, CO, 80202
303/592-4064

cpia@coloradophotonics.org; www.coloradophotonics.org

CPIA is a member organization promoting the photonics industry in Colorado. With almost 300 companies, Colorado produces components, systems, instruments and services, Colorado can help you reach your peak. Contact: Barbara Ihde, Executive Director.

Compound Semiconductor Technologies Global Ltd.

#1818

Block 6 Kelvin Campus, W of Scotland Science Park Maryhill Rd, Glasgow Scotland, United Kingdom, G20 0SP
44 141 579 3000; fax 44 141 579 3040

salesinfo@compoundsemi.co.uk; www.compound-semi.com

CST is the only "pure play" III-V semiconductor foundry specializing in the design, development and manufacture of custom discrete and integrated opto-electronic devices. We offer services from customization of devices & processes to a fully outsourced foundry model with ISO9001-2000 accreditation. CST has a unique library of leading edge fabrication processes allowing the creation of reliable device platforms with reduced time to market. Contact: Wyn Meredith, wmeredith@compoundsemi.co.uk.

Computer Optics Inc.

#348

120 Derry Rd, Hudson, NH, 03051
603/889-2116; fax 603/889-2393

sales@computeroptics.com; www.computeroptics.com

Computer Optics Inc, debuted the Worlds first commercial infrared zoom lens over 5 years ago featuring COI's patented optical zoom lens technology. Come by our booth to learn about new additions to our lens family in the Visible, SWIR, LWIR and MWIR wavelength regions of the spectrum. Feel free to contact us at sales@computeroptics.com with your infrared zoom lens requirements. The COI Megapixel MWIR 4X continuous zoom lens is available now from Computer Optics Inc, www.irzoom.com.

COMSOL Inc.

#6052

8 New England Executive Park Ste 350, Burlington, MA, 01803
781/273-3322; fax 781/273-6603

info@comsol.com; www.comsol.com

Conex Systems Technology, Inc.

#1538

2603 Camino Ramon #200, San Ramon, CA, 94583
925/735-8825; fax 925/242-2909

crystals@best.com; www.castech-us.com

Conex manufactures and supplies nonlinear optic (NLO) crystals and other optical materials. It is one of the most reliable source for patented LBO, BBO crystals and low-cost, high quality wedges, KTP, KD*P, YVO4, Nd:YVO4, Nd:YAG, LiNbO3, LiTaO3 and other optic crystals. Conex offers technical services and satisfaction guarantee for crystal products. Contact: Ken Zhang, Vice President of Sales and Marketing.

Continuum

#1635



3150 Central Expy, Santa Clara, CA, 95051-0816
888/532-1064; fax 408/727-3550

continuum@continuumlasers.com; www.continuumlasers.com

New Product: Agilite, variable pulsewidth high energy laser system.

Continuum is the global leader in high energy YAG lasers, OPOs and dye lasers for scientific, OEM and industrial applications. Standard and custom lasers range from 25mJ/pulse to 7J/pulse; tunable accessories range from 205nm to 2650nm. Variable pulsewidth systems include 50ns to 100µs outputs. Large glass lasers (>300J) are also available. Contact: Curt Frederickson, Sales and Marketing Vice President.

Control Optics Corp.

#6505

1445 Brook St Ste #H, Ontario, CA, 91762
909/983-0788; fax 909/983-0791

jasmine@controloptics.com; www.controloptics.com

Photonics West Exhibitor Directory

The Cooke Corp.



6930 Metroplex Dr, Romulus, MI, 48174
248/276-8820; fax 248/276-8825
info@cookecorp.com; www.cookecorp.com

New Product: High Speed Digital Camera with 2K x 2K resolution and 1,000fps at full resolution for Scientific, Military, Industrial and Automotive applications.

Manufacturer of High Speed and High Performance Digital CCD/ICCD and CMOS cameras for OEM, Scientific, Industrial, and Military applications. Our low noise CCD cameras range from 1.3M to 11Mpixel resolution, up to 14bit dynamic range and high frame rates. Our high speed 1.3Mpixel 10bit CMOS camera features 50ns exposure time and frame rates >100,000fps. OEM versions of our CCD cameras are available. Cameras feature Firewire, GigE and Camera Link outputs and come complete with software. Contact: Murad Karmali, murad.karmali@cookecorp.com.

CoorsTek Technical Ceramics

#6373

16000 Table Mountain Pkwy, Golden, CO, 80403-1693
303/271-7000; fax 303/271-7009
info@coorstek.com; www.coorstek.com

New Product: Advanced Silicon Carbide for critical components. CVD, Direct Sintered and Reaction bonded SiC.

CoorsTek is the largest technical ceramics manufacturer in North America and serves customers around the globe from 17 state-of-the-art facilities. Using our core strengths of custom engineering, materials expertise, operational excellence and rapid execution, we help our customers develop amazing solutions to their toughest technical challenges. Our experienced engineering and manufacturing experts are ready to help with your next project. Contact: Dennis Cavanaugh, Sales Manager, dcavanaugh@coorstek.com; Richard Ransom, rransom@coorstek.com.

CorActive High-Tech, Inc.

#6189



2700 Jean-Perrin Ste 121, Quebec, QC, Canada, G2C 1S9
418/845-2466; fax 418/845-2609
sales@coractive.com; www.coractive.com

CorActive, a financed independent developer and manufacturer of advanced Specialty Optical Fiber (SOF) products for OEM customers. CorActive uniquely offers a full line of standard SOF products, including Double Clad, Mid-IR transmission, Erbium doped single clad, Ultra Violet Sensitive and Attenuating optical fiber, plus custom fiber development services for specific applications. Contact: Jean Dubé, Vice President Sales; David Beiko, Director of Sales.

Coresix Precision Glass, Inc.

#6246

1737 Endeavor Dr, Williamsburg, VA, 23185
757/888-1361; fax 757/888-1366
sales@coresix.com; www.coresix.com

We are an industry leader in the development, manufacturing and fabrication of precision glass components for customers in a wide array of markets including photonics, display, biotech, imaging, opto-electronics, replication, lithography, office automation, sensor and semiconductor. From R&D to full production, our products are made to exacting dimensional and spectral tolerances using virtually any glass material available. We specialize in surface quality and cleanliness. Contact: Al Ralston, Sales Manager, ralston@coresix.com; Alan Graham, President, graham@coresix.com.

#1532



GENERAL REFRESHMENTS SPONSOR

Corning Incorporated

#342



1 Riverfront Plaza, Corning, NY, 14831
607/974-9329; fax 607/974-8177
dayjl@corning.com; www.corning.com

Corning is a world leader in delivering advanced optical solutions for a broad array of commercial and industrial markets. Corning Specialty Materials provides glass, glass ceramics and fluoride crystal materials, optical components and imaging systems for the world's leading equipment manufacturers in display, telecommunications, semiconductor, astronomy, aerospace, security defense and vision care. Contact: Dave Young, youngdj@corning.com; Elijah Baity, baityea@corning.com.

Covega Corp.

#6135

10335 Guilford Rd, Jessup, MD, 20794
240/456-7100; fax 240/456-7200
sales@covega.com; www.covega.com

New Product: Increased availability of 10G&40G Mod, SOA/SLD due to enhanced designs and streamlined production.

Covega Corporation has world-class proprietary technologies in InP and LiNbO₃ to produce high performance optical devices and modules at a low cost with a very small footprint. Covega is a leading provider of state-of-the-art opto-electronic components and subsystems with a wide customer base in the defense, medical, industrial, sensing, test & measurement and instrumentation. Covega's differentiator for superior product performance is based in the company's intellectual properties. Contact: Charles Bryan, Director of Product Management, cbryan@covega.com; Dan Petrescu, Chief Sales Officer, dpetrescu@covega.com.

CRC Press - Taylor and Francis Group LLC #6183

6000 Broken Sound Pkwy NW Ste 300, Boca Raton, FL, 33487
561/994-0555; fax 561/361-6018
orders@crcpress.com; www.crcpress.com

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CRI, Inc.

#1547



35-B Cabot Rd, Woburn, MA, 01801
781/935-9099; fax 781/935-3388
sales@cri_inc.com; www.cri-inc.com

Cristal Laser SA

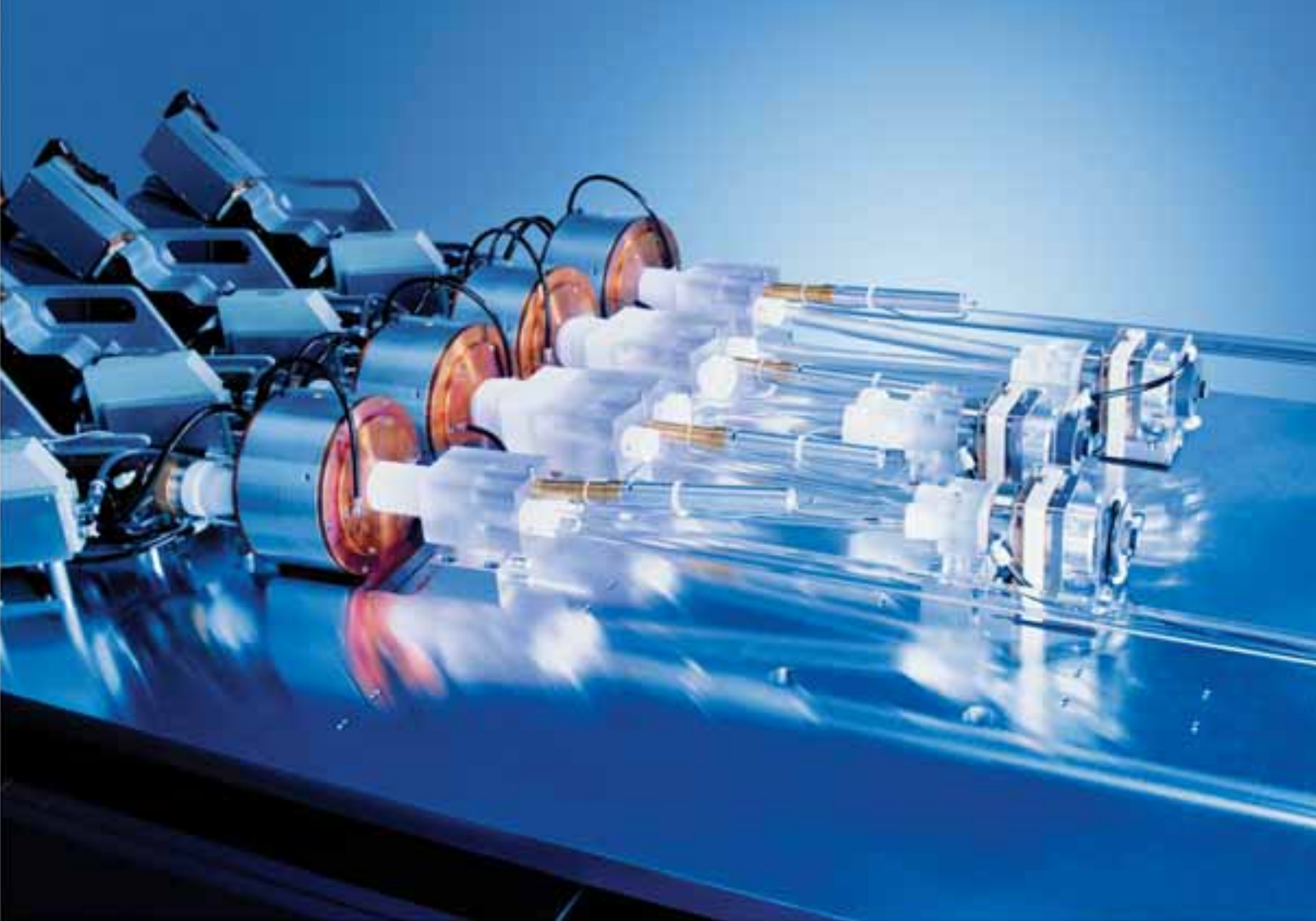
#715



32 Rue Robert Schumann, Messein, France, F-54850
33 3 83 47 01 01; fax 33 3 83 44 22 72
mail@cristal-laser.fr; www.cristal-laser.fr

New Product: BBO crystals: a versatile material suitable for electro-optics as well as non-linear optics.

We are specialized in the growth and optical manufacturing of crystal components for non-linear optics and electro-optics. Our product portfolio includes: KTP, KTA, RTP, LBO and now BBO. Our state-of-the-art manufacturing equipment enables us also to offer dicing/polishing services on non house-made materials. Contact: Herve Albrecht, United States Sales Executive, herve@cristal-laser.fr.



TRUMPF: The Laser Experts

TRUMPF is the world market leader in OEM lasers, beam delivery fibers, optics and laser systems for manufacturing. At Photonics West, we will demonstrate our dedication to laser technology and provide a glimpse into our extensive product portfolio.

TRUMPF's thin disk technology provides the most flexible and scalable laser medium for power levels up to 10 kW and ultra short pulses with 50 W average power and 6 ps pulse duration. CO₂ lasers, diode pumped laser markers with IR, visible, and UV wavelengths, and our new 300 W fiber laser with diffraction-limited output, enhance our portfolio. With this wide range of products and over 25 years of industrial experience, TRUMPF's laser solutions are unrivaled.



To see why TRUMPF is a world leader in lasers and laser systems, visit us at Photonics West, booth 6130.

Photonics West Exhibitor Directory

Crosslight Software, Inc.

#5106

206-3993 Henning Dr, Burnaby, BC, Canada, V5C 6P7
604/320-1704; fax 604/320-1734
info@crosslight.com; www.crosslight.com

New Product: New solar cell simulation tools, updated 3D simulation model for opto-electronic devices.

Crosslight Software Inc. is an international company headquartered in greater Vancouver, Canada, which for over a decade has been dedicated to providing state-of-the-art TCAD tools for simulation of semiconductor devices and processes. Crosslight Software was the first commercial company to provide CAD software for electrical and optical modeling of laser diodes (LD) and it has maintained the leadership position in that field since then. Contact: Z.Q. (Leo) Li, Vice President Of Engineering, zqli@crosslight.com; Michel Lestrade, Technical Marketing Manager, sales@crosslight.com.

CryLaS GmbH

#1733

Ostendstr 25 Haus 4, Berlin, Germany, 12459
49 30 5304 2400; fax 49 30 5304 2444
info@crylas.de; www.crylas.de

New Product: High power CW 532nm laser.

CryLaS GmbH, is a supplier of advanced photonics technologies to customers in the scientific research, defense/security, life sciences and precision industrial manufacturing markets. Crylas acquired Secopta GmbH which provides solutions for safety and security applications based on laser spectroscopic methods including the detection of landmines and analyzing the composition of scrap metal as part of the recycling process. Contact: Helmut Spanner, Chief Executive Officer, helmut.spanner@crylas.de.

Crystal Fibre A/S

#2019



Blokken 84, Birkerød, Denmark, 3460
202/742-2725; fax 45 43 48 28 01
contact@crystal-fibre.com; www.crystal-fibre.com

New Product: Aerolase-350 is a 350W fiber module used for building high power fiber lasers.

Crystal Fibre is the leading supplier of advanced optical fibers. Manufactures high power fiber laser sub-assemblies, enabling laser manufacturers to expand their product portfolio into fiber lasers. Product range also includes LMA doped double clad fibers for high power lasers and amplifiers as well as matching pump combiners. The passive fiber product range includes singlemode, multimode, high numerical aperture, hollowcore, PM, nonlinear fibers as well as custom designed fibers. Contact: Cato Fagermo, Sales Manager, caf@crystal-fibre.com; Rich Ramsay, Sales Manager, rjr@crystal-fibre.com.

Crystal GmbH

#1801

Ostendstr 25, Berlin, Germany, 12459
49 30 5304 2500; fax 49 30 5304 2525
ulrich.krzeniessa@crystal-gmbh.com; www.crystal-gmbh.com
CRYSTAL is a company committed to highly developed technologies and products with and related to crystals. Proven production technology and comprehensive measuring and testing procedures guarantee our exceptional standard of quality as well as the speed with which we meet your most sophisticated requirements. We apply our extensive experience in the field of crystal technology to processing specialized materials. Our expertise covers the spectrum from individual elements to large-scale orders. Contact: Ulrich Krzeniessa, Sales Engineer, ulrich.krzeniessa@crystal-gmbh; Steffen Sandner, Sales Engineer, Steffen.Sandner@crystal-gmbh.com.

Crystal Research, Inc.

#6261

48501 Warm Springs Blvd Ste 103, Fremont, CA, 94539
510/445-0833; fax 510/445-0835
suningtang@eocrystal.com; www.eocrystal.com

New Product: Electro-Optic Gratings, Electro-Optic Scanners, Thick Holographic Gratings, KTN and SBN Crystals.

Crystal Research Inc manufactures high performance volume holographic gratings: Electro-Optic Gratings and Ultra Thick Holographic Gratings. The diffraction efficiency of Electro-Optic Gratings can be electrically adjusted. The proprietary Ultra Thick Holographic Gratings (not DCG based) can be made with thickness from 3~500 microns in excellent optical transparency and temperature stability. We produce high-speed electro-optic scanners. We also produce KTN and SBN electro-optic crystals. Contact: Suning Tang, President, info@eocrystal.com.

Crystal Systems, Inc.

#1804

27 Congress St, Salem, MA, 01970-5575
978/745-0088; fax 978/744-5059
sales@crystalsystems.com; www.crystalsystems.com

Manufacturer of Sapphire and Ti:Sapphire for use in optics, IR applications, large windows, domes, laser rods, lenses, prisms, filters, substrates and other optical, non optical applications. Crystal Systems can provide a wide range of material grades to meet customers' requirements from economical to the highest quality sapphire available for demanding applications in defense, laser technology, electronics, life sciences and research. Contact: William Ripley, Senior Sales Engineer, bill@crystalsystems.com; Scott Cohen, Sales Engineer, scott@crystalsystems.com.

Crystal Technology, Inc.

#2014

1040 E Meadow Cr, Palo Alto, CA, 94303
650/856-7916; fax 650/354-0173
crystal-salespa@epcos.com; www.crystaltechnology.com

Crystal Technology is the leading manufacturer of lithium niobate and acousto-optic components. Our products include lithium niobate wafers for surface acoustic wave (SAW) applications and optical applications including wave guides, low pass filters, isolators and periodically poled lithium niobate (PPLN). We offer a full range of acousto-optic devices including modulators, deflectors, tunable filters and multi-channel modulators, as well as RF drive electronics and electro-optic q-switches. Contact: George Sadilek, Senior Sales Representative, george.sadilek@epcos.com; Sandy Wang, Sales Engineer, sandy.wang@epcos.com.

CrystaLaser LC

#120



4750 Longley Ln #205, Reno, NV, 89502
775/348-4820; fax 775/348-7047
sales@crystalaser.com; www.crystalaser.com

New Product: 40mW, 405nm, single longitudinal mode lasers and Fiber-Coupled 1W, 405nm lasers.

CrystaLaser designs and manufactures ultra-compact continuous wave and pulsed Q-switched DPSS laser systems from 5 mW to 2.5 W in a broad wavelength selection, from ultraviolet, violet, blue, green, yellow, red to infrared, between 262nm to 1550nm. All our laser systems are high efficiency and low power consumption. Contact: Gale Weng, Sales Engineer, gale@crystalaser.com; Zahnga Peabody.

CRYSTECH Inc.

#6122

177 Zhuzhou Rd, Qingdao Shandong, China, 266101
86 532 88703717; fax 86 532 88701077
sales@crystech.com; www.crystech.com

New Product: DPM: Compact structure, convenient application, cost effective. GTR-KTP: for high CW green laser.

CRYSTECH is a world's leading manufacturer of NLO crystals, Laser crystals and others for RGB laser systems. The main products include KTP, GTR-KTP, KTA, RTP, BBO, BIBO, LN, etc., Nd:YVO₄, Nd:YAG, Nd:GdVO₄, Diffusion Bonded crystals, Nd:YLF, Cr:YAG, etc, DPM crystals, Q-Switch, optical components. Customers extend more than 50 countries and distributors are located in the United State, Germany, Japan. etc. Contact: Stella Yu, Director of Sales and Marketing; Pikey Huang, Sales Engineer.

Ctr. Suisse d'Electronique et de Microtechnique SA

#6174

Rue Jaquet-Droz 1, Neuchâtel, Switzerland, 2002
41 32 720 5111; fax 41 32 720 5700
info@csem.ch; www.csem.ch

New Product: 360-imagers, smart imagers, 3D imagers, low-power digital imagers, high-speed imaging.

CSEM SA, the Swiss Center for Electronics and Microtechnology, carries out applied research, product development and low-volume production. CSEM is mainly active in the fields of micro/nanotechnology, microelectronics, systems engineering and photonics. It offers its customers tailored-made innovative solutions based on its technological expertise. Further information at www.csem.ch. Contact: Blanc Nicolas, Vice President Photonics, nicolas.blanc@csem.ch; Baechler Thomas, Section Head Image Sensing, thomas.baechler@csem.ch.

Curamik Electronics Inc.

#6519

3770 Arapaho Rd, Addison, TX, 75001
214/615-1533; fax 214/615-1540
sales@curamikusa.com; www.curamikusa.com



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CVI Melles Griot - Albuquerque

#1318



200 Dorado Pl SE, Albuquerque, NM, 87123
505/296-9541; fax 505/298-9908
sales@cvilaser.com; www.cvimellesgriot.com

CVI Melles Griot gets you what you need, when you need it. From the UV to the IR we offer unmatched breadth and flexibility in lasers, optical components, and electro-optical assemblies. Our extensive catalog, along with our custom and build-to-print capabilities deliver solutions from prototype to high-volume, OEM quantities. Providing solutions for semiconductor, biotechnology, industrial, and basic research applications, CVI Melles Griot manufactures on three continents, and maintains sales and engineering centers in 11 countries worldwide. Contact: Rich Drake, Sales Manager, West Coast, rdrake@cvimellesgriot.com; Chris Bridle, Sales Manager, Europe, cbridle@cvimellesgriot.com.



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.



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CVI Melles Griot - Carlsbad

#1318



2051 Palomar Airport Rd #200, Carlsbad, CA, 92011
760/438-2131; fax 760/438-5208
lasers@cvimellesgriot.com; www.mellesgriot.com

CVI Melles Griot gets you what you need, when you need it. From the UV to the IR we offer unmatched breadth and flexibility in lasers, optical components, and electro-optical assemblies. Our extensive catalog, along with our custom and build-to-print capabilities deliver solutions from prototype to high-volume, OEM quantities. Providing solutions for semiconductor, biotechnology, industrial, and basic research applications, CVI Melles Griot manufactures on three continents, and maintains sales and engineering centers in 11 countries worldwide. Contact: Lisa Tsufura, Marketing Manager, lasers@cvimellesgriot.com; Sherie Motakef, photonicproducts@cvimellesgriot.com.



METER BOARD SPONSOR

Cyber Laser Inc.

#6335

2F East Tower/Telecom Ctr Bldg, 2-38 Aomi, Koto-ku Tokyo, Japan, 135-8070
81 3 3599 3803; fax 81 3 3599 3804
info@cyber-laser.com; www.cyber-laser.com

New Product: IFRIT: Industrial femtosecond pulsed laser Realization of high stability of power.

Cyber Laser contribute to the advancement of optical industries and bring "new light" by the use of optical technologies, in four pillars of businesses: the industrial laser business, the medical laser business, the scientific laser business and the laser solution business. Cyber Laser combine advanced laser technology with various wavelength conversion technology, providing our customers with light source in any wavelengths that suits their needs. "Our light, creating the future." Contact: Jae Myung CHOI, CMO, jmchoi@kr.cyber-laser.com.

DataRay, Inc.

#646

605 Stapp Rd, Boulder Creek, CA, 95006
831/338-9055; fax 831/338-9098
info@dataray.com; www.dataray.com

New Product: NEW BeamScope-P8 beam profiler with M2: USB 2.0, 0.1 µm resolution, beams 4 µm to 43 mm, ISO 11146.

DataRay continues to bring high performance beam profiling innovation to the photonics community. DataRay was first with: Windows beam profiling software; software-controlled electronic shutter; sub-micron capable, linear scan; dual-mode slit/knife-edge beam profilers fully ISO 11146 compliant; compact multi-plane slit-scan head for real-time beam focus, collimation and M2 measurement; USB 2.0 interfaced compact beam profiling cameras; and 14-bit ADC Megapixel CCD beam profiling cameras. Contact: John Wilson, Sales and Marketing Manager, jwilson@Dataray.com; Andrew MacGregor, Vice President, amacgregor@dataray.com.

Davidson Optronics, Inc.

#1115



2223 W San Bernardino Rd, West Covina, CA, 90815
626/962-5181; fax 626/962-5188
sales@davidsonoptronics.com; www.davidsonoptronics.com

New Product: D-700, Digital Autocollimator D-275-400, Infrared Autocollimating Alignment Telescope.

Davidson Optronics provides optical metrology and test equipment regarded as the Standard of the Industry, including alignment telescopes, autocollimators, plano interferometers, optical flats, prisms and polygons. We also produce the TV Optoliner, a complete system for evaluating imaging devices. Custom components and instrumentation work is done in NIST-Certified facility. Contact: Sam Bailey, Vice President Sales, sam@davidsonoptronics.com; Charles Gaugh, Sales Manager.

Photonics West Exhibitor Directory

Daylight Solutions

#6392

13029 Danielson St Ste 130, Poway, CA, 92064
858/391-1010; fax 858/679-9470
info@daylightsolutions.com; www.daylightsolutions.com

New Product: CW mode-hop-free tunable Mid-IR laser with broad tuning up to 100 cm⁻¹ and fine PZT tuning of 1 cm⁻¹.

Daylight Solutions is a manufacturer of tunable External Cavity Quantum Cascade Laser systems in the Mid-IR, advanced molecular detection and imaging instruments. The company's room temperature Mid-IR tunable lasers provide the core technology for significant advancement in the fields of medical diagnostics, homeland security, military applications and industrial/environmental monitoring. Both Pulsed and CW mode-hop-free solutions are available with broad tuning in the 4 to 12 μm region. Contact: Chris Armacost, Director of Sales.

Dayoptics, Inc.

#5118

70 Area A, Pushang Industrial Zone, Fuzhou, China, 350008
86 591 83215681; fax 86 591 83215359
sales@dayoptics.com; www.dayoptics.com

New Product: Dayoptics E-O modulator Q-Switch using LiNbO₃ KD*P BBO crystals with high transmission & extinction.

Dayoptics manufactures crystals (Nd: YVO₄, Nd:YAG, Ti:Sapphire, BBO, LBO, KD*P, Cr:YAG, YVO₄, a-BBO, MgF₂) and optical components (Polarizer, Waveplate, Lens, Prism, Corner Cube, PBS) with technology of optical bonding and coating. E-O modulator, A-O Q Switch, DPSS green lasers are developed with great advantage base on the above products. High quality, on time delivery and customer satisfaction is what we pursue. Contact: Susan Zhang, Sales Manager; Bob Ruan, Sales Manager, ussales@dayoptics.com.

DCM Tech, Inc.

#6281

4455 Theurer Blvd, Winona, MN, 55987
507/452-4043; fax 507/452-7570
interest@dcm-tech.com; www.dcm-tech.com

New Product: IG 281SD & IG 280SD Fine Grinder with new controls and upgraded castings for enhanced precision.

DCM-Tech manufactures rotary grinding machines for crystal, ceramic and metal alloy grinding processes. 30+ years of experience in producing grinders and specialized tooling at our facility in Winona, Minnesota gives DCM the ability to provide both custom and "stock" grinders for our customers. Contact: Skip Green, Technical Sales, skipgreen@dcm-tech.com; Mike Anderson, Technical Sales, mikeanderson@dcm-tech.com.

Deltronic Crystal Industries, Inc.

#1439

60 Harding Ave, Dover, NJ, 07801-4710
973/361-2222; fax 973/361-0722
info@deltroniccrystal.com;

DenseLight Semiconductors Pte Ltd.

#5052

6 Changi North St 2, Singapore, Singapore, S498831
65 6415 4488; fax 65 6415 7988
info@denselight.com; www.denselight.com

DenseLight Semiconductors is a leading developer & manufacturer of InP-based optoelectronics devices & photonic solutions (integrating optoelectronics, fiber optics & electronics) for photonic-sensing (fiberoptic, industrial monitoring, environmental, chemical, homeland-security), biomedical imaging, telecom/datacom transmission & tests. Current products are Superluminescent LEDs, ELED, Ultra Narrow Linewidth laser diodes, ASE Broadband Sources (CW/Modulated) & Tunable Single-Frequency Laser Module. Contact: Lye-Hing Chua, Vice President (Sales & Marketing), lhchua@denselight.com; Daniel Hung, Technical Sales Manager, dhung@denselight.com.

Deposition Sciences, Inc

#6219



3300 Coffey Ln, Santa Rosa, CA, 95403
707/573-6700; fax 707/573-6748
sales@depisci.com; www.depisci.com

For over 20 years, Deposition Sciences, Inc. (DSI) has produced the most durable optical thin film filter coatings in the industry. DSI's coating capability ranges from the Ultraviolet (UV), through the visible (VIS), near infrared (NIR), Middle infrared (MIR or IR) and out to the far infrared (FIR). At the heart of these capabilities is DSI's patented MicroDyn® reactive sputtering technology enabling superior multilayer thin film coatings for optics, MEMS and other thin film nano-technologies.

Diacut, Inc.

#6236

773 Highway 105, Palmer Lake, CO, 80133
719/481-4205; fax 719/488-0872
sales@diacut.com; www.diacut.com

Diacut is a customer-oriented manufacturer of resin bond Diamond blades. The high precision wheels are made to customer specifications and are used on high production machines such as K&S, MTI, ITI, Disco plus standard surface grinders. The blades are used for slicing and dicing, grooving and precision cut-off operations to grind glass, ceramics, quartz, sapphire, ferrite. Every customer, regardless of size, is treated with the same individualized attention and orders are shipped within days. Contact: Rene Furrer, Owner; Toni Furrer, Vice President of Sales.

Diamond Wire Technology

#1921

1605 S Murray Blvd, Colorado Springs, CO, 80916
719/570-1150; fax 719/570-1176
info@diamondwiretech.com; www.diamondwiretech.com

The World's Leader in Diamond Wire and Diamond Wire Saws: Diamond Wire Technology, LLC is the world's largest and oldest manufacturer of Diamond Wire and Diamond Wire Saws, with over 38 years experience. We make Diamond Wire from 150 micron to 500 micron Diameter. Diamond Wire Technology, LLC has an extensive team of Design, Electrical and Software Engineers to accommodate a broad range of applications and needs. Contact: Cynthia Christensen, Vice President, Sales and Marketing, cynthiac@diamondwiretech.com; Carly Greenfield, Inside Sales Coordinator, carlyg@diamondwiretech.com.

Diemat, Inc.

#5121



19 Central St, Byfield, MA, 01922
978/499-0900; fax 978/499-8484
info@diemat.com; www.diemat.com

New Product: DM4232Hk High-Conductivity/Low-Modulus adhesive bonds large area components with a wide CTE mismatch.

Diemat produces high-performance materials for packaging semiconductors and photonics, replacing solder in many applications. Our adhesives offer unmatched thermal conductivity, up to 60 W/m-K, for semiconductor die attachment and heat sink bonding. Low-temperature sealing glasses (as low as 320 °C) hermetically seal optical fibers, lids, windows and lenses to packages and are used in wafer-level packaging. Diemat is ISO 9001 registered and has a worldwide sales network. Contact: Kevin McLaughlin, Manager, Sales and Marketing, k-mclaughlin@diemat.com; Terry Hartman, Director of Operations & Engineering, t-hartman@diemat.com.

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space
now!



LASER EXPO 2008

www.optronics.co.jp/en/le/

LENS EXPO 2008

Lens Design and Manufacturing Expo
www.optronics.co.jp/en/ls/

FIBER EXPO 2008

Optical Fiber Integrated Technologies Exhibition
www.optronics.co.jp/en/fib/



23-25 April 2008
Pacifico Yokohama, Japan

For further information

The Optronics Co., Ltd.
International Dept.

Fax +81 3 5229-7253 E-mail: intl@optronics.co.jp

Total Projected Participation

- Exhibitors 250
- Attendees 10,000

Photonics West Exhibitor Directory

Diffraction Optics Ltd.

#6058

Rm 216-217 Photonic Centre, Hong Kong Science Park NT, Hong Kong
852 2793 5976; fax 852 2793 1696
info@diffraction-optics.com; www.diffraction-optics.com

New Product: 3 kinds of module products: Optical engine module, Binocular display module, CMOS camera module.

Diffraction Optics Limited is proud to announce that we will launch a series of new optoelectronics module products. By using our own state-of-the-art precision optics technology combined with the advanced assembly and manufacturing processes, we have developed 3 kinds of module products. They are optical engine module for low cost projector application, binocular display module for wearable virtual reality goggle application and CMOS camera module for cell-phone, digital-camera application. Contact: Man Fok, Chief Executive Officer, manfok@diffraction-optics.com; Pak Leung, Senior Engineer, kpleung@diffraction-optics.com.

Digilab

#6009

2701 Lafayette, West Lafayette, IN, 47906
765/497-5853; fax 765/497-1102
cgong@digilabglobal.com; www.digilabglobal.com

New Product: Miniature, low-cost UV/VIS microspectrometer, 330–1050 nm spectral range.

Digilab based in Canton, Massachusetts has over 40 years of applications, systems and solutions expertise in spectroscopy. Digilab offers a broad range of spectroscopic solutions and applications covering such high growth areas as life sciences and healthcare, industrial process control and security. Contact: Cynthia Gong, Product Manager, cgong@digilabglobal.com; Joe Griffin, Chief Operating Officer, jgriffin@digilabglobal.com.

Digital Optics (Tessera North America)

#727



9815 David Taylor Dr, Charlotte, NC, 28262
704/887-3100; fax 704/887-3101
info@tessera.com; www.tessera.com

DILAS

#6073



9070 S Rita Rd Ste 1500, Tucson, AZ, 85747
520/232-3480; fax 520/232-3499
sales@dilas-inc.com; www.dilas.com

New Product: Fiber coupled modules: 30W, 40W, 50W, 100W, 200W and 400W, wavelengths (790nm to 976nm).

DILAS, the diode laser company, is focused on delivering the most innovative technologies and advanced product solutions in the industry. DILAS designs, develops and manufactures quality high power, high brightness semiconductor laser components, modules and systems, including fiber coupled products for worldwide distribution. For more information, visit our website at www.DILAS.com. Contact: John Agnello, Sales, j.agnello@dilas-inc.com.

Directed Energy Professional Society

#6277

PO Box 9874, Albuquerque, NM, 87106
550/998-4910; fax 550/998-4917
donna@deps.org; www.deps.org

With the goal to be recognized as the premier professional organization for exchanging information and advocating research, development and application of Directed Energy, we strive through our events, our Journal and our educational outreach to achieve a higher level of community continuity. Contact: Cynnamon Spain, Executive Administrator/Event Coordinator, cynnamon@deps.org; Donna Stormont, Administrative Assistant.

Docter Optics, Inc.

#415



1425 West Elliot Rd Ste A-105, Gilbert, AZ, 85233
480/844-7585; fax 480/844-7826
dopticsinc@aol.com; www.docteroptics.com

New Product: C-mount lens for 1, 2" sensor cameras, reflex-free Auto-Tessar® HDR lenses, Light Pipes.

Docter Optics GmbH, an ISO 9001:2000 certified OEM supplier, will be displaying many types of precision glass molded, ground and polished optical components from most glass materials, uncoated or coated, in sizes from 5mm to 165mm, including aspheric, achromatic, free-form, lens arrays and spherical lenses; aspheric and free-form mirrors; prisms; light tunnels and special shapes; Auto-Tessar® HDR lenses, Tevidon® CCD camera lenses; optoelectronic and optomechanical subassemblies. Contact: Bruce Nielsen, Vice President; Frank Müller, Sales Manager, frank.mueller@docteroptics.com.

Dominar, Inc.

#5070

734 Aldo Ave, Santa Clara, CA, 95054
408/496-0508; fax 408/496-0910
sales@dominar-inc.com; www.dominar-inc.com

New Product: Solderable metal coating for hermetic sealing, heat transfer or bonding.

Dominar, Inc. specializes in the design and manufacture of optical thin film coatings. We coat crystals, AMTIR and semiconductors, as well as glasses and silica, from UV to IR. We offer anti-reflection and high-reflection dielectric and most metals. We quote on prototype or production quantities. Dominar offers expertise for fiber optic light guides and imaging, optical design and testing and illumination engineering. Contact: John Ellis, Chief Operating Officer, jellis@dominar-inc.com; Dale Hansen, President, dhansen@dominar-inc.com.

DongWoo Optron Co., Ltd.

#5083

611-5 Maesan-ri Opo-Eup, Kwangju-shi Kyunggi, Korea, 464-893
82 31 765 0300; fax 82 31 765 0222
optron@optron.co.kr; www.dwoptron.com

New Product: Confocal micro Raman system; Photoluminescence Mapping system; Imaging monochromator/spectrographs; "MonoRa" imaging monochromator/spectrographs, focal length 150mm to 750mm; "Ramboss" Confocal Micro Raman Measurement system; "Maple" Micro/Macro Photoluminescence Mapping system; "ComRam-320i" Dispersive NIR Raman measurement system; "DongWoo is Drawing Wavelength".

We are focused in spectroscopy and offering a solution for optical spectroscopy application. You can see our products and performance at Photonics West 2008, concourse area - Booth#5083. Contact: Donghyun Kim, Director, dos@optron.co.kr; Youngjoon Kim, President.

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8–18 for complete time, schedules, and locations.

Doric Lenses Inc.

#6098

357 rue Franquet, Quebec, QC, Canada, G1P 4N7
418/877-5600; fax 418/877-1008
sales@doriclenses.com; www.doriclenses.com

New Product: FAC lens arrays matched to 3D geometry of specific LD bar stacks reduce overall beam divergence.

The company is a manufacturer of high quality photonic components, like the world renowned doric™ gradient-index cylindrical lenses, rods, cut-rods, a family of acylindric lenses, axicons, spherical lenses, custom optics etc. In addition to a large portfolio of photonics components, Doric Lenses Inc. provides photonics contract manufacturing services (photonics assemblies) and full photonics supply chain management. Contact: Branka Prijovic, Vice President Sales, branka@doriclenses.com; Kemal Trtak, Sales Representative, kemal@doriclenses.com.

DPSS Lasers Inc.

#6046

2525 Walsh Ave, Santa Clara, CA, 95050
408/988-4300; fax 408/988-4305
alaymon@dpss-lasers.com; www.dpss-lasers.com

New Product: DPSS Lasers Inc introduces the New Samurai UV Marking System utilizing DPSS' 355nm laser technology.

DPSS Lasers Inc. specializes in low cost, DPSS UV, "quasi CW" lasers, 0.1 to 3+ watts, 355 nm with high peak powers and high rep rates that are ideal for marking and engraving materials such as glass, plastic and metals. Applications using our UV "Cold Laser" are Product Coding, Micromachining, Marking, Sapphire Scribing, ITO Removal, Semiconductor and Medical Packaging. Also available, the low cost New Samurai UV Marking system utilizing DPSS 355 nm laser technology. Contact: Alex Laymon, President; Randy Kimball, Vice President Business Development, rkimball@dpss-lasers.com.

Draka Comteq Optical Fibre

#6616

2512B Penny Rd, Claremont, NC, 28610
828/459-8446; fax 828/459-8267
fibresales@drakafibre.com; www.drakafibre.com

Draka Comteq, one of the world's largest manufacturers of optical fiber, is a leading innovator in specialty fiber technology. A joint venture between of Draka and Alcatel-Lucent, Draka Comteq leverages its leadership in optical fiber technology to help you develop and deliver products requiring custom optical fibers. Contact: Olaf Storaasli, Product Manager, olaf.storaasli@draka.com; Ryan Chappell, North American Business Manager, ryan.chappell@draka.com.

DRS Infrared Technologies

#6223

13532 N Central Expy, Dallas, TX, 75243
972/560-6000; fax 972/560-6049
www.drsinfrared.com

DRS Sensors & Targeting Systems, Inc. - Infrared Technologies Division is a leader in advanced focal plane array (FPA) technology for both uncooled and cooled thermal imaging systems. Infrared Technologies offers the next generation of compact and low power sensor systems for the security OEM marketplace. Contact: Phil Lombardo, irsales@drs-irtech.com.

DVC Co.

#6184

10200 Hwy 290 W, Austin, TX, 78736
512/301-9564; fax 512/288-2961
sales@dvcco.com; www.dvcco.com

DVC Company is a manufacturer of high performance scientific grade CCD cameras for an array of quantitative and qualitative imaging applications. Our cameras use industry standard interfaces such as Gigabit Ethernet (or GigE), Firewire and CameraLink to provide the highest transfer rate available for applications that demand low noise and high dynamic range. DVC's OEM friendly SDK supports Linux and Windows developers, facilitating multi-platform system integration.

Dyna Technologies, Inc.

#6099



1670 Tropic Park Dr, Sanford, FL, 32773
407/330-6423; fax 407/330-6121
information@dti-fla.com; www.dti-fla.com

New Product: A compact press designed for compression molding of glass optical elements for product development.

A manufacturer of a precision glass molding presses for production of optical elements such as aspheric lenses. The presses feature a fully enclosed design for vacuum and inert gas purging operation. Programmable feedback controls provide high precision position, force, heating and cooling profiles throughout the molding process. Contact: Brent Binkley, Director of GMT, bbinkley@dti-fla.com; Howard Painter, President, hpainter@dti-fla.com.

Dynamics Research Corp.

#5059

50 Concord St, Wilmington, MA, 01887-2179
978/658-6100; fax 978/657-7765
metsales@drc.com; www.drc.com/metrigraphics

New Product: ERMF (Extreme Resolution Micro Flex) circuits. Can be multilevel / traces & spaces as low as 5µm.

Metrigraphics is a leading supplier of high resolution, custom components for designers and builders of telecom products. Our core technologies of electroforming, photolithography and thin-film deposition are applied to a variety of substrates, i.e. PZT alumina, glass and flexible polyimides. Typical components include: Microflex circuits (5µm conductors), inductors, coils, high-density interconnect and high aspect ratio micro-mechanical parts. Contact: Fred Pitman, Director of Marketing and Technical Sales, fpitman@drc.com; Diane Black, Technical Sales, dblack@drc.com.

Dynasil Corp.

#327

239 Cherry St, Ithaca, NY, 14850
856/767-4600; fax 856/767-6813
info@emf-corp.com; www.dynasil.com

Dynasil member companies include EMF & Optometrics Corporations, in addition to Dynasil/Fused Silica. We provide Fused Silica & ULE substrates, custom optical coatings, optical components, sub-assemblies and assemblies to fabricators and OEMS. We are an authorized distributor of Corning 7980 HPFS, including excimer grades, in machined blank or partial boule/ingot forms for optics, lasers, electronic and semiconductor applications. Fused quartz, Corning ULE also available. Contact: Bruce Leonetti, Vice President Marketing & Sales, sales@dynasil.com; Michael Orlando, Inside Sales, sales@dynasil.com.

Dynavac

#5130

110 Industrial Park Rd, Hingham, MA, 02043
781/740-8600; fax 781/740-9996
sales@dynavac.com; www.dynavac.com

New Product: 32" Optical Coating System - Compact design, E-beam & resistance sources, automated process control.

DynaVac designs and manufactures high vacuum process equipment for the optical, thin-film, space research and general vacuum markets. DynaVac is an industry leader due to our attention to sound engineering and manufacturing practices and our commitment to superior customer service. DynaVac's coating systems range from basic R&D systems to complex, fully automated, multi-coat systems. Each system is tailored to our customer's requirement while providing reliability and a cost effective solution. Contact: Bob Bilodeau, Sales Manager, bbilodeau@dynavac.com; Liz Clafflin, Sales Administrator, lclafflin@dynavac.com.

Photonics West Exhibitor Directory

Dyoptyka

7 Westland Ct, S Cumberland St, Dublin 2, Ireland
353 86 3800 769; fax 33 1 611 4626
info@dyoptyka.com; www.dyoptyka.com

New Product: A low cost MEMS deformable membrane mirror with integrated control electronics with 37 actuators.

Dyoptyka's Dynamic Optics technology offers disruptive improvements to a variety of optical systems. Our unique combination of Optical, MEMS, Electronic and Software skills allows us to exploit opportunities created by advances in MEMS technology that have made its inclusion in consumer products desirable and affordable. This technology allows us to reduce the cost and complexity of lenses and mirrors while at the same time improving optical performance and addressing size and weight issues. Contact: Mary Finegan, Vice President Business Development, mfinegan@dyoptyka.com.

#6332

École Polytechnique de Montréal/Université Laval/Univalor

#6098

5160 Decarie Blvd, Montreal, QC, H3X 2H9
514/340-3243; fax 514/340-3204
info@univalor.ca; www.univalor.ca

New Product: New filterless image sensor, Tunable delay lines, High speed communication, Fiber based biosensors.

École Polytechnique de Montréal, Université Laval and Gestion Univalor are involved in the technology transfer activities. As an example, the current portfolio of technologies available at Univalor is made of over 100 marketable technologies in various fields from life sciences to engineering. Contact: Didier Leconte, Manager, Sciences and Engineering, didier.leconte@univalor.ca; Thomas Martinuzzo, Project Leader, Sciences and Engineering, thomas.martinuzzo@univalor.ca.

e2v

#1340



106 Waterhouse Ln, Chelmsford, United Kingdom, CM1 2QU
44 1245 493 493; fax 44 1245 492 492
enquiries@e2v.com; www.e2v.com

New Product: e2v's 15 micron pixel series of sensors. Initial formats 2k x 2 x 4 outputs & 4k x 4k x 4 outputs.

e2v is a world leading designer and manufacturer of image sensing products for scientific, industrial, medical, dental, defense, space and astronomy applications. e2v's L3Vision™ technology offers outstanding QE performance and extremely low read noise, across light levels, making it suitable for life science, bio- and chemi-luminescence applications and 24/7 surveillance. Large area devices and focal plane arrays are further capabilities. Contact: Ana Marie Smith, Vice-President Medical and Science Business Unit Americas, anamarie.smith@e2v.com.

Eagleyard Photonics GmbH

#1733

Rudower Chaussee 29, Berlin, Germany, 12489
49 30 6392 4520; fax 49 30 6392 4529
info@eagleyard.com; www.eagleyard.com

Eagleyard Photonics is an ISO 9001 certified supplier of high power laser diodes with wavelengths ranging from 650 nm to 1120 nm. Based on GaAs wafer material our semiconductor laser diodes product portfolio comprises four basic types of lasers, Ridge Waveguide, Tapered Laser, DFB/DBR and Broad area pumps. Contact: Michael Kneier, michael.kneier@eagleyard.com.

Ealing Catalog Inc.

#6363



3845 Atherton Rd Ste 8, Rocklin, CA, 95756
916/435-4230; fax 916/435-4234
sales@ealingcatalog.com; www.ealingcatalog.com

New Product: ROG's, Lenses, Mirrors, Filters, Stages, Optic Mounts, Positioning Equip and Microscopes.

Ealing is your source for high-quality optics and opto-mechanics. Introducing a new line of premium Beck-Iroscope Microscopes. Ealing provides a comprehensive catalog of photonics products and has been serving the industry for over 50 years. Most products are carried in stock for immediate delivery. Call 1-800-295-3220; It is our privilege to serve you. Contact: Mike Fischer, Product Manager, mfischer@ealingcatalog.com; Shelly Lee, Service Manager, slee@ealingcatalog.com.

Eastman Kodak Co.

#618

1999 Lake Ave, Rochester, NY, 14650-2010
585/722-4385; fax 585/477-4947
imagers@kodak.com; www.kodak.com/go/ccd

EdgeWave GmbH

#1801

Schumanstr 18 B, Wuerselen, Germany, 52146
49 2405 4186 0; fax 49 2405 4186 33
info@edge-wave.com; www.edge-wave.com

New Product: 600W average power E/O-q-switched INNOSLAB laser with line or square top-hat beam profile: HD-series.

Diode pumped, E/O-q-switched Nd:YLF, Nd:YAG and Nd:YVO₄ lasers with SHG, THG and FHG: Beam quality M₂ < 2 for all series, pulse energy up to 60mJ, pulse length down to 4ns, pulse rep. rate up to 150 kHz, average power up to 600W, line, square or circular shaped Gaussian or Top-Hat beam profiles. Main applications: Ablation and scribing conduction or dielectric layer, drilling and cutting of metal, ceramic and glass, pumping of dye and Ti:Sapphire laser and of OPO. Contact: Keming Du, Chief Executive Officer.

Edinburgh Instruments Ltd

#615

2 Bain Sq, Kirkton Campus, Livingston,
United Kingdom, EH54 7DQ
44 1506 425 300; fax 44 1506 425 320
sales@edinst.com; www.edinst.com

Picosecond fluorescence lifetime spectrometers based on Time Correlated Single Photon Counting (TCSPC). Nanosecond Laser Flash Photolysis in kinetic and spectral modes, steady state fluorimeters with anisotropy measurement, modular fluorescence and phosphorescence lifetime spectrometers, advanced deconvolution software and analysis tools. Contact: Bert Paul, Applications Engineer, bpaul@boselec.com.



CONFERENCE BAG SPONSOR

Edmund Optics Inc.

#1019



101 E Gloucester Pike, Barrington, NJ, 08007-1380
800/363-1992; fax 856/573-6295
industrialsales@edmundoptics.com; www.edmundoptics.com

New Product: Edmund Optics Hybrid Lens Technology merges benefits of aspheres and doublets at an affordable price.

Edmund Optics, leading manufacturer of custom optics & off-the-shelf optical components for over 65 years, designs & manufactures an array of multi-element lenses, coatings, imaging systems & opto-mechanical equipment. EO products are used in applications ranging from biomedical & military to high-speed factory automation. EO's state of the art manufacturing & global distribution network position it as the world's largest supplier of optical components. Contact: Marisa Edmund, Vice President of Marketing & Communications, Medmund@edmundoptics.com; Allan Kreutzer, Vice President of Global Sales, Akreutzer@edmundoptics.com.

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LITERATURE SHOWCASE EXHIBITOR

EDP Sciences

#S1

17 Ave du Hoggar, Courtaboeu Les Ulis Cedex, France, F-91944
33 1 69 18 75 75; fax 33 1 69 86 07 65
edps@edpsciences.org; www.edpsciences.org

EDP Sciences (Édition Diffusion Presse Sciences), a subsidiary of learned societies, works closely with the scientific world. It is involved in the communication and dissemination of science to specialist audiences (researchers, engineers, students etc.) and non-specialist audiences alike (general public, decision makers, teachers). EDP Sciences produces and publishes international journals, books and Internet sites with a predominantly scientific or technical content. Contact: Nathalie Lecrosnier, Responsible for Journals Communication, lecrosnier@edpsciences.org.

EDT

#6119

1100 NW Compton DR Ste 306, Beaverton, OR, 97006
503/690-1234; fax 503/690-1243
sales@edt.com; www.edt.com

EGIDE

#6390

4 Washington St, Cambridge, MD, 21613
410/901-6100; fax 410/901-6250
sales@egideusa.com; www.egide.fr

EGIDE designs and manufactures hermetic glass-to-metal and ceramic-to-metal packaging for telecommunications, industrial, military and aerospace applications. Products include: 14 pin butterflies, minidil and various plug-in and optical devices and circuits that control wave monitoring, guided missiles, flight control operations and more. Contact: Kirk Williamson, Sales Manager, kirk.williamson@egideusa.com.

EKSPLA Ltd.

#1933

Savanoriu Av 231, Vilnius, Lithuania, 02300
370 5 264 9629; fax 370 5 264 1809
sales@ekspla.com; www.ekspla.com

New Product: First commercially available SFG microscopy by EKSPLA with Prof. Baldelli from Univ. of Houston.

From single components to complete systems. EKSPLA produces mode-locked picosecond Nd:YAG lasers, q-switched nanosecond Nd:YAG lasers and broadly tunable OPO/OPA/OPG systems. New DPSS lasers offer unprecedented opportunities in micro-machining and spectroscopic applications. Components include nonlinear and laser crystals, laser optics, crystal ovens with controllers and pulsed power supplies. Contact: Lucian Hand, President of Altos Photonics, lucian@altosphotonics.com.

Electro Optical Components Inc.

#314

5460 Skylane Blvd, Santa Rosa, CA, 95403
707/568-1642; fax 707/568-1652
info@eoc-inc.com; www.EOC-INC.COM

New Product: FEMTO high speed amplifiers and photoreceivers; IMM Messtechnologie Lasers; Intex IR Pulsed Sources.

Electro Optical Components (EOC) provides technologically advanced components for laser and optoelectronic systems from the UV to the far IR. Our products include signal recovery amplifiers and photoreceivers; thermopile and UV detectors and arrays; IR and visible laser diodes and modules; optics and coatings (including CO₂); IR interference filters; E-O modulators and many other key E-O components. Contact: Sales.

Electro Optics Magazine

#6062

27 Queen Sq, Bristol, United Kingdom, BS1 4ND
44 117 929 2506; fax 44 117 929 2506
drew.cameron@europascience.com; www.europascience.com

Electron Tubes

#6133

100 Forge Way Unit F, Rockaway, NJ, 07866
973/586-9594; fax 973/586-9771
sales@electron tubes.com; www.electron tubes.com

New Product: Electron Tubes is pleased to introduce the ADIT range of low cost, high quality photomultipliers.

Electron Tubes designs and manufactures photomultiplier tubes, housings and electronic signal processing modules. Photomultipliers are available in diameters from 3/4" to 8". Special tubes are available for use at cryogenic temperatures and with ultra low radioactivity glass for high energy and cosmic ray physics experiments. Ruggedized tubes are available for oil well logging and space flight applications. Electron Tubes welcomes your inquiry for special tubes for non-standard applications. Contact: Paul Davison, Sales Manager, paul@electron tubes.com; Jules Green, Sales Manager, jules@electron tubes.com.

Electro-Optical Products Corp.

#6212

PO Box 650441, Fresh Meadows, NY, 11365
718/997-8100; fax 718/997-8102
ziva@eopc.com; www.eopc.com

Electro-optical Products Corp. is a manufacturer and supplier of stock, custom and OEM components and sub-systems with drive electronics for light, plasma and laser light for industrial, scientific, medical, aerospace and military applications worldwide. Products include: Scanners and Beam Deflectors (resonant scanners, XY systems, polygons, acousto-optic beam deflectors, electro-optic beam deflectors); Choppers and Modulators (fixed and variable frequency: tuning fork choppers, rotating choppers, acousto-optic modulators, electro-optic modulators); Optical Shutters and Laser Safety Shutters and Motorized Filter Selectors.

Electro-Optical Systems, Inc.

#3015

1288 Valley Forge Rd Ste 49, Phoenixville, PA, 19460
610/935-5838; fax 610/935-8548
sales@eosystems.com; www.eosystems.com

New Product: vis and NIR quadrant and PSD modules with new sizes and bandwidth configurations.

EOS manufactures photodiode and detector components and integrated receiver modules for the visible to LWIR wavelength range. This includes single element, quadrant and PSD devices and support electronics. Detector materials include Silicon, Germanium, InGaAs, InAs, InSb, PbS, PbSe, HgCdTe and thermal detectors. Contact: Joyce Maddox, Sales Manager; William Pinkston, President, wp@eosystems.com.

Electro-Optics Technology, Inc.

#1817

5835 Shugart Ln, Traverse City, MI, 49684
231/935-4044; fax 231/935-4046
sales@eotech.com; www.eotech.com

New Product: EOT will display a 500W free space polarization insensitive isolator suitable for Yb:Fiber lasers.

EOT manufactures of Faraday isolators for use with Yb:Fiber, solid state and high power laser diodes in the 400-1100nm region. Polarization insensitive isolators are available for lasers with powers up to 500W. Rotators with apertures up to 100mm are available for pulsed high energy solid state lasers. EOT also manufactures photodetectors for monitoring the time domain response and frequency response of pulsed and externally modulated lasers. Contact: Mike Torrance, Vice President Business Development, mtorrance@eotech.com.

Electrophysics Corp.

#1912

373 Rte 46 W, Fairfield, NJ, 07004-2442
973/882-0211; fax 973/882-0997

info@electrophysics.com; www.electrophysics.com

Electrophysics will be displaying the Titanium 560M high performance infrared camera, a compact system designed for demanding R&D applications. The Titanium incorporates a 640x512 InSb infrared FPA featuring class-leading 15micron pixels that delivers longer range over larger pixel pitch cameras. This is the first IR camera to feature Hypercal™ and CNUC™, our new automatic radiometric calibration and non-uniformity calibration techniques that end user-performed field blackbody calibrations. Contact: Chris Alicandro, Director of Sales-Infrared Products, calicandro@electrophysics.com; Tim Callenbach, Western Regional Sales Manager, tcallenbach@electrophysics.com.

Elforlight Ltd.

#5095

4-B Brunel Close, Drayton Fields, Daventry Northants, United Kingdom, NN11 8RB
44 1327 300069; fax 44 1327 300076
info@elforlight.com; www.elforlight.com

New Product: "WAVE" Quasi-CW UV lasers, up to 500mW, repetition rates to greater than 100kHz at 355nm.

Elforlight is a UK manufacturer of high specification diode pumped solid-state lasers. Single longitudinal mode Green, Blue and IR lasers for interferometry, seeding, LDV, spectroscopy. Short pulse lasers with pulse widths <2ns at up to 50kHz, IR, Green, UV for FLIM. Cost effective 5W CW green lasers for fsec Ti:Sapphire pumping, flow visualization. Multi watt q-switched IR and Green laser for micromachining, PIV and Lidar. Ultrafast 1 micron lasers for imaging, spectroscopy and micromachining.

Elite Optoelectronics Co., Ltd.

#6517

22 Kejiwu Rd, Hi-Tech Zone, Xi'an, China, 710065
86 29 8845 2358; fax 86 29 8845 2480
sales@s-laser.com; www.s-laser.com

Elliot Scientific Ltd.

#742

3 Allied Business Ctr, Coldharbour La, Harpenden Herts, United Kingdom, AL5 4UT
44 1582 766 300; fax 44 1582 766 340
sales@elliotscientific.com; www.elliotscientific.com

Elliot Scientific manufactures fiber launch and waveguide alignment systems with manual or piezo actuators, miniature micropositioners, precision mirror mounts, optomechanical components and laser tweezers. We can also supply custom components and OEM assemblies to your specifications. We will also be exhibiting the range of diode pumped lasers and laser drivers from M Squared Lasers. Including single frequency Ti:sapphire lasers, IR and Terahertz sources and high power diode laser drivers. Contact: Colin Freeland, colin.freeland@elliotscientific.com; David Welsh, david.welsh@elliotscientific.com.

EM4, Inc.

#5128



7 Oak Park, Bedford, MA, 01730
781/275-7501; fax 781/275-7569

wgateway@em4inc.com; www.em4inc.com

EM4, Inc. is the premiere US based and owned volume manufacturer of state-of-the-art, optoelectronic components for the Defense and Industrial markets. Featured products include high power (up to 200mW) DFB lasers (1060nm-1620nm), High power (up to 8W) single emitter Multimode pump lasers (780nm-980nm), high power (up to 800 mW) SM pump lasers (915nm-1064nm), RF links and receivers up to 20GHz, high power fiber isolators and splitters (CW up to 10W) and Acusto-Optic Modulators (1060nm-1550nm). Contact: Ed McCartin, Director of Defense Sales, emccartin@em4defense.com; Winn Gatewood, Customer Service Representative.

EMCO High Voltage Corp.

#1247

70 Forest Products Rd, Sutter Creek, CA, 95685
209/267-1630; fax 209/267-0282

sales@emcohighvoltage.com; www.emcohighvoltage.com

Innovative High Voltage Power Supplies provide high performance in miniature, cost effective packages. Standard, off-the-shelf products range from ultra-miniature high voltage converters occupying 0.125 cubic inches to precision, multi-output, rack-mount high voltage systems. A complete line of RoHS compliant products are available. Contact: Sales.



GENERAL REFRESHMENTS SPONSOR

EMD Chemicals Inc.

#6114

7 Skyline Dr, Hawthorne, NY, 10532
914/592-4660; fax 914/592-9469

effects@emdchemicals.com; www.emdchemicals.com

We are an experienced manufacturer of high purity materials. We have developed Patinal® evaporants, with chemical, optical, electrical and mechanical properties suitable for evaporation. They are supplied as granules, tablets, discs or powders, to best suit the application. Contact: George Zeiter, Sales Manager, george.zeiter@emdchemicals.com.

EMF Corp.

#327

239 Cherry St, Ithaca, NY, 14850
800/456-7070; fax 800/456-3227

info@emf-corp.com; www.emf-corp.com

New Product: IAD E-beam coatings up to 20 layers & 80in dia. High temp, enhanced gold for IR space applications.

A thin film coating house with custom coating designs to enable solutions for your optical system & prototype projects. Huge chambers for volume production programs or large optics to 3 meters dia. Coatings include mirrors for the UV-VIS & IR, AR coatings for the VIS & NIR, plate beam splitters for VIS & custom filters. We're skilled with metal, glass and plastic optics. Our cool process coatings are great matches for 20th wave and plastic optics. We are a Dynasil family company. Contact: Joe Howe, Sales Account Manager, joe@emf-corp.com.

Empire West Inc.

#5089

PO Box 511, 9270 Graton Rd, Graton, CA, 95444
707/823-1190; fax 707/823-8531

ed@empirewest.com; www.empirewest.com

New Product: Stock sizes of Safe-Guard PET-G Optics Containers for square optics available at our online store.

Empire West designs and manufactures thermoformed PET-G optics packaging systems for the full range of today's optical lenses, filters and mirrors. Our unique slip-fit, non-out-gassing optics containers are the industry standard for value and performance. Designed to contact optics only on the bevels, these versatile containers eliminate the need for lens paper or foam liners and greatly reduce the opportunity for handling-generated surface degradation. Contact: Ed Davis, President; Sonya Yonash, Customer Service, sonya@empirewest.com.



Product Locator Kiosk

Find your way around the Exhibition. Perform a product or key word search, review the Product Demonstrations, print out the results, and be on your way in no time! You'll find the 3-station kiosk in the foyer area, outside the entrances to Exhibition Halls 1 and 2 of the Convention Center and in South Hall by Booth #6198.

Photonics West Exhibitor Directory

Engineering Synthesis Design, Inc.

#414



310 S Williams Blvd Ste 210, Tucson, AZ, 85711
520/296-3068; fax 520/296-2897
sales@engsynthesis.com; www.engsynthesis.com

New Product: The Intellium Asphere is designed for single-shot aspheric optic characterization in < 60 seconds.

ESDI is a globally recognized leader in providing innovative surface & wavefront metrology solutions for astronomical, aerospace, bio-medical, optical fabrication & production metrology applications. ESDI products include the world-renowned IntelliWave™ software; Intellium™ Fizeau, Shearing & Point-Diffraction Interferometers (classical & vibration-insensitive); Scatterometers; Interferometer Accessories, Upgrades and Training and Custom Metrology Solutions. Contact: Don Pearson, Sales & Marketing Director, don.p@engsynthesis.com; Bruno Berton, Manager, ESDI Europe, info@esdi-europe.com.

Enterprise Florida, Inc.

#639

800 N Magnolia Ave Ste 1100, Orlando, FL, 32803
407/956-5600; fax 407/956-5599
jgunter@eflorida.com; www.eflorida.com

Enterprise Florida Inc. (EFI) is a public-private partnership serving as Florida's primary organization for statewide economic development-supporting, attracting and helping create business in innovative, high-growth industries, including life sciences, information technology, aviation/aerospace, homeland security/defense and manufacturing. EFI assists companies with their expansion and location plans, providing site selection services, demographic and incentive information and trade leads. Contact: Joel Gunter, Project Manager; David Boyd, Director, Business Development Marketing, dboyd@eflorida.com.

EOLITE SYSTEMS

#1315

Parc Unitec 1, 6 allée du doyen Brus, Pessac, France, 33600
33 5 56 46 45 53; fax 33 5 56 46 24 35
sylvie.babeau@eolite.com; www.eolite.com

EOspace, Inc.

#6011

8711 148th Ave NE, Redmond, WA, 98052
425/869-8673; fax 425/869-8872
info@eospace.com; www.eospace.com

New Product: LiNbO₃ modulators, switches & pol. controllers for operation from <700 nm to >2 μm wavelengths.

EOSPACE is the technology and product leader in design and manufacturing lithium niobate-based electro-optic devices and large-scale optical ICs. Guided-wave electro-optical modulators, switches, and optical ICs from EOSPACE are commonly characterized as ultra-low-loss (< 2 dB), very-wide-bandwidth and high-extinction-ratio products: Intensity & phase modulators (10-40 GHz); Polarization controllers; NxN high-speed optical switches; Polarization maintaining splitters. Contact: Ed Miao, Customer Relations, ed.miao@eospace.com; Chung-Ping Chien, Vice President, Business Operations, cpchien@eospace.com.

EPIGAP Optoelektronik GmbH

#1801

Köpenicker Str 325 b Haus 201, Berlin, Germany, 12555
49 30 6576 2549; fax 49 30 6576 2545
sales@epigap.de; www.epigap.de

Epitaxial Technologies, LLC

#6305

1450 S Rolling Rd, Baltimore, MD, 21227
410/455-5594; fax 410/455-5595
info@epitaxialtechnologies.com; www.epitaxialtechnologies.com

Epitaxial Technologies develops and produces breakthrough sensor products including photon counting photodetector arrays and ultrasensitive photoreceivers with widespread applications in free-space lasercomm, lidar and infrared imaging for missile defense, homeland security and commercial applications. Contact: Olaleye Aina, President, oaina@epitaxialtechnologies.com.

EpiWorks, Inc.

#6030

1606 Rion Dr, Champaign, IL, 61822
217/373-1590; fax 217/373-1591
sales@epiworks.com; www.epiworks.com

New Product: EpiWorks now offers leading 635nm laser wafers and III-V solar cell (PV) wafers.

EpiWorks is the leading developer and manufacturer of III-V epitaxial wafers for lasers, photodetectors and solar cells. Our products include high-power AlGaAs/GaAs and Al-free (635nm - 1060nm) EEL and VCSEL wafers and InP-based (1200nm - 1900nm) laser wafers. In addition to high-quality manufacturing, our business model includes high-level customer interaction and co-development to rapidly advance our customers' technology capability and product development. Contact: David Ahmari, info@epiworks.com.

Epner Technology, Inc.

#3011

78 Kingsland Ave, Brooklyn, NY, 11222-5603
718/782-5948; fax 718/963-2930
epner78@aol.com; www.epner.com

A broad range of optical fabrication and coating technologies will be displayed with free samples of Laser Gold® the world's standard for a rugged IR reflective coating. Custom designed infrared lightpipes electroformed IR radiation shields and cold shields. Low-emissivity Gold and Laser Black® an inorganic non-outgassing coating that some say, "Actually swallows light". Contact: David Epner, President, david@epner.com; Paul Brancato, General Manager, paul@epner.com.

Equipment Acquisition Resources, Inc.

#6245

555 S Vermont St, Palatine, IL, 60067
847/705-7636; fax 847/705-7685
sales@eartechology.com; www.eartechology.com

New Product: EAR is pleased to now offer best-in-class auction services through EARBid Online Auctions.

EAR is the largest On-Hand supplier of dicing saws, lapping and polishing machines, ID and OD saws, wire saws and various other pieces of equipment related to the semiconductor industry. Our remanufactured equipment out-performs even new machines in finishing accuracy and attainable material thinness. We also offer a complete process development program, which includes Research & Development, for the successful completion of your specific application. Contact: Mark Anstett, Vice President, Marka@eartechology.com; Bruce Costello, Director Auction Services, Bruce@earbid.com.

European Optical Society

#6325

Hollerithallee 8, Hannover, Germany, 30419
49 511 2788115; fax 49 511 2788119
www.myeos.org

Evans Analytical Group

810 Kifer Rd, Sunnyvale, CA, 94086
408/530-3500; fax 408/530-3501
marketing@eaglabs.com; www.eaglabs.com

EAG is the leader in surface analysis, materials characterization and trace elemental analysis. We offer over 30 analytical techniques/services supported by 150 major instruments via 15 locations worldwide. Techniques available: SIMS, TOF-SIMS, XPS/ESCA, Auger, SAM, Auger Defect Review, FTIR, GDMS, IGA, ICP-OES, LA-ICP-MS, LEXES, TEM/STEM, SEM/EDS, FIB, TXRF, XRD, XRF, XRR, AFM/SPM, RBS, NRA, HFS, PIXE, Ion Channeling, micro Raman, GC/MS, Chip Decapsulation, FIB Circuit Edit, ESD & Latchup. Contact: Jim Norberg, Operations Coordinator, jnorberg@eaglabs.com; Ray Caron, Director, Sales and Marketing, rcaron@eaglabs.com.

Evaporated Coatings, Inc.

2365 Maryland Rd, Willow Grove, PA, 19090-1708
215/659-3080; fax 215/659-1275
sales@evapcoat.com; www.evapcoatings.com

ECI is a custom manufacturer of vacuum-deposited thin films including mirrors, anti-reflection, beam-splitters, custom bandpass filters on your substrates, solderable films, transparent conductive, LW/P/SWP and bandpass filters. We are specialists at coating temperature sensitive substrates including plastics, wafers, fiber optic components including fiberends, ferrule assemblies, laser bars, TO caps and ball lenses and semiconductor materials. We offer IAD, IBS and APS deposition methods.

Evatec NA

150 Dow St Tower 4 4th Fl, Manchester, NH, 03101
603/669-9656; fax 603/606-7043
www.evatecnet.com

EXALOS AG

Wagistr 21, Schlieren, Switzerland, 8952
41 43 444 60 90; fax 41 43 444 60 99
sales@exalos.com; www.exalos.com

EXALOS, an ISO 9001:2000 certified company, is developing and selling advanced Superluminescent Light Emitting Diodes (SLEDs) to the fiber optic gyroscope, medical imaging (OCT), fiber optic test equipment and sensor applications. EXALOS SLEDs operate with wavelengths from 700 to 1700 nm, optical bandwidth up to 190 nm and output power up to 50 mW. EXALOS provides customers with the optimum balance of price, time to market, performance and size for any given specification. Contact: Gene Covell, Director of Sales, covell@exalos.com.

Excell Technology

1001 Varian St, San Carlos, CA, 94070
650/592-6224; fax 650/592-6684
dlhodges@excelltechnology.com; www.excelltechnology.com

Excell is an industry leader in selling and rebuilding to OEM the following: Double Side & Single Side Lapping & Polishing Machines, Double Side Fine Grinders, ID Saws, Grinders-all types, Slicing/Dicing Equipment etc. Excell has an excellent 30 year track record of providing Top Brand precision and reliable equipment. Located 20 minutes north of San Jose International Airport. Visit us in our 20,000 sq ft sales & rebuild facility-see one of the largest selections in the west. Contact: David Hodges, President; Valerie Defigueiredo, Administration, val@excelltechnology.com.

#5092



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Exciton, Inc.

#6286

PO Box 31126, Dayton, OH, 45437-0126
937/252-2989; fax 937/258-3937
carrie@exciton.com; www.exciton.com

As Exciton celebrates 34 years in the Laser Dye industry, we will continue to offer the widest selection of laser dyes including ultraviolet dyes, visible and near-infrared dyes, mode-locking and q-switch dyes, surfactants, solvents and triplet state quenchers. Specialty dyes for other opto-electronic applications are available including dyes for bio-tagging, optical filters, photo resists, DVD's, laser eye protection and others. Contact: Richard Steppel, President, richard@exciton.com; Carrie Brown, Director of Office Relations.

Fairchild Imaging

#6034

1801 McCarthy Blvd, Milpitas, CA, 95035
408/433-2500; fax 408/435-7352
sales@fcimg.com; www.fairchildimaging.com

New Product: Conдор™ 486EF - 4k x 4k, 60 x 60 mm² image area, USB2.0, external fiber-optic, 4 port readout.

Fairchild Imaging, a manufacturer of scientific CCD and CMOS image sensors and cameras, provides high-performance detectors for visible, UV and x-ray imaging. Specialties include wafer-scale back-illuminated CCDs for the UV and soft x-ray and large c taper cameras up to 200-mm in aperture. Visit <http://www.fairchildimaging.com> for more information on these cooled, multiport cameras. Contact: Colin Earle, Vice President, Sales & Marketing, colin.earle@fcimg.com.

Fairfield Crystal Technology, LLC

#5109



8 S End Plz, New Milford, CT, 06776
860/354-2111; fax 860/354-3093
info@fairfieldcrystal.com; www.fairfieldcrystal.com

New Product: We are now manufacturing SiO₂ standard lenses in addition to our CaF₂, MgF₂ and BaF₂ products.

Fairfield Crystal Technology specializes in the growth and manufacture of single crystal material for the optics and semiconductor industries. For the optics industry we are producing high quality single crystal CaF₂, MgF₂ and BaF₂. We make-to-order any size and shape crystal to the customer's specifications. We also provide high quality polishing services and can manufacture lenses, prisms, windows, etc. Contact: Andy Timmerman, Sales Manager, atimmerman@fairfieldcrystal.com; Chris Snyder, csnyder@fairfieldcrystal.com.

Fastlite

#6255

45-47 Rue Croulebarbe, Paris, France, 75013
33 1 45 30 12 96; fax 33 1 45 30 12 97
pascal.tournois@fastlite.com; www.fastlite.com

Fastlite offers ultrafast pulse shaping systems (DAZZLER) and solutions, ultrafast pulse measurement systems (PHAZZLER), and ultrafast stabilization systems (STABBLER) for many application fields of interest to the scientific community. Applications range from multiphoton microscopy to femtochemistry and femtobiology research field, ultra high intensity physics as well as attosecond research, high harmonic generation in gases and solid targets, laser-generated filaments ...). Fastlite also offers control and measurement systems and solutions for solid state or fiber-based femtosecond laser manufacturers.

Photonics West Exhibitor Directory

FastVision, LLC

#6610

71 Spit Brook Rd #200, Nashua, NH, 03060
603/891-4317; fax 603/891-1881
joe@fast-vision.com; www.fast-vision.com

Provides high-speed megapixel digital cameras and systems based on state-of-the-art imagers and having high-speed, scalable, integrated FPGA processors and memory subsystems, which enable stand-alone, high-speed in-camera image processing. Offers lossless or lossy compressed image recording. Advanced IP and optimized software is available that can be added to allow stand-alone processing modes or integration. Contact: Joseph Sgro, Chief Executive Officer; Dov Mordowicz, President/Director of Sales, dov@fast-vision.com.

Feldmann GmbH

#1801

Bergstr 31, Wetzlar Hessen, Germany, 35578
49 6441 50005 0; fax 49 6441 50005 55
info@feldmann-wetzlar.de; www.feldmann-wetzlar.de

Femto GmbH

#314

Paul-lincke-Ufer 34, Berlin, Germany, 10999
49 30 446 9386; fax 49 30 446 9388
info@femto.de; www.femto.de

New Product: HCA-S-400M - 400 MHz photoreceivers. HCA-400M-5K-C high speed current (transimpedance) amplifier.

FEMTO offers a line of high quality specialty amplifiers for signal recovery and processing. These products include Low Noise Current Amplifiers, High and Low Frequency Voltage Amplifiers, Photoreceivers, High Speed GHz Amplifiers and Lock-In Amplifiers. Contact: Steffen Prein, Managing Director, steffenprein@femto.de.

Femtochrome Research, Inc.

#5087



2123 4th St, Berkeley, CA, 94710
510/644-1869; fax 510/644-0118
tech@femtochrome.com; www.femtochrome.com

New Product: FR-103TPM is a compact autocorrelator for two-photon microscopy applications.

FEMTOCHROME manufactures instruments for the characterization of optical pulses. Our current FR-103 Autocorrelators/Crosscorrelators are unmatched in resolution, sensitivity and overall versatility. While providing the utmost in technical performance, the FR-103 series is reasonably priced, offering excellent price/performance ratio. Contact: Frank Taylor, Vice President Sales, sales@femtochrome.com; Z.A. Yasa, Research Director, zyasa@femtochrome.com.

FemtoLasers, Inc.

#540



124 Mount Auburn St N Ste 200, Cambridge, MA, 02138
971/456-9920; fax 971/456-9922
infofli@femtolasers.com; www.femtolasers.com

New Product: XL™ 500: >500 nJ, <60 fs @ 5.2 MHz. INTEGRAL™: <10 fs, >400 mW, >100 nm.

FEMTOLASERS is the premiere manufacturer of compact laser oscillator and amplifier solutions, offering optical pulses down to 7 fs at multi MW/GW peak powers and MHz/kHz repetition rates, as well as a line of patented optics. The company's products and excellent services have evolved to be the first choice among OEMs and scientists worldwide. Applications: attoscience, non-linear microscopy/spectroscopy, micro-machining, OCT, THz generation, etc. Contact: Andreas Isemann, General Manager United States of America, info@femtolasers.com.

Ferrotec (USA) Corp.

#444

33 Constitution Dr, Bedford, NH, 03110
603/472-6800; fax 603/472-2511
info@ferrotec.com; www.ferrotec.com

Ferrotec's thermoelectric modules offer precise temperature control of optical components including LEDs, photodiodes, CCDs, laser diodes, sensors and detectors. They are low powered and maintenance-free and operate over a wide range of temperature and environmental conditions.

Fersht Inc.

#6098

148 Colonnade Rd Unit #1 & 3, Ottawa, ON, Canada, K2E 7R4
613/221-9177; fax 613/224-2511
jfersha910@rogers.com; www.jfersht.com

New Product: Qualification and Reliability Testing and Consulting Service Company for Photonics and Electronics.

Fersht Inc. is an independent private corporation based in Ottawa, Ontario, Canada that specializes in qualification, environmental, reliability testing and packaging consulting services in a secure and confidential facility supporting Electronic, Fiber Optic, Photonic, Sensor, Automotive and Aerospace industries at highly competitive rates. Contact: Joseph Fersht, President.

Fianium

#6158

20 Compass Pt, Southampton Hampshire,
United Kingdom, SO31 4RA
44 2380 458776; fax 44 2380 458734
info@fianium.com; www.fianium.com

New Product: High Power Supercontinuum Lasers. Ultrafast Fiber Lasers operating at 1064, 532, 355 and 266 nm.

Fianium is a world leading manufacturer of ultrafast fibre lasers, providing a product portfolio of unrivalled diversity. Fianium has its world headquarters and manufacturing facility in Southampton in the United Kingdom and sales offices in China, Japan, Korea, Taiwan and the United States. Contact: Vladimir Kozlov, Vice President, vlad.kozlov@fianium.com; John Clowes, Research & Development Manager, john.clowes@fianium.com.

Fiber Optic Center, Inc.

#6101

23 Centre St, New Bedford, MA, 02740
508/992-6464; fax 508/991-8876
sales@focenter.com; www.focenter.com

New Product: Adhera Rare Earth Solder, ÅngströmPOL® Bare Fiber Polisher, ÅngströmSphere® Nano-silica Sphers.

Worldwide supplier of Adhera Rare Earth Solder, ÅngströmPOL Bare Fiber Polisher, ÅngströmLap lapping film & ÅngströmBond® adhesives. Distributing polishing equip, epoxy dispensing, crimping, test equip, splicers & term tools, supplies, cables, ferrules, attenuators & cleaning supplies. Custom drillout & std connectors stock. On-site technical support & consulting for complete assembly production. Fiber manufacturing: MCVD gas-delivery, lathes, draw-towers, rotary seals-research/production. Contact: Ben Waite, Technical Sales, bwaite@focenter.com; Barry Siroka, Business Development, bsiroka@juno.com.



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

Precision Instrumentation for Science and Industry

OPTICAL PRODUCTS

We've expanded our line of optical products to include the SmartShutter™, a full-featured controllable shutter, and the Lambda 10-3 controller, capable of commanding up to three filter wheels and two shutters. Other optical instruments include the DG-4 high-speed wavelength switcher, Lambda LS xenon light source, and a full range of filter wheels. Robust, reliable, and versatile, our imaging hardware can be driven by most imaging software and adapted to any microscope.



MICROMANIPULATION

Rock-solid precision and sub-micron accuracy. Our expertise in electromechanical engineering and stepper-motor control is evident in the sub-micron resolution of our highly stable motorized and mechanical micromanipulators, stages, and translation systems. Our high performance designs offer precision smooth, ergonomic, micro-movements adaptable to diverse system designs and platforms.



DESIGN AND MANUFACTURING

We've combined extensive years of motor control experience and in-house precision CNC machined parts to create a line of versatile optical products to serve the tremendous growth in photonics, optical research, and imaging techniques. Our extensive engineering expertise and 50,000 square foot state-of-the-art manufacturing facility, allow us to rapidly fabricate custom imaging solutions at economical prices, making us a preferred OEM vendor for life sciences and industry.



MICROPIPETTE FABRICATION

Sutter Instrument has been a recognized leader in micropipette fabrication technology for over 30 years. Our puller technology includes the P-2000, an advanced CO₂ laser-based micropipette puller, that has been critical in the development of near-field scanning optical microscopy, fabricating fused silica probes with tip diameters as small as 20 nanometers.



SUTTER INSTRUMENT

ONE DIGITAL DRIVE, NOVATO, CA. 94949 PHONE: 415.883.0128 | FAX: 415.883.0572
EMAIL: INFO@SUTTER.COM | WWW.SUTTER.COM

Photonics West Exhibitor Directory

Fibercore Ltd.

#6124

Fibercore House, Univ Pkwy Southampton Science Park, Southampton Hampshire, United Kingdom, SO16 7QQ
44 23 8076 9893; fax 44 23 8076 9895
info@fibercore.com; www.fibercore.com

Fibercore Ltd is the leading supplier of cutting edge specialty singlemode optical fibers. With 26 year's experience manufacturing rare-earth doped, bend-insensitive, polarization-maintaining and fiber laser products, including the world's only 'All Silica Cladding Pump Fiber' - you can be confident that Fibercore has the expertise necessary to not only meet, but to exceed all your expectations and requirements. Whatever your specialty fiber needs - call us, email us or fax us - we can help! Contact: Ellen Landis, Director of Sales - North America, ellen.landis@sciatl.com; Simon Vargeson, Senior Sales Engineer - Europe and ROW, simon.vargeson@sciatl.com.

FIBERCRYST

#6152

23 rue Royale, Lyon, France, 69001
33 688 023 226; fax 33 426 689 874
jm.fourmigue@fiberocryst.com; http://www.fiberocryst.com

FIBERCRYST proposes single crystal fibers, tubes and shaped crystals for laser, detectors and sapphire applications. The high and unique properties of single crystal materials are now available for customers applications that require long length of crystal, light guiding properties and thin cross sections. Several crystal compositions are available such as sapphire, YAG, LuAG, LiNbO₃, BGO, LYSO. The fibers cross section range from 300 μm to several millimeters and the fiber length can be up to 1 meter.

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Fiberguide Industries, Inc.

#115

1 Bay St, Stirling, NJ, 07980-1529
908/647-6601; fax 908/647-8464
info@fiberguide.com; www.fiberguide.com

New Product: Fiber Optic Backscatter/Reflection Probes for measuring spectral or diffuse reflection.

Line of multimode, single mode, graded index fibers from UV to NIR. Design/engineer assemblies with widest range of custom and standard endfittings/connectors and outer jackets to tailor a product to technical/economic requisites. Manufacture high density 2D and V-Groove arrays; cables for SERCOS digital interface and VersaLink industrial automation; reflection/backscattering probes for measuring specular or diffuse reflection from a surface. FDA registered as Custom Device Manufacturer. Contact: Konrad Lisi, Director, Marketing and Sales, klsi@fiberguide.com; Patrick Fung, Technical Sales Manager, pfung@fiberguide.com.

FiberLogix Ltd.

#1646

Ashley House Vale Industrial Park, Tolpits Lane, Watford, United Kingdom, WD18 9QP
44 1923 777766; fax 44 1923 777100
sales@fiberlogix.com; www.fiberlogix.com

New Product: Fiberlogix Designs and manufactures Specialty Fibers for Harsh environments and also manufactures High Performance Passive Devices.

FiberLogix is World's leading All-fiber solutions provider. Fiberlogix leads the World for All-fiber Solutions based on its Specialty fibers and passive devices. Fiberlogix's Specialty Fibers are: High NA, Polyimide, 80μm, High Temperature Acrylate, Polyimide, Photosensitive and PEEK coated fibers. Some of the Passive Devices Fiber Polarizers, Fiber Depolarizers, PM couplers, Couplers, Polarization controller, Polarization filter, Beam combiner, Polarization Scrambler and Circulator. Fiberlogix targets Aerospace & Defence, Biomedical, Fiber Sensors, High Power lasers, Oil & Gas, IndustrialTelecoms. Contact: Shagiq Parwaz, Managing Director, Shafiq@fiberlogiz.com; Saeed Rehman, Director Marketing, saeed@fiberlogix.com.

Fiberoptic Systems, Inc.

#6064

60 Moreland Rd Unit A, Simi Valley, CA, 93065
805/583-2088; fax 805/583-4018
sales@fiberopticssystem.com; www.fiberopticssystem.com

Fiberoptic Systems, Inc. offers custom and standard fiber optic bundles and patchcords for the medical, semiconductor, entertainment, spectroscopy, microscopy and machine vision markets. In over 25 years of business we have worked with borosilicate, fused silica (quartz) and other exotic fibers. From prototype to production, we will help design a solution to fit your budgetary, timing and quality requirements. We are freeway close to Los Angeles in Southern California. Contact: Todd Johnson, Senior Engineer, todd@fiberopticssystem.com; Kathy Hanau, Vice President Operations, kathy@fiberopticssystem.com.

Fiberoptics Technology Inc.

#6272

1 Quassett Rd, Pomfret, CT, 06258
860/928-0443; fax 860/928-7664
www.fiberoptix.com

FiberTech GmbH Special Optical Fiber Technologies

#1801

Nalepastr 170/171, Berlin, Germany, 12459
49 30 5300 58 0; fax 49 30 5300 58 58
fiber@fibertech.de; www.fibertech.de

New Product: New family of fiber cables, specially designed for beam transmission of high-power diode lasers.

FiberTech GmbH produces multimode quartz fibers with core diameters from 10μm to 2000μm and fiber cable assemblies. The fibers are manufactured with in-house drawing towers. Various numeric apertures, coatings and jackets are available. Fiber cable assemblies include cables for laser beam delivery, fiber tapers and highly-efficient fiber bundles for spectroscopy and sensing applications. Additionally FiberTech offers a wide range of fiber products for various medical applications. Contact: Lars Leininger, Sales & Marketing Manager, leininger@fibertech.de; Thomas Heyer, Chief Executive Officer, THeyer@fibertech.de.

Fibertech Optica Inc.

#6054

 330 Gage Ave Ste 11, Kitchener, ON, Canada, N2M 5C6
519/745-2763; fax 519/576-0885
jeffdup@fto.ca; www.fto.ca

New Product: Imaging fiber arrays with up to 25x25 fused silica fibers (minimum core diameter 100μm) available.

Designer and manufacturer of specialty multimode all-silica, HCS, PCS, Hard Clad all-Silica fibers. Core diameters from 10μm to 2000μm. Manufacturer of high power laser cables, patchcords, pigtailed, spot-to-line converters, bundles and reflectance probes, vacuum feedthrough, linear and spaced v-groove arrays. Spectral bands coverage from deep UV to MIR. Capillaries, rods and tapers also available. Contact: Jeff Dupuis, Sales & Marketing Manager; Cheryl Park, Administrative assistant, cher@fto.ca.

ficonTEC Corporation

#6514

27926 Muirfield, Mission Viejo, CA, 92692
949/916-0200; fax 949/916-0201
jang@ficontec.com; www.ficontec.com

New Product: New ELIAS series are machines for annealing of wafer-based and thin-film microelectronic devices.

ficonTEC supplies semi-automatic and fully automated production and testing systems, concentrating on the optical industry, laser diode manufacture, optoelectronics, medical technology, security and military engineering and telecommunications. We understand your products and processes and support you with our systems, know-how and experience. Contact: Torsten Vahrenkamp, Chief Executive Officer, sales@ficontec.com.

Fietje Sensor & Optoelektronik GmbH

#1801

Dorfstr 1 E, Glashagen, Germany, 18209
49 38203 65633; fax 49 38203 17890
support@fietje-web.de; www.fietje-web.de

Filmetrics, Inc.

#5025

9355 Chesapeake Dr, San Diego, CA, 92123
858/573-9300; fax 858/573-9400
info@filmetrics.com; www.filmetrics.com

New Product: The F20-UVX has wavelength range of 200 to 1700nm and measures film thickness from 30Å to 450µm.

Measure thin films from 30Å to 450µm with Filmetrics spectral reflectance based systems. Filmetrics features a complete line of affordable UV to NIR spectrometer systems for measuring thickness, optical constants and deposition rates of thin films. Single-spot and mapping systems available. Contact: Michael Klayman, Technical Sales Manager, klayman@filmetrics.com.

Filtech Photonics Co., Ltd.

#1938, 1939

1FI Bldg 3 LongChen Industrial Park, Central Longgang,
Shenzhen Guangdong, China, 518172
86 755 89724661; fax 86 755 28957369
seancai107@yahoo.com; www.filtech-filters.com

New Product: High performance optical filters for biomedical applications: Flurescence filters, Raman filters.

We are a leading optical coating company in China. Our product lines include: (1)High performance Biomedical filters for flurescence and Raman applications; (2) Laser components such as high damage threshold mirrors, laser crystals and PBS's; (3) Telecommunication filters such as DWDM skip filters, full band CWDM, GFF and WDM filters; (4) Optical filters for digital cameras and projection displays. Our facility features IBS, APS and IAD technologies. We are ISO9000 certified and RHOS compliant. Contact: Sean Cai, General Manager; Maco Lin, Sales Manager.

Finetech

#419

8380 S Kyrene Ste 110, Tempe, AZ, 85284
480/893-1630; fax 480/893-1632
sales@finetechusa.com; www.finetechusa.com

Precise Bonding systems for opto-electronics, laser bars, laser diodes, VCSELs, MEMs, MCMs and flip chip. Thermo-compression, thermo-sonic, eutectic, epoxy, ACF & Indium bonding. Placement accuracy of ±0.5 micron on Lambda system - ideal R&D/prototyping machine. Adaptable to processes including heat, force, ultrasonic and UV cure. Femto automated bonder (±0.5 accuracy) eliminates operator interaction and secures process repeatability. Contact: Robert Avila, Western Regional Manager, robert@finetechusa.com.

Fisba Optik AG

#326

Rorschacher Str 268, St. Gallen, Switzerland, CH-9016
41 71 282 3131; fax 41 71 282 3130
info@fisba.ch; www.fisba.ch

FISBA OPTIK AG is a leading supplier of optical systems and components ranging from simple lenses to laser modules, from micro optics right up to complex optical components for industrial applications. Optical metrology systems, configured to a customer - specific measuring task are a further speciality of the company's product portfolio. Accordingly, making a major contribution to its customer's success, with products and solutions that provide high technological and commercial benefits, is FISBA's daily business.

FJW Optical Systems, Inc.

#433

322 N Woodwork Ln, Palatine, IL, 60067-6949
847/358-2500; fax 847/358-2533
irsales@findscope.com; www.findscope.com

New Product: FIND-R-SCOPE® 1800/2200 nm Cameras operate visible to NEAR-IR. NTSC/PAL video to monitor or PC card.

FJW Optical Systems, world-leading mfg. of self-contained, high-res. Find-R-Scope® Infrared Viewers, Ultraviolet Viewers, Infrared Viewers/Cameras & Radiometric Imagers. IR Viewers sensitive from 350-1550nm. UV Viewer from 180-1550nm. Vidicon Viewer/Camera sensitive 400-2200nm. Thermal Viewer 8-14 m. Great for inspecting IR diodes, aligning/profiling laser systems, research, biotech, forensics & document analysis. Optional lenses, std. & custom filters, CCD camera, mtg. accessories, etc. Contact: Mary Scarlata, Inside Sales; Barry Durr, Director of Sales and Marketing, bdurr@findscope.com.

FLIR Government Systems, Inc.

#2018

27700A Parkway Ave, Wilsonville, OR, 97070
800/322-3731; fax 503/498-3904
www.flir.com

New Product: Infrared and visible-light imaging solutions, laser components, precision optics.

FLIR Government Systems designs and manufactures military qualified, battle-proven infrared and multispectral imaging solutions for airborne, maritime and ground-based operations. FLIR also provides advanced technology in lasers, laser components, precision optics and coatings through FLIR Precision Optics (formerly Brysen Optical) and FLIR Laser Systems (formerly Scientific Materials).

FLIR Systems, Inc. - Thermography Division

#1511

25 Esquire Rd, N. Billerica, MA, 01862-2598
978/901-8000; fax 978/901-8532
info@flir.com; www.flirthermography.com

New Product: FLIR's mega-pixel SC8000 IR camera offers high resolution and speed with its 1024 × 1024 FPA.

FLIR, the global leader in infrared cameras, offers the most advanced IR temperature measurement systems for a wide variety of research, thermal testing and product validation applications. FLIR's systems provide an instant, accurate way to evaluate thermal performance. With FLIR's ThermoCAM SC Series cameras, engineers can capture and record thermal distribution in real time - helping them to visualize and quantify heat patterns in the devices they create and in the events they monitor. Contact: Steve Chisholm, Inside Sales Manager, steve.chisholm@flir.com; Dave Bursell, Director, Scientific Segment Engineers, dave.bursell@flir.com.

Florida High Tech Corridor Council

#639

1055 AAA Drive, Heathrow, FL, 32746
407/708-4630; fax 407/708-4635
www.floridahightech.com

The Florida High Tech Corridor Council is an economic development initiative of the University of Central Florida, the University of South Florida and the University of Florida whose mission is to attract, retain and grow high tech industry and to develop the workforce to support those industries in the 23-county Corridor. The partnership has resulted in a strategic approach to economic development, leveraging governmental, EDO and corporate budgets on a regional rather than local basis. Contact: Randy Berridge, President, randy.berridge@floridahightech.com; Ellen Andrews, Executive Assistant, ellen.andrews@floridahightech.com.

Photonics West Exhibitor Directory

Florida Photonics Cluster

#639

12424 Research Pky, Orlando, FL, 32826
407/723-6858; fax 407/823-6800
jpearson@mail.ucf.com; www.floridaphotonics.com

The mission of the Florida Photonics Cluster (FPC) is to support the growth and profitability of the Florida optics and photonics industry through the strength of a unified voice. The driving forces of the FPC are networking opportunities with industry peers, an expansive resource base and an educational community focused on creation of industry-university partnerships and on industry input for curriculum development. The FPC is a not-for-profit organization. Contact: Jim Pearson, FPC Acting Executive Director, jpearson@creol.ucf.edu; Alex Fong, FPC President, afong@olinet.com.

Foctek Photonics, Inc.

#6137

PO Box 366, 32 Bldg Juyuanzhou Ind Park 618 Jinshan Ave,
Fuzhou Fujian, China, 350008
86 591 3767 816; fax 86 591 3767 817
sales@foctek.com; www.foctek.com

New Product: High precision prisms include Penta Prism, Right Angle Prism, Corner Cube, Dove Prism, etc.

Manufacturer of optical components. Products include Penta Prism, Right Angle prism, Corner Cube, Glan Polarizer, Wollaston & Rochon Polarizer, Waveplate, BeamSplitter, PBS, Lens; BBO, KTP, Nd:YVO4, Nd:YAG. Foctek owns 3000-sqm-factory area and is equipped with advanced production and inspection facilities, such as Trioptics Lens and Prism Measurement System, AK-40 Interferometer. Foctek is ISO9001 certified. We commit our customers with Quality products, Reasonable Price, On-time Delivery. Contact: Steve Huang, Sales, steve.huang@foctek.com; Elisa Zhao, Sales, elisa.zhao@foctek.com.

Fogale Nanotech

#1309

125 rue de l'Hostellerie, NIMES, France, 30900
33 4 66 62 05 55; fax 33 4 66 62 71 60
a.courteville@fogale.fr; www.fogale.com

Foreal Spectrum, Inc.

#6248



2370-A Qume Dr, San Jose, CA, 95131
408/433-5558; fax 408/433-5557
sales@forealspectrum.com; www.forealspectrum.com

New Product: SuperCede filters: T>90%, steep slopes, OD>5, no color glass, durable/stable/reproducible every time.

Foreal offers total solutions for LED-based mini-projectors & illumination modules/engines and extremely high performance "hard coated" optical components. Foreal's vertical integration model helps you achieve project goals faster. X-Cubes for DLP >90% efficiency & polarization-insensitive, PBS for LCOS w/high-extinction ratio (>5000:1), bandpass filters w/steep slopes (ultra-narrow or wide band), long & short pass filters w/steep slopes, laser cavity coatings, mirrors, prisms and lenses. Contact: Dan Cifelli, Vice President Sales & Marketing, DanC@ForealSpectrum.com; Anmin Zheng, Chief Executive Officer/President, AnminZ@ForealSpectrum.com.



Product Locator Kiosk

Find your way around the Exhibition. Perform a product or key word search, review the Product Demonstrations, print out the results, and be on your way in no time! You'll find the 3-station kiosk in the foyer area, outside the entrances to Exhibition Halls 1 and 2 of the Convention Center and in South Hall by Booth #6198.

Fotofab

#6072

3758 W Belmont Ave, Chicago, IL, 60618
773/463-6211
sales@fotofab.com; www.fotofab.com

Fotofab manufactures Precision Metal Parts to meet the most critical design requirements in a wide range of applications. Typical applications: Optical apertures, encoders, RF/EMI shields, step lids, encoders, contacts, screens, flat springs, antennas, masks, lead frames and connectors, can be produced quickly and cost-effectively in prototype and production quantities. Standard delivery is two weeks, with same-day, three-day and five-day delivery options available. Contact: Alison Anzalone, Sales & Marketing Manager, alison@fotofab.com.

Framos GmbH

#6405

Zugspitzstr 5 House C, Munich, Germany, 82049
49 89 710 6670; fax 49 89 710 66766
info@framos.de; www.framos.de

New Product: CCD-Sensors, CMOS-Sensors, CCD-Cameras, CMOS-Cameras, FPGA, Lenses, Illumination, Vision-Accessories.

Framos Imaging Solutions is active in the industrial image processing sector for more than 25 years. Our branches in Germany, England and Italy offer a comprehensive range of image processing components and solutions. Through our close relationship with well known partner companies, we help our customers to continually be one step ahead of the market with regard to new technological developments whilst offering the best service, quality and support. Contact: Jens Kellermann, Sales Manager, J.Kellermann@framos.de.



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Frankfurt Laser Co.

#128



An den 30 Morgen 13, Friedrichsdorf, Germany, 61381
49 6172 27978 0; fax 49 6172 27978 10
sales@frlaserco.com; www.frlaserco.com

New Product: High power temperature stabilized laser diode module with up to 3W output power.

FLC supplies CW single mode and broad area laser diodes (visible 375nm-690nm, 3mW to 1.1W and IR 730nm-3800nm, 1mW to 10W), pulse IR laser diodes, superluminescent diodes in 680nm-1670nm wavelength range free space and fiber-coupled packages, high-power laser diode arrays with fiber output (2W-400W) CW and QCW, laser diode modules with high-quality glass optic, red, green, yellow and blue DPSS lasers, laser diode collimating and focusing optic, mid-IR 1.2µm-4.3µm LED lamps. Contact: V. Mazo, Sales Director; Kim Kreim, Sales Manager, kim.kreim@frlaserco.com.

Fraunhofer Institute for Lasertechnology #1801

Steinbachstr 15, Aachen NWR, Germany, 52074
49 241 8906 343; fax 49 241 8960 121
photonics-west2008@ult.fraunhofer.de; www.ilt.fraunhofer.de

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Today's research driving tomorrow's applications

Photonics West Exhibitor Directory

Fraunhofer Heinrich Hertz Institut

#1801

Einsteinufer 37, Berlin, Germany, 10587
49 30 31002 519; fax 49 30 31002 551
schlaak@hhi.fhg.de; www.hhi.fraunhofer.de

Photonic Components: From sensing to information technology - this is the range of applications developed at the HHI. LEDs, Lasers, THz devices, fast diodes and the integration of these devices make up the scope of components. There is also profound competence in DOEs and polymer devices. We develop according to customer specifications and fabricate in small volumes. Contact: Wolfgang Schlaak, Head of Business Development; Martin Schell, Head of Photonic Components, martin.schell@hhi.fraunhofer.de.

Fraunhofer Institute for Applied Optics and Precision Engineering IOF

#1801

Albert-Einstein-Str 7, Jena, 07745
49 3641 807 0; fax 49 3641 807 600
info@iof.fraunhofer.de; www.iof.fraunhofer.de

Fraunhofer IOF carries out research and development in the field of optical systems technology: opto-mechanical design, multi-functional optical coatings, solid state based light sources, high power fiber lasers and amplifiers, micro- and nano-optics, packaging and joining technologies, metal optics, plastic optics, measurement and testing technologies, opto-mechanical precision systems.

Fraunhofer Institute for Photonic Microsystems (IPMS)

#6239

Maria-Reiche-Str 2, Dresden, Germany, 01109
49 351 8823 0; fax 49 351 8823 266
info@ipms.fraunhofer.de; www.ipms.fraunhofer.de

New Product: MEMS based Microspectrometer for plastic waste selection.

The Fraunhofer IPMS carries out customer specific developments in microelectronic and micro systems technology, serving as a partner for the transition of innovative ideas into new products. The institute develops modern CMOS technology products in its own clean room facilities up to small pilot series production. With modern equipment and about 200 scientists, the range of projects covers sensor/actuator systems, microscanner, spatial light modulators, lifetronics and organic systems. Contact: Ines Schedwill, Marketing/PR, Ines.Schedwill@ipms.fraunhofer.de; Moritz Fleischer, Head of Marketing/PR, Moritz.Fleischer@ipms.fraunhofer.de.

Fraunhofer Institute for Physical Measurement Techniques IPM

#1801

Heidenhofstr 8, Freiburg, Germany, 79110
49 761 88570; fax 49 761 8857224
www.ipm.fraunhofer.de

Fraunhofer Institute for Silicate Research ISC

#1801

Neunerplatz 2, Würzburg Bavaria, Germany, 97082
49 931 4100 0; fax 49 931 4100 199
info@isc.fraunhofer.de; www.isc.fraunhofer.de

New Product: Contractual material research and development; Process consulting; Process development.

The team performs contractual research and development for industrial partners. Major focus is the development of inorganic-organic hybrid polymers for optical, electro-optical, micro- and polymer electronic applications and packaging as well as for micromed applications. The materials for optics feature low absorption losses, adjusted refractive indices over a wide range and can be processed by different technologies compatible to semiconductor processing on various substrates. Contact: Ruth Houbertz-Krauss, Competence Team Manager, houbertz@isc.fraunhofer.de; Marie-Luise Righi, Marketing and Communications, righi@isc.fraunhofer.de.

French Pavilion - UBIFrance

#1410

77 boulevard Saint Jacques, Paris, France, 75014
33 1 40 73 30 00; fax 33 1 40 73 32 04
romain.belveze@ubifrance.fr; www.ubifrance.fr

UBIFRANCE is the French Agency for International Business Development, we promote French technologies, products, services abroad. Capitalizing on its resources, the Agency offers French companies a full range of products and services designed to support them in their efforts to penetrate foreign markets: Informational services, business watch tools, on demand researches, Professional publications; Organisation specific events: Conferences, pavilions, technical and industrial meetings.

Fresnel Optics GmbH

#1801

Flurstedter Marktweg 13, Apolda, Germany, 99510
49 3644 5011 0; fax 49 3644 5011 50
info@fresnel-optics.de; www.fresnel-optics.de

Fresnel Optics, a German subsidiary of the US Reflexite Corporation, offers a complete chain of optical design, tool fabrication, prototyping, precision polymer replication and custom finishing of plastic microstructured optics. Product enhancement such as AR surface structuring (PlasmAR®), coating and printing improve our optical components' performance in automotive, machine-vision, sensor, avionics, solar, lighting and other systems. We are certified according to DIN EN ISO 9001:2000. Contact: H.-Ulrich Geyer, Sales Manager.

Fresnel Technologies Inc.

#5027



101 W Morningside Dr, Fort Worth, TX, 76110
817/926-7474; fax 817/926-7146
info@fresneltech.com; www.fresneltech.com

Fresnel Technologies manufactures diamond machined and molded optics, as well as infrared-transmitting materials and optics made from them. Specialties include lens arrays for passive infrared applications, diffusers and microlens arrays and optics for gas monitoring at 3.4 microns. Design assistance, tooling and production services are available. We offer diamond machining for prototyping, tooling and production, including diamond machining of freeform optics. Contact: Nelson Claytor, President, nclaytor@fresneltech.com.



EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

Fujian CASTECH Crystals, Inc.

#5046

No 155 Yangqiao West Rd, Fuzhou Fujian, China, 350002
86 591 8731 0533; fax 86 591 8371 1593
info@castech.com; www.castech.com

New Product: Thin film filters in optical communication.

A worldwide leading supplier of nonlinear crystals, laser crystals and a variety of optical components. Contact: Charley Ye, Sales Manager, sales@castech.com.

Fuzhou Alpha Optics Co., Ltd.

#6129



Bldg 14 Gulou Industrial Park, Jinshan Juyuanzhou, Fuzhou Fujian, China, 350002
86 591 88071539; fax 86 591 83841092
andy@alphaoptics.com.cn; www.alphaoptics.com.cn

GAGGIONE SAS

#1307

3 rue de la Rolland BP 29, Montreal la Cluse, France, 01460
847/810-7392; fax 847/810-7392
optic@gaggione.com; www.gaggione.com

New Product: LEDnLIGHT standardized collimator lens LED products and solutions using the top high-powered LEDs.

Fifty years in business providing world-class products and solutions in high-grade plastics for technology and consumer or industrial products ranging from luxury goods to solid-state digital lighting applications. More than a decade experience developing custom lenses, light guides, Fresnel lenses and collimators. Last year launched standardized products of collimator lens models [enabling rapid development] for the leading high-power LEDs on the market through LEDnLIGHT products group. Contact: John Ermel, North America Sales & Service, jm.ermel@gaggione.com; Jean-Pierre Lauret, Optical Engineer, jp.lauret@gaggione.com.

Galvoline

#6252

Clivo De Cinna 196, Rome, Italy, 00136
39 06 35402933; fax 39 06 35402879
galvoline@crisel-instruments.it; www.galvoline.it

Galvoline designs and produces a line of high performance galvanometer scanners for laser scanning applications. Our combinations of precision position detectors with high-torque actuators offer the systems integrator reliable products for spot placement in laser marking, machining, cutting, drilling and other applications. Please visit with application questions Contact: Phil Barrows, galvoline@bluehilloptical.com.

Gam Laser Inc.

#5077

6901 TPC Dr Ste 300, Orlando, FL, 32822
407/851-8999; fax 407/850-0700
sales@gamlaser.com; www.excimers.com

New Product: EX5/500; Industrial laser. High reliability industrial grade mini excimer laser.

GAM Laser, Inc. manufactures the longest gas lifetime excimer lasers. Applications include interferometry, micromachining, mask inspection, LIDAR, FBG, etc. Key benefits: High Reliability, Soft Corona preionization, high pointing stability, low trigger jitter, higher energy density, all metallic/ceramics design, internal. Vacuum pump & halogen filter, internal energy monitor, computer controlled. Contact: Joe Batcho, Sales Manager.

GAMDAN Optics

#6608



2380 Qume Dr Ste F, San Jose, CA, 95131
408/318-9253; fax 408/452-1640
sales@gamdan.com; www.gamdan.com

New Product: Non-linear optical crystals including BBO, LBO, KTP, LiNbO₃ and more.

GAMDAN Optics specializes in the manufacturing and distribution of nonlinear optical crystals (BBO, LBO, KTP, KDP, LiNbO₃, etc.) while providing excellent quality, price and service. From our San Jose, California facility, we grow optical crystals and provide complete post-processing and re-work services. Our United States facility provides fast turnaround and service for our customers. Our extended capacity in China provides the most competitive pricing. Contact: Teresa Hung, Sales Manager, teresa.hung@gamdan.com; Hanna Cai, Sales Manager, hanna.cai@gamdan.com.

Gamma Scientific, Inc.

#1236

8581 Aero Dr, San Diego, CA, 92123-1722
858/279-8034; fax 858/576-9286
sales@gamma-sci.com; www.gamma-sci.com

Providers of class leading light measurement devices from UV to IR. Specialists in Photopic and NVIS performance quantification. Offers class leading precision photometers, colorimeters and spectroradiometers designed for R&D, QA and manufacturing lines where speed and repeatability are utmost. Manufactures analog and digital light sources for calibration and spectral matching capability. Provides NIST traceable contract measurement, test and calibration services. Contact: Eric Nelson, Sales Manager, enelson@gamma-sci.com; Quinn Adler, Sales & Customer Support, qadler@gamma-sci.com.

Gavish, Inc.

#6397

337 Rt 101, Bedford, NH, 03110
603/472-5900; fax 603/472-8333
info@gavish.com; www.gavish.com

Sapphire optics from Gavish include windows, viewports, imaging arrays, optical lightpipes, lenses and a range of skin cooling optics for cosmetic surgical lasers. Optics are produced to end users specifications for finish and flatness with full service support including AR, filtering and other specialty coatings and metallization. Final assembly for glued, soldered and brazed multi-element assemblies are also available. We are a fully integrated ISO 9001 approved facility. Contact: Jeremiah Fitzgibbon, National Sales & Marketing Manager, jfitzgibbon@gavish.com; Cathy Schult, Account Manager, cschult@gavish.com.

GD Optical Competence GmbH

#1801

Herborner Str 7 i, Sinn, Hessen, Germany, 35764
49 2772 5744 0; fax 49 2772 5744 165
info@gdoptics.de; www.gdoptics.de

Founded in 1992, GD Optics develops and produces state of the art molded optics in glass for highest requirements. Due to a highly flexible production process we are able to provide both- individual customized solutions and standard lenses for different applications. In-house optical design, mold design and mold fabrication enable us to provide exceptional solutions. Special molding technology and state of the art equipment ensure a cost effective, highly competitive production. Low mold costs, compared to plastic, enable molded solutions in glass in smaller quantities also.

Photonics West Exhibitor Directory

GEL-PAK

#1436

31398 Huntwood Ave, Hayward, CA, 94544-7818
510/576-2220; fax 510/576-2282
sales@gelpak.com; www.gelpak.com

Gel-Pak manufactures a family of innovative carriers designed for applications where process uniformity is essential and maximum protection is required during shipping and handling of optics and other fragile devices. Gel-Pak™s proprietary GEL elastomer technology forms the basis of the film, tray and box products which meet the demanding requirements of advanced device manufacturers. Contact: Darby Davis, Director of Worldwide Sales and Marketing, darby@gelpak.com; Jeanne Beacham, President, jeanne@delphon.com.

General Atomics

#6083

10240 Flanders Ct, San Diego, CA, 92121
858/457-8700; fax 858/457-8746
sales@galasers.com; www.photonics.ga.com/everest

General Atomics Photonics Division manufactures DPSS and fiber laser systems for commercial, industrial and scientific applications. We design and build custom lasers for customer specific requirements. Compact and ruggedized enclosures with high reliability and long lifetimes. Airborne and spaced-based systems available. Contact: Steve Benda, Business Development Manager, steve.benda@ga.com.

General Optics

#316

10240 Flanders Ct, San Diego, CA, 92121
858/457-8700; fax 858/457-8746
sales@galasers.com; www.photonics.ga.com/everest

General Atomics Photonics Division manufactures ruggedized DPSS laser systems for commercial, industrial micromachining, and scientific applications. We can design and build custom lasers for customer specific requirements including airborne and spaced-based systems. Large size diffractive optics, for example Multi Layer Dielectric or metallic coated gratings, are also produced. Contact: Bill Johnson, Sales, Bill.Johnson@ga.com.

General Photonics Corp.

#6522

5228 Edison Ave, Chino, CA, 91710
919/590-5473; fax 919/902-5536
info@generalphotonics.com; www.generalphotonics.com

New Product: Highly stable SLED source: multiple wavelength, power and DOP options available.

General Photonics provides low cost, high performance solutions for polarization measurement/management and timing control. Applications include telecommunications, fiber optic sensors, and optical coherence tomography. Major products: polarization controllers, scramblers, synthesizers, stabilizers, and analysis instruments; PMD emulation and compensation platforms; digital programmable DGDs; variable optical delay lines; and other special products. Contact: James Fang, sales engineer, jfang@generalphotonics.com; Susan Wey, engineer, info@generalphotonics.net.

General Scanning Optical Scanning Products

#316

39 Manning Rd, Billerica, MA, 01821
978/439-5511; fax 978/262-0039
scannersales-americas@gsig.com; www.gs-scanners.com

General Scanning invented optical scanning technology and continues to lead the market with a complete line of Lightning™ Digital Scanners and scan heads, three-axis plug-and-play scan heads, resonant scanners, laser quality mirrors, and control electronics. These devices may be combined to produce scanning, marking, drilling, welding, and cutting systems of world-class caliber.

Gentec Electro-Optics Inc.

#732



445 St-Jean-Baptiste Ste 160, Quebec, QC, Canada, G2E 4N7
418/651-8003; fax 418/651-1174
info@gentec-eo.com; www.gentec-eo.com

New Product: Get the NEW Low-Power Thermopile-based XLP12. Ideal for μW and mW regimes, very low thermal drift.

Gentec-EO is a manufacturer of laser beam measurement technologies. With a 30 year track record of innovation and providing quality solutions for laser beam measurement applications from the factory to the hospital and laboratory, Gentec-EO stands ready to serve you now and in the future. Our product line includes a complete range of laser power meters and energy meters, monitors, photo detectors, OEM detectors, beam diagnostics and diffractive optics. Contact: Claude Lachance, Vice President Sales & Marketing, clachance@gentec-eo.com.

Gentex Corp.

#1541

324 Main St, Simpson, PA, 18407
570/282-8502; fax 570/282-8555
filtron@gentexcorp.com; www.gentexcorp.com

New Product: New Multi-Wavelength Acrylic Window offers an OD of six from 694-1064nm and a VLT of 25%.

Gentex Corporation is a recognized leader in engineering and manufacturing products for human safety and life support needs. Gentex has spent almost 30 years mastering light management and laser protection and is the premier supplier of laser safety viewing windows, resins, lens blanks, absorber dyes and other light filter products. When it comes to safety and performance, Gentex is unmatched. Contact: Tim Kopp, Marketing Specialist, tkopp@gentexcorp.com; Joe Rudy, Business Development, jrudyr@gentexcorp.com.

Geomatec Co. Ltd.

#6252

362 University Ave, Westwood, MA, 02090
781/255-1064; fax 781/255-1065
sales@bluehilloptical.com; www.bluehilloptical.com

GEOMATEC designs and produces high quality scan lenses & beam expanders for 1064nm, 532nm and 355nm applications. Beam expanders are available in fixed and variable ratio models with focus control. Scan lenses offer exceptional quality and uniformity at attractive prices. Please visit for more information. Contact: Phil Barrows, geomatec@bluehilloptical.com.

GfE Materials Technology, Inc.

#5124

435 Devon Park Dr Bldg 400, Wayne, PA, 19087
610/293-5811; fax 610/254-9617
cameron.may@gfe.com; www.gfe.com

GfE Coating Materials is a leading producer of sputtering targets, arc cathodes and evaporation materials. Some of these thin film applications include precision optics and ophthalmics, architectural and automotive glass, flexible substrates, thermal solar and photovoltaic films and on wear parts. In 2006, GfE Coating Materials established a sales representation agreement with Advanced Glass Industries to more effectively serve the precision optics thin film market. Contact: Astrid Borkowski, World Sales Executive, astrid.borkowski@gfe.com; Cameron May, Vice President.

Gist Optics Co., Ltd.

#6300



No 340 Jingyue St, Changchun Economic Technological Development Zone, Chnagchun, China, 130117
86 431 8670 8186; fax 86 431 8670 8185
sales@goptics.com; www.goptics.com

New Product: Pyramid prism for polarizing optics; anamorphic prism; cylinder prism; MID-IR LED.

Gist Optics is ISO 9000 certified leading provider in China to manufacture a wide range of high quality optical components, including precision lens, cylinder lens, aspherical lens, prism, window, beamsplitter, filter, mirror, crystal, laser and polarization optics, with rapid prototyping, guaranteed quality and timely delivery at highly competitive prices, for R&D and industries. Contact: Sara Li, Sales manager; Rachel Wang, Sales representative, sales01@goptics.com.

Glass Fab Inc.

#5068



257 Ormond St, Rochester, NY, 14605
585/262-4000; fax 585/454-4300
info@glassfab.com; www.glassfab.com

Manufacture of custom blanks. Products include fused quartz, fused silica, optical glasses, filter glasses and low/ultralow expansion glass. Capabilities include annealing, slumping, sawing, edging, drilling, water jet cutting, CNC shaping, CNC curve generating and CMM services. Contact: Daniel Saltzman, President, d_saltzman@glassfab.com; Wayne Leon, Sales Manger, w_leon@glassfab.com.

Glendale, Inc.

#247

910 Douglas Pike, Smithfield, RI, 02917-1874
401/232-1200; fax 401/757-2912
mmclear@bacou-dalloz.com; www.glendale-laser.com

New Product: HT Filters.

Glendale is introducing a new line of Crystal Clarity filters that offer up to 92% VLT for protection from infrared lasers. Our patented HT notch polymer laser filters have been expanded to include protection from the most common visible and IR lasers. HT filters are available in our contemporary XC spectacle and our new Signature series. Contact: Mark McLearn - 401-757-2298 or 401-225-7038 cell, Sales and Marketing Manager, Glendale, MMcLearn@SperianProtection.com.

Global Laser Ltd.

#6088

CWMTillery Industrial Estate, Abertillery Gwent, United Kingdom, NP13 1LZ
44 1495 212213; fax 44 1495 214004
sales@globalasertech.com; www.globalasertech.com

Gold Dragon Optics Co., Ltd.

#1938, 1939

Changchun Haoyuan L8-12, Nanguan, Changchun, China, 130022
86 431 85353336; fax 86 431 85353338
gdragon@public.cc.jl.cn; www.golddragonoptic.com

Gooch & Housego, PLC

#1013

A Gooch and Housego Co, The Old Magistrates Ct, Ilminster Somerset, United Kingdom, TA19 0AB
44 1460 52271; fax 44 1460 54972
sales@goochandhousego.com; www.goochandhousego.com

New Product: Cleveland Crystals, NEOS, Gooch & Housego UK and SIFAM are now called Gooch & Housego.

Gooch & Housego is a new company, which has integrated the five former businesses of Gooch & Housego UK Ltd, Cleveland Crystal Inc, NEOS, Landwehr Electronic GmbH (LE) and SIFAM. The combined product portfolio offers a broad range of optical components which act as enabling technologies for photonics-based systems in industries such as laser, automotive, aerospace, environmental sensing, imaging, energy research, scientific and medical. Contact: Victoria Fuller, Customer Service, VFuller@GoochandHousego.com.

Goodrich Corp.

#1344



100 Wooster Heights Rd, Danbury, CT, 06810-7589
203/797-5000; fax 203/797-5527
eos@goodrich.com; www.isr.goodrich.com

Goodrich Corporation, a Fortune 500 company, is a global supplier of systems and services to aerospace, defense and homeland security markets. With one of the most strategically diversified portfolios of products in the industry, Goodrich serves a global customer base with significant worldwide manufacturing and service facilities. For more information visit <http://www.goodrich.com>.

Gorman Rupp Industries

#6274

180 Hines Ave, Bellville, OH, 44813
419/886-3001; fax 419/886-2338
mhill@gripumps.com; www.gripumps.com

GPD Optoelectronics Corp.

#6256

7 Manor Pkwy, Salem, NH, 03079
603/894-6865; fax 603/894-6866
sales@gpd-ir.com; www.gpd-ir.com

GPD Optoelectronics Corp. manufactures germanium PN, PIN, APD and InGaAs PIN high-speed, large-area and extended wavelength photodetectors for infrared detection and telecommunications applications. Devices are available in die form, on submounts and in a large variety of TO- and custom packages. Custom designs are a GPD specialty. Contact: Dan LaPointe, Sales Manager, dlapointe@gpd-ir.com.

Grintech GmbH

#441



Schillerstr 1, Jena, Germany, 07745
49 3641 2276 0; fax 49 3641 2276 11
info@grintech.de; www.grintech.de

GRINTECH manufactures gradient index (GRIN) lenses and lens systems for applications in fiber optics, medical imaging, diode laser beam shaping and sensor technology. Contact: Anke Kraeplin, Marketing / Sales.

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Located Convention Center Lower Arcade.

Photonics West Exhibitor Directory

G-S PLASTIC OPTICS

#532

408 St Paul St, Rochester, NY, 14605
585/295-0200; fax 585/232-2314
info@gsoptics.com; www.gsoptics.com

New Product: Our manufacturing operations feature in-house diamond turning and thin film coating capabilities.

G-S PLASTIC OPTICS specializes in the custom manufacture of precision polymer optics for use in illumination, imaging, scanning and detection applications. The company has in-house capability to provide diamond turned and injection molded prototypes, production injection molding, thin film and reflective coatings and integrated optical solutions to meet a wide range of military, medical, commercial and consumer markets worldwide. Contact: Will Beich, Director of New Product Development, wbeich@gsoptics.com.

GTI Technologies

#6026

6 Armstrong Rd, Shelton, CT, 06484
203/929-2200; fax 203/926-0074
info@gti-usa.com; www.gti-usa.com

Guild Optical Associates, Inc.

#3010

11 Columbia Dr, Amherst, NH, 03031
603/889-6247; fax 603/889-8361
info@guildoptics.com; www.guildoptics.com

Guild Optical Associates specializes in the precision, custom fabrication of optical components including singlet, doublet and triplet lenses, window, mirrors and special shapes. We work with all of the common optical materials and have developed an industry wide reputation for the fabrication of sapphire. Prototypes through full production runs with tight tolerances and superior surface finishes. Contact: Frank A. Reed, Vice President.

Gurley Precision Instruments, Inc.

#343

514 Fulton St, Troy, NY, 12180
800/759-1844; fax 518/274-0336
sales@gurley.com; www.gurley.com

GPI manufactures high-end optical encoders and components to the optics, medical, aerospace and defense industries. From design phase to volume runs, we manufacture custom and catalogued components that are designed to meet your specific requirements. Our product line includes; linear and rotary encoders, lenses, windows, mirrors, prisms, reticles and full coating services for most types of substrates. For more information, stop by our booth or visit our website at www.gurley.com. Contact: Martin Gordinier, Senior Vice President and Chief Operations Officer; Brian Molis, Director of Optic Sales, b.molis@gurley.com; Chris Guiry, National Encoder Accounts Manager, c.guiry@gurley.com.

GWU Lasertechnik GmbH

#1927, 2027

Talstr 3, Erfstadt, Germany, 50374
49 2235 955 220; fax 49 2235 756 32
info@gwu-group.de; www.gwu-group.de

GWU-Lasertechnik offers a broad product line of pulsed optical parametric oscillators (OPOs) in a variety of versions and with many useful options including wavemeter for automated calibration and frequency converters to cover the UV range. Customized configurations include laser/OPO/harmonic generator systems in a common housing (even for outdoor use). Further products of GWU: Spectrelle - high resolution Echelle spectrographs, crystals and optics, including laser and non-linear crystals, periodically poled crystals, waveplates and prisms. Contact: Gunter Warmbier.

Hagitec Co., Ltd.

#6611

246-7 Dainichi, Yotsukaido Chiba, Japan, 284-0001
81 43 423 8741; fax 81 43 423 8684
info@hagitec.co.jp; www.hagitec.co.jp

LITERATURE SHOWCASE EXHIBITOR

Halbo Optics Ltd.

#S4



83 Haltwhistle Rd, S Woodham Ferrers, Chelmsford Essex, United Kingdom, CM3 5ZA
44 1245 325005; fax 44 1245 322356
sales@halbo.com; www.halbo.com

New Product: 2x2 matrix of PS20 Standard Glan Taylor polarizers, which gives an effective aperture of 41 x 41mm.

Halbo Optics will be exhibiting their comprehensive range of polarizing optical components, including Glan Taylor high power laser polarizers, Rochon, Wollaston and Glan Thompson designs in quartz, calcite and magnesium fluoride for excimer lasers. Also on display will be wide band achromatic retardation plates, optical depolarizers, polarizing beam splitters and optical isolators. Contact: Martin Greiner, Sales Manager; Harry Koetser, Technical Manager, harry@halbo.com.



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Hamamatsu Corp.

#826, 827



360 Foothill Rd, Bridgewater, NJ, 08807
908/231-0960; fax 908/231-1539
usa@hamamatsu.com; www.sales.hamamatsu.com

New Product: MPPC (Multi-Pixel Photon Counter), a new type of opto-semiconductor for photon counting.

Hamamatsu Corporation is the North American subsidiary of Hamamatsu Photonics K.K. (Japan), a leading manufacturer of devices for the generation and measurement of infrared, visible, UV light and x-rays. These devices include photomultiplier tubes, photodiodes, image sensors, CCD cameras and light sources. Hamamatsu Photonics also offers specialized systems for semiconductor inspection, NDT and drug discovery. The company is dedicated to the advancement of photonics through extensive research. Contact: Chris DePalma, Marketing Engineer, cdepalma@hamamatsu.com; George Marshall, Assistant to Vice President Marketing, gmarshall@hamamatsu.com.

Hangzhou Yongying Optics & Electronic Co., Ltd.

#6532

#23 JuGong Rd XiXing Gao Xin District, HangZhou, ZheJiang, China, 310051
86 571 86689779; fax 86 571 86733007
sales@yongying.net; www.yongying.net

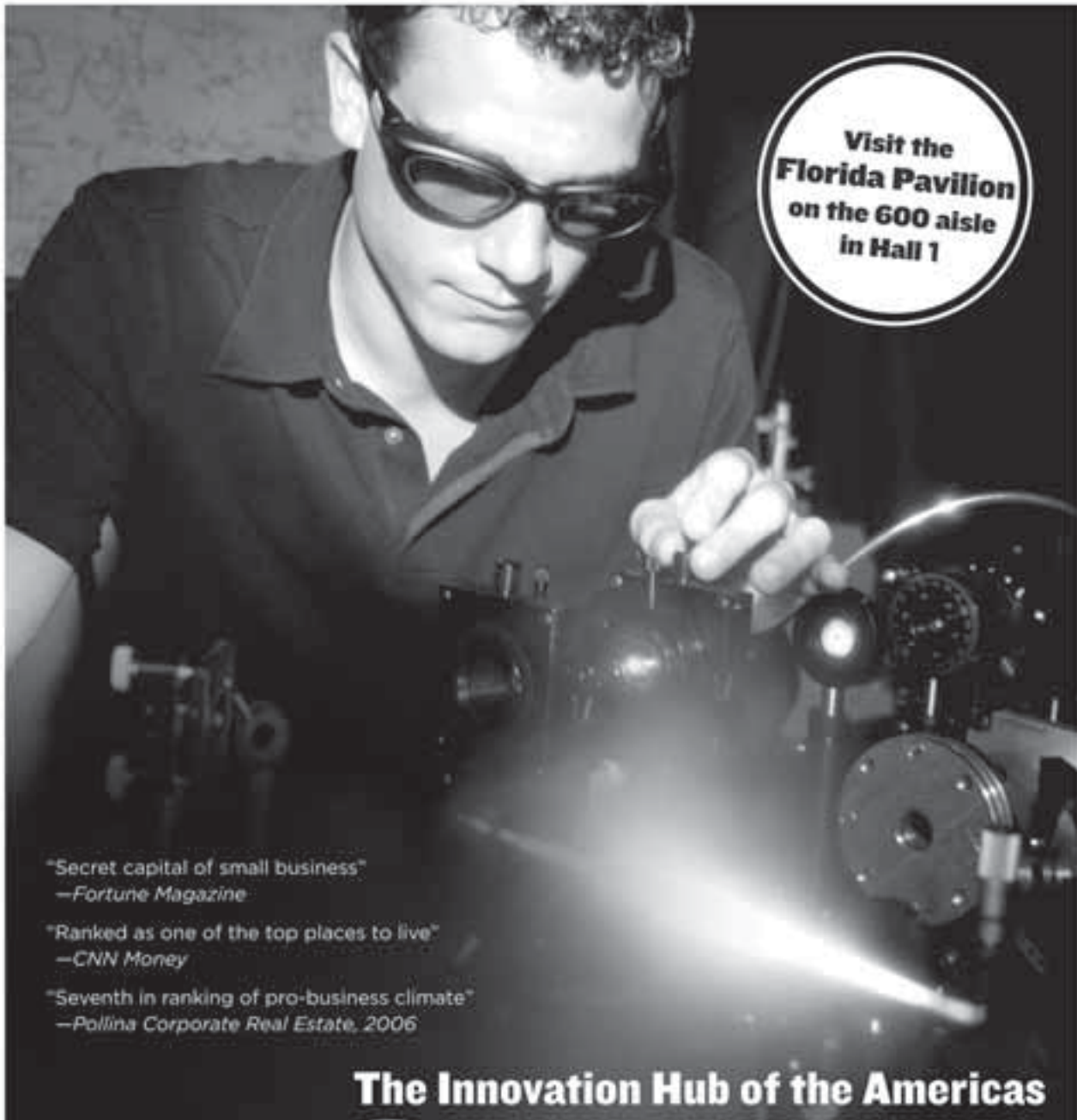
Hardin Optical Company

#6297



PO Box 219, Bandon, OR, 97411
541/347-9467; fax 541/347-8176
info@hardinoptical.com; www.hardinoptical.com

Hardin Optical Company (HOC) was founded in 1976 and is a Certified Small Hubzone firm that manufactures precision optical components. As a certified JIT supplier, we provide research and development services for the electro-optical and aerospace/defense industries. HOC's 50,000 Sq. Ft. of manufacturing space produces products that range from 2mm to lighthouse lenses. Contact: Bob Schalck, Development Engineer, bobschalck@hardinoptical.com; Dale Ness, Thin films, daleness@hardinoptical.com; Bill Shadbolt, Customer Liaison Coordinator/Senior Process Analyst, bill@hardinoptical.com.



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—*CNN Money*

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—*Pollina Corporate Real Estate, 2006*

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UCF College of Optics and Photonics, CREOL & FPCE



Photonics West Exhibitor Directory

Harold Johnson Optical Labs.

#3006

1826 W 169th St, Gardena, CA, 90247
310/327-3051; fax 310/327-6179
hj@hjol.com; www.hjol.com

New Product: Cylindrical and lens assemblies.

Custom manufacturer of cylindrical and spherical lenses, achromats, prisms, mirrors, filters, wedges, beam splitters, domes, hyperhemispheres and multi-element assemblies in prototype and volume quantities for industrial, medical research, commercial and Mil-Spec applications. Contact: Hal Johnson, President; Julia Stockwell, Production Control, julia@hjol.com.

Harris Corp.

#6185

1025 W NASA Blvd, Melbourne, FL, 32919
321/727-4000; fax 321/674-2701
webmaster@harris.com; www.harris.com

Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. Headquartered in Melbourne, Florida, the company has annual revenue of over \$4 billion and 16,000 employees - including nearly 7,000 engineers and scientists. Harris is dedicated to developing best-in-class assured communications™ products, systems and services. Additional information about Harris Corporation is available at www.harris.com. Contact: Lee Harwood, Marketing Communications, lharwood@harris.com.

Harris International

#5125

35 W 45th St, New York, NY, 10036
212/869-3037; fax 612/225-4490
info@harrisinternational.com; www.harrisinternational.com

HB Optical Technology Co., Ltd. #1938, 1939

242 Beihai St, Dadong District, Shenyang, China, 110043
86 24 88710655; fax 86 24 88722312
sale@hb-optical.com; www.hb-optical.com

New Product: Variable neutral density filters and cold reflectors using for digital film projectors.

HB Optical specializes in design and manufacture precision optical filters and coatings. We have more than 30 years of experience in manufacturing filters and reflectors for biomedical instrumentation, fluorescence, analytical chemistry instruments, cinematograph, projector, lighting, etc. We manufacture standard and custom components, including bandpass filters, dichroic filters, beamsplitters, hot/cold mirrors, variable neutral density filters, UV and cold reflectors. ISO9001:2000 certified. Contact: Fei Shuguo, General Manager; Linlin Gao, International Business Director, gaolinlin@hb-optical.com.

HC Photonics Corp.

#1919

Hsinchu Science Park, 4F No 2 Technology Rd, Hsinchu, Taiwan, 300
886 3 666 2123; fax 886 3 666 2124
service@hcphotonics.com; www.hcphotonics.com

New Product: Mixer - full spectrum wavelength conversion platform (module).

HC Photonics specializes in optical wavelength converters based on Periodically Poled Nonlinear Materials: PPMgO:CLN/SLT/SLN Bulk and Waveguide. With SHG/OPG/OPO/SFG/DFG configurations to cover 400 to 5500nm range for full spectrum applications including RGB Display, Bio-photonics, Scientific & Others. Contact: Karin Wu, Sales Director, Karin@hcphotonics.com; Susan Soon, Sales Specialist, ssusan_soon@hcphotonics.com.

Headwall Photonics, Inc.

#3002



601 River St, Fitchburg, MA, 01420
978/353-4100; fax 978/348-1864
information@headwallphotonics.com;
www.headwallphotonics.com

New Product: Hyperspec LC - a low cost spectral imaging instrument.

Designer and manufacturer of imaging spectrometers and high performance spectral instruments for OEMs and end-users. Core technology based holographic diffraction gratings. Instruments designed and manufactured to provide specific market differentiation to meet customer's application requirements in the lab or on the factory floor. Products: Hyperspectral sensors, Raman spectrometers, single and dual-beam spectrometers and original holographic gratings. Spectral ranges: UV through LWIR. Contact: Jay Zakrzewski, Business Development; David Bannon, Sales & Marketing.

Hellma USA, Inc.

#520



80 Skyline Dr, Plainview, NY, 11803
516/939-0888; fax 516/939-0555
info@hellmausa.com; www.hellmausa.com

New Product: MMS CCD module with 4 channels.

Manufacturer of Hellma Optics, Photometer Cells, Fiber Optic Immersion Probes, Photometric Calibration Standards, Quartz Microplates. Cylindrical/Flat Optics, Beam Splitters and Mirrors for Laser and other applications. Supplier of Heraeus Light Sources including D2, HCL, PID, Spectral Line; Zeiss MMS/MCS Monolithic Miniature Spectrometer modules covering 190-2200nm in combination (16 bit S/N); Tec5 Interface electronics for display/readout of PDAs and CCDs. Custom designs of all products. Contact: Ed Roth, Sales Engineer, eroth@hellmausa.com; Dan Fields, Vice President, dfields@hellmausa.com.

Heptagon

#6176

Moosstr 2, Rueschlikon, Switzerland, CH-8803
41 44 497 3000; fax 41 44 497 3001
info@heptagon.fi; www.heptagon.fi

Heptagon is the pioneer and leader in replicated wafer-scale diffractive optics and micro-optics. Our expertise in design and mastering and unique wafer-scale REEMO® UV replication technology enable a breakthrough in size, performance and cost for applications such as LED-beam shaping, CMOS imaging and laser pattern generation. Products are lead-free reflow compatible and Telcordia qualified. Heptagon is ISO9001 certified and manufactures components in high volumes for customers worldwide. Contact: Markus Maile, Sales Director, markus.maile@heptagon.fi; Jyrki Saarinen, Senior Vice President, jyrki.saarinen@heptagon.fi.

Heraeus Quartz America

#716



100 Heraeus Blvd., Buford, GA, 30518
678/714-4350; fax 678/714-4358
sales.hqa-optics@heraeus.com; www.heraeusoptics.com

Heraeus Quartz America LLC, is a United States subsidiary of Heraeus Quarzglas GmbH & Co. KG. Heraeus Quarzglas is one of the world's market and technology leaders in the manufacture of high-purity natural and synthetic fused glass used in the semiconductor, lamp, optics and optical communications markets. Contact: Bambi Everett, Marketing, Advertising and Promotions, bambi.everett@heraeus.com; David Gritz, Director, david.gritz@heraeus.com.

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Email: info@bwtek.com
Website: www.bwtek.com

High Energy Laser Joint Technology Office #6357

901 University Blvd SE Ste 100, Albuquerque, NM, 87106
505/248-8200; fax 505/245-2195
nancy.wilson@jto.hpc.mil;

High Plains Optics #5066

SPIE Corporate Member
105 S Sunset Ste M, Longmont, CO, 80501
303/678-1406; fax 303/678-0299
sales@highplainsoptics.com; www.highplainsoptics.com

High Q Laser (US), Inc. #127

118 Waltham St, Watertown, MA, 02472
617/924-1441; fax 617/924-5554
office@highq-us.com; www.highqlaser-us.com
New Product: Ultra compact femtoREGEN™ UC OEM - an all-in-one femtosecond regenerative amplifier.

High Q Laser is a leading manufacturer of ultrafast all-diode-pumped, solid state pico- and femtosecond oscillators and regenerative amplifiers. All lasers are based on direct diode-pumping and semiconductor saturable absorber mirror (SESAM) modelocking. High Q Laser systems are compact and modular - operation and installation is easy. Sealed-off technology leads to long life times and reliability - saving time and budget. High Q Laser is the exclusive distributor of APE products in the United States of America. Contact: Ted Naugler, Sales Manager, ted.naugler@highq-us.com; Heinz Huber, Sales and Applications Director, heinz.huber@highqlaser.at.

Hilger Crystals Ltd. #5108

Unit RI Westwood Estate, Margate Kent, United Kingdom, CT9 4JL
44 1843 231 166; fax 44 1843 290 310
sales@hilger-crystals.co.uk; www.hilger-crystals.co.uk
Hilger Crystals have a long history supplying high quality synthetic crystals for infrared and radiation detection applications. Materials such as Potassium Bromide, Sodium chloride, Calcium Fluoride, Sodium Iodide, Cesium Iodide, Bismuth Germanate, Cadmium Tungstate, Zinc Tungstate, etc., are available up to several tens of centimeters in size. X ray detector materials are available in a variety of geometries including 2 dimensional and linear arrays with pixel sizes as small as 75 microns. Contact: Chris Smissen, Sales Engineer, chris.smissen@hilger-crystals.co.uk; Jim Telfer, Managing Director, jim.telfer@hilger-crystals.co.uk.

Hinds Instruments, Inc. #1609

SPIE Corporate Member
7245 NW Evergreen Pkwy, Hillsboro, OR, 97124-7135
503/690-2000; fax 503/690-3000
sales@hindsinstruments.com; www.hindsinstruments.com
Hinds Instruments manufactures instrumentation for birefringence measurements (Exicor®), Stokes polarimetry, high speed optical chopping and other polarization modulation applications. Our core technology, the photoelastic modulator (PEM), is an integral part of each instrument. The PEM operates in the vacuum UV to far-IR spectral regions at frequencies of 20-100 kHz. It's the ideal polarization modulation device for high performance applications in ellipsometry, spectroscopy and MOKE. Contact: Connie Wimmer, Technical Sales; Andy Kaplan, Sales Manager, sales@exicor.com.

Photonics West Exhibitor Directory

Hitachi High Technologies America, Inc. #6107

3100 N First St, San Jose, CA, 95134
800/548-9001; fax 408/432-0704
sales-ls@hitachi-hta.com; www.hitachi-hta.com

The Life Science Group of Hitachi High Technologies America, Inc. (HTA) assists researchers in finding solutions to their scientific instrument requirements. We support thousands of satisfied customers with a wide range of reliability-proven analytical instrumentation. At Photonic WEST 2008, Hitachi will showcase the U-4100 UV-Vis-NIR Spectrophotometer. The U-4100 is available with a variety of accessories to meet the stringent requirements of today's laboratories. Contact: Terry May, Account Representative, terry.may@hitachi-hta.com; Luis Moreno, Product Manager, luis.moreno@hitachi-hta.com.

Hitachi Kokusai Electric America, Ltd. #6429

150 Crossways Pk Dr, Woodbury, NY, 11797
516/682-4404; fax 516/496-3718
ivs@hitachikokusai.us; www.hitachikokusai.com

New Product: Hitachi introduces ten new Camera Link cameras available in monochrome or color.

Hitachi Kokusai Electric America, Ltd. (formerly Hitachi Denshi America) was formed in 1963 and is headquartered in Woodbury, New York. Hitachi Kokusai Electric America, Ltd. is a worldwide supplier of video cameras and related video equipment to the industrial, medical, scientific, security, telecommunications and broadcast markets. Contact: Neil Enright, Regional Sales Manager, neil.enright@hitachikokusai.us.

Holland Pavilion #6278

PO Box 10, The Hague, The Netherlands, 2501 CA
31 70 344 1544; fax 31 70 347 5071
info@nchnl.nl; www.handelsbevoeding.nl

In the Holland Pavilion, organized by the Netherlands Council for Trade Promotion NCH, the following 10 companies and institutions from The Netherlands will present their products and services: Astron, Cedova, Knowledge and Service Centre Optronics, Lambert Instruments, Lionix, Photonics Cluster Netherlands, Senter Novem/IOP Photonics Devices, Sumipro, Technobis Fibre Technologies, TNO Science & Industry. Contact: Akie Plomp, Director Fairs and Exhibitions, aplomp@nchnl.nl.

Holochip Corporation #6358

1009 Bradbury SE Ste 05, Albuquerque, NM, 87106
650/906-1064; fax 505/268-2201
info@holochip.com; www.holochip.com

New Product: A variable-focal length singlet lens with 10-mm-dia aperture and 50-diopter focal power range.

Holochip Corporation (Albuquerque, NM) manufactures adaptive polymer lenses (APL's) that meet the most demanding technical requirements, enabling engineers, scientists and consumers with innovative solutions for utilizing and manipulating light. Our durable, high-precision variable-focal-length APL's provide a wide range of focus without having to move the position of the lens. Current products include APL's for research and OEM applications. www.holochip.com. Contact: Robert Batchko, PhD, Chief Executive Officer, rgb@holochip.com; Technical Information.

HOLOEYE Photonics AG #2033



Albert-Einstein-Str 14, Berlin, Germany, 12489
49 30 6392 3660; fax 49 30 6392 3662
contact@holoeye.com; www.holoeye.com

HOLOEYE Photonics AG and its US-subsiary, HOLOEYE Corp., are providing services and products in the fields of diffractive optics (DOE), spatial light modulation (SLM) and LCOS microdisplay components. HOLOEYE offers design- and production services of diffractive micro-optical elements, Spatial Light Modulators (SLM) which are based on high-resolution translucent or reflective microdisplays and a great variety of high resolution LCOS microdisplay types and products. Contact: Klaus von Guenner; Rudy Garza, rudy.garza@holoeye.com.

HORIBA Jobin Yvon Inc. #621

3880 Park Ave, Edison, NJ, 08820-2417
732/494-8660; fax 732/548-9725
info@jobinyvon.com; www.jobinyvon.com

New Product: OEM mini spectrometers with backthinned and front-illuminated CCDs (TE cooling optional).

Optical spectroscopy products for Photoluminescence, Fluorescence, Raman, Ellipsometry, Plasma Analysis, Trench Depth Monitoring, Endpoint Detection: Complete instruments and optical subassemblies (spectrometers, spectrographs, gratings, detectors); retail and OEM quantities. Products are used in Nanotech, Biotech, Pharmaceutical, Semiconductor, Medical, Space Flight, Laser, Pulse Compression, Synchrotron and Life Science applications. Extensive Applications and Engineering staff to help you. Contact: Dave Goodwin, OEM Applications Engineer, dave.goodwin@jobinyvon.com; Daniel Meyer, OSD Sales Manager, daniel.meyer@jobinyvon.com.

Hoya Corp. USA #1341



3400 Edison Way, Fremont, CA, 94538
800/818-4692; fax 510/490-1988
opticsales@hoyausa.com;

HOYA CORPORATION USA is a leading provider of optical materials and components. Our product portfolio includes Molded Aspheric Lenses, LCD Display Glass, CCD Cover Glass, Silicon Wafer Bonding Glass and Color Filter Glass. We have a variety of Coatings and Fabrication capabilities. We also promote our new product DCG-1 (Display Cover Glass) for electronics application.

HTA Photomask #6515

1605 Remuda Ln, San Jose, CA, 95112
408/452-5500; fax 408/452-5505
sales@htaphotomask.com; www.htaphotomask.com

New Product: Optical Components patterned up to 14" in size. New see-through materials available.

HTA Photomask manufactures Photomasks for the Semiconductor, Optical, MEMS and precision lithography manufacturing industries. We can pattern to sub-micron levels as well and do large area lithography for pc boards, packaging and other applications. Contact: Kenneth Caple, Manager; Mykola Kulishov, Director New Business Development.

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8-18 for complete time, schedules, and locations.

Huanic Corp.

#1938, 1939

No. 67 Jineye Rd, High-tech Zone, X'ian Shaanxi, China, 710077
86 29 81881001; fax 86 29 81881011
sales@huanic.com; www.huanic.com

New Product: Laser Gun Sight.

Huanic specialized in design and manufacture laser diode modules, laser gun sight and control circuitry for instrument. The annual capacity of the high delicate laser module is more than 2.400.000 sets, the control circuitry for laser instrument is 6.000.000 pcs, the laser instrument is 400,000 thousand and the optical lens for laser module is 5.000.000 pcs. Huanic also can offer a large range of OEM and ODM Lasers and Laser Systems for the most diverse applications and especial range. Contact: Bao Yanling, Marketing Manager; Sun Wenhui, Vice General Manager.

IB/E OPTICS - Ing.-Büro Klaus Eckerl

#1801

Industriestr 6, Hutthurm Bavaria, Germany, 94116
49 8505 3222; fax 49 8505 3400
ibe@ibe-optics.com; www.ibe-optics.com

New Product: HD SCOPE - Borescope/Snorkel lens system designed to produce high resolution image for 2/3" cameras!

IB/E OPTICS is a service company and producer for industrial customized solutions of imaging optics, illumination systems and machine vision applications. Beside developing and construction we also offer the complete manufacturing of prototypes and small series. Our own CNC-manufacturing allows rapid realization and flexibility. Contact: Klaus Eckerl, Dipl.-Engineer Mechatronics.

Ibsen Photonics

#6180

Ryttermarken 17, Farum, Denmark, 3520
45 4434 7000; fax 45 4434 7001
inquiry@ibsen.dk; www.ibsenphotonics.com

New Product: 100% fused silica transmission gratings for beam combining / pulse compression / beam splitting.

Ibsen's Fused Silica Transmission Gratings provide high efficiency, high dispersion and highest power/energy handling. Grating types include Pulse Compression / Beam Combiner gratings, telecom gratings for ROADM/WSS, spectrometer gratings and Phase masks for FBGs and waveguides. Ibsen's OEM Spectrometer modules are based on Ibsen gratings. The I-MON family of FBG Sensor System Interrogation Monitors offer very fast measurement frequency, high resolution, low power consumption and compact size. Contact: Kristian Buchwald, Sales & Marketing Manager, kjb@ibsen.dk.

ICA Corp.

#1438

12130 Brockton Ln, Minneapolis, MN, 55369
800/345-2801; fax 763/428-4230
sgoran@icacorp.com; www.icacorp.com

iC-Haus Corp.

#6386

750 E Diehl Rd Ste 120-D, Naperville, IL, 60563
630/245-1000; fax 630/245-1001
ann.walczak@ichaus.us; www.ichaus.us

Founded in 1999 and headquartered in Naperville, Ill., ic-Haus Corporation USA is the exclusive distributor for the Americas region of ic-Haus GmbH, one of the leading independent German manufacturers of standard integrated circuits (iCs) for both ASSP and customized ASIC semicon-ductor solutions. The company has been active in the design, production and sales of application-specific iCs for industrial, automotive and medical technology since 1984 and is represented worldwide. Contact: Mike Walczak, Chief Operating Officer, mike.walczak@ichaus.us; Kate DeLeonardis, Manager, kate.deleonardis@ichaus.us.

id Quantique SA

#615

Chemin de la Marbrerie 3, Carouge/Geneva, Switzerland, CH-1277
41 22 301 83 71; fax 41 22 301 83 79
sales@idquantique.com; www.idquantique.com

New Product: 280-900 Si APD Photon Counter for TCSPC.

The latest single photon counters from id Quantique exhibit best-in-class timing resolution and low dead time in a compact and easy-to-use module. Based on a reliable silicon avalanche photodiode sensitive in the visible and near IR spectral range, the module is able to detect weak spectral signals down to the single photon level. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

IEC Berlin GmbH

#1801

Torstr 124, Berlin, Germany, 10119
49 30 2839 39 14; fax 49 30 2839 39 28
broede@iecberlin.de; www.iecberlin.de

Federal Ministry of Economics and Technology

Villemombler Str. 76, D-53123 Bonn
+ 49 1888 6150; fax: + 49 1888 615 44 36
email: buero-V5@bmwi.bund.de; www.bmwi.de

Association of the German Trade Fair Industry (AUMA)

Littenstr. 9, D-10179 Berlin
+ 49 30 240000; fax: + 49 30 24000 262
email: info@auma.de; www.auma-messen.de

II-VI Infrared

#438

375 Saxonburg Blvd, Saxonburg, PA, 16056
724/352-1504; fax 724/352-4980
info@iiviinfrared.com; www.ii-vi.com

New Product: NEW Brochure! CO₂ laser optics for product UID marking, engraving and via hole drilling systems!

II-VI INFRARED is the world leader in CO₂ laser optics for industrial applications, thermal imaging, medical applications and more. Conventional and diamond-turned products include lenses, mirrors, nozzles, windows, partial reflectors, beam splitters, phase retarders, rhombs, beam expanders, polarizers, wave plates and modulators. Infrared materials include ZnSe, ZnS and ZnS MultiSpectral. Contact: Tom Neff, Sales Manager, tneff@ii-vi.com.

ILX Lightwave Corp.

#5084

31950 E Frontage Rd, Bozeman, MT, 59715
406/586-1244; fax 406/586-9405
sales@ilxlightwave.com; www.ilxlightwave.com

ILX Lightwave is a market and technology leader in providing high performance test and measurement solutions for people who work with laser diodes and other photonic components. We maintain our market leadership through the relentless pursuit of quality, performance, innovation and speed. ILX Lightwave products are used throughout the world in research and development labs and production areas, wherever photonic technology is advancing. Contact: Steve Gwinner, Vice President Sales and Marketing, sgwinner@ilxlightwave.com; Patrick Gale, Sales Engineer, pgale@ilxlightwave.com.

Photonics West Exhibitor Directory

Image Engineering Dietmar Wuller

#6263



Augustinus Str 9d, Frechen, Germany, 50226
49 2234 912 141; fax 49 2234 912 142
info@image-engineering.de; www.image-engineering.de

New Product: Digital Camera Test Stand; Image stabilizer test device; Analyzer Software.

Image Engineering is manufacturing test charts and illuminators under the worldwide popular brand Esser Test Charts. For more than 20 years now Esser Test Charts is known for high quality test charts for evaluating and measuring electronic cameras in video and broadcasting. The company is represented in more than 30 countries. Contact: Pascal Steinmetzer, Sales Manager, p.steinmetzer@ivent.de.

Imagine Optic

#715

18 Rue Charles De Gaulle, Orsay, France, 91400
33 1 648 61560; fax 33 1 648 61561
jballesta@imagine-optic.com; www.imagine-optic.com

New Product: SL Sys Neo: new revolutionary automatized device dedicated to lens production.

Imagine Optic is one of the world's leading providers of Shack-Hartmann wavefront sensing hardware and software, adaptive optics technologies and professional services in applied optics. From X-EUV, through the visible light spectrum and on to NIR (near infra-red), we develop, manufacture, distribute and support the largest range of wavefront measurement and correction technologies available. Contact: Jerome Ballesta, United States Sales Operations Manager; Samuel Bucourt, Chief Executive Officer, sbucourt@imagine-optic.com.

IMM Messtechnologie GmbH

#314, 1801

Ohmstr 4, Unterschleissheim, Germany, 85716
49 89 321412 0; fax 49 89 321412 11
info@imm-laser.de; www.imm-laser.com

New Product: OCTOLIGHT® is a fiber coupled high power LED module. Laser Diode Modules in high quality.

IMM Messtechnologie GmbH - Competence in Laser Technology, Optoelectronic and Fiberoptic - is one of the leading supplier with own development and production department. Our product range includes single components (laser diodes, optics), sub-systems (collimators, modules) and complete devices. With regard to customer specific solutions, we have got over 100 years of experience in engineering; our technical know-how is reflected in the high quality of our products. Contact: Oliver Mueller, Sales Laser Diode Collimators/Modules; Friedrich Raith, Managing Director.

IMPEX HighTech GmbH

#6028



Hovesaatstr 6, Rheine, Germany, 48432
49 5971 981650; fax 49 5971 981659
sales@impex-hightech.de; www.impex-hightech.de

New Product: 1064-Q laser with high energy >200µJ at 1kHz rep. rate and 2 ns pulse is new; and >100µJ at 532nm.

Impex HighTech is manufacturer of lasers, custom optics and optical crystals. Core business is sapphire crystal growth and laser crystals. Since several years Impex HighTech also produces its own real monolithic, passively q-switched lasers (Nd:YAG/Cr4+:YAG) at 1064 nm and 532 nm with > 200 µJ at 1 kHz repetition rate and 2 ns pulsewidth. To complete the product range Impex offers also continuous wave (CW) lasers (longitudinal multimode or single frequency) at 1064 nm and 532 nm. Contact: Jens Meyer, Laser Engineer, meyer@impex-hightech.de; Norbert Munser, munser@impex-hightech.de.

Impulsion SAS

#6253

Pole Optique Rhone Alpes, 12 rue Barrouin, Saint-Etienne, France, 42000

33 4 77 92 69 10; fax 33 4 77 91 01 99
contact@impulsion@sas.com; www.impulsion-sas.com

Micro structuration of any substrate by laser with ultra short pulses of all types of materials: Design and laser realization of machines femtoseconde integrating our knowledge to make in process: Subcontracting in micro cutting, micro drilling, micro structuring and micro marking.

IMRA America, Inc.

#2001

1044 Woodridge Ave, Ann Arbor, MI, 48105
734/930-2560; fax 734/930-9957
lasers@imra.com; www.imra.com

IMRA is a world-leading developer and manufacturer of ultrafast fiber lasers for commercial, OEM and scientific applications with a track record of more than 9 years delivering product. IMRA's pioneering ultrafast technology includes Femtolite Series oscillators and FCPA µJewel Series amplified lasers - compact, maintenance-free solutions for turnkey use in biomedical, materials processing and instrumentation applications. Contact: Kiyomi Monro, Director Business Development, Marketing & Sales; Phyllis McLaughlin, Administrative Coordinator.

IMT Masken und Teilungen AG

#5013

Im Langacher, Greifensee, Switzerland, 8606
41 44 943 1900; fax 41 44 943 1901
rtrottini@imtmask.com; www.imtag.ch

New Product: Our new plasma etch equipment now allows IMT to produce feature sizes as small as 0.25 microns.

With our long experience in optics and reticle production and by using semi-conductor grade equipment and automated, repeatable processes, IMT offers a service that is unparalleled in our industry. The advantages to our customers are high-end reticles and microlithography solutions in a uniform quality at competitive prices. Contact: Robert Trottini, Sales Manager.

Incom, Inc.

#231



294 Southbridge Rd, Charlton, MA, 01507
508/765-9151; fax 508/765-0041
sales@incomusa.com; www.incomusa.com

Manufacturer of fused fiberoptic faceplates, tapers, light conduits. These products have made critical contributions to many markets including genetic, medical, dental, drug research, military and homeland security. Participated in the design and development of large format tapers for X-ray crystallography, microwell arrays for genome sequencing, tapers and faceplates for medical and dental X-ray, microcapillary arrays for homeland security filtration systems, inverters for military night vision. Contact: Jeff Solari, Product Development Manager, jbs@incomusa.com; Allan Narris, Sales Engineer, aln@incomusa.com.

LITERATURE SHOWCASE EXHIBITOR

Industrial Laser Solutions Japan

#S6

Aihara Bldg, 2-13-1 Hirakawa-cho, Chiyoda-ku Tokyo, Japan, 102-0093

81 3 3556 1575; fax 81 3 3556 1576
ex-press@ex-press.jp; www.ils.japan.jp

New Product: Industrial Laser Solutions Japan; Japanese edition of Industrial Laser Solutions.

Industrial Laser Solutions Japan was launched in April 2007. Published quarterly (Jan, Apr, Jul and Oct) to reach 8,000 industrial leaders in Japan -one of the biggest markets for industrial lasers. Contact: Manami Konishi, Publisher, manami.konishi@ex-press.jp.

Infinite Graphics Inc.

4611 East Lake St, Minneapolis, MN, 55406
612/721-6283; fax 612/721-3802
sales@igi.com; www.igi.com

#6086

Infinite Optics Inc.



1712-F Newport Cir, Santa Ana, CA, 92705
714/557-2299; fax 714/557-2170
info@infiniteoptics.com; www.infiniteoptics.com

Optical thin film coatings for a wide variety of applications, ranging from UV to far-IR, used in many industries. Our in-house services include R&D, prototype development, high volume production, standard and custom designs for special applications and more to meet our customers exact specifications.

#6355

Information and Communications Technology Council (ICTC)

116 Lisgar St Ste 300, Ottawa, ON, K2P 0C2
613/237-8551; fax 613/230-3490
info@ictc-ctic.ca; www.ictc-ctic.ca

New Product: Outlook for Canadian IT Occupational Employment.

A not-for-profit sector council, the Information and Communications Technology Council (ICTC), strives to create a strong, prepared and highly educated Canadian ICT industry and workforce. ICTC provides skills definitions, labour market intelligence, career awareness and professional development for Canadian ICT stakeholders. We forge partnerships that develop the quantity and quality of ICT professionals which improves Canada's position as a leader in the global marketplace. Contact: Adèle Descarie, Project Coordinator, a.descarie@ictc-ctic.ca; Derek Corneil, Project Manager, d.corneil@ictc-ctic.ca.

#6098

Infotonics Technology Center

5450 Campus Dr, Canandaigua, NY, 14424
585/919-3000; fax 585/919-3001
info@infotonics.org; www.infotonics.org

#6370

Infrared Fiber Systems, Inc.

2301-A Broadbirk Dr, Silver Spring, MD, 20904
301/622-9546; fax 301/622-7135
info@infraredfibersystems.com; www.infraredfibersystems.com

#430

New Product: Athermal windows for high energy lasers.

IFS manufactures infrared fibers for Er: Yag laser power delivery (Germanium Oxide glass) and sensor applications (Zirconium Fluoride glass). Fibers can be cabled or bundled and custom configurations are available. IFS also manufactures handheld infrared AOTF spectrometers and produces athermal windows and domes for high power lasers. Contact: Ken Levin, Vice President.

Infratec Infrared LLC

530 Means St Ste 120, Atlanta, GA, 30318
877/797-6748; fax 877/389-2668
r.goodloe@infratec.de; www.infratec.de

#6389

New Product: Mono and multi-spectral Pyroelectric Detectors for use in gas analyzers and flame detectors.

Since 1991 InfraTec has focused on quality products and services based on the 2-25µm infrared technology. Headquartered in Dresden Germany, InfraTec has over 130 professionals working with subsidiaries in Europe (UK, France, Poland) and North America (Atlanta GA). The Sensor Division brings standard and custom pyroelectric detectors to market that are built into high quality gas analyzers, flame detectors, radiometers and spectrometers. Contact: Roy Goodloe, Sales Manager, sensor@InfraTec.de.

INGENERIC GmbH



Dennewartstr 25-27, Aachen, Germany, 52068
49 241 9631340; fax 49 241 9631349
contact@ingeneric.com; www.ingeneric.com

#6142

New Product: High efficiency fiber coupling modules for mm-diode arrays and sm-laser diodes.

INGENERIC develops and manufactures micro-optics and micro-optical systems for high-end applications. The range of optical elements comprises FAC, SAC, beam transformation optics and customized aspheres. Optical modules are offered for efficient fiber coupling of mm- and sm-diode lasers as well as beam shaping modules for distinct intensity distributions (line, square, circle, rectangle). Standard and customized designs are offered. Visit INGENERIC at booth #6142. Contact: Stefan Hambuecker, Managing Partner; Volker Sinhoff, Managing Partner.

Inlight Precision Optics Co., Ltd.



Rm 2314 Wellborne Commercial Centre, 8 Java Rd North Point, Hong Kong, Hong Kong China
852 2887 6018; fax 852 2887 6301
www.inlightcn.com

#6606

We are a Hong Kong company with two precision optics manufacturing sites (Beijing and Shenzhen) in China. We specialize in optical assemblies and precision optics components manufacturing such as cylindrical, spherical, rods, mirrors, prisms, ball lenses and crystal lenses etc. Our quality system is certified with ISO9001:2000, ISO14001:2004 and OHSAS18001:1999. Our metrology laboratories are equipped with interferometers, spectrophotometer and MTF etc to ensure the quality of our lenses. Contact: Mos Yip, mos@inlightcn.com.

Innolas GmbH

Justus von Liebig Ring 8, Krailling, Germany, 82152
49 89 866360 0; fax 49 89 899360 16
info@innolas.com; www.innolas.com

#1927, 2027

Innolas GmbH was founded in 1995 and is focused to highly specialized fields of applications in the laser technology like waver marking, micro material processing, micro drilling and cutting, ablation, holography and scientific. To offer in all these fields the best solutions to our customers, we develop and produce all of our products in house. Our engineers are using the most modern methods in optical, mechanical and software design. Contact: Peter Menzenbach.

Innolume GmbH

Konrad-Adenauer-Allee 11, Dortmund, Germany, 44263
49 231 47730 200; fax 49 231 47730 2501
info@innolume.com; www.innolume.com

#6226

New Product: Single Mode Laser, 1120nm/1178nm; 1320nm High Brightness Laser; Diode Laser for frequency doubling.

Innolume manufactures Quantum Dot based diode light sources (lasers, gain chips, SOAs, SLDs) in the operational range of about 1050nm-1320nm. Having all capabilities in-house we manufacture customized solutions cost efficiently and in a flexible way. Contact: Guido Vogel, Business Development Manager.

Photonics West Exhibitor Directory

Innovations In Optics, Inc.

#6082

82 Cummings Park, Woburn, MA, 01801
781/933-4477; fax 781/933-0007
info@innovationsinoptics.com; www.innovationsinoptics.com

Innovations In Optics is a provider of high brightness LED solutions; offering standard products, as well as design and production capability for custom OEM applications. The company will be exhibiting a line of high brightness LED light engine products for monochromatic and white light applications. Contact: Chuck DeMilo, Vice President, chuckd@innovationsinoptics.com.

Innovative Photonic Solutions #3030, 3031

4260 US Rte 1 Ste 3, Monmouth Junction, NJ, 08852
732/355-9301; fax 732/355-9300
srudder@innovativephotonics.com;
www.innovativephotonics.com

New Product: The I1064SB0300P is a 300 mW Single Frequency 1064 nm laser designed for pulsed fiber laser seeding.

IPS specializes in the manufacture of high performance spectrum stabilized lasers for use in Raman spectroscopy, fiber laser pumping & seeding & remote sensing applications. Our technology enables us to lock the laser to any wavelength without complex feedback mechanisms. Products include multi-mode and single frequency lasers & span the 630 nm - 2400 nm wavelength range. Lasers are available in 14-Pin BF packages or in turn-key modules with integral laser and temperature control electronics. Contact: Scott Rudder, Vice President Marketing & Sales; John Connolly, President & Chief Executive Officer, jconnolly@innovativephotonics.com.

INO

#1043

2740 rue Einstein, Quebec City, QC, Canada, G1P 4S4
418/657-7006; fax 418/657-7009
info@ino.ca; www.ino.ca

INO is a world-class technology developer and provider, using its core expertise in optics and photonics to bring to the industry custom solutions that enable more competitive products and production processes. INO produces in-house prototypes and short run products tailored to the needs of partners & clients. INO designs and produces specialty fibers, fiber lasers, diffractive optical elements and GRM. INO also has expertise in biophotonics, micro-optics and micro-packaging. Contact: Pierre Talbot, Business Development Manager, pierre.talbot@ino.ca.

InPhenix Inc.

#3020

250 N Mines Rd, Livermore, CA, 94551
925/606-8809; fax 925/606-8810
info@inphenix.com; www.inohenix.com

InPhenix Corporation is a leading developer and manufacturer of Indium-Phosphide (InP) and Gallium Arsenide (GaAs) based active optoelectronic chips, devices and modules for the telecom, datacom, defense, biomedical and industrial markets. InPhenix's products include Semiconductor Optical Amplifiers (SOAs), Superluminescent Light Emitting Diodes (SLEDs), Fabry-Perot Lasers and Photodetectors. Contact: Ken Chang, Sales Manager, kchang@inphenix.com; David Eu, President, deu@inphenix.com.

INRAD, a PPGI Company

#1600

181 Legrand Ave, Northvale, NJ, 07647-2498
201/767-1910; fax 201/767-9644
sales@inrad.com; www.inrad.com

INRAD grows crystals with important non-linear, electro-optic and optical properties, including BBO, KDP, LiNbO3 and ZnGeP2. Our crystal handling expertise is reflected in a product line that includes electro-optic Q-switches, autocorrelators and harmonic generation systems that are sold to OEM laser companies and to individual researchers. Contact: Tom Pelnar, Senior Account Manager, tpelnar@inrad.com.

Insaco, Inc.

#5023

1365 Canary Rd, Quakertown, PA, 18951-9006
215/536-3500; fax 215/536-7750
sales@insaco.com; www.insaco.com

Precision machining of ultra hard materials including technical ceramics, especially sapphire. Insaco engineers are available to discuss your design concepts from a manufacturability point. Insaco produces no materials, so offers unbiased guidance on sourcing the best options. Contact: Scott Mittl, Sales Engineer, sdm@insaco.com; Klaus Burckhardt, Sales Engineer, kab@insaco.com.

Institute of Photonics, Univ. of Strathclyde

#1818

Wolfson Bldg, 106 Rottenrow, Glasgow, United Kingdom, G4 0NW
49 141 553 4120; fax 44 141 552 1575
tim.holt@strath.ac.uk; www.photonics.ac.uk

The Institute of Photonics is a 50-strong commercially oriented research unit, whose key objective is to bridge the gap between academic research and industrial applications and development in the area of photonics. We work with other Universities and Companies to undertake leading, commercially relevant research in photonics. Research topics include: Solid-State Lasers; Semiconductor Materials and Devices; Applications (esp. biophotonics). Contact: Tim Holt.

Inta Technologies

#6341

2281 Calle de Luna, Santa Clara, CA, 95669
408/748-9955; fax 408/727-3027
mdoshi@intatech.com; www.intatech.com



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502/491-1144; fax 502/491-4888
info@ipisc.com; www.ipisc.com

Intense Ltd.

#5041, 5044

Hamilton International Technology Pk, 4 Stanley Blvd, Blantyre
Glasgow, United Kingdom, G72 0BN
44 1698 827 000; fax 44 1698 827 262
info@intenseco.com; www.intenseco.com

New Product: Intense-HPD Series 6000: high power, QWI enabled 830nm single mode laser diodes, up to 200mW output.

Utilizing its patented Quantum Well Intermixing (QWI) technology, Intense creates innovative laser products that enable unrivaled levels of power, brightness and reliability. State-of-the-art, high volume manufacturing processes deliver exceptional performance in high power visible and IR laser diodes, bars and stacked arrays, fiber lasers and individually addressable arrays. Designed for print & imaging, defense, medical and industrial applications. Contact: Kevin Laughlin, Vice President Sales North America, kevin_laughlin@intenseco.com; Chris Baker, Vice President Sales & Marketing, chris_baker@intenseco.com.

Intense-HPD

#5041, 5044

1200-A Airport Rd, North Brunswick, NJ, 08902
732/249-2228; fax 732-249-8139
sales@hpdinc.com; www.hpdinc.com

International Light Technologies #6311

10 Technology Dr, Peabody, MA, 01960
978/818-6180; fax 978/818-6181
ilsales@intl-lighttech.com; www.intl-light.com

New Product: The ILT490 is the next generation of our popular IL390 belt radiometer with impressive improvements.

Since 1965 International Light Technologies, within our Sources Division, has been providing customers with off-the-shelf and customized solutions across a full spectrum of light sources including LEDs, UV-Visible-IR lamps and specialized replacement lamps. Through Systems Division we have been solving the inherent difficulties in light measurement through the design and manufacture of a wide-range of highly accurate light measuring instruments. Contact: Jill Fowler, Sales Manager.

International Radiation Detectors, Inc. #2015

2527 W 237th St Unit A, Torrance, CA, 90505-5243
310/534-3661; fax 310/534-3665
irdinc@earthlink.net; www.ird-inc.com

New Product: Low-energy backscattered electron detector for SEM applications, AXUVPS1F2.

Manufacturer of stable UV, VUV, EUV and soft x-ray photon and electron detectors and associated electronics. IRD has radiometric characterization facility spanning in wavelengths from 190nm to 2500nm. Contact: Raj Korde, President, sales@ird-inc.com; Jacob Sprunck, Device Physicist, jsprunck@ird-inc.com.

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Intevac, Inc. #6025

SPIE Corporate Member

3560 Bassett St, Santa Clara, CA, 95054
408/986-9888; fax 408/654-9869
sales@mosir950.com; www.mosir950.com

New Product: MicroVista is the world's first back-thinned CMOS sensor and imaging system.

Intevac, Inc. designs, manufactures and markets sensors, cameras and integrated spectroscopy solutions for low-light imaging and spectroscopy using patented and exclusive CCD and CMOS technology. Affordable, high-performance monochromators are available for integration with Intevac detectors for spectroscopy applications. Powerful and user-friendly application software available including LabView, MatLab and Image-Pro Plus. Contact: Scott Ireland, tel. 585-256-3119, Director of Sales, sireland@intevac.com; Les Tcak, Director of Business Development, ltack@intevac.com.

Intex, Inc. #314

7080 N Cathedral Rock Pl, Tucson, AZ, 85718
520/299-9533
info@intexworld.com; www.intexworld.com

New Product: MEMS-based high intensity pulsed infrared emitters used as light source in infrared gas sensors.

Intex develops unique microsystems based on a combination of proprietary nano-amorphous carbon (NAC) films and silicon processing. NAC is a new class of electronic materials with many of the properties of diamond-like carbon but can be doped conducting. The first product in this category is a high intensity pulsed infrared light source used in IR gas sensors. Other products include thermopiles with rapid response. Contact: Terje Skotheim, Chief Executive Officer, terje.skotheim@intexworld.com.



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BERLINER GLAS GROUP

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IntlVac

#6194

6-247 Armstrong Ave, Georgetown, ON, Canada, L7G 4X6
905/873-0166; fax 905/873-0168
sales@intlvac.com; www.intlvac.com

IntraAction Corp.

#5099

3719 Warren Ave, Bellwood, IL, 60104-2055
708/547-6644; fax 708/547-0687
sales@intraaction.com; www.intraaction.com

Ion Beam Milling Inc.

#6703

1000 E Industrial Park Dr, Manchester, NH, 03109
603/644-2326; fax 603/647-6889
info@ionbeammilling.com; www.ionbeammilling.com

Founded in 1982, Ion Beam Milling, Inc. serves the microelectronic and microwave community in creating ultra high density micro-machined devices. The company utilizes photolithography and ion beam milling to fabricate electronic and mechanical elements for an array of commercial (automotive), industrial, military, satellite, biomedical, optical and magnetic applications. Custom thin film circuits and laser diode submounts are our fine line specialty. Contact: Rick Pergamo, Vice President Sales and Operations, pergamo@ionbeammilling.com.

IPG Photonics Corp.

#1119



50 Old Webster Rd, Oxford, MA, 01540
508/373-1100; fax 508/373-1103
sales@ipgphotonics.com; www.ipgphotonics.com

New Product: Featuring New 3kW Single Mode Laser as well as 5 new pulsed products

IPG Photonics is the leading developer and manufacturer of high-performance fiber lasers and amplifiers. Our diverse lines of low, mid and high-power products are used in a multitude of arenas: from materials processing, communications & medical, to advanced scientific applications. IPG's products share the common attributes of extremely compact size, long diode life, maintenance-free operation, high wall plug efficiency and completely consistent beam divergence and profile at all power levels. Contact: Diana Ferreira, Account Manager, Scientific, dferreira@ipgphotonics.com; Denis Gapontsev, Vice President, Research & Development, sales.us@ipgphotonics.com.

IQ Evolution GmbH

#1801

Jan-Wellem-Platz 3, Düesseldorf NRW, Germany, 40212
49 241 8906 347; fax 49 1212 0188023
t.ebert@iq-evolution.com; www.iq-evolution.com

Iridian Spectral Technologies

#6187

IPF M50, 1200 Montreal Rd, Ottawa, ON, Canada, K1A 0R6
613/741-4513; fax 613/741-9986
inquiries@iridian.ca; www.iridian.ca

Leading manufacturer of standard and custom thin film optical filters and coatings for UV, visible, and near-IR applications. Raman filters: edge pass, notch, and laser line filters offering transmittances of >90%, exceptional edge steepness and blocking of >OD6, providing more signal with less background. Fluorescence filters: standard fluorophores for spectroscopy and microscopy; high transmission for brighter imaging, with very steep cutoff and excellent isolation for improved image quality. Contact: Nikki Bulgarea, Manager, Sales and Marketing, istsales@iridian.ca.

IRphotonics

#6098

627 rue McCaffrey, Montreal, QC, Canada, H4T 1N3
514/578-5060; fax 514/227-5210
info@irphotonics.com; www.irphotonics.com

New Product: High Power Delivery Fiber for Er:YAG lasers with high proof strength and improved transmission.

IRphotonics is a leading manufacturer of mid-infrared (MIR) optical fibers and materials that can be customized for specific wavelengths and applications such as defense, aerospace, process analytics, medical field and telecommunications. The optical fibers provide superior transmission from UV to mid-infrared, and they are especially suited for applications in the 2 to 4.5 μm range. Using enhanced patented fluoride fiber glass manufacturing technology and unique chemical compositions, IRphotonics provides quality glass and fiber at a competitive cost. Contact: Antoine Kasprzak, Sales Manager, ak@irphotonics.com; Jean-Sébastien Tassé, Marketing Manager.

ISP Optics

#2029

1 Bridge St, Irvington, NY, 10533
914/591-3070; fax 914/591-3715
josephm@ispopitics.com; www.ispopitics.com

New Product: Aspheric & Diffractive Optics.

ISP is a manufacturer of high precision infrared optical elements for the infrared spectral range including lenses, aspherics, windows, domes, prisms, wedges, beamsplitters, polarizers, filters, diffusers, mirrors & micro-optics made from CaF₂, ZnSe, Ge, BaF₂, Si, MgF₂, LiF, KRS-5, KBr, KCl, NaCl, CdTe, GaAs, ZnS, Sapphire, Crystal Quartz, Fused Silica & more. Catalog, custom & OEM items. Contact: Fred White, Sales Manager, fredw@ispopitics.com; Joe Mignano, Sales Manager, joem@ispopitics.com.

Isuzu Glass Inc.

#6017



23505 Crenshaw Blvd Ste 130, Torrance, CA, 90505
310/517-1866; fax 310/517-1866
sales@isuzuglass.com; www.isuzuglass.com

New Product: Chalcogenide molded lenses.

Manufacturer of molded glass optics, lens arrays, optical components and optical filter glass. Applications include display, medical, sensing, laser safty and solar. From prototype to large scale production. High quality at an economical price. Contact: Hiro Yokoi, Vice President Sales, hiro@isuzuglass.com; Mike Preston, Sales, mike@isuzuglass.com.

iXFiber SAS

#1406

Rue Paul Sabatier, Lannion, France, 22300
33 2 96 04 10 50; fax 33 2 96 04 10 61
patrice.crochet@ixfiber.com; www.ixfiber.com

iXFiber is a leading independent French manufacturer of active and passive specialty optical fibers and Fiber Optic components for Telecom, Fiber laser, Medical, Sensors and others industries.

Janos Technology, Inc.

#945

55 Black Brook Dr, Keene, NH, 03431
603/757-0070; fax 603/757-0069
contact@janostech.com; www.janostech.com

JCMwave GmbH

#6600

Haarer Str 14a, Putzbrunn, Germany, 85640
49 89 460 65 68; fax 49 89 460 59 25
a.daidrich@jcmwave.com; www.jcmwave.com

JDSU

SPIE Corporate Member

430 McCarthy Blvd, Milpitas, CA, 95035
408/546-5000; fax 408/546-4300
info@jdsu.com; www.jdsu.com

JDSU designs, manufactures and distributes commercial/non-telecommunications laser components and subsystems for a broad range of OEM applications in biotechnology instrumentation, graphics and imaging, semiconductor, materials processing, remote sensing and biohazard detection.

JENOPTIK Diode Lab GmbH

Max-Planck-Str 2, Berlin, Germany, 12489
49 30 677987 0; fax 49 30 677987 199
info@diodelab.com; www.diodelab.com

New Product: High quality semiconductor material for high efficient diode lasers with an excellent beam profile.

JENOPTIK Diode Lab GmbH is the diode laser bar manufacturer in the Jenoptik group. As a 100% subsidiary of JENOPTIK Laserdiode GmbH, the company's main focus is also centered on quality with the same maxim "Quality First" and it is specialized in the manufacturing of high efficiency high-power semiconductor material. The company's semiconductor material for reliable lasers provides a high output power, excellent beam characteristics and a long lifetime. Contact: Juergen Sebastian, Managing Director, juergen.sebastian@diodelab.com; Ralf Huelsewede, Manager Technology Development, ralf.huelsewede@diodelab.com.

#1327

JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Lasers

#1027

Goeschwitzer Str 25, Jena, Germany, 07745
49 3641 65 4015; fax 49 3641 65 4011
laser.sales@jenoptik.com; www.jenoptik-los.com

New Product: Thin Disc Laser q-switched IR (up to 50W)& Green (up to 100W) with adjustable pulse width. Fiber lasers.

Business Unit Lasers of the JENOPTIK Laser, Optik, Systeme GmbH manufactures diode lasers, fiber lasers and diode-pumped-solid-state lasers for OEM and R&D customers. Target applications in material processing are marking, deep engraving, ablating, structuring, cutting and drilling for electronics, semiconductor, automotive and packaging markets. Life science laser for ophthalmology and dermatology. Lasers for show & entertainment also available. High power fiber lasers. Contact: Sven Poggel, Product Manager Material Processing, sven.poggel@jenoptik.com; Bert Kremser, Product Manager Medical Applications, bert.kremser@jenoptik.com.

#1027

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JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics #1027



Goeschwitzer Str 25, Jena, Germany, 07745
49 3641 65 3311; fax 49 3641 65 3677
marketing@jenoptik.com; www.jenoptik-los.com

New Product: F-Theta Scan Lenses, High-Precision Cylindrical Lenses, Polarization Optics, DLC Components.

The Business Unit Optics of the JENOPTIK Laser, Optik, Systeme GmbH is a leading OEM supplier of high-precision optical components of varied shapes and materials from XUV to IR. Oriented towards customers' targets it develops and produces customized lenses, subsystems and opto-mechanical modules for the semiconductor equipment industry, laser material processing, defence and security, scanning applications, medical engineering, metrology and machine vision. Contact: Wolfgang Seiferth, Manager Sales & Marketing Optics, wolfgang.seiferth@jenoptik.com; Ray Malcom, Vice President, Sales & Marketing of Coastal Optical Systems, Inc., ray.malcom@coastalopt.com.

JENOPTIK Laserdiode GmbH #1027

Goeschwitzer Str 29, Jena, Germany, 07745
49 3641 65 4300; fax 49 3641 65 4392
jold@jenoptik.com; www.jold.com

New Product: Passively cooled QCW diode laser stack ready for uses in the aerospace industry among others.

JENOPTIK Laserdiode GmbH is the diode laser manufacturer in the Jenoptik group. For years the company's main focus is centered on quality with its slogan "Quality First" which has governed its thinking and acting for many years. Therefore, today the company is the acknowledged quality leader in development, manufacturing and global distribution of high-power diode lasers. Its products are renowned in the market for their long lifetime and high reliability. Contact: Detlev Wolff, Manager Sales & Marketing, detlev.wolff@jenoptik.com; Ingolf Michler, Regional Sales Manager, ingolf.michler@jenoptik.com.

JENOPTIK Polymer Systems, Inc. #1027



2217 Buffalo Rd, Rochester, NY, 14624
585/272-6184; fax 585/424-6436
ldobosz@jenoptik-ps.com; www.jenoptik-ps.com

JENOPTIK Polymer Systems is technology-driven company which is well-known for pushing the technological limits for opto-electronic and opto-mechanical systems and components. Our products are used in medical technology, sensor technology and information technology. Today we offer our clients the complete process chain from one source: From development, production and coating of optical components, up to assembling of opto-electronic and opto-mechanical systems. Contact: Lynn Dobosz, Senior Optical Program Engineer.

JML Optical Industries Inc. #331

820 Linden Ave, Rochester, NY, 14625
585/248-8900; fax 585/248-8924
jml@jmloptical.com; www.jmloptical.com

JML is a designer, manufacturer and coater of precision optical systems and components. We design and make prototypes, production quantities, coatings, etc. We provide solutions for OEM optical needs as well as off the shelf catalog items. Our brand new 4th Edition JML Direct Optics Catalog is now available with over 4000 items listed. We make optics for the medical, robotics, semi-conductor, inspection, security and other industries. Contact: Gary Clark, Vice-President of Sales, garyc@jmloptical.com; Marty Roberts, Director of Catalog Operations, marty@jmloptical.com.

JP Sercel Associates, Inc. #6147

220 Hackett Hill Rd, Manchester, NH, 03102
603/518-3200; fax 603/578-3298
photonicswest@jpsalaser.com; www.jpsalaser.com

JT Ingram Sales & Marketing #637



316 Harlequin Ct, Oviedo, FL, 32765
800/335-5588; fax 561/276-3402
jim@jtingram.com; www.jtingram.com

Judson Technologies, LLC #1813



221 Commerce Dr, Montgomeryville, PA, 18936-9641
215/368-6900; fax 215/362-6107
information@judsontechnologies.com;
www.judsontechnologies.com

A leading designer/manufacturer of subsystems in the IR Sensor Arena with design/fabrication expertise in FPAs (InGaAs, InSb, & HgCdTe) and photodetectors (Ge, InGaAs, InAs, InSb, PbS, PbSe, & HgCdTe), packaging/cooling, electronics and optics. We deliver solutions for industrial, military and space markets through rapid prototyping capability of customized solutions, high-rate production capabilities for OEM, commercial, military products and highly customized space products. Contact: George Gasparian, Sales/Applications Engineer, ggasparian@judsontechnologies.com; Joseph Kimchi, Vice President, Engineering, jkimchi@judsontechnologies.com.

Kaiser Optical Systems, Inc. #6250

371 Parkland Plaza, Ann Arbor, MI, 48103
734/665-8083; fax 734/665-8199
smoyer@kosi.com; www.kosi.com

Kaiser Systems, Inc. #2012

126 Sohier Rd, Beverly, MA, 01915
978/922-9300; fax 978/922-8374
cust-svc@kaisersystems.com; www.kaisersystems.com
Founded in 1980, Kaiser Systems is a specialist in the design, development and manufacturing of OEM and custom high voltage power supplies. With a broad range of capacitor charging, pulsed power and HV DC supplies serving applications in medical, industrial, security and semiconductor markets. Kaiser has been ISO9000 registered since 2001 and has a subsidiary operation, HPE Located in Germany. Contact: Steve Swech, Vice President, sswech@kaisersystems.com; Steve Klibansky, Sales, sklibansky@kaisersystems.com.

Kaleido Technology #5078

Ryttermarken 15-21, Farum, Denmark, DK-3520
45 44 34 70 40; fax 45 44 34 70 41
contact@kaleido-technology.com; www.kaleido-technology.com
Manufacturer of ultra-precision mirrors and lenses specializing in free-form and long working-distance off-axis mirrors with world-leading accuracies and surface smoothness Contact: Dr. Palle Geltzer Dinesen, Chief Sales Officer, Founder, pgd@kaleido-technology.com.

Kapteyn-Murnane Labs. Inc.

#1708

1855 S 57th Ct, Boulder, CO, 80301
303/544-9068; fax 303/821-2284
sales@kmlabs.com; www.kmlabs.com

New Product: The Wyvern laser: 20uJ, 100kHz, <50fs, M2 <1.3, employing patented down chirped pulse amplification.

KMLabs' team includes world renowned experts in ultrafast technology, manufacturing cutting-edge and user-friendly Ti:sapphire lasers. Our cryo-cooled Dragon amplifiers produce 1-20kHz, 25-100fs pulses at up to 10W in one stage and up to 30W or 20mJ in two stages. Our new Wyvern amplifier produces 20uJ, sub-50fs at 100kHz, employing patented down chirped pulse amplification. KMLabs also offers CEP stabilization of our lasers based upon our extensive research and knowledge in the field of CEP. Contact: Kendall Read, Vice President of Sales and Marketing, kread@kmlabs.com; Jeremy Arnold, Sales Associate, jarnold@kmlabs.com.

Kelvin Nanotechnology Ltd.

#1818

Rankine Bldg, Oakfield Ave, Glasgow, United Kingdom, G12 8LT
44 0141 330 8512; fax 44 0141 330 3726
brendan@kelvinnanotechnology.com; www.kelvinnanotechnology.com

At Kelvin Nanotechnology Ltd (KNT) we provide nanofabrication solutions to industry and academia delivered through the state of the art James Watt Nanofabrication Centre. We specialize in high resolution, large area, multilevel electron beam lithography for applications such as transistor gate writing, imprint masks, optical elements, photonic crystals, nanotextured surfaces and many more. Contact: Brendan Casey, brendan@kelvinnanotechnology.com.

Keopsys Inc.

#5101

16 White Bridge Rd, Pittstown, NJ, 08867
908/238-0898; fax 908/238-9178
webslaes@keopsys.com; www.keopsys.com

New Product: 500uJ pulsed fiber laser at 1550nm.

Keopsys' fiber amplifiers and lasers deliver high output powers - up to 30W CW or 25kW peak - in the 1 micron or 1.5 micron bands. Standard or polarization maintaining, these efficient devices find their applications in industrial, medical and military environments. Contact: Yves Deiss, Regional Sales Director, ydeiss@keopsys.com; Alexandre Amavigan, Regional Sales Director, aamavigan@keopsys.com.

Kigre, Inc.

#1841



100 Marshland Rd, Hilton Head Island, SC, 29926
843/681-5800; fax 843/681-4559
kigreinc@cs.com; www.kigre.com

New Product: MK-88 & MK-81 High Efficiency Side Pump, (HESP) Diode Pumped Solid State Lasers (DPSS).

Kigre manufactures solid-state laser transmitters, laser glass and laser components. New compact eye-safe high power diode pumped 1.54um lasers suitable for laser range-finding, range-gated imaging and LIBS. The MK-88 and MK-81 are the first two examples of a new Kigre laser product family based upon conduction cooled High Efficiency Side Pump, (HESP) Diode Pumped Solid State Lasers (DPSS). Contact: Michael Myers, President, info@kigre.com; Jeffrey Myers, Vice President, jeffmyers@hargray.com.

Kimmon Electric

#6524

7002 S Revere Pkwy Ste 85, Centennial, CO, 80112
303/754-0401; fax 303/754-0324
p.townsend@kimmon.com; www.kimmon.com

New Product: Kimmon is introducing our new line of solid state blue lasers operating at 408, 442 and 445nm.

Kimmon, the leading developer and supplier of Helium Cadmium lasers for over 35 years, will be exhibiting its ultraviolet (2-100mW @ 325nm) and blue (14-180mW @ 442nm) HeCd lasers. Also on display will be our new line of single mode solid state ultraviolet (15mW @ 375nm), blue (50mW @ 408nm, 20mW @ 442nm and 40mW @ 445nm) and green (30-300mW @ 532nm) lasers. Our 442nm and 532nm solid state laser systems offer single frequency operation yielding a coherence length exceeding 100m. Contact: Patrick Townsend, General Manager.

Kimoga Material Technology Co., Ltd.

#6409

512 Chung-Ho, Pei-To, Taipei, Taiwan, 11252
886 2 28918690; fax 886 2 28935226
material2@kimoga.com.tw; www.kimoga.com.tw

Kinetic Systems, Inc.

#545

20 Arboretum Rd, Boston, MA, 02131-1102
617/522-8700; fax 617/522-6323
sales@kineticsystems.com; www.kineticsystems.com

Kiyohara Optics, Inc.

#6428

6-24-2 Shinjuku, Shinjuku-ku Tokyo, Japan, 160-0022
81 3 3352 1919; fax 81 3 3352 3348
sales@koptic.co.jp;

New Product: Compact beam expanders for testing large optics up to 12" with standard 4" Fizeau interferometer.

Last 50 years, Kiyohara Optics has been active in Japan as a developer and supplier of unique optical components and subsystems. We are now offering these products to overseas customers. Contact: Aki Tomita, Director, United States Operations, atomita@kopticus.com; Motosuke Kiyohara, President, pmk@koptic.co.jp.

KLA-Tencor Corp.

#6368



160 Rio Robles, San Jose, CA, 95134
408/875-3000
info@kla-tencor.com; www.kla-tencor.com

KLASTECH - Karpushko Laser Technologies GmbH

#6121

Konrad-Adenauer-Allee 11, Dortmund, Germany, 44263
49 231 47730 648; fax 49 231 47730 620
info@klastech.de; www.klastech.de

New Product: The new DENICAFC 532-1000 single frequency laser emits 1 W at 532 nm.

KLASTECH is dedicated to development, manufacturing and sale of a new generation of Diode Pumped Solid State (DPSS) lasers based on the proprietary, patented DENICAFC laser technology which offers unparalleled performance quality of the products at highly-competitive prices for that performance. DENICAFC lasers offer guaranteed long term single frequency operation with spectral linewidth below 1 MHz (coherence length >100 m), rms noise better than 0.3% and M2 better than 1.1. Contact: Dr. Peter Merz, Sales and Marketing Manager, p.merz@klastech.de.

Photonics West Exhibitor Directory

Knowledge and Service Centre Optronica #6278

Limmenhoeck 46, Alkmaar, The Netherlands, 1811 BA
fax 31 72 5208491
www.optronica.eu

The Knowledge and Service Centre Optronica is specialized in: Independent consulting and research on optronic equipment, Maintenance and modification services for optronic equipment, Production and reworking of (special) optical components mainly for defense applications. Contact: AJR Pouw, Manager Service Centre, ajr.pouw@mindef.nl.

Koheras A/S #6035

Blokken 84, Birkerød, Denmark, DK-3460
45 4348 3900; fax 45 4348 3901
enquiry@koheras.com; www.koheras.com

New Product: Tunable high-power SuperK sources, 450nm - 2400nm, up to 8 multi-wavelengths simultaneous emission.

KOHERAS delivers industrial graded all-fiber-technology ultra low noise DFB fiber lasers and supercontinuum sources. We are the industry preferred supplier to markets like fluorescent imaging, CARS, spectroscopy, flow cytometry, ophthalmology, oil & gas sensing, LIDAR, perimeter security and novel scientific applications. Contact: Chuong Tran, Vice President Sales & Business Development, cht@koheras.com; Husain Iman, Sales Manager, hui@koheras.com.

Komatsu Electronics Inc. #6430

3-25-1 Shinomiya, Hiratsuka, Kanagawa, Japan, 254-8543
81 463 23 8724; fax 81 463 22 3692
www.komatsu-electronics.co.jp/english/

New Product: Multi-stage-TECs for cooling optical sensors & Mini-TECs for the fiber optics.

Komatsu is a manufacturer of thermo-electric coolers (TECs) and temperature control equipments. Since foundation in 1966, Komatsu has been devoted to providing products to be the world's leading and most reliable supplier of precise thermal control systems based on TECs with outstanding quality and innovative technology. By such a continuous effort, Komatsu became the most influential supplier in an optoelectronics market. Komatsu can provide you good solution with quality and technology. Contact: Takahiro Murase, Deputy General Manager, takahiro_murase@kelktech.komatsu.co.jp; Takuya Kobayashi, Sales Engineer, takuya_kobayashi@kelktech.komatsu.co.jp.

Kopp Glass, Inc. #3032

2108 Palmer St, Pittsburgh, PA, 15218
412/271-0190; fax 412/271-4103
gbako@koppglass.com; www.koppglass.com

Leading specialty glass manufacturer specializing in color filters, molded and precision glass. More than 300 compositions of clear and colored glass from UV to IR. Complete line of night vision and color glass (prev. Corning) filters. Custom formulation and molding capabilities. Filters: UV, color filters, color correcting, NVIS, IR, neutral density, Holmium/Didymium, Neodymium and more (many market equivalents). Contact: Gregg Bako, Product Manager, Color Filters & NVIS.

Kreischer Optics, Ltd. #6402

1729 Oak Dr, McHenry, IL, 60050-0306
815/344-4220; fax 815/344-4221
www.kreischer.com

New Product: Added OptiPro's Ultraform aspheric polisher & MRF from QED for versatility & precision in aspheres.

Manufacturer of precision optical components and sub-assemblies including aspheric, cylindrical and spherical lenses and mirrors. All work done in McHenry, Illinois from raw glass through final coating, incorporating experienced master opticians and state of the art equipment. Rapid prototyping available, often with no premium charge. Contact: Cody Kreischer, President, cody@kreischer.com; Jeff Beckler, Special Projects Manager, jeff@kreischer.com.

Krell Technologies #5113

1126 Campus Dr W, Morganville, NJ, 07751
732/617-7091; fax 732/617-7092
sales@krelltech.com; www.krelltech.com

New Product: Rev Micro Polisher for repairing damaged fiber optic connectors and assemblies.

Manufactures automated connector polishing/inspection systems for high volume production, portable polishers for FTTX/LAN/CATV installation and repair, waveguide polishers, in-line video inspection equipment and precision cleaving systems. Also offers lensing systems for processing bare fiber into conical, chisel and angle shapes. Manufactures the CleanTouch Connector Cleaner and SATWipe 100% alcohol wipes. Contact: Al Cheswick, Vice President Sales and Marketing.

Kugler GmbH #1801

Heiligenberger Str 100, Salem, Germany, 88682
49 7553 9200 0; fax 49 7553 9200 45
info@kugler-precision.com; www.kugler-precision.com

Kunming Institute of Physics #1938, 1939

No 31 Jiao Chang Dong Rd, Kunming Yunnan, China, 650223
86 871 7238078; fax 86 871 7238079
info@kiro.cn; www.kiro.cn

New Product: Infrared lenses, Infrare thermal imger, IRmaterial, IR optical coating, IR system.

Kunming Institute of Physics was built in 1958. It has specialized in infrared technology. There are more than 1000 employees. Contact: Li Maozhong, Chief Engineer, kirok@126.com.

Kyocera America Inc. #6292

8611 Balboa Ave, San Diego, CA, 92123
858/576-2600; fax 858/569-9412
kaicorp@kyocera.com; www.kyocera.com/packaging

Kyosemi Opto America Corp. #5141

3003 Bunker Hill Ln Ste 102, Santa Clara, CA, 95054
408/492-1486; fax 408/492-9843
info@kyosemi-opto.com; www.kyosemi-opto.com

New Product: UV LED and PD; Sphelar - Spherically shaped photo-voltaic cell; InGaAs NIR Detector.

Kyosemi has over 25 years experience designing and manufacturing components for Optical Sensing, Control Sensing, Optical Communication and Photo-Voltaic Energy using Silicon and Compound Semiconductor materials. Product line-up includes: UV LED and Photo-Detectors, InGaAs NIR PD, SiAPD, InGaAs APD, PD Arrays (Si, GaAs and InGaAs), Mini-Can (World smallest TOCAN package), VCSEL, Parallel Beam LED, Pin-Point LED, Multi-wavelength LED, SMD Package options. Contact: Steve Iwashita, Vice President Sales and Marketing.

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Laser
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Fax: +49(0)6172 27978-10
E-Mail: sales@frlaserco.com
Internet: www.frlaserco.com

Laser Diodes
Green and Blue Lasers
Laser Diode Modules

L-3 Communications, Tinsley Laboratories, Inc. #538



4040 Lakeside Dr, Richmond, CA, 94806
510/222-8110; fax 510/223-4534
sales@asphere.com; www.asphere.com

Manufacturer of custom precision optical components including complex aspheric surfaces for reflective and refractive systems from 50mm to 1.5 meters in size and a wide variety of materials, including glass, beryllium and silicon carbide. Founded in 1926 and also known in the industry as the "Asphere Company", Tinsley has many years of experience fabricating precision optics in such areas as Space and Astronomy, Laser Fusion, Surveillance and Tactical. Contact: Clay Sylvester, Director of Sales and Marketing, clay.sylvester@l-3com.com; Teri Bordeau, Sales Support Administrator, teri.bordeau@l-3com.com.

Labsphere, Inc. #237



231 Shaker St, North Sutton, NH, 03260
603/927-4266; fax 603/927-4694
info@labsphere.com; www.labsphere.com

Labsphere has provided innovative test and measurement technologies for over 25 years in light measurement, sensor calibration, diffuse reflectance materials and spectroscopy accessories. Contact: Ed Cammarota, Western Regional Sales, ecammarota@labsphere.com; Brian Lai, Eastern Regional and Canadian Sales, blai@labsphere.com.

LaCroix Optical Co. #6149



PO Box 2556, Batesville, AR, 72503
870/698-1881; fax 870/698-1880
lacroix@lacroixoptical.com; www.lacroixoptical.com

For over 60 years, LaCroix Optical Co. has manufactured custom precision optics including achromats, lenses, windows, prisms, wedges and mirrors. LaCroix Optical Co. is an ISO 9001:2000 registered company that can supply your optical components in any volume. A combination of modern and conventional production equipment plus an in-house coating facility allows LaCroix Optical Co. to be responsive to your needs. Contact: Tom Cox, Manufacturing Engineer, tom@lacroixoptical.com; David Cossey, Manufacturing Engineer, david@lacroixoptical.com.

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Laird Technologies #6339

3481 Rider Trail South, St. Louis, MO, 63045
314/344-9300; fax 314/344-9301
jennifer.pliske@lairdtech.com; www.lairdtech.com

Laird Technologies, a world leader in thermal management, provides solutions for photonic systems and sub-components. In addition, we provide thermoelectric (Peltier) modules, assemblies and chillers for temperature stabilization of laser systems. Our global coverage teamed with full-line product capability, rapid response times and an ability to provide complete engineering and design solutions, leaves Laird Technologies uniquely placed to serve its customers! Contact: Malkiat Singh, Field Applications Engineer, malkiat.singh@lairdtech.com; Hans Agren, Sales Manager, hansa@supercool.com.

Photonics West Exhibitor Directory

Lambda Americas - HP Division

#6622

405 Essex Rd, Neptune, NJ, 07753
732/922-9300; fax 732/922-1441
www.lambda-hp.com

Lambda High Power is a leading designer and manufacturer of Programmable High Power AC to DC and High Voltage Capacitor Charging and DC supplies. Our AC to DC products cover powers from 750W to 90kW in a single package, with Voltages to 600V and Currents to 3,000A. Our ALE HV supplies cover powers from 500J/sec to 30kJ/sec for capacitor charging, and 500W to 50kW in continuous DC applications. Supplies can be operated in parallel for increased power.

Lambda Research Corp.

#117



25 Porter Rd, Littleton, MA, 01460-1434
978/486-0766; fax 978/486-0755
sales@lambdare.com; www.lambdare.com

New Product: Stop by to demo the latest releases of TracePro®, TracePro Bridge™ and OSLO® optical software.

Lambda Research provides optical engineering solutions by developing world-class optical software: OSLO®, which allows users to design and analyze image-forming lens systems, TracePro®, to perform virtual prototyping, stray-light analysis and illumination design and TracePro Bridge™ for SolidWorks®, which allows users to incorporate optical elements into mechanical models within SolidWorks and ensures the efficient transition of opto-mechanical models between SolidWorks and TracePro. Contact: Jim Zambuto, Principal Optical Engineer, jzambuto@lambdare.com; Barbara Calt, Director of Sales, bcalt@lambdare.com.

Lambda Research Optics, Inc.

#1433



1695 W MacArthur Blvd, Costa Mesa, CA, 92626
714/327-0600; fax 714/327-0610
lambda@lambda.cc; www.lambda.cc

Our products include standard and custom UV Excimer Optics such as high-power mirrors and lenses; polarizing Optics such as polarizing and non-polarizing beamsplitter cubes and plates; Infrared Optics such as windows, lenses (spherical, cylindrical, aspheric), mirrors (total reflectors, phase retarding mirrors). Also provide thin-film coatings. Contact: Jae Oh, Technical Sales Engineer; Yingwu Lian, Technical Sales.

Lambert Instruments

#6278

Turfweg 4, Leutingewolde, Netherlands, NL-9313 TH
31 50 5018461; fax 31 50 5010034
ria@lambert-instruments.com; www.lambert-instruments.com

New Product: Fluorescence Lifetime Imaging Microscopy, attachment for widefield fluorescence microscope.

Lambert Instruments is specialised in electronic imaging and devoted to development, production and worldwide sales of products for imaging at low light levels. It integrates image intensifiers in its products, like the modulated intensifier-based system for FLIM. FLIM is a tool for measuring FRET, ion imaging, oxygen imaging, pH measurements, etc. Other products are the gated intensified High-Speed cameras and High-Speed camera attachment for high-speed & low light level imaging applications. Contact: Ria Oosterveld-Hut, Export Manager, ria@lambert-instruments.com; Bert van Geest, Director, info@lambert-instruments.com.

Landwehr Electronic GmbH

#1013

A Gooch and Housego Co, Stettiner Str 7, Norderstedt, Germany, 22850
49 40 528 8990; fax 49 40 528 2863
sabine.herberts@le-tronic.com; www.le-tronic.com

New Product: Cleveland Crystals, NEOS, Gooch & Housego UK and SIFAM are now called Gooch & Housego.

Gooch & Housego is a new company, which has integrated the five former businesses of Gooch & Housego UK Ltd, Cleveland Crystal Inc, NEOS, Landwehr Electronic GmbH (LE) and SIFAM. The combined product portfolio offers a broad range of optical components which act as enabling technologies for photonics-based systems in industries such as laser, automotive, aerospace, environmental sensing, imaging, energy research, scientific and medical. Contact: Udo Hellmig, hellmig@le-tronic.com; Sabine Herberts, Customer Service.

Larsen Equipment Design, Inc.

#5093

1117 NW 52nd St, Seattle, WA, 98107
206/789-5121; fax 206/789-7756
erik@larsenequipment.com; www.larsenequipment.com

Larsen Equipment Design specializes in superior quality benchtop polishing equipment for micro and miniature lenses. Since 1981 we have been recognized as the source for your micro optics manufacturing needs. Our polishers are made with sturdy stainless steel cases and sealed spindles for worry free operation. Have tooling requirements? Our engineering department can help. Turn to us as your precision optics manufacturing resource. Contact: Erik Larsen, President.

LAS-CAD GmbH

#746

Brunhildenstr 9, Munich, Germany, 80639
49 89 173607; fax 49 89 172594
Dr.Altmann@las-cad.com; www.las-cad.com

LAS-CAD GmbH announces a new version of simulation tools for Laser Cavity Analysis and Design. Thermal and Structural Finite Element Analysis, Gaussian ABCD Algorithm and Wave Optics Beam Propagation Code are integrated in one software package to analyze thermal lensing, stability and efficiency of 3-level and 4-level diode-pumped solid state lasers. The new version 3.4 allows for multiple crystals inside and outside the cavity as well as for misalignment analysis. Contact: Harry Skolnik, US Sales Representative, hskolnik@hotmail.com; Konrad Altmann, President, dr.altmann@las-cad.com.

Laser 2000 GmbH

#5055

Argelsrieder Feld 14, 3 rue de la Plaine, Wessling, Germany, 82234
49 8153 405 0; fax 49 8153 405 33
contact@laser2000.de; www.laser2000.com

Laser Compliance, Inc.

#6252

4666 Oxford Way, Bountiful, UT, 84010
801/292-2309; fax 801/292-2415
sales@lasercompliance.com; www.lasercompliance.com

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Laser Components Canada

#1827

195 Joseph Carrier, Vaudeuil-Dorion, QC, Canada, J7V 5V5
450/455-8270; fax 450/455-0583
hayes@laser-components.com; www.lasercomponents.com

New Product: New Multi-Junction 905nm Pulsed Laser Diode compliments established 850, 905 & 1550nm PLD's.

Pulsed Laser Diodes produced for high power at 850, 905 and 1550nm. Applications such as range finding, speed measurement, laser radar, safety scanners, laser light curtains or for use in testing and measurement systems. The new multi-junction 905nm laser compliments the well established 850, 905 & 1550 lasers having peak power levels to 220W. Sales/Support in USA by Laser Components IG, Inc. Contact: Gary Hayes, General Manager; Matt Robinson, Sales Engineer, robinson@laser-components.com.

Laser Components DG, Inc.

#1827

7755 S Research Dr Ste 123, Tempe, AZ, 85284
480/491-4006; fax 480/491-4009
hayes@laser-components.com; www.lasercomponents.com

New Product: Silicon/InGaAs Avalanche Photodiodes wavelength 400-1700nm with optimization @ 905, 1550, new 1060nm.

Avalanche Photodiodes manufactured in USA with high quality and low cost. Silicon and InGaAs APDs covering the wavelength range of 400-1700nm with optimization at 905, 1550 and now new 1060nm. SMD or ceramic submount package. Suitable for applications in range finding, speed measurement, laser radar, security scanners, fluorescence measurements in the industrial, military, medical markets. Sales/Support in North America by Laser Components IG, Inc. Contact: Gary Hayes, General Manager; Matt Robinson, Sales Engineer, robinson@laser-components.com.

Laser Components GmbH

#1827

Werner von Siemens Str 15, Olching, Germany, 82140
49 8142 28640; fax 49 8142 28641
hayes@laser-components.com; www.lasercomponents.com

New Product: Laser Optics with High Damage Threshold, Hard Dielectric Coatings Ranging from 193nm(UV) to 5µm(IR).

Specializes in production and distribution of high-tech COMPONENTS for optoelectronic and laser industries. In-house manufacturing capability includes production of hard dielectric coatings for laser optics, ranging from 193nm(UV) to 5µm(IR). Manufacture broad range of spectroscopic laser diodes from 3-25µm. Available technologies are VCSEL, HCSEL, DFB, Lead Salt, QCL, THZ. Production of Fiber Optics, laser diode modules and spectroscopic tuneable diode laser systems. Contact: Gary Hayes, General Manager; Valerie King, Sales/Marketing, king@laser-components.com.

Laser Components IG, Inc.

#1827



9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
info@laser-components.com; www.lasercomponents.com

New Product: Quantum Cascade Laser, Oem Driver Head with Integrated QCL at new wavelengths.

Provides high power laser optics from 193nm to 10.6µm. IR lead salt diode lasers (3-25 µm), SPCDILAS Spectroscopic diode lasers in the range of 750 to 2050nm, including VCSEL's and DFB's. Quantum Cascade Lasers, THz and Flexpoint miniature laser modules available. Glass polarizing filters, fiber optic assemblies and color sensors. Spectroscopic instrumentation including NIR SPECTROMETERS and Echelle spectrum analyzers. Avalanche Photo Diodes (APD's) and Pulsed Laser Diodes (PLD's) in stock. Contact: Gary Hayes, General Manager, hayes@laser-components.com; Valerie King, Sales/Marketing, king@laser-components.com.

Laser Diode, Inc.

#434

2 Olsen Ave, Edison, NJ, 08820-2419
732/549-9001; fax 732/906-1559
sales@laserdiode.com; www.laserdiode.com

Laser Diode Incorporated offers a line of high power CW and short pulse lasers. CW lasers from 0.5-5W and pulsed lasers from 1-100W are available from 635 to 1550nm. LDI also produces a comprehensive range of lasers ELEDs and PINFETs for fiber-optic data transmission and OTDR lasers instrumentation applications. Our products also include commercial and ruggedized transmitter-receiver modules compliant with SONET and FDDI hierarchies. Contact: Peggy Scarillo, Inside Sales Manager, pscarillo@tycoelectronics.com; Steve Lerner, Product Manager, steve.lerner@tycoelectronics.com.

Laser Drive, Inc.

#534

5318 Ranalli Dr, Gibsonia, PA, 15044-9625
724/443-7688; fax 724/444-6430
sales@laserdrive.com; www.laserdrive.com

Laser Drive manufactures High Voltage Power Supplies for Argon, HeNe and Diode Lasers; Capacitor Charging Power Supplies for Dye and Excimer Lasers; Deuterium, CW Arc and Tungsten Lamp Power Supplies; and a variety of Flash Lamp Power Supplies. Custom design and turnkey capabilities. ISO9001:2000 certified quality system.



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Laser Focus World

#1601

PennWell Publishing, 98 Spit Brook Rd, Nashua, NH, 03062-5737
603/891-0123; fax 603/891-0574
www.laserfocusworld.com

Laser Focus World is a monthly magazine for engineers, researchers, scientists and technical professionals providing comprehensive global coverage of optoelectronic technologies, applications and markets. The magazine reports on and analyzes the latest developments and significant trends in both technology and business in the worldwide optoelectronics and photonics industry.

LITERATURE SHOWCASE EXHIBITOR

Laser Focus World Japan

#S2

Hirakawacho TEC Bldg, 2-11-11 Hirakawacho, Chiyoda-ku
Tokyo, Japan, 102-0093
81 3 3556 1575; fax 81 3 3556 1576
info@lfw-japan.jp; www.lfw-japan.jp

New Product: *Laser Focus World Japan*; Japanese edition of *Laser Focus World*.

Laser Focus World Japan is a monthly magazine published in Japanese with 12,000 circulation. We translate and deliver editorial contents in *Laser Focus World* to the essential readers in Japan, in addition to the original articles tailored for them. Contact: Manami Konishi, Publisher, manami.konishi@ex-press.jp.

Laser Institute of America

#5053

13501 Ingenuity Dr Ste 128, Orlando, FL, 32828
407/380-1553; fax 407/380-5588
info@laserinstitute.org; www.laserinstitute.org

New Product: ANSI Z136.1 - 2007, Laser Safety Guide, Guide for the Selection of Laser Eye Protection.

Laser Institute of America is the international society dedicated to fostering lasers, laser applications and laser safety worldwide. For three decades, LIA has served the laser community through conferences, symposia, publications and courses. The LIA is the secretariat and publisher of the ANSI Z136 series of laser safety standards. Contact: Gus Anbarro, Education Manager, gus@laserinstitute.org.

Photonics West Exhibitor Directory

Laser Materials Corp.

#3018

12706 NE 95 St #102, Vancouver, WA, 98682-2410
360/254-4180; fax 360/254-4182

sales@lasermaterials.com; www.lasermaterials.com

Manufacturer of Nd:YAG laser rods and slabs. Utilizing the Czochralski process, we grow large diameter Nd:YAG crystals at our plant in Vancouver, Washington, USA. Our high yield growth process allows us to provide high quality laser rods at reasonable prices. Contact: Paul Collins, President, paul@lasermaterials.com; David Collins, Vice President, dcollins@lasermaterials.com.

Laser Optics. a PPGI Std Company

#1600

181 Legrand Ave, Northvale, NJ, 07647
201/767-1910; fax 201/767-9644

sales@laseropticsinc.com; www.laseropticsinc.com

Manufacturer of OEM & custom optical components and coating services for ultraviolet, visible and infrared. Specialists in coatings for high-power lasers. Products include cavity and beam steering components, waveplates and polarizing optics. Extensive optics catalog for visible and infrared applications. Serving Semiconductor inspection, Medical, National labs and Defense industries. Contact: Devaunshi Sampat, Vice President Sales & Marketing, dsampat@laseropticsinc.com.



METER BOARD SPONSOR

Laser Quantum Ltd.

#1136, 1640

Emery Court Vale Rd, Stockport Chesire,
United Kingdom, SK4 3GL

44 161 975 5300; fax 44 161 975 5309

sales@laserquantum.com; www.laserquantum.com

New Product: Opus, 3W of 532nm, this laser offers a highly stable, near diffraction-limited beam with low noise in a compact, rugged design.

Laser Quantum is an established UK company and a recognized contributor to the photonics industry. Specializing in CW green, blue and infrared diode pumped solid state lasers - including single frequency and stable high power visible lasers - Laser Quantum's products are known globally for reliability, compactness, rugged design, excellent performance and long lifetime. All products have been well received across industries such as aerospace, medicine, biomedicine and research.

Laser Research Optics

#1045

120 Corliss St, Providence, RI, 02904
401/331-3838; fax 401/331-4004

sales@laserresearch.com; www.laserresearch.com

Laser Research Optics supplies CO₂ laser optics for 25 to 200 watt lasers, factory direct and optimized for 10.6 micron. Featured are ZnSe positive focusing lenses in plano-convex, plano-concave and meniscus configurations in 1/2" to 2" dia., focal length 1" to 20". CO₂ laser turning mirrors offered are made from molybdenum for harsh environments; other mirrors include copper, dual band, silicon and phase retardation. These OEM quality replacement optics ship from stock within 12 hours. Contact: Scott Rouillard, Sales, scott@melleroptics.com.



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

Laser Safety Systems

#6302

527 Lakeshead Dr, Williamsburg, VA, 23185
757/229-6109; fax 757/229-4144

sales@lasersafetysystems.com; www.lasersafetysystems.com

New Product: Entire safety product line is new for 2007.

Laser Safety Systems - Your Engineered Laser Safety Solution. Engineered laser interlock and access control systems; Unique modular design permits expansion as client needs dictate; Service includes professional laser area design consultation; Meets ANSI Z136.1-2007 requirements. Contact: Noreen Hansknecht, President, noreen@lasersafetysystems.com; John Hansknecht, Vice President, vplss@lasersafetysystems.com.

Laser Zentrum Hannover e.V.

#1801

Hollerithallee 8, Hannover, Germany, 30419
49 511 2788 0; fax 49 511 2788 100

info@lzh.de; www.lzh.de

Laser Zentrum Hannover e.V. is a professional institute dedicated on research, development, consulting and education in all areas of laser technology. It was founded under the patronage of the German State Ministry of Trade, Industry, Technology and Transportation in Lower Saxony. Products & services: Solid-state lasers, Ultrafast Photonics, Space Technology. Contact: Michael Botts, m.botts@lzh.de.

Laser-compact Co., Ltd.

#6141

SPIE

3 Vvedensky St, Moscow, Russia, 117342

7 495 333 0000; fax 7 495 720 5451

www.laser-export.com

Represents a group of companies Laser-compact specializing in the field of DPSS lasers (Laser-compact™). Designing & manufacturing of lasers for OEM projects based on 16-year custom design experience. Over 28,000 of DPSS lasers produced for world-leading industrial companies for use in: Mass spectrometry, laser microdissection, laser microscopy, interferometry, holography, industrial & medical alignment/positioning. Contact: Natalia Gavrilenko, Marketing Director, ik@lcompact.msk.ru.

Laser-export Co. Ltd.

#6141

3 Vvedensky St, Moscow, Russia, 117342

7 495 720 54 50; fax 7 495 720 54 51

sales@laser-export.com; www.laser-export.com

New Product: YLF Line pulsed DTL-series lasers with optimum set of parameters for OEM.

Laser-export Co. Ltd. is manufacturer of DPSS lasers (Laser-compact™). The company offers variety of CW and pulsed laser systems and laser modules radiating in ultraviolet (at 263 nm, 266 nm, 351 nm, 355 nm), green (at 527 nm, 532 nm), infrared (at 1053 nm, 1064 nm) range of spectrum designed for OEM in different application fields: Mass spectrometry (MALDI TOF), laser microdissection, laser microscopy, interferometry, holography, industrial & medical alignment/positioning, etc. Contact: Natalia Gavrilenko, Head of Sales Department.

Laserline Inc.

#5090

1800 Wyatt Dr Ste 9, Santa Clara, CA, 95054

408/834-4660; fax 408/834-4671

info@laserline-inc.com; www.laserline-inc.com

LASEROPTIK GmbH - laser optics and coatings

#1801

Gneisenaustr 14, Garbsen, Germany, 30826
49 5131 4597 0; fax 49 5131 4597 20
service@laseroptik.de; www.laseroptik.de

New Product: IBS coatings & optics: super-mirrors, edge filters, band pass designs, non-polarizing beam splitters.

LASEROPTIK produces optical thin-film coatings and components using IBS and 3 other techniques. Products are high LIDT laser mirrors, thin-film polarizers, beam splitters, OPO mirrors, edge filters etc. in the range 157nm - NIR, with focus on Excimer- and dpps laser optics. With 18 coating machines and 4 different coating techniques (i.e. e-beam evap., ion assisted depos. (IAD), ion beam sputtering (IBS) & magnetron sputtering) LASEROPTIK finds a solution and offers an Express coating service. Contact: Wolfgang EBERT, Managing Director, webert@laseroptik.de; Werner MOORHOFF, Coating Manager, wmoorhoff@laseroptik.de



METER BOARD/PLASMA SCREEN SPONSOR

Lasertel

#2038



7775 N Casa Grande Hwy, Tucson, AZ, 85743
520/744-5700; fax 520/744-5766
info@lasertel.com; www.lasertel.com

New Product: Lasertel's patented array technology delivers unparalleled output power in demanding operations.

Lasertel is a vertically-integrated semiconductor laser manufacturer. In-house epitaxy, wafer processing and packaging enables consistent delivery of a wide range of standard and customer-specific product solutions. Lasertel's chips, bars, array packages and fiber-coupled devices are available with peak wavelengths from 770nm to 1000nm and peak powers from 200mW to 3kW. Contact: Robert Walker, Director of Sales & Marketing, rwalker@lasertel.com; Robin Stroud, Sales & Marketing Representative, rstroud@lasertel.com.

Laservision USA

#832

595 Phalen Blvd, Saint Paul, MN, 55130
800/393-5565; fax 651/357-1830
info@lasersafety.com; www.lasersafety.com

LASERVISION•USA is your leading source for laser protective equipment. We are the market leader in design, manufacturing and distribution of safety solutions for all laser applications. Our laser safety solutions include eyewear, barrier and curtain systems, viewing windows, signs and labels and safety training. Contact: Tom Poole, Sales Manager, tom.poole@lasersafety.com.

LASOS Lasertechnik GmbH

#1733

Carl Zeiss Promenade 10, Jena, Germany, 07745
49 3641 2944 0; fax 49 3641 2944 79
lasosinfo@lasos.com; www.lasos.com

New Product: Fiber coupled Diode pumped solid state laser at 561nm.

LASOS Lasertechnik GmbH develops, manufactures and markets Argon Ion lasers, Diode lasers, DPSS lasers, HeNe lasers. The industrial manufactured lasers operate in the visible wavelength range from 405 nm to 685 nm and show output powers 0.5 mW up to 200 mW and provide excellent beam quality and long life time for OEM applications such as Biomedical Imaging, DNA Sequencing, Flow Cytometry, Holography, Optics Testing, Reprographics and Test and Measurement. Contact: Philip Crowley, Sales Manager, Phil@markettechinc.net.

Lattice Electro Optics, Inc.

#321



1324 E Valencia Dr, Fullerton, CA, 92831
714/449-0532; fax 714/449-0531
lattice@lattice-eo.com; www.lattice-eo.com

New Product: Beam Expander, High Energy, 11mm dia input, triple wavelength, 355nm, 532nm, 1064nm. TAR coated.

EXCIMER (193 & 248nm), YAG, CO₂ & FEMTOSECOND optics. OPO & Laser Rod coatings. Sandia Nat. Labs' Level 1 Supplier. 24 Hours turn around on coating. High Power Beam Expanders are available. High Damage Threshold Optics & Coatings. Mirrors, Windows, Beamsplitters, polarizing optics, Waveplates. Cylindrical/aspheric lenses, ETALONS, Filters, Prisms. Contact: Scott Kim, Application Engineer, latticeoptics@gmail.com.

Lattice Materials LLC

#6359

516 E Tamarack St, Bozeman, MT, 59715
406/586-2122; fax 406/587-9055
marketing@latticematerials.com; www.latticematerials.com

Lattice Materials LLC is the world's leading producer of custom silicon and germanium machined parts. We provide blanks for infrared optics and laser mirrors, as well as silicon and germanium coating sources. We also machine complex shapes for many custom applications. Lattice possesses unsurpassed capabilities in custom crystal growth, allowing us to meet demanding transmission and resistivity requirements. Contact: Peter Brown, Manager of Sales and Marketing; Bob Spetz, Sales Engineer.

Lee Laser, Inc.

#638

7605 Presidents Dr, Orlando, FL, 32809
407/812-4611; fax 407/850-2422
salesdept@leelaser.com; www.leelaser.com

New Product: Introduces diode-pumped UV YAG lasers up to 10-Watts at 355 nm and microprocessor control options.

Manufactures industrial-grade OEM solid-state lasers. Diode- and lamp-pumped YAG and Vanadate. CW and Q-switched lasers to 25 Watts TEMoo and 1000 Watts multimode at 1064 nm to mark/engrave, trim resistors and microcircuits, process diamonds, cut and weld. To 200 Watts at 532 nm to pump Ti:Sapphire, PIV, cut silicon and process semiconductors. Pulse-pumped at 1064 nm to 15 Watts TEMoo and 100 Watts multimode to cut stents and stencils. Specializes in OEM engineering to enhance form and function. Contact: Steve Lendway, Sales Engineer, slendway@leelaser.com; Robert Schricker, Vice President, bschricker@leelaser.com.

LEG Thüringen - State Development Corporation of Thüringen

#1801

Mainzerhofstr 12, Erfurt, Germany, 99084
49 361 5603 445; fax 49 361 5603 328
www.invest-in-thueringen.org

Thüringen is home to a world-class optics cluster with a long tradition. As the business development corporation for the Free State of Thüringen, LEG is responsible for marketing the region and attracting new investors. LEG works with investors to select the most appropriate sites from all the industrial and manufacturing areas in Thüringen, establishes contact with regional authorities, liaises with government agencies and provides individual advice on financial incentives. Contact: Steffen Laufmöller, Investment Promotion North America, steffen.laufmoeller@leg-thueringen.de; Barbara Kupfer, Director North America, barbara.kupfer@leg-thueringen.de.

Photonics West Exhibitor Directory

Leica Microsystems GmbH

#1801

Ernst-Leitz-Str 17-37, Wetzlar Hessen, Germany, 35578
49 6441 29 0; fax 49 6441 29 2599
info@leica-microsystems.com; www.leica-microsystems.com

Leica Microsystems is a leading global designer and producer of innovative high-tech precision optics systems. Leica Microsystems has the competence to produce high precision optical parts like lenses with form errors less than 20nm and surface roughness below 1 nm. Coatings in a spectral range > 193 nm. Leica Microsystems has now won the coveted German Business Innovation Award three times for milestones in optical development Contact: Raimund Bayer, Project manager, Raimund.Bayer@leica-microsystems.com.

Leister Technologies LLC

#1345



1253 Hamilton Pkwy, Itasca, IL, 60143
630/760-1000; fax 630/760-1001
info@leisterusa.com; www.axetris.com

New Product: Microlens arrays for fiber collimation, optical switching and laser diode collimation.

Axetris Microsystems (a division of LEISTER Technologies) develops and manufactures microlens arrays, diffractive optics and infrared sources. Our standard and OEM solutions include optics for Fiber Array Collimation & Coupling (DWDM, MUX, OADM, OXC), Laser Diode Collimation (SAC, FAC, & Silicon lenses), Shack-Hartmann Sensors & Optical Switching applications. An ISO 9001:2000 certified process, combined with 50 years of manufacturing experience, makes Swiss-based LEISTER a reliable supplier. Contact: John Vrakas, Optical Engineer, Axetris Sales.

LEYBOLD OPTICS USA, Inc.

#1245



539 James Jackson Ave, Cary, NC, 27513
919/657-7100; fax 919/657-7101
www.leyboldoptics.com

New Product: The SYRUSpro710LION delivers excellent quality films at low consumable costs and competitive price.

Leybold Optics designs and manufactures vacuum coating systems used for coatings from the deep ultraviolet to the far infrared. The SYRUSPro is a high productivity electron beam gun coating tool with ion plasma assisted deposition for production of dense and shift free optical coatings. The HELIOS system is based on reactive magnetron sputtering and includes an in situ optical monitoring system and delivers dense, shift-free, high refractive index, amorphous, smooth films. Contact: Tobias Haecker, Regional Sales Manager, tobias.haecker@leyboldoptics.com.

LEYSOP Ltd.

#314

18 Repton Ct, Repton Close, Basildon Essex,
United Kingdom, SS13 1LN
44 1268 522 111; fax 44 1268 522 111
sales@leysop.com; www.leysop.com

New Product: Ultra-Wide Tuning Range Faraday Isolator.

Leysop Ltd. provides a wide range of electro optic and passive optical components: Pockels cells, Q-switches, electro-optic phase and amplitude modulators, high quality calcite crystal polarizers, high quality calcite crystal polarizers, Faraday rotators and isolators and high voltage drive electronics. Contact: Steve Payne, Sales & Marketing Manager, steve.payne@leysop.com.

Liebmann Optical Co.

#145

1 Industrial Pky, Easthampton, MA, 01027-1164
413/527-0079; fax 413/527-5132
sales@liebmann.com; www.liebmann.com

Specializing in the manufacture of precision spherical glass lenses, typically from 0.5mm to 130mm diameter. Conventional and CNC polishing (16 machines). AR coating in house in 3 chambers including Laser damage coatings. 250-2000nm. Doublets, triplets, metal and glass subassemblies. Prototypes to thousands per month. 43 people with over 400 years collective optical manufacturing experience. Liebmann is part of Jenoptik with sister companies in Jupiter FL, Huntsville AL and Jena Germany. Contact: Robert Bush.

Liekki Corp.

#1806, 6312

See listing under nLight Corp.

Light Age, Inc.

#6383

500 Apgar Dr, Somerset, NJ, 08873
732/563-0600; fax 732/563-1571
sales@lightage.com; www.lightage.com

Light Guide Optics Germany GmbH

#6024

Heerstra Benden 10, Rheinbach, Germany, 53359
49 2226 158516; fax 49 2226 158520
info@lgoptics.de; www.lgoptics.de

New Product: Fused end silica fibre bundles for high temperature or UV curing or flame watching systems.

We are manufacturer of fibre optics, fibre optic cable, bundles, fused end bundles for applications like laser delivery systems, spectroscopy, analytical and medical applications as well. We have more than 20 years experience. We have our own fibre production. Highest quality level and customer support are our targets. We are ISO certificated for industry and medical products. Contact: Peter Taenzer, Manager Sales & Marketing, taenzer@lgoptics.de.

LightConversion

#1933

Saulėtekio av. 10, Vilnius, Lithuania, 10223
370 5 2491830; fax 370 5 2698723
lc@lightcon.com; www.lightcon.com

New Product: Femtosecond diode-pumped Yb:KGW system PHAROS (Light Conversion, Ltd.)

Light Conversion is the world-leader for continuously tunable fs/ps OPA systems offering worldwide proven TOPAS series products. Versatile femtosecond DPSSL system PHAROS featuring unique flexibility in industrial and medical applications (up to 10 W, 0.4 mJ, 350 kHz) is also capable of pumping OPA's (620...2600 nm + harmonics, ~ 100 fs). Contact: Lucian Hand, President of Altos Photonics, lucian@altosphotonics.com.

LightMachinery Inc.

#6342

272 Spring St, Almonte, ON, Canada, KOA 1A0
613/749-4895; fax 613/749-8179
inquiry@lightmachinery.com; www.lightmachinery.com

New Product: IMPACT® Pulsed CO2 Lasers: Excimer-like performance at a fraction of excimer cost.

LightMachinery is dedicated to producing the world's finest optical components, optical process machinery and laser systems. LightMachinery specializes in the production of difficult tight tolerance components and equipment that stretches the limits of current technology. Contact: Gregg Senechal, Business Manager, gsenechal@lightmachinery.com; John Hunter, President, jhunter@lightmachinery.com.

LightPath Technologies, Inc.

#632

2603 Challenger Tech Court, Ste 100, Orlando, FL, 32817
407/382-4003; fax 407/382-4007
info@lightpath.com; www.lightpath.com

New Product: IsoBeam Fusion™ Fiber Collimator.

LightPath Technologies, Inc. is a recognized leader in optical solutions for medical, industrial, defense and communication applications. We offer a full line of UV to long wavelength infrared optics and assemblies, including aspheric, GRADIUM® and traditional optics, fiber collimators, optical isolators and optical assemblies. Complete custom engineering and design support is available. Contact: Jim Magos, Vice President Sales and Marketing, jmagos@lightpath.com; Ray Pini, Product Manager, rpini@lightpath.com.

Lightspeed Technologies

#6097

PO Box 110161, Campbell, CA, 95011-0161
408/761-0062; fax 408/578-3629
sales@light-speed-tech.com; www.light-speed-tech.com

New Product: HPLS-76 High Intensity Short Pulsed or Continuous LED Illumination. Available in UV, VIS, NIR.

Supplier of products for making, aligning and measuring light. Light sources include high intensity LED, fiber lasers and QCLs. Precision alignment: Flexure, Mini and Long Travel Piezo Stages. Automated alignment and optical tweezers. Spectrometers, Wavefront Sensors, Laser Beam Profilers and Mid IR Vapor Process Monitoring. Engineering Services. Distributor for Elliot Scientific, Mechnics, Photon Control, Laser Lab Göttingen, Neoplas Control, Arden Photonics, SPI Lasers. Contact: Randall Wilcox, Director of Sales and Marketing, randall.wilcox@light-speed-tech.com; Maureen Arios, Sales Support, maureen.arios@light-speed-tech.com.

LightTrans GmbH

#1801

Wildenbruchstr 15, Jena, Germany, 07745
49 3641 675 430; fax 49 3641 675 437
service@lighttrans.com; www.lighttrans.com

New Product: The latest release, VirtualLab™ 3.5, offers various new functions and performance improvements.

LightTrans develops the only optics software on the market providing comprehensive light information, including phase, amplitude, color, polarization and coherence data. The optical simulation software VirtualLab™ is perfectly suitable for simulation tasks in: Laser Optics; LED/Excimer Laser Modeling; Diffractive/Micro-Optics; Lens Arrays; Gratings; Beam Splitters; Diffusion/Homogenization; High NA Systems; Polarization and Color in Optics; Interferometry; Optics Education. Contact: Hagen Schimmel, Technical Director, hagen.schimmel@lighttrans.com.

LightVision Technologies, Corp.

#6242

5F-13 No 40-2 Sec 1 Ming Sheng N Rd, Kwei-Shan, Taoyuan, Taiwan, 333
886 3 3555931; fax 886 3 3555934
sales@lightvision.com.tw; www.lightvision.com.tw

New Product: 1). Laser Display; 2). RF Green Laser Presenter; 3). IR Green Laser Presenter.

Developed and produced in Taiwan these high end lasers qualified outstanding quality. Established in 2000, LightVision Technologies (LTV) is a laser-technology company staffed by specialists and scientists. The main line includes Blue, Green and Red laser pointer, module and system. Always trying to improve production methods and reduce costs. OEM and ODM orders are both efficiently handled. Contact: Derrick Chen, President; Deborah Liang, deborah@lightvision.com.tw.

Lightwaves2020 Inc.

#6260

1323 Great Mall Dr, Milpitas, CA, 95035
408/503-8888; fax 408/503-8988
sales@lightwaves2020.com; www.lightwaves2020.com

New Product: High power tunable ASE light source; Raman filters, Fluorescence filters; polarization controller.

Lightwaves2020 is an innovative technology driven company specializing in optical monitoring including power, wavelength and polarization, as well as optical thin film coating for applications from laser, biomedical, communication and aerospace. Contact: David Gong, Sales Account Manager, dgong@lightwaves2020.com; Alice Leung, Customer Service, aleung@lightwaves2020.com.

LIMO Lissotschenko Mikrooptik GmbH

#140

Bookenburgweg 4, Dortmund, Germany, 44319
49 231 22241 300; fax 49 231 22241 301
sales@limo.de; www.limo.de

LIMO offers experience in the industrial use of new optical technologies in combination with volume-production of micro-optics and laser systems. The special advantages of LIMO solutions lie in the optimized combination of lasers sources and beam shaping optics. At the interface between laser source and application, we have a unique range of solutions for the development and manufacture of optics and laser systems. Contact: Klaus Reinecke, Director Sales, k.reinecke@limo.de.

Lincoln Laser Co.

#421



234 E Mohave, Phoenix, AZ, 85004-2845
602/257-0407; fax 602/257-0728
bmcgrath@lincolnlaser.com; www.lincolnlaser.com

Custom Engineered and Manufactured Solutions for laser beam delivery systems and laser-based technologies. Extensive engineering expertise and manufacturing resources for component, sub-assembly or module level projects, prototype to production. Products include Polygon Mirrors, Motors, Resonant Scanners, Control Electronics, Optics, Precision Spindles and Electro-Optic Modules. Any Industry. Any Application. Contact: Beverly McGrath, Corporate Account Manager; Michael Adkins, Vice President Sales, madkins@lincolnlaser.com.



LANYARDS SPONSOR

LINOS Photonics, Inc.

#1227



459 Fortune Blvd, Milford, MA, 01757-1723
800/334-5678; fax 508/478-5980
info@linos.com; www.linos.com

A member of the Qioptiq Group, LINOS offers over 4000 standard optical components, optomechanical and opto-electronic devices plus thousands of custom solutions. Flexible production process can meet any customer demand from one offs to large volume. Lenses, mirrors, beam splitters, filters, prisms, polarizers, laser optics, beam expanders, modulators, Pockels cells, Faraday isolators, x-ray imaging and cw OPOs. Contact: Mark Hutcheson, Business Division Manager, mark.hutcheson@linos.com; Gary Bishop, President/Chief Executive Officer, gary.bishop@linos.com.

Photonics West Exhibitor Directory

Lionix B.V.

#6278

PO Box 456, Enschede, The Netherlands, 7500 AH
31 53 489 3827; fax 31 53 489 3601
www.lionixbv.nl

New Product: XiO Photonics offers solutions in passive optical components for communication.

XiO Photonics supplies optical chips for use in telecom and datacom networks and wireless communication applications. The technology base is the patented TriPleX planar light circuit technology. Products include passive and active optical components such as planar lightwave circuit (PLC) splitters, line terminals, ROADMs, true-time delays and beam formers for smart antennas in wireless telecom base stations, avionics, astronomy, etc. Contact: Willem Hoving, Chief Executive Officer, info@xiophotonics.com.

Litron Lasers North America

#6387

2449 Arnica Dr, Bozeman, MT, 59715
406/522-7566; fax 406/522-7567
sales@litronlasers.com; www.litronlasers.com

New Product: Diode pumped pulsed solid state lasers. Up to 50mJ Q-switched, up to 200Hz.

Litron manufactures Nd:YAG and other solid state lasers, lamp pumped and diode pumped, pulsed and CW for OEM and scientific applications. High repetition rate pulsed lasers a specialty for applications such as deflashing and PIV. Contact: Ken Bell, ken@litronlasers.com.

Logitech UK Ltd.

#1818

Erskine Ferry Rd, Old Kilpatrick, Glasgow,
United Kingdom, G60 5EW
44 1389 875444; fax 44 1389 879042
darren.savery@logitech.uk.com; www.logitech.uk.com

Logitech manufacture precision sawing, lapping and polishing equipment, which may be used where there is a need for high specification surface finishes prepared with precise geometric accuracy. Our systems are used in the processing of fibre, laser, optic, opto-electronic and semiconductor materials to provide high quality surfaces on rods, wafers, crystals or planks. Our unique training package and continued customer support ensure that customers obtain superior processing performance. Contact: Darren Savery.

LT Ultra Precision Optics

#6624



51111 W Pontiac Trail, Wixom, MI, 48393
248/936-1717; fax 248/936-1713
info@ltultra.com

New Product: LT-4 Combination cutting/welding head system. Instantly, cut or weld without changeover.

LT Ultra is recognized around the world for its exceptional manufacturing of quality metal optics and beam delivery components. LT's line of products include: Metal Optics, Laser Cutting & Welding Heads, Beam Reducers/Expanders, 5-Axis Cutting Systems, Air Bearing Machines, and Electrode Cables. Contact: Scott Greene, Director of Sales, info@ltultra.com; Karen Smith, Sales, karen@ltultra.com.

LTB Lasertechnik Berlin GmbH

#1801

Rudower Chaussee 29, Berlin, Germany, 12489
49 30 6392 6190; fax 49 30 6392 6199
info@ltb-berlin.de; www.ltb-berlin.de

New Product: Nitrogen Laser MNL 100:337 nm, stable operation > 3 years or 60 million pulses, max rep.rate 120 Hz.

Co-exhibitor in German pavilion (Hall 3, Booth 1801). LTB develops, manufactures and markets worldwide short-pulse UV lasers for industrial use and tunable laser systems in the UV-VIS-NIR; fluorescence spectrometers with wavelength-variable laser excitation; highest-resolution echelle spectrometers for the spectral characterization of lasers and for the material/elemental analysis in laser-induced breakdown spectroscopy (LIBS) and Raman spectroscopy. Contact: Schirin Boernert, Manager Marketing/Sales; Christian Scholz, Director Spectroscopy Department.

Lumenera Corp.

#1419

7 Capella Ct, Ottawa, ON, Canada, K2E 8A7
613/736-4077; fax 613/736-4071
info@lumenera.com; www.lumenera.com

New Product: Lumenera mini Lm085 CMOS USB2 Cameras 752x480, ultra-wide dynamic range, GPI/O connector.

Lumenera is a leading developer and manufacturer of high performance digital cameras and custom imaging solutions for a wide range of industrial and scientific applications. Lumenera's innovative line of cost-effective digital cameras range from 0.5 through 32 megapixel resolution and offer a variety of sensors, resolutions, sensitivities, form factors and custom product offerings. USB2/Ethernet, CMOS/CCD/Cooled CCD/ Large Format/Pixel Shifting, OEM board-level/enclosed/mini, color/mono available. Contact: Drew Buttress, Director of Business Development-Industrial, drew.buttress@lumenera.com; Brian Graydon, Director of Business Development - Scientific, brian.graydon@lumenera.com.

Lumera Laser GmbH

#2039

Opelstr 10, Kaiserslautern, Germany, 67661
636/272-7227; fax 636/272-3909
rpmc@rpmclasers.com; www.rpmclasers.com

LUMERA LASER pioneered industrial 1MHz picosecond cold ablation lasers for micromachining, material research, ps-spectroscopy, nonlinear optics (UV generation & OPO/OPG pumping) ranging, surface structuring. Picosecond ultrafast micromachining (Drilling small aperture/structures into any material); Rounding edges of hard metal tools; Cutting/repairing masks, display/OLED tech.; Structuring solar cells; Make/repair lithographic masks; Fuse blowing for memory repair. Application lab for fast trials. Contact: Chuck Ratermann, President.

Lumerical Solutions, Inc.

#422

789 W Pender St Ste 660, Vancouver, BC, Canada, V6C 1H2
604/733-9006; fax 604/733-3188
sales@lumerical.com; www.lumerical.com

Lumerical delivers high performance optical design software that boosts productivity and helps optical designers confront challenging design problems. Lumerical serves Fortune 500 customers, government research laboratories and academic institutions that span the semiconductor manufacturing, biomedical, optical storage, digital imaging and materials science industries. Contact: Paul Paddon, Director of Sales.

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Lumics

#5075

Carl-Scheele-Str 16, Berlin, Germany, 12489
49 30 67806760; fax 49 30 678067626
sales4@lumics.com; www.lumics.com

New Product: LU09xxU013 diode laser with 13 cw or optical peak power of 25W from 190µm emitter.

Lumics GmbH, based in Berlin, Germany is specialized in fiber coupled laser devices. The product range includes fiber coupled modules in 14-pin BTF, Mini DIL and TO220 designs and laser systems for the use in optical communication networks, analytical instruments and industrial laser applications. The company is specialized in development and production of laser devices in the range from 800nm to 1080nm wavelength. Contact: George Schaefer, Vice President Sales & Marketing.

Lumina Power, Inc.

#6056

26 Ward Hill Ave, Bradford, MA, 01835
978/241-8260; fax 978/241-8262
sales@luminapower.com; www.luminapower.com

New Product: New LDQCW pulsed Diode drivers. Pulse currents to 200A, pulse widths from 50µs to 2ms.

Designs and manufactures laser diode drivers and capacitor charging power supplies. CW and quasi-CW laser diode drivers have CW outputs up to 150 A and pulsing capabilities up to 200 A. Capacitor charging power supplies can be configured up to 15 kV at power levels up to 6 kJ/s. All models feature power factor correction and will operate from any world input voltage. Lumina Power, the reliability standard in Laser Power Supplies. Contact: Barry Essig, Director, Sales & Marketing, bessig@luminapower.com.

Luminit LLC

#1235

20600 Gramercy Pl, Torrance, CA, 90501
310/320-1066; fax 310/320-8067
www.luminitco.com

New Product: Micro Optics Replication Services.

Luminit, formerly the Light Shaping Diffuser Division of Physical Optics Corporation, is a high technology company specializing in polymer and glass based diffusers. Luminit's commercial experience covers applications including bio-medical, semiconductor metrology, automobile lighting, architectural lighting and display. Contact: Suleyman Turgut, Global Accounts Manager, sturgut@luminitco.com; Lisa Nakagawa, Inside Sales Associate, lnakagawa@luminitco.com.



METER BOARD/PLASMA SCREEN SPONSOR

Luna Technologies

#6164, 6165

3157 State St, Blacksburg, VA, 24060
540/552-5128; fax 540/961-951-0760
solutions@lunatechnologies.com; www.lunatechnologies.com

LUNA Technologies, a division of Luna Innovations Incorporated (NASDAQ: LUNA), specializes in advanced solutions for fiber-optic test and measurement. Our award-winning product line includes the Optical Vector Analyzer and the Optical Backscatter Reflectometer: flexible and easy to use tools for loss, dispersion, PMD, polarization, high-resolution OTDR and distributed temperature and strain analysis for optical fiber components, modules and networks. Contact: Jim Mirabile, Director of Sales, North America, edv@lunatechnologies.com.

Luvantix Co. Ltd.

#6623

See listing under SSCP USA.

M Squared Lasers Ltd.

#742

1 Technology Terrace, West of Scotland Science Park Maryhill Rd, Glasgow, United Kingdom, G20 OXA
44 141 945 0500
mail@m2lasers.com; www.m2lasers.com

New Product: SolsTiS: The smallest, lowest noise CW SLM Ti:S laser available, with hands-free & Ethernet control.

Next-generation diode-pumped solid-state lasers and photonics instruments that bring new, unique capabilities to applications including: Spectroscopy, remote sensing, bio-medical diagnostics, security and NDT. Covering DUV to THz and CW to fs, systems include: SolsTiS™ ultracompact, CW SLM Ti:S laser for spectroscopy/atom cooling; Firefly high brightness, tunable mid-IR & THz sources for remote sensing and spectroscopy; and ICE-BLOC™ photonics control modules (including diode drivers) with Ethernet. Contact: Graeme Malcolm, Chief Executive Officer.

m-u-t America Inc.

#6510

VA Biotech Park, 800 E Leigh St, Richmond, VA, 23219
804/512-3449; fax 804/241-9507
info@mut-america.com; www.mut-group.com

m2k-laser GmbH

#1801

Tullastr 72, Freiburg, Germany, 79108
49 761 5158 7370; fax 49 761 5158 7376
info@m2k-laser.de; www.m2k-laser.de

New Product: Tapered amplifiers for MOPA and external cavity systems at 780nm and 976nm with 2W output power.

M2k-laser is specialized on the development and production of high-brightness diode lasers based on the III-V compounds GaAs and GaSb. The production line comprises tapered amplifiers up to 2W between 760nm and 1064nm. In the field of GaSb-based diode lasers the company focuses diode lasers and laser bars up to 15W between 1.9 and 2.3µm. The diodes are mounted on customer designed heat sinks for state of the art applications in sensing, spectroscopy, material processing and medical treatment. Contact: Marc Kelemen, Managing Director, m.kelemen@m2k-laser.de; Patrick Friedmann, Product Manager, p.friedmann@m2k-laser.de.

Mad City Labs, Inc.

#6214

2524 Todd Drive, Madison, WI, 53713
608/298-0855; fax 608/298-9525
sales@madcitylabs.com; www.madcitylabs.com

Mad City Labs designs and manufactures high precision, piezo based nanopositioning devices for research and industry. As leaders in innovative design, our products incorporate true flexure guided (decoupled) motion, proprietary PicoQ sensor technology and closed loop control. Our PicoQ sensors outperform traditional capacitive sensors with extremely low drift and superior stability. System attributes include picometer resolution, high speeds, real time position sensing. Contact: Dale Baldwin, Technical Sales; Shannon Ghorbani, Technical Sales, mclgen@madcitylabs.com.

Mahr GmbH

#1801

Carl-Mahr-Str 1, Göttingen, Germany, 37073
49 551 7073 800; fax 49 551 7073 888
information@mahr.com; www.mahr.com

New Product: The new MarSurf LD 120 Aspheric 3D can measure both 2D scans and the 3D topography of aspheres.

The Mahr Group is the world's third largest manufacturer of a complete range of production dimensional measuring technology. Mahr measuring instruments - from calipers to optical coordinate measuring systems - are used for measuring minute length, form and surface deviations on workpieces in the automotive industry and in the mechanical, precision and optical engineering, as well as in science and research. Contact: Pat Nugent, Vice President, Metrology Systems, pat.nugent@mahr.com; Andreas Beutler, Manager Technology, andreas.beutler@mahr.de.

MANLIGHT

#6322

4, rue Louis de Broglie, Lannion, France, 22300
33 296 04 20 00; fax 33 296 04 27 05
info@manlight.com; www.manlight.com

New Product: Linearly Polarized Fiber Laser with up to 10W.

Industrial Manufacturer of CW and Pulsed high-power Fiber Laser with facilities in France and Germany. Member of the ALCEN High-Tech Group with 25 companies and revenues of €160mio. Contact: Franco Felice, Sales Manager; Sebastien Grot, Product Line Manager.

Market Tech, Inc.

#1733

PO Box 67037, Scotts Valley, CA, 95067
800/326-5714; fax 831/461-1136
info@markettechinc.net; www.markettechinc.net

New Product: Single mode fiber couplers for visible lasers.

Market Tech is a leading distribution and sales company offering a wide variety of Gas, Solid State, Diode and Fiber Lasers covering UV, visible and IR spectrum. We also offer laser power meters, light and color measurement instruments, optics and fiber optics products for life science, medical, aerospace, quality control and research applications. Contact: Philip Crowley, Sales Manager; Tim Bodenhamer, Sales Engineer, Tim@markettechinc.net.

Marlow Industries, Inc.

#645

10451 Vista Park Rd, Dallas, TX, 75238-1698
214/340-4900; fax 214/341-5212
www.marlow.com

New Product: Thermoelectric power generation devices. Thermoelectric Thermal Reference Sources (TTRS).

Marlow Ind., world's largest provider of TECs and assemblies for Photonics, Defense and Space applications. Marlow's competency is based on in depth knowledge of thermoelectric materials, thermal analysis, design and application expertise. High reliability devices manufactured in an ITAR compliant facility by certified manufacturing personnel in accordance with soldering requirements, ANSI J-STD-001. Marlow is ISO 9001:2000 compliant and a Malcolm Baldrige National Quality Award winner. Contact: Bill Kolander, Senior Account Manager, bkolander@marlow.com; David Finrock, Senior Sales Engineer, dfinrock@marlow.com.

Max Levy Autograph, Inc.

#735

220 W Roberts Ave, Philadelphia, PA, 19144-4298
800/798-3675; fax 215/842-3637
sales@maxlevy.com; www.maxlevy.com

Max Levy Autograph specializes in precise patterned components and metrology standards for the photonic, machine vision, mil-aerospace and semiconductor industries. Major capabilities include photolithography, electroforming and diamond turning. Product breath ranges from submicron features on exotic materials to 3' x 10' NIST traceable calibration grids. Contact: Tom Cinque, Sales Manager, tom@maxlevy.com; David Metzger, Senior Engineer, dmetzger@maxlevy.com.

Meadowlark Optics

#1712

PO Box 1000, 5964 Iris Pky, Frederick, CO, 80530
303/833-4333; fax 303/833-4335
sales@meadowlark.com; www.meadowlark.com

New Product: New benchtop liquid crystal driver adds digital display readouts for voltage and frequency settings.

Meadowlark Optics designs and manufactures standard and custom polarization control components and systems including polarizers, retarders, liquid crystal devices, subassemblies, and instrumentation. Customer applications include aerospace, defense, medical imaging/analysis, data storage, polarimetry, semiconductor inspection/processing and astronomy. New line of tunable optical filters targets spectroscopic imaging microscopy. Contact: Anthony Artigliere, Vice President - Sales and Marketing, anthony@meadowlark.com; William Barbarow, Sales Engineer, wbarbarow@meadowlark.com.

MediVision Optics

#218

1210 N Jefferson St Ste D, Anaheim, CA, 92807
714/563-2772; fax 714/563-2711
optics@medivisionusa.com; www.medivisionusa.com

MediVision manufactures custom optics ranging from spherical, flat to multi-element systems. Sizes ranging from 0.5mm to 400mm. Our capabilities include manufacturing components out of UV, Visible and IR Materials. We also offer ground and polished aspheric lenses. We work with customers from prototype to production. Contact: Roxanne Johnson, Optics Sales Manager, rjohnson@medivisionusa.com; Alex Vayser, President.

Megaopto Co., Ltd.

#6602

2-17-5 Maruyamadai, Wako Saitama, Japan, 351-0112
81 48 469 3377; fax 81 48 469 3332
megasales@megaopto.co.jp; www.megaopto.co.jp

MegaWatt Lasers, Inc.

#6164, 6165

PO Box 24190, Hilton Head Island, SC, 29925-4190
843/342-7221; fax 843/342-7223
mwl@mwlasers.com; www.megawattlasers.com

MegaWatt Lasers manufactures a complete line of high-quality diffuse-reflector pump chambers for solid-state laser applications including medical, industrial and military. Our pump chamber designs are well suited for both breadboard experimentation as well as OEM applications. Contact: Scott Hamlin, Sales Engineer, scott.hamlin@megawattlasers.com.

Melles Griot - see CVI Melles Griot

#1318

Photonics West Exhibitor Directory

Meller Optics, Inc.

#1045

120 Corliss St, Providence, RI, 02904-2602
401/331-3717; fax 401/331-0519

sales@melleroptics.com; www.melleroptics.com

Meller Optics has been providing high quality optics to defense, medical, laser and industrial markets for over 50 years. Specializing in grinding and polishing of hard, durable materials. Meller has developed high-speed, low-cost finishing processes for Sapphire, Ruby, Laser Glasses, Fused Silica, Zinc Selenide, Germanium, Silicon, Fluorides and Ceramics. Configurations include windows, substrates, lenses, domes and prisms. Meller Optics is an ISO 9002 certified company. Contact: Craig Schweriner, National Sales Manager, craig@melleroptics.com; Steve Lydon, steve@melleroptics.com.

MEMS Optical Inc.

#141



205 Import Cir, Huntsville, AL, 35806
256/859-1886; fax 256/858-0581

info@memsoptical.com; www.memsoptical.com

MEMS Optical, Inc. is a leading supplier and manufacturer of high performance refractive and diffractive microoptics and MEMS devices. MEMS Optical provides solutions to diverse markets such as fiber optic communications, military and aerospace, industrial and semiconductor equipment and biomedical industries. MEMS Optical continues to develop and improve microoptics applications through the use of grayscale technology and other proprietary processes.

Menlo Systems GmbH

#1527

Am Klopferspitz, Munich, Germany, 82152
49 89 189166 0; fax 49 89 189166 11

sales@menlosystems.com; www.menlosystems.com

Menlo Systems is a leading developer and global supplier of instrumentation for high-precision metrology. Known for its Nobel Prize winning optical frequency comb technology, the Munich-based company and its recently opened US subsidiary also supply ultrafast fiber lasers, femtosecond phase stabilization units and a broad spectrum of high-sensitivity ultrafast photodetectors. Contact: Ida Kozma, i.kozma@menlosystems.com.

MeshTel - INTELITE

#3016

2562-F1 Silver State Pkwy, Minden, NV, 89423
775/267-5959; fax 775/267-5958
info@meshtel.com; www.meshtel.com

New Product: 1550nm SM PM Fiber Pigtailed Laser System up to 50mW fiber output via FC connector.

Manufacturer and supplier diode/DPSS Laser. CW, Acousto-optic modulator (AOM) Q-switched, single longitudinal mode, fiber coupled and pigtailed laser with wavelength of 266, 351, 355, 473, 532, 671, 1034 and 1064nm DPSS Laser, 375 to 1600nm Diode Laser. Power up to 20W. Side Emitting Fiber Optics, Laser safety Goggles, Closed-loop scanner/driver. Contact: Ray Newton, Technical Sales.

Messe Stuttgart

#6705

Am Kochenhof 16, Stuttgart, Germany, 70192
49 711 2589 0; fax 49 711 2589 440
info@messe-stuttgart.de; www.messe-stuttgart.de

New Product: LASYS 2008, www.lasys-fair.com. TopClinica 2008, www.topclinica.de.

Organizer of highly-qualified technical and International trade fairs in Stuttgart, especially: VISION, machine vision and identification technologies; LASYS, system solutions for laser material processing; MiNaT, precision mechanics, ultra-precision, micro and nano technologies; TopClinica, medical equipment and solutions. Contact: Silvia Blumenschein, International Business Development, silvia.blumenschein@messe-stuttgart.de; Andrea Weinmann, andrea.weinmann@messe-stuttgart.de.

Metavac

#6431

4000 Point St, Holtsville, NY, 11742
631/447-7700; fax 631/447-7715

info@metavac.com; www.metavac.com

Metavac is a global leader in the manufacture and development of thin film, optical and electro-optical products serving the defense and security industries since 1945. Products include ruggedized display shields, transparent heater panels, NVIS compatible filters, EMI/RFI shielding, contrast enhancement and polarized display filters and specialty coatings for optoelectronic applications. Metavac is a part of Thermo Fisher Scientific. Contact: Richard Zinkiewicz, Sales Manager, richard.zinkiewicz@thermofisher.com; Joseph Pozzolano, Business Development Manager, joseph.pozzolano@thermofisher.com.

Metro Orlando Economic Development Commission

#639

301 E Pine St Ste 900, Orlando, FL, 32810
407/422-7159; fax 407/425-6428

www.orlandoedc.com

The Metro Orlando Economic Development Commission (EDC) is an organization that helps business. We are dedicated to meeting the needs of today's industries and creating a competitive economic climate where businesses can thrive. To meet this goal, the EDC provides key services and support, which range from relocation and expansion expertise to export counsel to long-term planning with our community partners. Contact: Eric Ushkowitz, Director, Technology Business Development, eric.ushkowitz@orlandoedc.com; John Fremstad, Vice President, Technology Business Development, john.fremstad@orlandoedc.com.

Metrology Concepts LLC

#326



Bldg E, 3495 Winton Pl Ste 120, Rochester, NY, 14623
585/427-9155; fax 585/427-9026

info@metrologyconcepts.com; www.metrologyconcepts.com

Supplier of measurement solutions for surface and wavefront metrology. Core technologies include phase shifting interferometry, wavefront sensing, optical and mechanical profilometry. Standard and custom instrumentation offered as well as support of existing metrology, training and measurement services. Contact: John Nemechek, JNemechek@MetrologyConcepts.com.

MetroLux Analytics, Inc.

#5107

Achilles Dr, Reno, NV, 89507
775/250-3379; fax 734/370-6537

jutta_recktenwald@msn.com; www.metrolux.de

Meyer Burger AG

#6002

Alte Bernstr 146, Thun, Switzerland, 3600
41 33 4390505; fax 41 33 4390510

sales@meyerburger.ch; www.meyerburger.ch

MICOS USA

#6301



15375 Barranca Pkwy Ste G-101, Irvine, CA, 92618
949/480-0538; fax 949/480-0538

info@micosusa.com; www.micosusa.com

MICOS serves the high-precision positioning market including industry and research with an emphasis on laser and micro-wave technology, communications, semi-conductor technology and micro-manipulation. We offer a wide range of precision positioners and control electronics as well as complete system integration services. Additionally, MICOS is known as the premier supplier for vacuum, clean room and extreme temperature applications. Contact: Manfred Schneider, mschneider@micosusa.com.

Capacitor Charging Power Supplies for your OEM Application

New for 2008: Additional XLS and TLX Models The Industry's Most Reliable Designs

- Designed and tested to protect itself from load, line, and operational faults
- Universal input voltage and active Power Factor Correction
- Available with integrated simmer, trigger, and auxiliary power outputs
- Over-voltage, open circuit, short circuit, over-temperature, and arc protected
- Agency approved for medical and industrial applications; meets EMI Class A
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FX 978-922-8374

Micro Care Corp.

#6186

SPIE CONSUMER MEMBER

595 John Downey Dr, New Brittan, CT, 06051
860/827-0626; fax 860/827-8105
techsupport@microcare.com; www.microcare.com

New Product: Precision Optical Cleaner - a nonflammable solvent replacement for alcohol and acetone.

MicroCare is the world leader in critical cleaning, including photonics, optical devices and fiber optics. Our high-performance, non-aqueous cleaners are perfect for lenses and other photonics. These dense solvents dissolve oils and lift away buffing compounds. They instantly remove water from surfaces without energy-wasting heat or air knives. Nonflammable, they out-perform IPA and acetone, are safe for coatings, protect your people and the environment and are easy to ship, store and handle. Contact: Tech Support.

Micro Laser Systems, Inc.

#714

SPIE CONSUMER MEMBER

12841 Western Ave Ste H, Garden Grove, CA, 92841
714/898-6001; fax 714/897-0979
sales@microlaser.com; www.microlaser.com

New Product: Fiber Collimator for High Power Fiber Lasers.

Manufacturer of Diffraction Limited Free Space and Fiber Coupled Diode Laser Systems. Singlemode and DFB lasers from 375nm to 1600nm have narrow linewidths and high stability. Accessories include expander, focusing optics for free space beams. Fiber collimators, singlemode and PM splitters and wavelength combiners complement the Fiber Laser Systems. Contact: Norma Adachi, Marketing, norma@microlaser.com.

Micro Motion Technology Co., Ltd.

#6618

Namdong Industrial Complex, 20B-11L 428-11 Nyunheondong, Namdong-gyu, South Korea, 405-848
82 32 820 2900; fax 82 32 822 2910
mmt@micromt.com; www.micromt.com

New Product: Manual & Motorized Stage, Vacuum Chamber Stage, Air Bearing & Floating Stage, Clean-Dry-Coating System.

To become No.1 solution provider of existing Micro-motion control industries and a pioneer of next Nano-motion technology. Produce varies Manual & Motorized stages. Varies application with stepper, rotary servo, linear servo motor, piezo motor. Maintaining the designing skills for high precision, huge length for air bearing stages. Built up outstanding customer service and support systems. Maintained OEM design ability and process. Contact: Justin Na, Sales Manager, justin@micromt.com; Ara Ko, Sales Coordinator.

Micro Photon Devices

#6044

Via Stradivari 4, Bolzano, Italy, 39100
39 0471 051212; fax 39 0471 501524
sales@optoecomponents.com; www.microphotondevices.com
MPD's single-photon detection modules have ultra-fast timing resolution, high photon detection efficiency, low power consumption, small size and are extremely robust and reliable. The company benefits of the efforts and the expertise of a research group at Politecnico di Milano, led by Professor Sergio Cova. Contact: Nick Bertone, Nick.Bertone@optoecomponents.com.

Photonics West Exhibitor Directory

MicroE Systems

#316

9 Erie Dr, Natick, MA, 01760
508/903-5000; fax 508/903-5005
info@microesys.com; www.microesys.com

New Product: Mercury II™, motion feedback encoders: unmatched performance, versatility, ease of use and robustness.

MicroE Systems manufactures the world's smallest high-performance motion feedback encoders. Smaller, smarter and faster than competitive encoders, the Mercury™ family contains 33 models in programmable, digital output, analog output, multi-axis and vacuum styles. Resolutions range from 5 microns to 1.2 nanometers, linear and up to 268 M CPR, rotary. Mercury II™, our next generation family of high performance encoders is unsurpassed for performance, versatility, ease of use and robustness. Contact: Mitchell Jones, Business Development Manager, mjones@gsig.com.

Micron Optics, Inc.

#6163

1852 Century Pl NE, Atlanta, GA, 30345
404/325-0005; fax 404/325-4082
moi@micronoptics.com; www.micronoptics.com

New Product: ss225 Swept Laser: Fast, wide range tuning across 1060, 1310 or 1550nm bandwidths.

Micron Optics, Inc. offers a comprehensive portfolio of products. Our broad line of tunable fiber optic devices provides superior components for signal conditioning, channel drop, spectrum measurement and swept source applications (i.e. OCT). Our instrument line addresses optical sensing applications in energy, aerospace, civil, transportation and defense markets. Contact: Kevin Hsu, Vice President Research & Technology, khsu@micronoptics.com; Clyde Story, Director - Telecom Sales, cstory@micronoptics.com.

Midwest Optical Systems

#433

322 Woodwork Ln, Palantine, IL, 60067
847/359-3550; fax 847/359-3567
info@machinevisionfilters.com; www.midwestopticalsystems.com

Midwest Optical Systems offers more than 1000 types of mounted optical filters designed for industrial and scientific CCD cameras and lenses. We also manufacture custom & stock optical components & assemblies including single & multiple element lenses, windows, mirrors, prisms, beamsplitters and much more, for a variety of applications. We carry a large stock of raw materials and finished components, which can be quickly and economically modified to meet custom requirements. Contact: Jason Dougherty, Director of Sales & Marketing, jason.dougherty@midwestopticalsystems.com.

Mightex Systems

#6333



2343 Brimley Rd Ste 868, Toronto, ON, Canada, M1S 3L6
416/840-4991; fax 416/840-6541
sales@mightex.com; www.mightex.com

New Product: CMOS/CCD cameras for OEM. Support multiple cameras; arbitrary ROI; full-featured SDK. From \$199/ea.

Mightex Systems is specialized in developing and marketing imaging and illumination products used in machine vision, industrial tests & measurements, life & health sciences and optical microscopy etc. Products include CMOS and CCD cameras for industrial and scientific applications, LED controllers (including software, manual and/or analog controlled units) and LED light sources (e.g. ring lights and spot lights). Contact: Miles Li, Managing Director.

Mildex, Inc.

#620

1388 Crittenden Rd, Rochester, NY, 14623-2308
585/473-6540; fax 585/475-1971
mildex@eznet.net; www.mildex.com

New Product: OptiSpheric/OptiCentric PC-controlled Lens Bench.

Mildex, Inc. is a US Distributor of optical manufacturing and testing systems. Products offered include auto-collimators, collimators, diopter telescopes, electronic auto-collimators, lens benches, spherometers, lens centering machines and precision surface grinding and polishing machines. Available for demonstration will be Trioptics OptiSpheric/OptiCentric PC-controlled lens bench that can measure EFL, BFL, MTF and Centering errors of lenses or lens assemblies. Contact: Harvey Miller, President, hmiller@mildex.com.

Mindready Solutions

#1642

75 Belfast Rd, Carrickfergus Co Antrim, N Ireland, United Kingdom, BT38 8BX
44 28 93 357300; fax 44 28 93 357305
info@mindready.com; www.mindready.com

New Product: Mindready will be showing their highly successful modular Life-Test and Burn-in equipment including the field proven high power offering with currents to 200A.

The United Kingdom based Mindready will show their industry leading Life-Test and Burn-in equipment for the Laser Diode Industry. Mindready Solutions Ltd is part of the international solutions provider Mindready Solutions Inc. which has 2 offices in the United States of America, Headquartered in Canada and the United Kingdom Life-Test and Burn-in equipment design centre in the United Kingdom. As an international company Mindready provide and support Life-Test and Burn-in solutions on a global scale. Contact Dave Hall, Business Development Manager, dave.hall@mindready.com; Deirdre Francis, Vice President, Deirdre.francis@mindready.com.



STAIRWAY STRIPS SPONSOR

Mindrum Precision, Inc.

#230



10000 Fourth St, Rancho Cucamonga, CA, 91730
909/989-1728; fax 909/987-3709
sales@mindrum.com; www.mindrum.com

Specializing in Complex Shapes in glass, quartz, ceramic and exotic materials. We also work with metals and plastics. Prototype and production quantities, engineering services available. Precision polishing, lapping (including double-sided), grinding, redrawing, I.D./O.D., small diameter drilling of holes, laser engraving, class 1000 clean room, chemical etching, manufacturer of flow cells. Manufacture and distribute of Eye Safe Laser Range Finders. All products and services provided are Made in the USA. Currently building a new expanded facility in Houston, TX. Visit us at our web site, www.mindrum.com. Contact: Todd Van Son, Sales Manager. Linda Kondris, Technical Sales. Adam Pohl, Manager of Laser Systems.

Minus K Technology

#2046



420 S Hindry Ave Unit E, Inglewood, CA, 90301
310/348-9656; fax 310/348-9638
sales@minusk.com; www.minusk.com

Minus K Technology manufactures vibration isolation products ideal for SPMs, SEMs, micro-hardness testers, laser and optical systems and other metrology tools. They are easy-to-use, low-cost, passive, vacuum-adaptable and require no air supply. Guaranteed 1/2 Hz natural frequencies make them very effective against low-frequency building vibrations. Isolation performance is typically 10 to 100 times better than high-performance air tables and even better than the higher-priced active systems. Contact: Erik Runge, Director of New Product Development, erik@minusk.com; David Platus, President, david@minusk.com.

Mitsubishi Cable Industries, Ltd. #6324

Shin-Kokusai Building, 4-1 Marunouchi 3-chrome, Chiyoda-ku Tokyo, 100-8303
81 3 3216 1551; fax 81 3 3201 3948
james-stevens@comcast.net; www.mitsubishi-cable.co.jp
Mitsubishi Cable Industries is Japan's leading producer of silica core fiber and cables for use in laser delivery in industrial and medical applications. We also produce the world's leading non-solarizing fiber for DUV (Deep-Ultraviolet) light delivery applications in spectroscopy, process end-point detection and excimer laser delivery. Our engineers will be in our booth to discuss and assist end users in finding solutions to demanding fiber optic applications requirements. Contact: James Stevens, US Fiber Optics Sales & Marketing Manager.


MLD Technologies, LLC #6230

2672 Bayshore Pkwy Ste 701, Mountain View, CA, 94043
650/938-3780; fax 650/938-3113
info@mldtech.com; www.mldtech.com
MLD offers high-performance optical coatings and components; specializing in the design, development and manufacture of ion-beam-sputtered, low optical-loss, laser-damage resistant thin-films for the UV-visible-IR spectral region. Product applications include lasers, laser devices, non-linear crystals, medical instruments and other photonic devices. Contact: Gary DeBell, Principal, 650-938-2488; Len Mott, Principal, 650-938-3780.

MLOptic Corp. #6077

398 Pu Gang St, Jiang Ning Economic Development Zone, Nanjing Jiangsu, China, 211100
86 25 84436288; fax 86 25 84433188
alan@mloptic.com; www.mloptic.com

Model Optics #345

 SPIE
10 Dixon Ave, Woodstock, NY, 12498
845/679-7386; fax 845/679-7449
info@modeloptics.com; www.modeloptics.com

Fabricate custom, precision optical components and assemblies. Customers include biomedical, aerospace, automotive, semiconductor, telecom and entertainment industries. Manufacture custom precision optics components and assemblies to your specifications. Optical coating services, optical design, optomechanical design, Class 1000 Clean room facility. Specialize in economical prototype to medium production volumes. Double sided lapping capabilities can support medium volumes of precision plano windows. Contact: Robb Sawyer, Director of Sales & Marketing, robb@modeloptic.com; Larry Kim, President, lk@modeloptics.com.

Moeller-Wedel Optical GmbH #1047

Rosengarten 10, Wedel Schleswig-Holstein, Germany, 22880
fax 49 4103 937 7660
info@moeller-wedel-optical.com; www.moeller-wedel-optical.com

Monocrystal PLC #6282

4/1 Kulakov Prospect, Stavropol, Russia, 355035
7 8652 956528; fax 7 8652 956529
sales@monocrystal.com; www.monocrystal.com

Moore NanoTechnology Systems LLC #1044

426A Winchester St, Keene, NH, 03431-0605
603/352-3030; fax 603/352-3363
sales@nanotechsys.com; www.nanotechsys.com

New Product: NanoCAM™ is the most advanced freeform programming package available for ultra-precision machining.

Nanotech® Ultra-Precision Machining Systems are available in various models with 2 to 5 axes of CNC motion. Single point diamond turning or deterministic microgrinding of spherical, aspheric, freeform, linear diffractive and prismatic optical structures yield form accuracies as fine as 50nm P-V and surface finishes < 2nm Ra. All Nanotech machines utilize a programming resolution of 1.0 nanometer and an unprecedented system feedback resolution of only 0.034 nanometer. Contact: Bob Cassin, Sales Manager, cassin@nanotechsys.com; Jeff Perra, Sales Engineer, perra@nanotechsys.com.

Morgan Technical Ceramics #6021

414 24th Ave, San Mateo, CA, 94403
800/433-0638; fax 973/227-7135
ussales@morganadvancedceramics.com;
www.morganadvancedceramics.com

Morgan Technical Ceramics (MTC) manufactures products from a comprehensive range of ceramic, glass, precious metal, piezoelectric and dielectric materials. MTC's broad range of photonic solutions includes components for photomultiplier tubes, feedthrus, laser reflectors and waveguides, braze alloys and piezoelectric bimorphs. www.morgantechnicalceramics.com. Contact: Keith Ferguson, Business Development Manager, keith.ferguson@morganplc.com.

Moulded Optics GmbH #1801

Steinstr 13-15, Schoeffengrund, Germany, 35641
49 6445 6000 0; fax 49 6445 6000 40
martin.pfeil@mouldedoptics.com; www.mouldedoptics.com

New Product: Half-Ball-Lenses for high power LEDs and Hybrid-Optical-Elements, that is the combination of plastic and glass components in one element: "The best properties of both materials".

Moulded Optics GmbH will be displaying many types of precision molded glass optical components from 2mm to 100mm sizes including singlet, aspheric, bubble, cylindrical, fly's eye array, free form, fresnel, half-ball, light pipe, plano, prismatic and spherical lenses; concave first surface, flat, spherical and free form mirrors; dispersing, dove, penta, porro, roof and wedge prisms; ellipsoidal, multi-faceted, parabolic and prismatic reflectors; flat, free form and spherical windows. Contact: Martin Pfeil, Managing Director.

MOXTEK, Inc. #6289

452 W 1260 N, Orem, UT, 84057
801/225-0930; fax 801/221-1121
www.moxtek.com

New Product: Polarizers now extending into Ultra Violet & Infrared. Check out new Absorptive & Ultra Products.

MOXTEK specializes in wire-grid polarizers up to 8-inches in diameter for use in consumer displays, scientific instruments, industrial and military applications ranging from the UV to LWIR. MOXTEK is interested in high-volume and custom applications of wire-grid polarizers and other nano-photonics devices. Contact: Matt Free, Marketing Director, mfree@moxtek.com; Jim Meyer, Applications Engineer, jmeyer@moxtek.com.

Photonics West Exhibitor Directory

MPA Crystal Corp.

#437

1032 Irving St #968, San Francisco, CA, 94122
415/681-2185; fax 415/681-0787
mpma@mpa-crystal.com; www.mpa-crystal.com

New Product: Sapphire optics, Crystal quartz, Optical glass, Fused silica, Silicon, Germanium and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specs. Also provides optics made of Crystal quartz, Optical glass, Fused silica, Silicon and Germanium. Coating is available as well. Products include Windows, Substrates, Lenses, Prisms, Rods, Spheres, Cylinders and more. Contact: Pauline Liang, Chief Executive Officer.



EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

MPB Communications Inc.

#6198



147 Hymus Blvd, Pointe-Claire, QC, H9R 1E9
514/694-8751; fax 514/694-6869
info@mpbc.ca; www.mpbcommunications.com

New Product: 1 WATT ORANGE! New! High-Power 592 nm Orange Fiber Laser.

Since 1977, MPBC has been manufacturing high-performance photonic products for the military, telecommunications, industrial and research markets. MPB Communications Inc. will be exhibiting Visible Fiber Lasers that output 1 or 2 W in the yellow, green and orange regions; Compact Excimer lasers; Low power consumption and small size Yb lasers and EDFAs; High Power EYDFAs and Yb Lasers; high-power EFAs, C- and L- Band Erbium Broadband Sources, CombSources, FBGs, Mode-Locked Fiber Lasers, etc. Contact: Claudette Linton, Account Executive, claudette.linton@mpbc.ca; Kim Boumansour, Account Executive, kim.boumansour@mpbc.ca.

MRC a PPGI company

#1600

6455 Parkland Dr, Sarasota, FL, 34243
947/753-8707; fax 947/751-4249
sales@mrcoptics.com; www.mrcoptics.com

Manufacturer and designer of precision metal and infrared optical components, systems and sub-assemblies. Full in-house aspheric diamond machining, plating, polishing and testing capability. Materials include all non-ferrous metals, crystals, beryllium and composites. Products include polygons, aspheric components, off-axis parabolics, large flat mirrors and multi-mirror systems. Contact: Tom Crafts, Director of Business Development, tcrafts@mrcoptics.com.

mso jena GmbH

#1040



Carl-Zeiss-Promenade 10, Jena, Germany, 07745
49 3641 35 2930; fax 49 3641 35 2935
info@mso-jena.de; www.mso-jena.de

New Product: Optical interference filters with single and multiple narrow rejection bands for life science.

mso jena is a leading German manufacturer of interference coatings, e.g. interference filters, thin-film polarizers and AR/HR-coatings. Spectral reflectance and transmittance of the coatings are adjusted according to specific needs in the UV-NIR spectral range. The coatings excel by long-term spectral stability and high mechanical hardness. In combination with photolithography patterned coatings or filter arrays are produced, e.g. for spectral masking of photodiodes. Contact: Uwe Schallenberg, Managing Director; Reinhard Dohle, Technical Sales.

MTI Corp.

#543

2700 Rydin Rd Unit D, Richmond, CA, 94804
510/525-3070; fax 510/525-4705
carson@mticrystal.com; www.mticrystal.com

MuAnalysis, Inc.

#6098

2301 St Laurent Blvd Ste 500, Ottawa, ON, Canada, K1G 4J7
613/721-4664; fax 613/721-4682
info@muanalysis.com; www.muanalysis.com

New Product: Teardown reports & reliability analysis of solid state lighting & compound semiconductor products.

MuAnalysis - a laboratory specializing in design verification, reliability testing and analysis, failure and materials analysis. MuAnalysis serves customers world-wide including electronic manufacturing, materials transformation, defense and aerospace, fabless semiconductor, MEMS and photonics. MuAnalysis is a leader in RoHS compliance testing and standards development. Contact: Martine Simard-Normandin, President and Chief Executive Officer; Ann Halliday, Office Manager.



EXHIBITION MAP/RESTAURANT GUIDE /CONFERENCE BAG INSERT SPONSOR

Multiwave Photonics

#6117

Rua Eng Frederico Ulrich 2650, Moreira da Maia, Portugal, 4470-605
351 22 9408260; fax 351 22 9408261
jsalcedo@multiwavephotonics.com;
www.multiwavephotonics.com

MV Laboratories, Inc.

#6711

One 8th St Ste 15, Frenchtown, NJ, 08825
908/996-6633; fax 908/996-6697
info@mvlaboratories.com; www.mvlaboratories.com

MV Laboratories, Inc., founded in 1985, is a world leader in the manufacture of ultra high-purity inorganic chemicals for chemical analytics and synthesis, crystal growth, nanotechnology, specialty ceramics and optoelectronics research and development. The company manufactures and stocks more than four hundred, 99.999% pure chemicals, including the oxides, chlorides, fluorides, bromides, carbonates and nitrates of 70 elements. Contact: Marge Gwynne, Manager, Business Development & Marketing, mgwynne@mvlaboratories.com; Warren Miller, President, wmiller@mvlaboratories.com.

Naked Optics Corp.

#5134



16 Mt Bethel Rd Ste 374, Warren, NJ, 07059
908/685-0352; fax 908/325-0250
sales@nakedoptics.com; www.nakedoptics.com

New Product: Optical glass strip produced by Hubei New Huaguang (NHG) in China.

Supplier of IR optics and diamond-turned components with aspheric, diffractive and hybrid surfaces in IR materials, plastics and metals; optical design services; IR materials including ZnS, Ge, ZnSe, Si, BaF₂, CaF₂ and optical glasses in finished & blank forms: raw optical glass, molded and CNC-machined blanks of all optical materials. Contact: Buzz Nesti, buzz@nakedoptics.com; Glen Dunn, glen@nakedoptics.com.

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8-18 for complete time, schedules, and locations.

Nalux Co., Ltd.

#242

Yamazaki 2-1-7, Shimamaoto-cho, Mishima-gun, Osaka, Japan, 618-0001
81 75 963 3456; fax 81 75 963 3450
kitagawa@nalux.co.jp; www.nalux.co.jp

New Product: Glass imprinting elements, glass-plastic hybrid elements and plastic elements for UV range.

NALUX is a global leader, in high volume manufacturing services, for high performance, plastic optics and micro-optical elements including diffractive gratings, microlens arrays, free-form surface optics, beam shapers, sub-wavelength structures, prisms, mirrors and other types of optics with various surface shapes. NALUX also offers glass imprinting elements, glass-plastic hybrid elements, plastic elements for UV range and complete subassemblies such as CMOS lens unit. Contact: Seiichiro Kitagawa, President.

Nanjing Fenghua Optical Instrument Co., Ltd.

#1938, 1939

Gaoqiao Industrial Concentration Area, Shangfang, Nanjing Jiangsu, China, 210000
86 2552 269304; fax 86 2552 239085
fenghua_feng_nanyan@hotmail.com

New Product: Optical lens and lens units design and product. Lens' cool-processing agglutinating coating.

Nanjing Fenghua Optical Instrument Co., Ltd (Nanjing Nanyan Optical Instrument Co., Ltd) is one of the professional manufacturer has abundant optical products and lens units. It's established more than 10 years and have a late-model manufactory. The current output capacity is 3 million optical lens monthly and 100 thousand lens units annually. It is practising and researching base of Nanjing University of Science & Technology. Moreover, it cooperate with Nanjing Society of Photoelectric Science. Contact: Feng Qing, General Manager Assistant, orange2004qq@yahoo.com.au; Feng Guangfu, General Manager.

Nanjing Sapphire Electro-Optics Co., Ltd. #437

22 N Liuzhou Rd Taishan Park, Nanjing Hi-Tech Development Zone, Nanjing, China, 210031
415/681-2185; fax 415/681-0787
pmpa@mpa-crystal.com; www.saifei.com

New Product: Sapphire optics, Crystal quartz, Optical glass, Fused silica, Silicon, Germanium and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specs. Also provides optics made of Crystal quartz, Optical glass, Fused silica, Silicon and Germanium. Coating is available as well. Products include Windows, Substrates, Lenses, Prisms, Rods, Spheres, Cylinders and more. Contact: Pauline Liang, Chief Executive Officer.

Nanonics Imaging Ltd.

#1607

The Manhat Technology Park, POB 48330, Malcha Jerusalem, Israel, IL-91487
972 2 6789 573; fax 972 2 6480 827
info@nanonics.co.il; www.nanonics.co.il

New Product: Optometric 4000 multi-probe SPM system, for ultra low noise photonics/plasmonics characterization.

Ultimate resolution AFM & NSOM systems fully integrated into upright/inverted/dual 4 pi microscopes, on-line, correlated Raman chemical info & confocal imaging. Compatible with SEMs & FIBs. Applications in photonics, multiple probe electrical measurements, gas & liquid nanowriting, nanothermal, nanoindentation probes/software. Cryogenic 100K SPM/NSOM systems, rsingular multiprobe NSOM/AFM photonics characterization platforms for plasmonics, active/passive optical devices, PBGs, etc. Contact: Solly Ezekiel, Chief Operating Officer.

Nanoplus GmbH

#6331

Nanosystems & Technologies, Oberer Kirschberg 4, Gerbrunn, Germany, 97218
49 931 908 270; fax 49 931 908 2719
www.nanoplus.com

New Product: 2.7 µm DFB laser diodes for high precision trace gas sensing of water vapour and CO₂.

Nanoplus supplies DFB and FP laser diodes at any wavelength between 760 nm and 3 µm as well as QCL lasers from 5 µm to 14 µm. Contact: Johannes Koeth, Chief Executive Officer, koeth@nanoplus.com.

Naso Corp.

#6224

3007 Bunsen Ave Ste Q, Ventura, CA, 93003
805/650-1231; fax 805/650-0504
scott@nasocorp.com

New Product: High Power Laser Diode Test Systems, 200 Amp+, configurable for R&D/production applications.

Naso is a photonics based custom manufacturing and test systems company. Naso purchased and supports the entire Newport line of laser diode test racks and has developed a line of bench top through multi rack high power test systems. High power test systems will fit the needs of diode manufacturers' requiring high current, cooling, custom software interface with measurement and reporting capabilities. Systems are a modular design, configurable for R&D and expandable for full scale production. Contact: Scott Persico, Director of Sales & Marketing; Chris Persico, Director of Engineering, chriscp@nasocorp.com.

National Aperture, Inc.

#246

16 Northwestern Dr, Salem, NH, 03079
603/893-7393; fax 603/893-7857
sales@nationalaperture.com; www.nationalaperture.com

New Product: NAI announces the release of the new MM-3M-F-LS-NM nanometer linear stage with 15-25nm resolution.

National Aperture, Inc. provides a complete line of state-of-the-art pinhole, air slit, high-power slit and pinholes, target apertures, etc. in standard and exotic materials. We accept custom-designed aperture configurations to suit your needs. We also manufacture precision manual and motorized micro-positioning translation linear and rotary stages for both standard and vacuum-compatible working environments, motion control systems and software. Contact: Kevin Yonge, Sales Manager - Motion Systems, kyonge@NAIMotion.com; Paul Ziarnowski, Sales Manager - Aperture Systems, pziar@NationalAperture.com.



GENERAL REFRESHMENTS SPONSOR

National Institute of Advanced Industrial Science and Technology

#6309

1-8-31 Midorigaoka, Ikeda Osaka, Japan, 563-8577
81 72 751 8425; fax 81 72 751 9637
hiraga-t@aist.go.jp; http://unit.aist.go.jp/photonics/in

National Instruments

#1007

11500 N Mopac Expy, Austin, TX, 78759
866/474-2463; fax 512/683-9300
info@ni.com; www.ni.com

National Instruments is a technology pioneer and leader in virtual instrumentation - a revolutionary concept that has changed the way engineers and scientists approach measurement and automation. Using PCs and commercial technologies, virtual instrumentation increases productivity and lowers costs for test, control and design applications through easy-to-integrate software and modular measurement and control hardware.

Photonics West Exhibitor Directory

National Reconnaissance Office

#6353

14675 Lee Rd, Chantilly, VA, 20151-1715
703/808-2769; fax 703/808-2646
dii@nro.mil; www.dii.westerfields.net

New Product: Director's Innovation Initiative Program is a R&D Funding Program.

R&D Funding-The National Reconnaissance Office's Director's Innovative Initiative invests in advanced technologies, foster innovation and provides seed funding to push the boundaries of technology to dramatically improve our overhead reconnaissance capabilities. It presents an opportunity for developers not traditionally associated with the NRO to participate in building the NRO of the 21st century. Contact: John Mills, Program Manager; William Harter, DII Program Technical Lead.

Nature Publishing Group

#6270

75 Varick St 9th Fl, New York, NY, 10013
212/726-9200; fax 212/696-9591
www.nature.com

New Product: January 2008 is Nature Photonics first anniversary, visit booth #6270 for your free sample copy.

Nature Publishing Group's physical sciences portfolio is rapidly expanding-from the broad scope and excellence of Nature to specific titles in physics, materials, nanotechnology and photonics. Nature Photonics provides a unique forum for all aspects of photonics and optoelectronics. Visit the NPG booth (#6270) to pick up your free sample copy and for more information on the portfolio, alternatively, visit <http://www.nature.com>. Contact: Gurpreet Gill-Bains, Marketing Manager, Physical Sciences, g.gill-bains@nature.com.

Navitar Inc.

#6092

200 Commerce Dr, Rochester, NY, 14623
585/359-4000; fax 585/359-4999
info@navitar.com; www.navitar.com

Navitar, a global leader in imaging optics technology, manufactures machine vision lenses and electronic imaging optics. Our products support a number of markets including semiconductor, electronics, flat panel display inspection, metrology, biomedical imaging, food and beverage inspection, pharmaceutical, factory automation and military. The patented Optical Wizard lens selection tool is available online 24/7 to help generate basic and customized solutions for machine vision applications. Contact: Joe Corsi, Regional Account Manager, joecorsi@navitar.com.

neoplas control GmbH

#1801

Walther-Rathenaur-Str 49a, Greifswald, Germany, 17489
49 3834 515 400; fax 49 3834 515 401
contact@neoplas-control.de; www.neoplas-control.de

New Product: The Q-MACSystem is a compact and user friendly quantum cascade laser measurement and control system.

neoplas control GmbH is a center of competence for gas and plasma diagnostics and environmental technology for industrial applications. Our mission is to provide pioneering work for your operations in gases and plasmas. Our product portfolio Q-MACS represents an outstanding solution for on-line process control and measurement applications. Contact: Jürgen Röpcke, Chief Executive Officer, roepcke@neoplas-control.de; Bärbel Hannover, Manager Administration and Accounting, hannoever@neoplas-control.de.

NEOS Technologies, Inc.

#1013

A Gooch and Housego Co, 4005 Opportunity Dr,
Melbourne, FL, 32934
321/242-7818; fax 321/242-1019
neos@neostech.com; www.neostech.com

New Product: Cleveland Crystals, NEOS, Gooch & Housego UK and SIFAM are now called Gooch & Housego.

Gooch & Housego is a new company, which has integrated the five former businesses of Gooch & Housego UK Ltd, Cleveland Crystal Inc, NEOS, Landwehr Electronic GmbH (LE) and SIFAM. The combined product portfolio offers a broad range of optical components which act as enabling technologies for photonics-based systems in industries such as laser, automotive, aerospace, environmental sensing, imaging, energy research, scientific and medical. Contact: Richard Toman, Sales, rtoman@neostech.com; Janet Jones, Customer Service.

Nerac, Inc.

#6020

One Technology Dr, Tolland, CT, 06084
860/872-7000; fax 860/872-6026
www.nerac.com

Nerac is a Research and Advisory Firm for companies developing innovative products and technologies. We deliver custom assessments of product and technology development opportunities, competitor intelligence, Intellectual Property strategies and compliance requirements. Our custom analysis includes review, investigation and appraisal of market dynamics and business impacts and allows companies to identify the best opportunities for competitive advantage and strategic growth. Contact: Karen Sheridan, Marketing Coordinator, ksheridan@nerac.com; Susan Lucek, Marketing Communications Manager, slucek@nerac.com.

New England Photoconductor Corp.

#541

 SPIE

253 Mansfield Ave, PO Box M, Norton, MA, 02766-0927
508/285-5561; fax 508/285-6480
nepcorp@nepcorp.com; www.nepcorp.com

New Product: Hermetic TO headers, cap assemblies, thermoelectric coolers, thermistor, custom optical filter caps.

Lead Sulfide (PbS) Lead Selenide (PbSe) and Indium Gallium Arsenide (InGaAs) infrared detectors. N.E.P. offers a wide range of room temperature and thermoelectrically cooled assemblies that are available in a variety of standard and custom hermetic packages. All assemblies are offered with custom optical filters and testing. N.E.P. also offers linear arrays up to 256 elements with multiplexing, quad detectors, amplifiers, thermoelectric cooler controllers and custom control electronics. Contact: Richard Brennan, Operations Manager, nepcorp@nepcorp.com; Paul Brennan, Engineer, pb@nepcorp.com.



TECHNICAL CONFERENCE NOTEPAD SPONSOR

New Focus, Inc.

#1207

 SPIE

A division of Bookham, 2584 Junction Ave,
San Jose, CA, 95134-1902
408/919-1500; fax 408/919-6083
contact@newfocus.com; www.newfocus.com

New Focus is a leading supplier of Simply Better™ Photonics for advanced research, semiconductor equipment and industrial applications. Products include single-wavelength and tunable lasers, detectors, modulators, motion control actuators and solutions, optomechanics, vacuum and ultraclean solutions, optics, breadboards and integrated precision OEM solutions.

New Scale Technologies, Inc.

#6089

SPIE Corporate Member

121 Victor Heights Pkwy, Victor, NY, 14564
585/924-4450; fax 585/924-4468
sales@newscaletech.com; www.newscaletech.com

New Product: SQL-3.4 series mini piezoelectric SQUIGGLE motor has new housing that simplifies mounting & handling.

What could YOU do with a motor this small? The piezoelectric SQUIGGLE motor is the world's smallest linear motor. Patented motor has incredibly small size (1.5x1.5x6 mm), amazing precision, high force and long travel for disruptively small imaging and positioning systems. Low power use, too! For optical instruments, lasers, endoscopes, electronic locks, tiny phone cameras and more. Ask about application-specific closed-loop modules. Non-magnetic, vacuum, UHV and cryogenic options also available. Contact: Fred Haas, Sales Manager, fhaas@newscaletech.com.

New Source Technology, LLC

#6351

SPIE Corporate Member

1249 Quarry Ln Ste 100, Pleasanton, CA, 94566
925/462-6888; fax 925/462-8388
sales@newsourcetechnology.com;
www.newsourcetechnology.com

New Product: Excimer and V/EUV optics with High Damage Resistance Efficient and Durable Lamp Pumped Cavities.

New Source Technology, a worldwide supplier of laser and electro-optical components, has supported Laser OEMS with quality products, on-time delivery, technical support and competitive pricing. For over 10 years, we have supported our OEM customers with Flash Lamps, Optics, Cavities, Power Supplies and Laser Rods. This year we have introduced Excimer/EUV coatings to our product portfolio for critical cutting edge applications. Contact: Naoko Mizuide, Marketing and Business Development Manager, nmizuide@newsourcetechnology.com; Gregory Pon, President, gpon@newsourcetechnology.com.

New Wave Research, Inc.

#731

48660 Kato Rd, Fremont, CA, 94538
510/249-1550; fax 510/249-1551
lasers@new-wave.com; www.new-wave.com



CONFERENCE BAG INSERT; INTERNET PAVILION; WIFI SPONSOR

Newport Corp.

#817

1791 Deere Ave, Irvine, CA, 92606-4814
949/863-3144; fax 949/253-1680
sales@newport.com; www.newport.com

New Product: Agilis handheld 2-axis USB controller and AG-M100N piezo-driven mount.

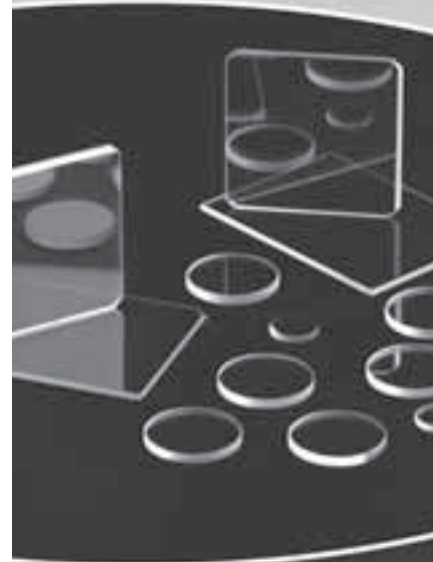
At Newport we believe that the best way to enhance life and fuel discovery is to support experts, by being experts. As a global company, we draw upon expertise from around the world to deliver knowledge and solutions that make manage and measure light. Combined with the expertise from Spectra-Physics Lasers, Oriel Instruments, Richardson Gratings and Corion Fluorescence Filters, we partner with scientists, engineers and OEMs to provide them with solutions that help make a world of difference. Contact: Gary Spiegel, Vice President Sales and Services, gary.spiegel@newport.com.

Fluorescence Filters

EDGE FILTERS

BANDPASS FILTERS

DICHROIC BEAM SPLITTERS



- ◆ Customized high-performance spectral characteristics
- ◆ Highly-resistant all-dielectric multilayer coatings
- ◆ User-defined filter size in single-substrate assembly

mso jena

Phone: +49(0) 36 41/35 29 30
E-mail: info@mso-jena.com

www.mso-jena.com

Photonics West Exhibitor Directory

Nextreme Thermal Solutions

#6328

3040 Cornwallis Rd, PO Box 13981, Research Triangle Park, NC, 27709-3981

919/990-8300; fax 919/485-2600

info@nextreme.com; www.nextreme.com

New Product: Embedded Thermoelectric Components (eTEC™) for rapid temperature control or power generation.

Nextreme, Inc. manufactures thin-film thermoelectric components that address the most challenging thermal management and power generation needs of the semiconductor, photonics, consumer and defense/aerospace industries. Nextreme uses semiconductor processing techniques to fabricate a paper-thin thermoelectric module (eTEC™) that can be seamlessly embedded into applications for cooling, heating and power generation requirements. Contact: Paul Magill, Vice President Marketing and Business Development, pmagill@nextreme.com; Randall Ihrig, Sales Coordinator, rihrig@nextreme.com.

Nichia Corp

#6308

491 Oka, Kaminaka-Cho, Anan-Shi Tokushima, Japan, 774-8601
81 884 22 2311; fax 81 884 23 7752

www.nichia.com

Nikon Corp.

#6360

10-1 Asamizodai 1-Chome, Sagamihara City, Kanagawa, Japan, 228-0828

81 42 740 6746; fax 81 42 740 6336

info.glass@nikon.co.jp; www.nikon.co.jp

Nikon Glass Division will exhibit optical materials, such as fused silica glass, calcium fluoride and i-line glass, that offer extremely high standards of purity, a homogenous index of refraction and superior durability.

Nitto Optical Co., Ltd.

#6421

1-14-18 Kudankita, Chiyoda-ku, Tokyo, Japan, 102-0073

81 3 3511 8111; fax 81 3 3511 8110

www.nitto-optical.co.jp

Contact: Shusaku Shiina, Sales, shu.shiina@nitto-optical.co.jp.

Nivo Technology

#6440

1165 Mayfield Manor Dr, Alpharetta, GA, 30004

678/230-6066; fax 801/846-3218

New Product: High quality thin film coating materials at very competitive price.

Nivo Technology is a leading thin film coating material manufacturer. Our company specializes in making high quality evaporation material for optical thin film coating. Our products include a complete line of oxides, fluorides, compound such as SiO₂, TiO₂, Ta₂O₅, MgF₂, Ti₃O₅, YF₃, YbF₃, Y₂O₃, Sc₂O₃ etc. Our products have been used by companies across the world with great customer satisfaction. Our very competitive price has brought our customer tremendous savings on coating consumables. Contact: John Wang, Global Sales Vice President, jwang@photonicsupply.com.

nLIGHT Corp.

#1806, 6312

SPIE CONSUMER MARKET

5408 NE 88th St Bldg E, Vancouver, WA, 98665

360/566-4460; fax 360/546-1960

sales@nlight.net; www.nlight.net

nLIGHT designs and manufactures industry leading high-power fibers, semiconductor lasers and tailored integrated solutions. Driving advancement of efficiency, power and reliability across the spectrum of 635nm to 2000nm, nLIGHT enables differentiated advantages for our customers in industrial, medical, defense and consumer applications. nLIGHT's four volume manufacturing facilities in the USA, China and Finland support our customer's growth. Contact: Terri Entler, Strategic Account Manager.

NM Laser Products Inc.

#1039

337 Piercy Rd, San Jose, CA, 95138

408/227-8299; fax 408/227-8265

sales@nmlaser.com; www.nmlaser.com

New Product: LSTX series high energy, large aperture shutters for safety and pulse gating.

Manufacturer of Laser Shutters for Safety Interlocking, Modulation, Exposure, Gating and Process Control. Custom products for OEMs. Standard products offer a wide selection of package geometries and apertures for most commercial lasers. Full line of electronic controllers for shutters. Contact: David Woodruff, Sales Engineer, dave@nmlaser.com.



GENERAL REFRESHMENTS SPONSOR

NoIR LaserShields

#439

6155 Pontiac Trl, South Lyon, MI, 48178

734/769-5565; fax 734/769-1708

david.bothner@noirlaser.com; www.noirlaser.com

New Product: Introducing the #38 LaserShield frame, the most universal ever.

CE-certified LaserShields are made in the USA and offer the highest levels of protection, visibility and comfort for the world of laser applications. NoIR specializes in custom frequency absorption and all Lasershield filters are available in a variety of adjustable and universal frame styles, all with a lifetime warranty. NoIR announces certified LaserShields for femtosecond pulses, plus several new multi-line alignment filters and the new Ultra High Visible Light Transmittance Filters. Contact: David W. Bothner, Marketing Director; Mary Klinke, International Sales, mary.klinke@noirlaser.com.

Norland Products Inc.

#6416

Bldg 100, 2540 Rte 130, Cranbury, NJ, 08512

609/395-1966; fax 609/395-9006

tnorland@norlandproducts.com; www.norlandproducts.com

New Product: NBA 107 cold blocking UV adhesive used for polishing lenses can be dissolved with warm soapy water.

Manufacturer of high quality optical and electronic UV and heat curing adhesives. These, one component, solventless adhesives cure quickly when exposed to UV light and are designed for precision bonding applications. Our Optical adhesives are designed for bonding components where low strain, optical clarity or low outgassing are required in military, aerospace, fiber optics and commercial optics applications. Contact: Tim Norland, General Manager.

SPIE Marketplace

Your Source for SPIE Publications,
Professional Development Tools,
Gifts for Kids and Souvenirs.

Located Convention Center Lower Arcade.

NorPix, Inc.

#6361

1751 Richardson St Ste 6117, Montreal, QC, Canada, H3K 1G6
514/846-0009; fax 514/846-0117
db@norpix.com; www.norpix.com

New Product: StreamPix digital video recording software for single and multiple cameras.

NorPix Inc is a developer of digital video recording software used in the machine vision, scientific and monitoring industries. NorPix has a team of software and machine vision experts with many years of experience in the machine vision industry. Our team has extensive knowledge of industrial, scientific and high speed cameras used in the vision industry along with experience in the fields of optics and triggering. Contact: Luc Nocente, President, ln@norpix.com; Debbie Belafi, Office Manager.

North American Coating Labs.

#5123

9450 Pineneedle Dr, Mentor, OH, 44060
440/357-7000; fax 440/357-7001
info@nacl.com; www.nacl.com

North American Coating Laboratories provides optical coatings for a variety of customers in the polymer and glass optics markets. Our experience in both dip and vacuum-applied processes make NAEL one of the most respected organizations in the optical coatings field. Our coating competencies include Protective, Scratch-resistant, Reflective, Anti-reflective, Filter, Conductive, ITO and Chemically Resistive coatings. North American Coating Laboratories is certified to ISO 9001:2000 standards. Contact: Dan Fiore, Business Development Manager, dfiore@nacl.com; Brian Wilson, President, bwilson@nacl.com.

North Crystals

#6182



96A Leningradskoye Shosse, Moscow, Russia, 125195
7 495 746 0548; fax 7 495 458 5696
sales@northcrystals.com; www.northcrystals.com

New Product: High quality stoichiometric and magnesium doped lithium niobate single crystals.

North Crystals is a large scale manufacturer of variety single crystals for optical, scintillating and acoustical applications. Contact: Alexander Nefedov, Commercial Director, com@northcrystals.com; Alexander Tseitline, United States Sales Director.

Northrop Grumman Synoptics

#1726

1201 Continental Blvd, Charlotte, NC, 28273
704/588-2340; fax 704/588-2516
STSYNOPTICSSales@ngc.com;
www.st.northropgrumman.com/synoptics/

New Product: Diffusion bonding of Nd:YAG, CTH:YAG, Er:YAG, Nd:YLF and Nd:YVO₄ to Undoped YAG and Undoped YVO₄.

Northrop Grumman Synoptics is the world's leading manufacturer of crystals for use in solid-state lasers. We also manufacture a line of specialty crystals and Air Spaced Polarizers for use at 1064nm. Products are used in applications in the military, medical, industrial and scientific markets. Materials include Nd:YAG, CTH:YAG, Er:YAG, Alexandrite, Nd:YLF, Nd:YVO₄, KTP, Cr³⁺:YAG, Co:Spinel, Yb:YAG and TGG. Contact: Scott Griffin, Director, Sales and Marketing, scott.e.griffin@ngc.com; Clark Tooley, Sales Engineer, Commercial Products, clark.tooly@ngc.com.

Northrop Grumman, Cutting Edge Optronics

#1726

20 Point W Blvd, St Charles, MO, 63301
636/916-4900; fax 636/916-4994
st-ceolaser-info@ngc.com;
www.st.northropgrumman.com/ceolaser

Northrop Grumman Cutting Edge Optronics is a leading supplier of high-power laser diodes, DPSS modules, laser diode drivers and complete DPSS laser systems. Many of our diode laser based products have become industry standards and are used in a wide variety of commercial and military applications. The company is registered to ISO 9001:2000 and is located in St. Charles, MO. Contact: David Jones, Director of Sales & Marketing, david.b.jones@ngc.com; Brad DeBok, International Sales Manager, brad.debok@ngc.com.

Northumbria Optical Coatings (NOC) Ltd.

#314

10 Burford Way, Boldon Business Park, Boldon Tyne & Wear, United Kingdom, NE35 9PZ
44 191 537 4888; fax 44 191 537 4777
sales@noc-ltd.com; www.noc-ltd.com

New Product: Small prototype quantities of NBP, WBP, SWP & LWP Infrared Filters.

Northumbria Optical Coatings Ltd (NOC) specializes in the design and manufacture of Infrared Optical Filters and Coatings (1.5µm - 20.0µm). They are used for environmental monitoring, gaseous effluent monitoring, vehicle exhaust monitoring, ozone layer monitoring, night vision systems and space applications. Contact: Steve Armstrong, Sales Manager, steve@noc-ltd.com.

Nova Phase

#1527

435 Route 206, Newton, NJ, 07860
973/300-3000; fax 973/300-3600
sales@thorlabs.com; www.novaphase.com

Novacam Technologies Inc.

#6098

277 Lakeshore Rd Ste 04, Pointe-Claire Quebec, QC, Canada, H9S 4L2
514/694-4002; fax 514/630-6420
info@novacam.com; www.novacam.com

New Product: Microcam-4D SS-OCT Swept Source Optical Coherence Tomography System used for real-time imaging.

Novacam Technologies is manufacturer of OCT-Optical Coherence Tomography detectors for cross section imaging of the tissue for bio-medical applications and fiber-based profilometers based on low coherence interferometry with precision of less than 1 micron µm. Profilometers are used for surface mapping and inspection, roughness measurements, process control, multi-layer film thickness, deposition testing, metrology and profilometry in inhospitable environments and restricted spaces. Contact: Bartulovic Vuk, President, vuk@novacam.com.

NovaWave Technologies

#6244

900 Island Dr Ste 101, Redwood City, CA, 94065
650/610-0956; fax 650/610-0986
sales@novawavetech.com; www.novawavetech.com

New Product: NovaWave's IRIS™ 1000 DFG- based tunable single frequency mid-IR laser system.

NovaWave Technologies offers a range of enabling photonics tools, including high performance optical and fiberoptic components, turnkey middle infrared tunable laser sources, fiber laser modules for OEM applications and optical metrology instrumentation. NovaWave's recently introduced IRIS 1000 laser is a high spectral purity difference frequency generation (DFG)-based tunable middle infrared laser that is suitable for quantitative spectroscopy and chemical sensing applications. Contact: Larry Peterson, Sales Manager, lcpeterson@novawavetech.com; Joseph Laird, Operations Manager, jlaird@novawavetech.com.

Photonics West Exhibitor Directory

NP Photonics

#418

9030 S Rita Rd Ste 120, Tucson, AZ, 85747
520/799-7400; fax 520/799-7403
info@np Photonics.com; www.npphotonics.com

NP Photonics, a leading fiber laser company, produces and delivers a new class of advanced optical light sources for sensing, medical and R&D markets. The company has developed a broad family of products including Narrow-Line width/low phase noise Fiber Lasers, ASE Sources and High Power Single Frequency Light Sources. Contact: Philippe Brak, President & Chief Executive Officer, pbrak@np Photonics.com

nPoint, Inc.

#6504

1617 Sherman Ave, Madison, WI, 53704
608/310-8770; fax 608/310-8774
info@npoint.com; www.npoint.com

nPoint, Inc. manufactures ultra-precision motion and control devices for nano-scale research and manufacturing. Our products include a series of nanopositioning systems that consist of stages and control electronics. The positioning products enable rapid, precise and repeatable motion and are used in applications ranging from life science to semiconductor industry. Contact: Katerina Moloni, Director of Sales, katerina.moloni@npoint.com.

NTT Electronics Corp.

#6400

Shibuya Mark City, 1-12-1 Dogenzaka, Shibuya-ku, Tokyo, Japan, 150-0043
81 3 5456 4605; fax 81 3 5456 4604
sales@photo.nel.co.jp; www.nel.co.jp

New Product: Wavelength conversion lasers (visible and mid-IR ranges) and NIR DFB lasers with TEC-CAN packages.

NTT Electronics Corporation (NEL) develops, produces and provides innovative semiconductor lasers for communication, sensor and medical markets. Products include semiconductor lasers in near-IR range and wavelength conversion lasers (WCLs) in visible and mid-IR ranges and PPLN chips/modules. Newly developed WCLs can be operated in direct modulation mode up to 1MHz. Contact: Fumiaki Hyuga, Sales Director, hyuga@hqs.nel.co.jp.

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Nufern

#2042

 SPIE

7 Airport Park Rd, East Granby, CT, 06026
860/408-5000; fax 860/408-5080
info@nufern.com; www.nufern.com

New Product: The NuFIRE™ 200W fiber laser is designed for extreme ease of use and precise process control.

Nufern® is a leading United States manufacturer of specialty optical fibers, fiber lasers and amplifiers serving diverse markets. Current products include over 300 standard fibers and range from sub-assemblies to complete turn-key fiber lasers and amplifiers. From its headquarters in East Granby, Connecticut, United States of America, Nufern's integrated fiber and fiber laser teams also provide rapid and cost-effective OEM fiber laser design, assembly and contract manufacturing services. Contact: Nufern Customer Service.

NuSil Technology

#6173

1050 Cindy Ln, Carpinteria, CA, 93013
805/684-8780; fax 805/566-9905
silicone@nusil.com; www.nusil.com

NuSil Technology is a cutting edge manufacturer of silicone products for the photonics industry developing products that require precise, predictable, cost-effective materials performance. NuSil Technology's Lightspan brand product line is the most extensive for index matching applications. ISO-9001 certified since 1994, NuSil operates state-of-the-art laboratories and processing facilities in North America and Europe and provides on-site, in-person application engineering support worldwide. Contact: Michelle Velderrain, Technical Sales Specialist, michelle@nusil.com.

Nutfield Technology, Inc.

#1339

49 Range Rd, Windham, NH, 03087
603/893-6200; fax 603/893-6214
www.nutfieldtech.com

New Product: QuantumScan-30 galvanometer for 20 to 40 mm apertures. ScanWare Windows® based scanhead control software.

Manufacturers of standard and custom laser scanning components. Precision multi-axis scan heads with PC interface and Windows® control software. Moving magnet galvanometers for raster and vector applications. Optical scanning solutions for 5- 50 mm apertures and all laser wavelengths.

OASYS Technology, LLC

#6337

 SPIE

25 Sundial Ave Ste 404, Manchester, NH, 03103
603/232-8221; fax 603/628-0222
info@oasys-technology.com; www.oasys-technology.com

New Product: Family of Universal Night Sight Systems including image intensifier, thermal, and fusion solutions.

OASYS Technology, LLC specializes in providing rugged and reliable solutions to complex and challenging electro-optical specifications that require the most demanding environmental conditions of land, sea, air and space. The company's offerings are segmented into four primary markets: Military products and accessories, Laboratory and Test Instrumentation, Optical Assemblies and Precision Optical Components. Contact: Brett Rosner, Chief Operations Officer, Vice President Business Development, brosnor@oasys-technology.com.

Ocean Optics, Inc.

#927, 6146

 SPIE

830 Douglas Ave, Dunedin, FL, 34698-5761
727/733-2447; fax 727/733-3962
info@oceanoptics.com; www.oceanoptics.com

Oerlikon Optics USA Inc.

#1700

 SPIE

16080 Table Mtn Pky Ste 100, Golden, CO, 80403
303/273-9700; fax 303/273-2995
sales.optics.go@oerlikon.com; www.oerlikon.com/optics

New Product: Oerlikon introduces Oerlikon Optics NightVision™ and adds b-stage epoxy to cover glass portfolio.

For 60 years, Oerlikon Optics has been producing coated optical components and subassemblies with outstanding properties for a diverse set of industries incorporating optics and photonics. Oerlikon Optics today is a recognized technical leader in consulting, prototyping and volume production of optical thin-film products. We produce systems and thin-film components on glass and plastic and offer additional services such as optical design and complete assembly. Contact: Kevin Liddane, Head of Sales - The Americas, kevin.liddane@oerlikon.com; Larry Vair, United States Sales Engineer, larry.vair@oerlikon.com.

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FREE Exhibitor Product Demonstrations

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Microwave Photonic Signal Processing



TNO develops advanced optomechanical instruments for science and industry, with main application areas being space exploration, astronomy and lithography and, also working in other leading fields of technology



Foundry for III-V Compound Semiconductors

Technobis Fibre Technologies
Passion for precision technology



Optical Fiber Interrogator Modules & Sensors



Photonic Integrated Circuits



Precision Optical Components & Systems



FLIM, FRET, Microscopy & Intensified High Speed

**Knowledge & Service Centre
Optronica**

Consulting & Research on Optronic Equipment for Defense Applications



The Dutch Platform for Photonics

National representatives:



SenterNovem

Agency of the Dutch Ministry of Economic Affairs

The Netherlands Council for Trade Promotion NCH is organizer of the Holland Pavilion.

Photonics West Exhibitor Directory

OFS - Specialty Photonics Div.

#1237

55 Darling Dr, Avon, CT, 06001
860/678-0371; fax 860/674-8818
info@specialtyphotonics.com; www.specialtyphotonics.com

OFS Specialty Photonics Division is the industry leader in optical fiber design and modification for highly customized applications. It develops focused fiber solutions - the right fibers, cables and other specialty fiber optic products - to meet the needs of established and growing industries. Contact: John Earnhardt, Senior Sales Manager, jearnhardt@ofsoptics.com; Chrystal Green, Customer Relations Manager, cgreen1@ofsoptics.com.

Ohara Corp.

#1434

23141 Arroyo Vista Ste 200, Rancho St Marg, CA, 92688-2613
949/858-8700; fax 949/858-5455
info@oharacorp.com; www.oharacorp.com

Manufacturer of precision optical glasses available as strip/slab, cut/molded blanks, high-homogeneity blanks, fine gobs and polished ball lenses, near UV transmitting i-Line glasses, ultralow expansion glass, negative expansion and glass ceramic substrates. Supplier of double-sided polished substrates (low surface roughness/excellent flatness). Contact: Brion Hoffman, President, brionhoffman@oharacorp.com; Chris Ghio, Sales Manager, chrishgio@oharacorp.com.

Olympus Industrial America

#6374

One Corporate Dr, Orangeburg, NY, 10962
845/398-9400; fax 845/398-9443
info@olympusindustrial.com; www.microimaging.com

O-m6 Technologies Inc.

#6098

14163 Rd 117 Ste 90, Mirabel, QC, Canada, J7J 1M3
450/979-2275; fax 450/979-4110
sales@om6.com; www.om6.com

New Product: Specialty fiber/jacket assemblies: PM, specific wave, large core, high power, specialty jackets.

O-m6 Technologies is a leading manufacturer of Fiber Optic Cable Assemblies. Patchcords; Pigtailed; Multi-fiber cables; Specialty fiber cable, including PM, Puremode, Non-standard fibers; Specialty jacketing cables, such as Loose tube, Soft jacket, Metallized jacket; Custom device termination including Connector and Ferrule installation; Hi-tech assemblies such as Si-V groove array, Fiber polishing, Metallization; Custom Cables and harness. Contact: Jean-Yves Couturier, General Manager, jy.couturier@om6.com.

Omega Optical, Inc.

#215

Delta Campus, 21 Omega Drive, Brattleboro, VT, 05301
802/254-2690; fax 802/254-3937
sales@omegafilters.com; www.omegafilters.com

Omega Optical offers standard and custom optical filters. The extensive range of products includes bandpass, longpass/shortpass, rejection bands, dichroic beamsplitters/mirrors, neutral density, laser line, analytical, astronomy & fluorescence filters. Omega Optical adds in Dual Magnetron Reactive Sputtering coating capability to satisfy requirements for high-performance surface coatings. Contact: Ruth Gorham-Houle, Vice President of Business Development, rgorham@omegafilters.com.

Omicron Laserage Laserprodukte GmbH

#1733, 1801

Raiffeisenstr 5E, Rodgau, Germany, 63110
49 6106 8224 26; fax 49 6106 8224 10
mail@omicron-laser.de; www.omicron-laser.de

New Product: Bluephoton® and Redphoton® wavelength stabilised and narrow bandwidth lasers from 375 to 1064nm.

Omicron, located in Rodgau - Germany, develops and produces state-of-the-art diode lasers, DPSS lasers and LED light sources. Founded in 1989, Omicron is a young company which has succeeded in positioning itself as a market leader in the area of laser diode systems and laser applications. Examples are the successful LDM-Series and the lasers of the FKLA-Series which were developed for highend laser applications such as CtP, DVD mastering, wafer inspection, microscopy and reprography. Contact: Ralf Dietzel, Product Manager; Soenke Baumann, Chief Executive Officer, s.baumann@omicron-laser.de.

Ondax, Inc.

#5122

 SPIE

850 E Duarte Rd, Monrovia, CA, 91016
626/357-9600; fax 626/357-9321
info@ondax.com; www.ondax.com

New Product: Ondax adds fiber pigtailed units to stabilized laser product line.

Ondax Inc. manufactures Volume Holographic Gratings and wavelength stabilized laser sources. The lasers are single mode with linewidths <50MHz and coherent lengths >10m. Lasers available in 5.6mm TO can packages, fiber coupled modules or pigtailed units. Collimation accessories, custom laser wavelengths, VHG PowerLockers™ (350nm to 3 microns), RGB display filters, spectroscopy filters and VHG-FACs are also available. Products ready for immediate shipment from our online store at www.ondax.com. Contact: Linda West, Vice President Sales and Marketing, lwest@ondax.com; Dawn Ebertowski, Sales and Marketing Administrator, dawn@ondax.com.

Onefive GmbH

#6063

 SPIE

Oberwiessenstr 5, Zurich, Switzerland, 8057
41 43 538 36 57; fax 41 43 538 36 86
contact@onefive.com; www.onefive.com

Onefive is a global supplier of industry-ready, high-performance low-noise ultrafast and narrow linewidth single-frequency OEM lasers with guaranteed 24/7 operation. The passively air-cooled lasers are as user-friendly as a laser pointer, featuring true one-button operation. The product portfolio contains femtosecond and picosecond lasers in the 266nm to 1560nm range, as well as tunable single-frequency lasers with kHz linewidth for commercial, OEM and scientific applications. Contact: Gabriel Spuehler, Chief Technology Officer.

Ontario Photonics Industry Network - OPIN

#6098

2625 Queensview Dr Ste 200, Ottawa, ON, Canada, K2B 8K2
613/726-3430 ext. 4233; fax 613/726-3424
john.fielding@oce-ontario.org; www.ontariophotonics.com

New Product: Photonics Cluster Network.

OPIN is a joint initiative between the Ontario Photonics Technology Industry Cluster, OPTIC and The Ottawa Photonics Cluster, OPC. The OPIN vision is to become a sustainable, integrated, industry-led network of photonics related people, companies and organizations in Ontario that interact closely, share ideas and expertise within and across academic/industry boundaries and strive for mutual success. Contact: John Fielding, Business Development Manager, Centre for Photonics; Don Wilford, Managing Director, Centre for Photonics, don.wilford@oce-ontario.org.



Innovation you can see

Oerlikon Optics has been your reliable partner for innovative optical solutions for over 60 years. Together with our customers, we turn visions into a reality and shape technological progress. The Optics Business Unit possesses comprehensive know-how in optical thin films, glass processing, lithography, and the production of optical subassemblies.

www.oerlikon.com/optics

Europe/Headquarters Balzers/Liechtenstein sales.optics@oerlikon.com T +423 388 4444	USA Golden/Colorado sales.optics.go@oerlikon.com T +1 303 273 9700	Asia Shanghai/China sales.optics.sh@oerlikon.com T +86 21 5057 4648
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Visit us at:
Photonics West 2008
San Jose, CA, Booth #1700

oerlikon
optics

ON-TRAK Photonics, Inc.

#1243

26782 Vista Terrace, Lake Forest, CA, 92630
949/587-0769; fax 949/587-9524
info@on-trak.com; www.on-trak.com

On-Trak Photonics is a manufacturer and distributor of position sensing detectors and support electronics. North American distributor for Sitek Electro-Optics. Contact: Dave Hunnicutt, Director of Sales, dave@on-trak.com.

Onyx Optics Inc.

#740

6551 Sierra Ln, Dublin, CA, 94568
925/833-1969; fax 925/833-1759
lreo@onyxoptics.com; www.onyxoptics.com

Onyx Optics' product capabilities include Adhesive-Free Bonded (AFB®) crystal and glass laser components such as laser rods, slabs, disks and waveguiding structures. We work with materials such as doped and undoped YAG, YLF, YVO4, sapphire, diamond and spinel, as well as many others. Our patented composite technology enables higher efficiency, more compact and higher power solid state laser and photonic devices. Contact: Lesley Reo, Sales & Marketing Manager.

OP Mount Instrument Inc.

#6432

16 Lane 717 Lunghsing Rd, Chung Li, Taiwan, 320
886 3 4379 081; fax 886 3 4367 560
opmount@opmount.com.tw; www.opmount.com.tw

OPCO Lab., Inc.

#519

704 River St, Fitchburg, MA, 01420-2913
978/345-2522; fax 978/345-5515
info@opcolab.com; www.opcolab.com

New Product: Diffraction Gratings, ruled and holographic, with high efficiency and low stray light.

OPCO Laboratory, Inc. is your single source for your most demanding and cost-effective optical, coating and replication requirements. We provide design services, prototype and high volume production solutions to commercial and defense markets worldwide. As a full service in-house manufacturer, we can provide a wide range of high precision lenses, mirrors, diffraction gratings, turn key optical assemblies and coating and replication services. Contact: Robert Moody, Director Sales & Marketing, rmoody@opcolab.com.

Photonics West Exhibitor Directory

Ophir-Spiricon

#834

60 W 1000 N, Logan, UT, 84321
435/753-3729; fax 435/753-5231
sales@ophir-spiricon.com; www.ophir-spiricon.com

New Product: Ergonomic Universal Power/Energy Meter with Computer Connectivity & COLOR DISPLAY!

Laser power/energy meters and beam profilers for lasers and optical devices from UV - FIR. Products include software, full spectrum cameras and Thermopile, Pyroelectric & Photodiode detectors covering pJ to KW. Complete OEM capabilities for all your custom applications! Contact: Kenneth Ferree, Vice President Sales.



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Opnext, Inc.

#6181



104 Treemonte Dr, Orange City, FL, 34763
386/774-2404; fax 386/774-2403
info@opnext.com; www.opnext.com

New Product: Opnext introduces a new laser diode for miniature display and medical sensor applications.

From the latest communications networks to new security systems and from major advances in medical systems to high-demand consumer electronics, Opnext (NASDAQ: OPXT) laser technologies add the spark of innovation to a world of new applications. The company's industry expertise, future-focused thinking and commitment to research and development combine in bringing to market solutions that are ready for the next generation of laser-based products. For additional information, visit www.opnext.com. Contact: James Brown, Director, North America Sales, JBrown@Opnext.com; Bob Murphy, Director, Business Development, BMurphy@Opnext.com.

OPOTEK, Inc.

#1240

2233 Faraday Ave Ste E, Carlsbad, CA, 92008
760/929-0770; fax 760/929-8782
opotek@opotek.com; www.opotek.com

New Product: Opolette 100: 100Hz, tunable 410-2400nm or 2.65-3.15 micron; Opolette HE: 40% increase in energy.

Manufacturer of efficient, compact and broadly tunable solid-state laser systems based on its Optical Parametric Oscillators (OPO). These products stand out in their efficiency, reliability and robustness. Applications include photochemistry, photobiology, medical diagnostics, spectral imaging and environmental monitoring. The systems are computer controlled and simple to use. Contact: Eli Margalith, Ph.D., President, elimar@opotek.com; Lam Nguyen, Ph.D., Applications Scientist, lkguyen@opotek.com.

Optec S.p.A.

#515

Via Mantegna 34, Parabiago, Italy, I-20015
39 029 149 1945; fax 39 029 149 5091
gcilia@optec-spa.com; www.optec-spa.com

OptecNet Deutschland e.V.

#1801

Garbsener Landstrasse 10, Hannover, Germany, 30419
49 511 277 1290; fax 49 511 277 1299
optecnet@optecnet.de; www.optecnet.de

OptecNet Deutschland e.V. is the association of the nine regional Competence Networks for Optical Technologies HansePhotonik, OptecBB, PhotonNet, OpTech-Net, Optence, OptoNet, PhotonAix, PhotonicsBW and bayern photonics. Contact: Sieglinde Hartmann, Assistant to the Board of Directors, info@optecnet.de.

Optek Systems

#6084

111 Smith Hines Rd Ste C, Greenville, SC, 29607
864/272-2640; fax 864/272-2630
osi@opteksystems.com; www.opteksystems.com

New Product: OpTek now features a laser processing facility in North America. Outsource R&D thru to production.

OpTek Systems provides precision laser materials processing. Featuring sub-contract machining services, process development and fully automated laser machining centers for volume production. Applicable to fiber optics, biophotonics, medical device, opto-electronics, micro-electronics, semiconductor, automotive as well as universities and researchers. Visible to UV lasers facilitate micromachining of most materials including metals, glass, polymers, plastics, ceramics and quartz. Contact: Andrew Webb, Vice President Sales, andy.webb@opteksystems.com; Gideon Foster-Turner, Head of Business Development, gideon.ft@opteksystems.com.

Op-Test

#6615



630 Twin View Blvd, Redding, CA, 96003
530/242-0527; fax 530/242-0568
dmorrow@op-test.com; www.op-test.com

New Product: CUBE: A modular testhead integrating spectral, vision & electrical production tests of HBLED & VCSEL.

Op-Test specializes in the art and science of high speed automated Optical testing. Focusing on production test environments, our High Brightness Light Emitting Diode (HBLED) and Vertical Cavity Surface Emitting Laser (VCSEL) Test Systems combine quick and accurate electrical and optical measurements with proven handling systems and high throughput data handling to provide complete turnkey solutions for volume testing requirements. Contact: Dan Morrow, Business Development; Jonathan Dummer, Chief Technical Officer, jdummer@op-test.com.

Opti Temp, Inc.

#2017

484 W Welch Ct, Traverse City, MI, 49684
231/946-2931; fax 231/946-0128
information@optitemp.com; www.optitemp.com

OPTI TEMP provides a wide range of innovative heat transfer solutions for the laser, semiconductor and medical industries. Offering a complete line of re-circulating chillers, heat exchangers, water quality systems and fluid treatments, OPTI TEMP has the right solution for your liquid temperature control needs. Choose from our standard line of products or work with our experienced engineers to obtain a solution tailored to your specific application requirements. Contact: Rob VanSumeren, Sales & Marketing Manager.

Optical Comb, Inc.

#6382

Tokyo Tech Yokohama Venture Plaza W103 4259-3,
Nagatsuta-cho, Midori-ku Yokohama, Japan, 226-8510
81 45 982 2213; fax 81 45 982 2215
info@optocomb.com; www.optocomb.com



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.



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No tracking error for speeds beyond any analog or digital PID servo
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**Everything else is just
smoke (and mirrors)**

 **Cambridge Technology**

25 Hartwell Avenue, Lexington, MA 02421 USA / Tel: (781) 541-1600

www.cambridgetechnology.com

Photonics West Exhibitor Directory

Optical Filter Source, LLC

#5135



10109 McKalla Pl Ste F, Austin, TX, 78758
512/248-0605; fax 512/491-8735
sales@ofs-online.com; www.ofs-online.com

New Product: R&D Specialists: Excellent product development assistance. Proven track record for success.

Thin film coating service provider located in Austin, Texas. We provide thin film coatings on polymer, metal and glass components. Coatings include: AR, beamsplitter and metallic coatings. Custom coatings to fit your unique requirements. Experienced with prototype thru OEM volumes. Coatings available from the UV to the IR. A combination of in-house processing and strategic suppliers enables OFS to provide complete optical components for your turn-key requirements. Contact: Frank Calcagni, Sales, frank@ofs-online.com; Jan Confalone, Vice President-Administration, jan@ofs-online.com.

Optical Research Associates

#1501



3280 E Foothill Blvd Ste 300, Pasadena, CA, 91107
626/795-9101; fax 626/795-9102
info@opticalres.com; www.opticalres.com

New Product: LightTools 6.0 delivers enhanced illumination design modeling and optimization capabilities.

Optical Research Associates will exhibit two optical design software products. LightTools® provides virtual prototyping, simulation, optimization and photorealistic renderings of precision illumination systems. CODE V® has state-of-the-art capabilities for lens optimization, analysis, tolerancing, beam propagation and coupling efficiency. Engineering services will also be exhibited. Contact: Stuart David, North American Sales Manager; John Tamkin, Director of Engineering, engr@opticalres.com.

Optical Society of America

#3025

2010 Massachusetts Ave NW, Washington, DC, 20036
202/223-8130; fax 202/223-1096
info@osa.org; www.osa.org

Stop by the OSA booth to pick up materials on OFC/NFOEC and CLEO/QELS/PhAST. OFC/NFOEC (www.ofcnfoec.org) is February 24 - 28, 2008, in San Diego, California, USA. CLEO/QELS (www.cleoconference.org) and PhAST (www.phastconference.org) is May 4 - 9, 2008, in San Jose, California, USA. These events feature world renowned keynote speakers, technical programming, short courses, business sessions and over 300 exhibiting companies at CLEO and 600 exhibiting companies at OFC. Contact: Melissa Russell, Director of Sales, cleosales@osa.org.

Optical Support, Inc.

#5064



11751 E Timrod St, Tucson, AZ, 85748
520/546-0642; fax 520/203-0228
msavard@opticalsupport.biz; www.opticalsupport.biz

Optical Support provides opto-mechanical engineering services. We work with teams of optical and manufacturing engineers to design hardware to support optical systems, provide designs and documentation to facilitate manufacturing of mechanical and optical components. We provide optical and mechanical drawing packages and optomechanical expertise to facilitate manufacturing. Contact: Michael Savard, President; Skip Savard, ssavard@opticalsupport.biz.

OPTICS 1, Inc.

#221

3050 Hillcrest Dr Ste 100, Westlake Village, CA, 91362
805/373-9340; fax 805/373-8966
info@optics1.com; www.optics1.com

OPTICS 1, Inc.'s uniquely experienced staff has the broad background to design, develop, prototype and manufacture precision electro-optical systems for commercial and government applications. We leverage our expertise in end-to-end system design within the disciplines of optics, electronics, mechanics and software to deliver state-of-the-art integrated systems. Contact: William McGuigan, Director of Engineering, wmcguigan@optics1.com; Dane Hileman, dhilmand@optics1.com.

Optics for Research, Inc. (Division of Thorlabs)

#1138



62 Depot St, Verona, NJ, 07044
973/228-4480; fax 973/228-0915
info@ofr.com; www.ofr.com

New Product: Fiber isolators using SM, PM, MM and LMA fibers. Custom units available with ASE filters and taps.

OFr has been providing innovative optical components for over 30 years. We continue this innovation with our high power fiber isolators with >10W cw power ratings. We offer isolators for SM, PM, MM and LMA fibers. Isolators are also offered with collimated outputs. Units can be customized to include ASE filters, taps and integrated beam expanders. Other new products include OEM isolators for 633nm and 1064nm. Contact: Geetha Abraham, Sales Manager, gabraham@ofr.com.

Optics Technology, Inc.

#348

3800 Monroe Ave, Pittsford, NY, 14534
716/586-0950; fax 716/248-2371
sales@opticstechnology.com; www.opticstechnology.com

Optics Technology, Inc., designs, manufactures and assembles custom application microscope objectives and optical systems up to 30mm in diameter. Wavelength regions span the UV through the far IR. OTI offers rapid design and prototyping working with all optical glasses and crystals, we offer our customers mechanical design and fabrication capabilities as well. OTI has been serving the needs of the defense, industrial, medical and bio-medical industries for over 20 years. Contact: Dominick Polizzi, Sales & Marketing Manager.

optics.org - Optics & Laser Europe

#1135

Dirac House, Temple Back, Bristol, United Kingdom, BS1 6BE
44 117 9297481; fax 44 117 9301178
custserv@iop.org; www.optics.org

IOP Publishing, a not for profit company wholly owned by the Institute of Physics, is one of the largest and most dynamic publishers of physics information in the world. Our publishing activity, which dates back to 1874, includes a wide range of journals, magazines and community websites. We partner more than a dozen international organizations and have a global network of offices located in Bristol, Philadelphia, Washington DC, Munich, St Petersburg, Moscow, Beijing and Tokyo. Contact: Fiona Walker, Exhibitions Manager, fiona.walker@iop.org; Cadi Jones, Advertising Manager, cadi.jones@iop.org.

OptiGrate

#5139

3267 Progress Dr, Orlando, FL, 32826
407/381-4115; fax 407/384-5995
sales@optigrate.com; www.optigrate.com

New Product: Longitudinal and Transverse Chirped Bragg Gratings in PTR glass for CPA and SBC applications.

OptiGrate manufactures volume Bragg gratings (VBGs) in PTR glass for mode selection in lasers, spectral beam combining, optical communication, etc. VBGs for stabilization of semiconductor, solid state and fiber lasers are available for wavelengths from 350 to 2700 nm. Output couplers and high reflective mirrors with spectral bandwidth from 0.03 to 1 nm are manufactured for all laser types. OptiGrate is a pioneer in implementation of VBGs for revolutionary technology of laser projection displays. Contact: Leon Glebov, President and Chief Technology Officer, lbglebov@optigrate.com; Vadim Smirnov, Director of Holography and Diffractive Optics, vsmirnov@optigrate.com.

Optikos Corp

#1442



107 Audubon Road, Bldg. 3, Wakefield, MA, 01880
617/354-7557; fax 617/354-5946
info@optikos.com; www.optikos.com

New Product: The Photometric Camera simulates the human eye by characterizing II tubes, CRT's, LCD's and more.

Optikos Corporation is the world's largest manufacturer of equipment for the measurement of optical image quality and a leading provider of optical product development services. As the world leader in the field of MTF testing, Optikos offers complete solutions for both component and system level tests on imaging systems operating from the ultraviolet to the far infrared. Optikos's product line includes testing suites for measuring the performance of optical and electro-optical imaging systems. Contact: Jamie Hutchins, Vice President, Sales and Marketing, jhutchins@optikos.com; Ryan McDonough, Senior Sales Executive, rmcDonough@optikos.com.

Optikron GmbH

#5015

Löbstedter Strasse 70, Jena, Germany, 07749
49 3641 384 970; fax 49 3641 384 978
info@optikron.de; www.optikron.de

New Product: Micro-optical components/micro prisms down to 0.3 mm with customized optical coatings.

Optikron is a manufacturer of micro-optics, micro-optical assemblies, customized subsystems, mounts and mechanical supports for micro-optics. Our products are mainly used in laser applications, endoscopy, high brightness diode laser modules, modern medicine devices, fiber-optical systems, sensor systems and measuring instruments. Contact: Gerrit Seyffert, Managing Director, seyffert@optikron.de.

Optimax Systems, Inc.

#340



6367 Dean Pky, Ontario, NY, 14519-8939
585/265-1066; fax 585/265-1033
sales@optimaxsi.com; www.optimaxsi.com

Optimax is dedicated to small volume, high quality, and quick delivery of precision optical components. Specializing in aspheres, cylinders, plano-optics and spheres, manufactured to customer-supplied specifications. Final inspection data is provided with the optics. We enjoy a good challenge, call us! Contact: Joe Pinto, Sales Engineer; Joseph Spilman, Sales Engineer.

OptiPro Systems

#330



6368 Dean Pkwy, Ontario, NY, 14519-8939
585/265-0160; fax 585/265-9416
sales@optipro.com; www.optipro.com

New Product: OptiPro UltraForm Finishing (UFF) - Aspherical and Conformal 5-axis CNC Polishing machine.

Fabrication products include CNC Optical Machining Centers and Cad/Cam software for 4/5 axis grinding & polishing of spherical, aspherical and conformal optics. Popular low-cost "eSX 150" is quickly becoming the industry standard for manufacturing complex optical components. Manufacturer and distributor of optical/surface metrology equipment - Electronic Spherometers, Zeiss Surface Profilometers and STIL MicroMeasure non-contact surface measurement systems with resolution to 1 nm. Contact: Mike Bechtold, President, mike@optipro.com.

OptiSource, LLC

#644



102 Mountain Park Pl NW Ste D, Albuquerque, NM, 87114
505/792-0277; fax 505/792-0281
optisource1@msn.com; www.optisourcecellc.com

New Product: Customer specified laser grade windows from 10.0mm to 101.6mm diameters are available.

Manufacturers crystal quartz waveplates in multiple, zero dual or low order; also ultrathin and mica waveplates. Stock and custom optical components include etalons, windows, prisms, lenses, polarizers and rotators. Supplies high-damage threshold mirrors, partial reflectors and beamsplitters. Contact: Ralph Temer, Sales Manager, ralph_optisource@msn.com; Sherry Annan, Technical Sales, sherry_optisource@msn.com.



EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

Optiwave Systems Inc.

#435

7 Capella Ct, Ottawa, ON, Canada, K2E 7X1
613/224-4700; fax 613/224-4706
info@optiwave.com; www.optiwave.com

New Product: Flexible electrode simulation environment to facilitate the design of electro optical waveguides.

Optiwave is the leading provider of innovative software design tools for optoelectronic and optical system engineers, hosting an unparalleled suite of award winning simulation software products. Design advanced passive and non-linear photonic components using sophisticated simulation environments. Plan, test and simulate almost every type of optical link in the physical layer of a broad spectrum of optical networks. Visit optiwave.com for a free evaluation license. Contact: maxwell@optiwave.com.

Optiworks, Inc.

#5120

Mitsuru Plaza 204, 1-2-4 Azuchi-machi, Chuo-ku, Osaka, Japan, 541-0052
81 6 6264 7310; fax 81 6 6264 7310
sales@optiworks.jp; www.optiworks.jp

OptiWorks is independent optics engineering company from Osaka Japan. OptiWorks will propose and provide optical system design, prototyping and production line to all worldwide customers. OptiWorks is organizing a forum on optics engineering and related marketing information. Also OptiWorks will provide optics global supply chain network. Contact: Toshihide Dohi, President; Mie Kitamura.

Photonics West Exhibitor Directory

Opto Diode Corp.

#6078

750 Mitchell Rd, Newbury Park, CA, 91320
805/499-0335; fax 805/499-8108
sales@optodiode.com; www.optodiode.com

New Product: Opto Diode Introduces New Low-Noise, Red-Enhanced, Bi-Cell Photodiode.

Opto Diode Corporation has been supplying the global market with reliable, high quality IR LEDs and custom LEDs in the visible range since 1981. Latest products include high performance photodetectors, both standard and custom devices, manufactured in Opto Diode's domestic, U.S. facility. Opto Diode's signature high standards and uncompromising attention to quality and detail inherent in the LEDs, are now incorporated in the new photodetectors product line. Contact: Russell Dahl, Director, Sales & Marketing, russdahl@optodiode.com.

Optocraft GmbH

#326

Am Weichselgarten 7, Erlangen, Germany, 91058
49 9131 69 15 10; fax 49 9131 69 15 11
info@optocraft.com; www.optocraft.de

Manufacturer of standard and custom wavefront and surface measurement solutions serving the laser, ophthalmic and precision optics markets. Visit booth #326 for demonstrations of ShearCam, SHSCam and SHS Inspect. ShearCam is a low cost collimation tester for LED's and lasers. SHSCam is a Shack-Hartmann sensor offering real time wavefront optimization and acceptance testing of optical systems. SHS Inspect is a highly modular family of instruments for measurement of IOL's, contact lenses and high dynamic range aspheres.

OptoElectronic Components

#6042, 6044



28 Des Lilas, Kirkland, QC, Canada, H9J 4A7
514/694-0336; fax 514/694-8535
sales@optoelectronics.com; www.optoelectronics.com

New Product: Photon Counting Energy Discriminating X-Ray Detectors.

Supplier of single photon counting detector modules with 30ps timing resolution from Micro Photon Devices, TCSPC electronics and software from PicoQuant, EM-CCD and intensified CCD with near Photon Counting capabilities from Photonic Science and Photon Counting Energy Discriminating X-Ray detectors from Gamma Medica-Ideas. Contact: Nick Bertone, President, Nick.Bertone@optoelectronics.com; Natalie Raymond, Marketing, Natalie.Raymond@optoelectronics.com.

Optoelectronic Industry & Technology Development Association (OITDA)

#6343

1-20-10 Sekiguchi, Bunkyo-ku, Tokyo, Japan, 112-0014
813 5225 6431; fax 813 5225 6435
interopt@oitda.or.jp; www.oitda.or.jp

LITERATURE SHOWCASE EXHIBITOR

OptoIndex

#S3

Papier Muehlenweg 74, Ratingen, Germany, 40882
49 2102 1678 0; fax 49 2102 1678 28
info@opto-index.de; www.opto-index.de

Optometrics Corp.

#327

8 Nemco Way, Ayer, MA, 01432
978/722-1700; fax 978/772-0017
sales@optometrics.com; www.optometrics.com

New Product: Wire Grid Polarizers on Germanium, mounted/unmounted; Short & Long Pass edge filters 450-1500 nm.

A world-class manufacturer of optical components and instruments for OEMs and distributors world-wide. Wavelength selection solutions for the Photonics Industry include: original/replicated ruled/holographic gratings for UV-VIS-NIR spectroscopy; echelles, grazing incidence gratings, transmission grating and 50/50 beamsplitters, NUV-VIS-NIR interference filters, neutral density filters & monochromators. New web site. Expanded assembly services. A Dynasil family company. Contact: Jim Falls, Director of Marketing & Sales.

Optonetic LLC

#642

6901 TPC Dr Ste 500, Orlando, FL, 32822
407/857-4410; fax 407/857-4409
sales@optonetic.com; www.optonetic.com

Manufacturer of custom, high precision, high power optical components with fast production turnaround. Provider of thin-film coating services including Low Scattering and High Durability Broadband AR Coatings, High Laser Damage Threshold greater than 5GW/cm² Nd:Yag and Crystal Coatings. Mass production glass & plastic coatings with Ultrasonic Cleaning capability. Fast 24 and 48 hrs delivery. Contact: Trami Nguyen, Sales Representative.

Opto-Precision Pte Ltd.

#6515

11 Toh Guan Rd E #02-01, Singapore, Singapore, 608603
65 6565 1110; fax 65 6565 0012
enquiries@opto.com.sg; www.opto.com.sg

New Product: 1 Wave flatness wedge filter, Optical subassembly, Laser mirrors.

Opto-Precision Pte Ltd is one of the leading providers of optical sub assembly devices, optical component and thin film coating services provider in Asia. We have successfully manufactured many optical thin film components and using the Leybold Ion-assisted evaporative vacuum deposition technology, we have been producing products such as Excitation / Emission filters, Optical Density (OD6) Filters, etc. Off the shelf optics are available. Opto Precision is truly your solutions to optics. Contact: Keigo Tang, Vice President, keigo.tang@opto.com.sg; CK Lim, Operations Manager, ck.lim@opto.com.sg.

OptoSigma Corp.

#1232

2001 Deere Ave, Santa Ana, CA, 92705
949/851-5881; fax 949/851-5058
sales@optosigma.com; www.optosigma.com

OptoSigma Corporation, a global manufacturer of opto-mechanics, manual and motorized positioners, laser grade optics and specialized optical coatings. 1 of 7 manufacturing facilities, OptoSigma, Santa Ana, California, offers optical and mechanical engineering support; over 4000 off-the-components. OptoSigma is your first and last choice for all your needs. Click to get your OptoSigma free catalog. Contact: Dan Denison, Western Region Sales Manager, Dan@optosigma.com.

3D imaging Abstracts Academic Access adaptive optics
Alerts Archival Atmospheric propagation Authoritative Availability
Beam control BibTeX Biomedical Imaging biophotonics BIOS
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Collections Connected CrossRef Diagnostics Displays
e-First EndNote Experts Fast Findability GaN Global Google
Scholar Holography Impact Factor Industry Innovation
INSPEC Interdisciplinary Intuitive IP Journals LASE
Laser Communication Laser Micro-/Nanoengineering and
Applications Laser Sources Laser-Tissue Interaction LCD
LEDs Letters Materials Medline MEMS Metrology
Microfabrication Microscopy MOEMS Multimedia
MySPIE Nanobiophotonics Nanofabrication Nanophotonics
Nanotechnology Networking Nonlinear Optics
Not-for-Profit OCT OLEDs ophthalmology OPTO
Optoelectronics photonic crystals Photonic Integration
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Lasers Seminal Silicon Photonics Spectroscopy Technology
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Your trusted source for the
science and application of light

SPIE 
Digital Library

SPIDigitalLibrary.org

Photonics West Exhibitor Directory

Optoskand AB

#6306

Krokslätts Fabriker 30, Mölndal, Sweden, SE-431 37
46 31 706 2750; fax 46 31 706 2778
info@optoskand.se; www.optoskand.se

New Product: The Square Formed Optical Fiber is aimed for high precision work where the beam shape is critical.

Developing, manufacturing and marketing fiber optical systems for industrial high power lasers. Example of products: Fiber Optic Cables for high power lasers, Incoupling Optics (couplers), External optics (collimating units, focusing units, beam benders). Contact: Magnus Pålsson, Sales & Marketing Manager; Anna Berner, Sales & Marketing Assistant, anna.berner@optoskand.se.

OptoTech Optikmaschinen GmbH

#436

PO Box 131, E Greenville, PA, 18041
215/679-2091; fax 215/679-2013
info@optotech.us; www.optotech.de

Designs, develops and manufactures machinery and new process technology for precision optics and ophthalmics. CNC and conventional high-speed generators and polishers for 01-800mm, 5-axis processing centers, centering/edging, plano/prism, rod, cylinder and aspheric machines, interferometers, autocollimators and software. In-house tool design and manufacture. Also offers consumables, machine parts, repairs and maintenance contracts.

Optowell Co., Ltd.

#6433

308 SPRC, 664-14 Deokjin-dong 1-ga Deokjin-gu, Jeonju-si, South Korea, 561-756
82 63 214 1186; fax 82 63 214 1137
smjeong@optowell.com; www.optowell.com

New Product: Visible 670nm VCSEL 670nm VCSEL chip, TO Can package and Epoxy molded package.

As a top expert and manufacture of VCSEL, we have 7 years of history of this field. We, Optowell are focusing the VCSEL, GaAs PD and RCLED product. From epi wafer and chip to various packaged VCSEL you can meet high quality products with low price. Contact: Seonmi J, Marketing Coordinator; Hojin Jang, Technical Sales, hojin@optowell.com.

Optronic Laboratories, Inc.

#1113

A Gooch and Housego Co, 4632 36th St, Orlando, FL, 32811
407/422-3171; fax 407/658-5412
info@olinet.com; www.olinet.com

New Product: OL 490 Agile Light Source.

Optronic Laboratories designs and manufactures industrial and research-grade light measurement instrumentation. For over 35 years, clients have received the industry's highest quality modular systems, standards and accessories. Optronic Laboratories specializes in Scanning Spectroradiometers, Multichannel Spectroradiometers, LED Test & Measurement Systems, Radiometer/Photometers, Integrating Sphere Systems, NIST-Traceable Standards, Calibration and Measurement Services. Contact: Alex Fong, Vice President, Sales & Marketing, afong@olinet.com; Chris Rapp, Senior Applications Engineer, chris@olinet.com.

Optronics Co., Ltd.

#5040

Sanken Bldg, 5-5 Shin Ogawamachi, Shinjuku-ku Tokyo, Japan, 162-0814
81 3 3269 3550; fax 81 3 5229 7253
intl@optronics.co.jp; www.optronics.co.jp

Orbits Lightwave, Inc.

#6534

101 Waverly Dr, Pasadena, CA, 91105
626/795-0667; fax 626/546-7946
sales@orbitlightwave.com; www.orbitlightwave.com



GENERAL REFRESHMENTS SPONSOR

OSI Optoelectronics, Inc.

#214

12525 Chadron Ave, Hawthorne, CA, 90250
310/978-0516; fax 310/644-1727
info@osioptoelectronics.com; www.osioptoelectronics.com

OSI Optoelectronics is the global leader in design and manufacture of high performance standard and custom Silicon and InGaAs photodiodes as well as a host of optoelectronic components and sub-assemblies for aerospace and defense, security and inspection systems, medical, communications and industrial automation applications. The company also offers added value turnkey electronics and box build in state-of-the-art manufacturing facilities worldwide. Contact: Robert Garton, Regional Sales Manager, sales@osioptoelectronics.com; Steven Cuffel, Vice President Sales, sales@osioptoelectronics.com.

OSRAM Opto Semiconductors

#1833

21800 Haggerty Rd Ste 115, Northville, MI, 48167
248/277-8018; fax 248/596-0395
www.osram-os.com

New Product: SMT Laser the world's smallest and first surface-mountable high-power laser for continuous wave mode.

OSRAM Opto Semiconductors, a leading supplier and manufacturer of solid-state optoelectronic products including high power laser diodes, infrared components and LEDs, will exhibit their latest laser diode products and infrared components. To learn more about our new SMT laser technology, Cs mounts and microchannel cooled vertical stacked diode laser arrays, laser bars, pulsed laser diodes and various infrared product offerings visit us in booth #1833. Contact: Rolf Kojima, rolf.kojima@osram-os.com; Sevugan Nagappan, sevugan.nagappan@osram-os.com.

OWIS GmbH

#1801

Im Gaisgraben 7, Staufen, Baden-Wuerttemberg, Germany, 79219
49 7633 950 40; fax 49 7633 950 444
awi@owis.eu; www.owis.eu

More than 25 years of experience in developing and producing optical beam handling components and highly precise positioning systems for R&D and industrial applications. A new production line with modern machines which enable the manufacturing of high-quality products as standard as well as customized solutions for photonics. With the goal to ensure consistent customer service. Contact: HJ Kiefer, Sales Manager OWIS Overseas, hjk@owis.eu; S Husariu, General Manager PLE, sabinh@plequipment.com.

OXIDE/NIMS

#5104

1747-1 Mukawa Hokuto, Yamanashi, Japan, 408-0302
81 551 26 0022; fax 81 551 26 0033
furukawa@opt-oxide.com; www.opt-oxide.com

OXIDE Corporation was established in Oct. 2000. We provide different type of oxide single crystals such as Super LT/LN, GdVO₄, YVO₄, CLBO, BBO, SBN, BGO, DAST and newly developed Mg:PPLT, Mg:PPCLN devices for a wide variety of optical applications. They are based on the inventions at National Institute of Materials Science and now we start to produce optical module products. If you have any request, please contact: Yasunori Furukawa, President; Masa Miyauchi, International sales and Marketing, masa@opt-oxide.com.

OXXIUS

#6296

4 Rue Louis de Broglie, Lannion, France, F-22300
33 2 96 48 70 28; fax 33 2 96 48 21 90
info@oxxius.com; www.oxxius.com

New Product: High power, ultra-stable single-frequency & low noise DPSS lasers (473, 532, 561 nm).

Oxxius manufactures ultra compact, extremely stable Diode Pumped Solid-State (SLIM) and Diode Laser (Oxxius Violet) modules in the visible and ultraviolet wavelength range (at 561, 532, 473, 445, 405 and 375nm).

The patented Alignment-free Monolithic Resonator technology assures stable, noise-free single-frequency operation with unmatched efficiency. These features of the SLIM-series ensure superior performance in biomedical, analytical, interferometric or sensing applications. Contact: Bruno Acklin, US Business Unit, General Manager, backlin@oxxius.com; Bruno Lefèvre, Europe & Asia Sales Director, blefevre@oxxius.com.

OZ Optics Ltd.

#1127



West Carleton Industrial Park, 219 Westbrook Rd, Carp, ON, Canada, K0A 1L0

613/831-0981; fax 613/836-5089

sales@ozoptics.com; www.ozoptics.com

Distributed Temperature and Strain Sensors, Fiber Length Meter, Fault-Fibers, Smart Patchcords & Wireless Fiber for Power and Wavelength Monitoring, Fiber Lasers, High Power Patchcords, High Power Connectors with Shutters, EDFA's, Extinction Ratio Meters, Stable Turnkey LED/LD Light Sources, Directional Taps/Power Monitors, Fixed/Variable/Digital Attenuators, Mini-Power Meters, Faraday Mirrors/Rotators, Polarization Maintaining Patchcords/Connectors/Splitters, PM/SM/MM Fused Fiber Couplers, Polarization Rotators/Controllers/Analyzers, Polarizing Splitters/Combiners, Laser to Fiber Delivery Systems, Optical Delay Lines, Polarization Rotators/Controllers/Analyzers, Polarizers, RGB Combiners, U-Brackets, V-Grooves, Hermetically Sealable Patchcords, Isolators, Collimators/Focusers, Circulators. Contact: Omur Sezerman, Chief Executive Officer and President, sales@ozoptics.com.

P&P Optica

#6098

330 Gage Ave Ste 11, Kitchener, ON, Canada, N2M 5C6
519/576-0007; fax 519/576-0885
sales@ppo.ca; www.ppo.ca

New Product: HISPPEC spectrometers offer 50,000:1 SNR, slit lengths up to 12 mm and aberration controlled optics.

P&P Optica's high performance, non-scanning, UV, VIS and NIR spectrometers are built to increase useful optical signal and eliminate noise. Our CCD spectrometers include: high performance optical, multichannel, imaging and Raman spectrometers. Our models use volume phase holographic - VPH gratings which provide average absolute diffraction efficiency above 80%. Our clients use these low aberration spectrometers in fluorescence spectroscopy, Raman, LIBS, OCT and other biomedical applications. Contact: Olga Pawluczyk, President, olga@ppo.ca; Romek Pawluczyk, Chief Scientist, romek@ppo.ca.

Pacific Coast Optics

#6707

1361 E Edinger Ave, Santa Ana, CA, 92705
714/835-1888; fax 714/835-6510
www.pcoptics.com

Specializing in design, development, and mfg of precision optical systems or components of virtually any form...spherical, cylindrical, conic or aspheric type, .040" to 24" diameters, UV to IR. We manufacture prototype lenses and volume production quantities. Our dedicated cylinder dept houses equipment unique to PCO. Other departments include spherical, flat, high-speed, thin film and assembly. We also have an extensive library of spherical and cylindrical test plates. Contact: Steven DiAnda, President, skdianda@pcoptics.com; Peter Moyes, Project Manager, pmoyes@pcoptics.com.

Pacific Rim Optical

#6258

141 E Cascade Blvd Ste 208, Sisters, OR, 97759
541/549-0770; fax 541/549-0769

billp@pacificrimoptical.com; www.pacificrimoptical.com

Large Chinese manufacture with USA headquarters and USA design and engineering. Best of both worlds, Asia pricing with USA engineering, design and service. Contact: Bill Phelan, Senior Sales Engineer; Eric Ye, General Manager, eric@pacificrimoptical.com.

Pacific Silicon Sensor Inc.

#6015

5700 Corsa Ave Unit 105, Westlake Village, CA, 91362
818/706-3400; fax 818/889-7053

www.pacific-sensor.com

New Product: A new series of PINs and APDs enhanced for the "blue" region and 1064nm.

Providing a full range of silicon PINs and Avalanche Photodiodes, Position Sensors and optoelectronic modules for the Medical, Industrial, Military/Aerospace, Security and Automotive markets. Contact: Mark Nicklas, Vice President Sales and Marketing, mnicklas@pacific-sensor.com; Barry Jones, Chief Executive Officer, bjones@pacific-sensor.com.

Paradigm Lasers, Inc.

#5082



1620 N Mamer Rd Ste C-100, Spokane Valley, WA, 99216
509/232-2040; fax 509/232-1947

info@paradigmlasers.com; www.paradigmlasers.com

New Product: Paradigm will be unveiling its latest innovation. You have got to see this!

Paradigm Lasers, Inc. designs, develops and manufactures diode pumped, solid-state, laser solutions from pump modules and drive electronics to fully integrated systems, incorporating our unique, patented, radial pumping technology. Our modular designs with scalable power and high brightness technology are certain to meet your requirements. Additional products include the PolaScope, and intuitive tool for measuring & displaying polarization and Night Sun night vision products. Contact: Judy Irwin, Vice President, judi@paradigmlasers.com; Judy Irwin, President, judi@paradigmlasers.com.

Parker domnick hunter

#6388

5900-B Northwoods Pkwy, Charlotte, NC, 28269
800/345-8462; fax 704/921-1960

industrialusa@domnickhunter.com; www.domnickhunter.com

New Product: Hyperchill Process Chillers for the Laser Industry and MAXIGAS Nitrogen Gas Generators.

Manufacturer of OEM specific process water chillers for the laser industry, on-site nitrogen gas generators for laser cutting and high-purity metal cutting and compressed air treatment products. Contact: Brett Maiorano, Market Development Manager, brett.maiorano@parker.com; Robert Tucker, Market Development Manager, robert.tucker@parker.com.

Pavilion Integration Corp.

#2013



2380-F Qume Dr, San Jose, CA, 95131
408/453-8801; fax 408/453-8802

info@pavilionintegration.com; www.pavilionintegration.com

Photonics West Exhibitor Directory

PD-LD, Inc.

#6138

30-B Pennington-Hopewell Rd, Pennington, NJ, 08534
609/564-7900; fax 609/564-7901
info@pd-ld.com; www.pdld.com

New Product: LUXXMASTER WAVELENGTH STABILIZED 785nm RAMAN SOURCE.

PD-LD, Inc. provides LuxxMaster based upon volume Bragg gratings technology. This technology uses photo-sensitive glass to produce filters to stabilize laser wavelength; narrow the absorption envelope and improve wavelength accuracy. We offer coaxial pigtailed or receptacle short and long wavelength (635-1550nm) lasers, LED's (850-1310nm), CWDM pigtailed laser diodes and detectors (400-1700nm) in both standard and custom packages. Bi-Directional modules. Visit our web site at www.pdld.com. Contact: Neal Stoker, Director of Marketing, nstoker@pd-ld.com; Tom DeBerardine, Director of Sales, tomd@pd-ld.com.

The Pennsylvania State University, Industrial Research Office

#6259

119 Technology Center, University Park, PA, 16802
814/865-9519; fax 814/865-5909
www.iro.psu.edu

Penn State is one of the nation's premier research universities, ranked by the NSF as second in industry-sponsored research. The Industrial Research Office is available to help companies access research opportunities from many University centers such as the Materials Research Institute and the Electro-Optics Center. These groups focus on advances in materials science, electro-optic materials design/process, sensors, lasers, fiber optics and photonics, as well as education and outreach. Contact: Tanna Pugh, Director, iro@psu.edu.

PerkinElmer Optoelectronics

#6014

35 Congress St, Salem, MA, 01970
978/224-4100; fax 978/745-0894
opto@perkinelmer.com; www.optoelectronics.perkinelmer.com

PerkinElmer, Inc.

#1241

710 Bridgeport Ave, Shelton, CT, 06484
203/925-4602; fax 203/944-4914
productinfo@perkinelmer.com; www.perkinelmer.com
PerkinElmer helps scientists worldwide through application-focused measurement solutions: materials characterization, environmental, forensics, pharmaceutical, food & beverages and chemical/hydrocarbon processing. PerkinElmer's EcoAnalytix initiative addresses the global imperatives of food safety, water quality and biofuels development. EcoAnalytix goes beyond analytical instrumentation to include training, SOPs, regulatory leadership, community outreach and industry collaboration. Contact: Steffen Ball, Regional Sales Manager, steffen.ball@perkinelmer.com.

PFG Optics

#144

733 Bienville Blvd, Ocean Springs, MS, 39564-2842
228/875-0165; fax 228/875-9354
sales@pfgoptics.com; www.pfgoptics.com

PFG Optics is an ISO 9001:2000 certified manufacturer of precision optics, coatings and assemblies from UV to Near-IR wavelengths. Our specialties include high index, high included angle and truncated lenses using the latest CNC milling, shaping, polishing with MRF finishing and edging technology. Double sided and planetary polishing for prisms, windows, wedges and filters. Custom vacuum-deposited and Ion-assisted coatings. Assemblies include Telecentric, Eyepiece, Scan and Imaging Lenses. Contact: Colin Green, Vice President Sales, cody@pfgoptics.com.

PHASICS SA

#1311

Xtec Batiment 404, Campus de l'Ecole Polytechnique Route de Saclay, Palaiseau, France, 91128
33 1 69 33 3083; fax 33 1 69 33 3044
serra@phasics.fr;

PHASICS manufactures wave front sensor based on the innovative technology: 4-wave lateral shearing interferometry. The very high resolution (up to 400 x 300 simultaneous measurement points) offers the optimal features for laser characterization and optical metrology. PHASICS also proposes adaptive optics loop for laser spot optimization and beam shaping. Contact: Raphaël SERRA, Technical Sales engineer, contact@phasics.fr.

Phoenix Infrared

#5115

3 Foundry St, Lowell, MA, 01852
978/458-8328; fax 978/458-8414
sales@phoenixinfrared.com; www.phoenixinfrared.com

New Product: Experts in CVD materials - ZnSe, MS ZnS material in blank, generated, polished and coated form.

Recognized world leader in CVD produced materials. Phoenix Infrared personnel have been producing ZnSe materials since the late 1960s. Phoenix Infrared offers Zinc Selenide (ZnSe), Germanium (Ge), Multispectral Zinc Sulfide (MS ZnS) in blank, generated, polished and coated form. We've expanded our material offerings to include Silicon, GaAs, CaF2, BaF2 and other materials. Contact: Stephen Allen, Vice President, Stephen.Allen@PhoenixInfrared.com.

Photek, Ltd.

#332

26 Castleham Rd, St Leonards-on-Sea, E Sussex, United Kingdom, TN38 9NS
44 1424 850 555; fax 44 1424 850 051
sales@photek.co.uk; www.photek.co.uk

New Product: HRPCS, high resolution photon counting camera system.

Photek is a specialist manufacturer of vacuum based tubes and camera systems for photon detection. Our product range includes; Camera Systems, Image Intensifiers, Photomultiplier Tubes, Streak Tubes plus a range of associated electronics. We are experts in large area and ultra-high speed imaging and advanced photon counting camera systems. Contact: Ian Cox, Sales and Marketing Manager, ian.cox@photek.co.uk; Mike Pavia, US Sales, Pavia@sydorinstruments.com.

Photodigm, Inc.

#6264

1155 E Collins Blvd Ste 200, Richardson, TX, 75081
972/235-7584; fax 972/235-1609
info@photodigm.com; www.photodigm.com

Photon Control

#6252

8363 Lougheed Hwy, Burnaby, BC, Canada, V5A 1X3
604/422-8861; fax 604/422-8418
sales@photon-control.com; www.photon-control.com

New Product: NIR Spectrometer 900-1700nm, High Performance UV Sensitive Back Thinned CCD Spectrometers.

Photon Control designs and manufactures compact spectrometers and spectroscopy accessories for R&D and industrial applications. We also design custom spectroscopy solutions as well as optical sensors for harsh environments such as semiconductor processing, power utilities and Oil and Gas industries. Contact: Brian Dewan, Product Manager, bdewan@photon-control.com; Ivan Melnyk, Chief Operations Officer, imelnyk@photon-control.com.

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Photon Design

#5030



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44 1865 324990; fax 44 1865 324991
pdadmin@photond.com; www.photond.com

New Product: PICWave - photonic IC circuit simulator for modelling both passive and active components.

Photon Design, founded in 1992, provides a wide range of photonics modelling software for integrated and fibre-based component design. Products include FIMMPROP-our revolutionary bi-directional optical propagation tool, PICWave our innovative new photonic IC circuit simulator, CrystalWave-a complete photonic crystal simulator, OmniSim-a general purpose 3D FDTD simulator and CLADISS-2D- a powerful laser-diode/TWA model. Contact: Dominic Gallagher, Chief Executive Officer, info@photond.com; Klearchos Chaloulos, Technical Support, kchaloulos@photond.com.

Photon Engineering, LLC

#516



440 S Williams Blvd Ste 106, Tucson, AZ, 85711
520/733-9557; fax 520/733-9609
info@photonengr.com; www.photonengr.com

New Product: FRED Turbo features multi-threaded raytrace algorithms for the fastest non-sequential raytracing.

FRED Optical Engineering Software is the premier proven software to visualize and solve today's optical and illumination problems. FRED uses today's latest software tools and multi-threaded algorithms to help you design and analyze optical and illumination systems faster. FRED's 3D virtual prototyping CAD environment is unparalleled in reducing product development time and costs. Contact: Carolyn Johnson, Sales Manager, sales@photonengr.com.

Photon Etc Inc.

#6098

Pavillon JA Bombardier, 5155 Decelles Ave, Montreal, QC, Canada, H3T 2B1
514/340-5789; fax 514/385-9555
info@photonetc.com; www.photonetc.com

New Product: The Hyperspectral Imager delivers very narrow band images with high efficiency and fast scan time.

Photon etc. develops and manufactures spectral analysis and calibration instruments as well as optical filters. Our new technology provides sub-nm bandwidths for fixed and tunable wavelength configurations from UV to NIR. Our main products include Hyperspectral Imagers, Tunable Sources, Monochromators, Fixed and Tunable Notch Filters, Multiband and Multinotch Filters, and custom optical systems for various applications. Suitable for bio-medical imaging, nanotechnology, astronomy, and more. Contact: Kim Thay Kaing, Sales and Marketing, kim@photonetc.com; Sebastien Blais-Ouellette, President, sbo@photonetc.com.

Photon Gear, Inc.

#6093

245 David Pkwy, Ontario, NY, 14519
585/265-3360; fax 585/265-3364
sales@photongear.com; www.photongear.com

Photon Gear specializes in the design, assembly and characterization of high-precision optical systems. Custom lens assemblies are verified with interferometric test capabilities from 266 nm to 1600 nm. Supported application areas include semiconductor inspection and processing, military, metrology, biomedical, laser scanning and polymer optics. We also provide contract optical engineering and optical design services as well as systems engineering support for custom software and optical hardware. Contact: Gary Blough, President, blough@photongear.com.

Photon Inc.

#116

6878 Santa Teresa Blvd, San Jose, CA, 95119-1205
408/226-1000; fax 408/226-1025
beam@photon-inc.com; www.photon-inc.com

New Product: Get Real-Time M-Squared with the fast and highly accurate ModeScan 1780.

Photon manufactures instruments that measure the spatial properties of light from virtually any light source-including LEDs-with exceptional accuracy, repeatability and reliability. Photon systems provide complete spectral response from <200nm to >20µm, for applications in the UV, visible, near- to far-infrared. They also characterize pulsed and CW beams for fast and accurate analysis of near- and far-field irradiance distribution patterns, providing laser beam and optical fiber parameters. Contact: Derrick Peterman, Sales Engineer, dpeterman@photon-inc.com; Bill Hammer, Sales Engineer, bhammer@photon-inc.com.

Photon Systems, Inc.

#1733

1512 Industrial Park St, Covina, CA, 91722
626/967-6431; fax 626/967-5813
r.reid@photonsystems.com; www.photonsystems.com

Photonic Cleaning Technologies

#3023



PO Box 435, Platteville, WI, 53818
608/348-7353; fax 608/467-5397
sales@photoniccleaning.com; www.photoniccleaning.com

Photonic Cleaning Technologies manufactures First Contact™ Polymer products, the next generation of optics cleaning and protection materials. The only 'cleaning and protection system' in a bottle, apply First Contact™ by spraying, dipping or manually. Easy to use, environmentally friendly, safe and effective. We provide complete manual spray systems and brush application kits. Available worldwide from authorized distributors, see the Independent Distributors page on www.PhotonicCleaning.com. Contact: Philip Jackson, jacksonp@photoniccleaning.com.

Photonic Lattice Inc.

#6434

Aoba Incubation Square, Aramaki Aza-Aoba, Sendai Miyagi, Japan, 980-0845
81 22 726 2076; fax 81 22 726 2078
info@photonic-lattice.com; www.photonic-lattice.com/en

New Product: UV Polarizer (266nm); 2D Optical Stress Analysis System; Radial & Azimuthal Polarization Elements.

Photonic Lattice, Inc is a venture company based in Japan that undertakes the R&D, design, prototyping and fabrication of photonic crystal polarization elements and micro-arrays. In addition Photonic Lattice, Inc develops optical instruments and modules incorporating such elements. We welcome inquiries regarding custom solutions. For further details refer to <http://www.photonic-lattice.com/en/>.

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Photonic Products Ltd.

#6041



Pierce Williams, Sparrow Lane, Hatfield Broad Oak Herts, United Kingdom, CM22 7BA
44 1279 717170; fax 44 1279 717171
sales@photonic-products.com; www.photonic-products.com

New Product: 532nm green TEC laser module gives stability and wavelength precision for industrial and laboratory use.

Photonic Products is an ISO9001:2000 certified UK manufacturer of laser modules, laser diode assemblies, electro-optical subassemblies and precision machined components which deliver performance and manufacturing efficiencies to OEM companies in industrial, medical, scientific and defence markets. Photonic Products is an authorised distributor of premium industrial laser diodes and optical lens from Sanyo, Sony, Opnext and Panasonic. Photonic Products is a StockerYale (NASDAQ: STKR) company. Contact: David Stephen, Sales Manager, USA, Canada and South America, salesusa@photonic-products.com; Paul Bonsi, Sales Manager, NW USA and Western Canada, salesusa@photonic-products.com.

Photonics Cluster Netherlands

#6278

Prins Bernhardstraat 64, Koudekerk a/d Rijn, The Netherlands, 2396 GN
31 6 286 26 15354
info@photonicscluster-nl.org; www.photonicscluster-nl.org

Photonics Cluster Netherlands (PCN) is the Dutch platform in the field of Photonics. Founded in May 2006, PCN has a growing network with other international Photonics Clusters and initiatives which play an important role in promoting Photonics as an enabling technology. PCN is the gatekeeper that directs foreign companies to partners (companies and universities) in Photonics in the Netherlands. Contact: Guus Taminiau, Secretary; Bart Snijders, Chairman.

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Photonics Industries International, Inc.

#721



390 Central Ave, Bohemia, NY, 11716
631/218-2240; fax 631/218-2275
info@photonix.com; www.photonix.com

New Product: High Power air-cooled small form factor nanosecond and picosecond regenerative amplified lasers.

Photonics Industries International, Inc. develops and manufactures a wide range of DPSS laser systems for industrial and scientific applications. Conventional nanosecond, picosecond, modelocked and regenerative amplified TEM00 lasers are available in Nd:YAG, Nd:YLF and Nd:YVO4. Output powers range from 100mW-150W at 1064nm, 100mW-100W at 532nm, 50mW-40W at 355nm and 5mW-10W at 266nm; pump lasers up to 60mJ at 1kHz at 527nm; Eye-safe, OPO, Ti:Sapphire tunable lasers are also available. Contact: Matt Corrello, Sales Director, mcorrello@photonix.com; Joyce Kilmer, Marketing Director, jkilmer@photonix.com.

Photonics Industry & Technology Development Association (PIDA)

#5131

5th Fl, 9 Roosevelt Rd Sec 2, Taipei, Taiwan, 100
886 2 2351 4026; fax 886 2 2396 8513
pamela@mail.pida.org.tw; www.pida.org.tw

New Product: International shows of OPTO Taiwan, LED Taiwan, Solar Taiwan and Display Taiwan, June 11-13, 2008, Taipei.

PIDA is a non-profit organization working with enterprise and government agencies to increase the competitiveness of Taiwan's photonics industry. PIDA hosts Photonics Festival in Taiwan events annually. More info at www.optotaiwan.com. Contact: Pamela Hsiao, Project Manager; Ryan Chung, Manager, ryan@mail.pida.org.tw.

Photonics Online

#6004

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Shedding new light on the world of lasers, optics, imaging and nanotechnology, Photonics Online is the one-stop-site for coverage of optical occurrences and photonic phenomena. Whether you're looking for cutting-edge technology, the latest business developments, engineering reference data or hot new products, Photonics Online has all the information you need. Visit www.photonicsonline.com and join our community to discover where the future of photonics is found. Contact: Tim Bretz, Director of Sales/Publisher, tbretz@vertmarkets.com.

Photonics Spectra

#1212

Berkshire Common, 2 South St, Pittsfield, MA, 01201
413/499-0514; fax 413/442-3180
photonics@laurin.com; www.photonics.com/spectra

Photonics Spectra is the leading photonics magazine serving industries that use photonic technology: lasers, imaging, fiber optics, optics, electro-optics and photonic component manufacturing. It presents the latest news articles and in-depth reports on photonics technology. It is distributed free to those who use or apply photonics. Contact: Breck Hitz, Senior Technical Editor; Joseph Wholley, Regional Manager, advertising@photonicsgroup.com.

Photonics Tech Briefs

#1437

1466 Broadway Ste 910, New York, NY, 10036
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Photonis

#736

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717/295-6264
www.photonis.com

Photonics West Exhibitor Directory

Photonix Ltd.

#1818

Block 7 West of Scotland Science Park, Maryhill Rd, Glasgow, United Kingdom, G20 0TH

44 141 579 3030; fax 44 141 579 3033

tooley@photonix.org.uk; www.photonix.org.uk

Photonix is a micro-optics, optoelectronics and microstructures fabrication facility with a full suite of tools and processes for deposition, lithography and patterning of polymers, metals, dielectrics and semiconductors. The facility manufactures micro-optic and active optoelectronics components. Materials processed include GaAs, InP, GaN, glass, diamond, sapphire and polymers used to create devices used in life sciences, fibers, sensors and displays. Contact: Frank Tooley.



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Photop Technologies, Inc.

#1445



253 Fuxin E Rd, Fuzhou Fujian, CA, China, 350014

86 591 88052888; fax 86 591 83610136

contact@photoptech.com; www.photoptech.com

PHOTOP is a leading photonics designer and integrated manufacturing company on Fiber Optics and Optics, Projection and Display Optics, Laser, Crystal Material and Photonics Products. Photop is dedicated to low cost, high efficient manufacturing infrastructure, advanced design and manufacturing technologies, high volume production capability/capacity. Contact: Henry Yu, Vice President, henry.yu@photoptech.com; Frank Fu, Director of Business Development, frank.fu@photoptech.com.

Photo-Sonics, Inc.

#6288

820 S Mariposa St, Burbank, CA, 91506

818/842-2141; fax 818/842-2610

mestrada@photosonics.com; www.photosonics.com

New Product: Ultra Fast Framing camera SIM w/framing up to 2Billion fps w/1360x1040x12bit pixels & multi-spectral.

Photo-Sonics other products include Optronis Ultra Fast Streak Cameras, SIR2 Eleven Mega pixels double frame range cameras, Lens intensifiers and Real Time Projectile Trackers for ballistics applications. Sales Manager: Graham Jones; Product Applications and Sales: Frank Kosel and Paul Roehrenbeck Contact: Martha Estrada, Administrative; Frank Kosel, Sales & Applications, fkosel@photosonics.com.

Photron USA, Inc.

#1913



9520 Padgett St Ste 110, San Diego, CA, 92126-4446

858/684-3555; fax 858/684-3558

image@photron.com; www.photron.com

New Product: Fastcam SA1: Mega pixel @ 5K fps with superb sensitivity. Fastcam MH4: 2K fps tiny hi-G camera heads.

Photron offers the widest and most innovative range of high speed cameras available. Systems include: Fastcam SA1: Superb sensitivity and 12-bit image quality, with mega pixel resolution to over 5,000 fps (frames per second). Fastcam MH4: Four sub-compact CMOS camera heads connect to a single processor 10m away, with battery backup built in. FocusScope SV-200i: Uses a Gen III ii to image biofluorescence at speeds as high as 2,000 fps. A wide range of PC based and stand alone slow motion systems. Contact: Andrew Bridges, Director Sales/Marketing.

Physics Today

#1802

One Physics Ellipse, College Park, MD, 20740-3843

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PI (Physik Instrumente) LP

#627



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PicoQuant GmbH

#427, 6042

Rudower Chaussee 29, Berlin, Germany, 12489

49 30 6392 6560; fax 49 30 6392 6561

www.picoquant.com

Booth 427 (Hall 1, Convention Center): PicoQuant is the leading supplier of picosecond pulsed diode lasers & intensity modulated diode lasers up to the GHz range and instrumentation for time-correlated single photon counting (TCSPC). Based on these technologies, PicoQuant builds systems for fluorescence lifetime measurements in sensitive analysis down to the single molecule for applications that include FLIM, FCS, FRET or anisotropy. United States Contact: Alain Bourdon (sales-usa@picoquant.com), Sales Director, arb@als-sales.com.

Booth 6042 (South Hall 1): PicoQuant GmbH, Photon Counting Instrumentation, product lines include Time-Correlated Single Photon Counting (TCSPC) electronics and detectors (PMT, SPAD), fluorescence lifetime spectrometers, time-resolved fluorescence microscopes and upgrade kits for Laser Scanning Microscopes. Applications include Single Molecule Spectroscopy, Fluorescence Lifetime Imaging (FLIM), Fluorescence Resonance Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS), Anisotropy, Optical tomography and Quantum Key Distribution. Contact: Nick Bertone, sales@optoecon.com.



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#238

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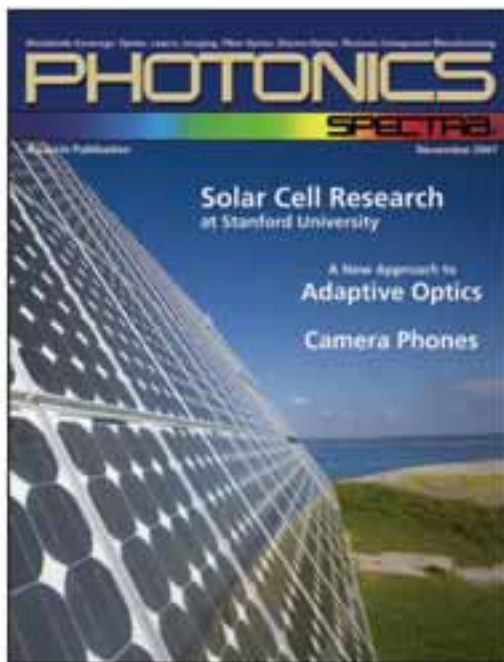
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PLANSEE Thermal Management Solutions #6354



10113 Carroll Canyon Rd, San Diego, CA, 92131
858/271-1993; fax 585/271-1980
sales@plansee-tms.com; www.plansee-tms.com

Plansee Thermal Management Solutions provides leading solutions in thermal management materials as well as engineered package solutions. We are a leading manufacturer of Copper-Tungsten, Copper-Molybdenum, diamond composites and ceramics for the photonics industry.

PLC Industries Pte Ltd. (Singapore) #6516

Blk 28B Penjuru Close #01-01, Singapore, Singapore, 609130
65 626 52908; fax 65 265 5036
marc@plc.com.sg; www.plc.com.sg

PLX, Inc. #6139



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POG Precision Optics Gera #1801

GP Keplerstr 35, Gera Thuringen, Germany, 07549
49 365 773930; fax 49 365 7739329
ray.george@precisionoptic.com; www.precisionoptic.com

New Product: Wide Field Collimator for inline inspection. Scales and Calibration targets on glass ceramics.

POG is a leading European manufacturer of microstructures on glass and (glass) ceramic substrates. Reticles, calibration plates and test targets. Highest quality for large serial quantities as well as for small batches. All processes and technologies in house. POG designs, develops and produces custom optical systems and components from UV to IR for applications in the semiconductor industry, machine vision, aerospace and defense. POG is a management owned company and employs a staff of 92. Contact: Ray George, Sales and Marketing Manager; Jan Schubach, Marketing, jan.schubach@precisionoptic.com.

Point Source #6334



Ensign Way, Mitchell Point, Hamble Southampton, United Kingdom, SO31 4RF
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sales@point-source.com; www.point-source.com

New Product: iFLEX-Viper: a compact multi-line laser source with a modular singlemode fiber delivery system.

Point Source designs and manufactures high performance fiber optic laser delivery systems and lasers for a wide range of commercial applications. We offer a personalized service, producing fully customized products to fit your exact fit, form and functional requirements. We excel in product performance and reliability. That's why our solutions are chosen by the world's leading instrument manufacturers for the most demanding applications in biotechnology and semi-conductor manufacturing. Contact: Fiona Evans, Field Sales Engineer - USA, fiona.evans@point-source.com; Anne Short, Field Sales Engineer - Europe, anne.short@point-source.com.

Polaris Electronics Corp. #6319

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Hermetic sealing equipment including AC or CD projection welders, parallel seam sealers, parallel gap welders, spot welders, lid tackers, atmosphere chambers and vacuum bake out ovens. We also provide contract hermetic sealing and processing services for small electronic packages. Contact: Stan Mitchell, Exhibits Manager/ Sales, stan@polariselectronics.com; Cara McAdams, Sales, cara@polariselectronics.com.

PolarOnyx, Inc. #6040



470 Lakeside Dr Ste F, Sunnyvale, CA, 94085
408/245-9588; fax 408/245-9587
jianliu@polaronyx.com; www.polaronyx.com

New Product: Low cost high power supercontinuum fiber laser.

World leading company in high energy/power ultrashort (fs, ps, ns) and super continuum fiber lasers. Its features of fiber delivery, stability, turn-key and maintenance-free operation are excellent for micro surgery, spectroscopy and biomedical applications. Wavelength ranges from VIS to IR. Contact: Jian Liu, President; Lihmei Yang, Manager Product Sales & Support, lihmeiyang@polaronyx.com.

Polymer Optics, LLC #3029

3100 Dutton Ave #118, Santa Rosa, CA, 95407
707/573-5929; fax 707/573-5951
contactus@polyoptics.com; www.polyoptics.com

New Product: Lightweight NIR Camera Lenses and housings by injection molding.

Manufacturer of precision plastic optics in prototype and production volumes for lighting, instrumentation, NIR lenses, cameras, LEDs, displays, etc. In-house capabilities include opto-mechanical design for plastics, diamond turning, precision mold design and fabrication, optical injection and compression molding, thin-film coating design and deposition of optical coatings on plastic. Contact: Shari Powell, shari@polyoptics.com; Dan Fisher, P.E., dan@polyoptics.com.

Polymicro Technologies LLC #323



18019 N 25th Ave, Phoenix, AZ, 85023-1200
602/375-4100; fax 602/375-4110
sales@polymicro.com; www.polymicro.com

Manufactures multimode, step-index fused silica fibers with polyimide, acrylate, silicone and custom buffers; solarization-resistant optical fibers; hollow silica waveguides; f/o cables and assemblies; high strength/temperature flexible fused silica capillaries; square capillaries; light guiding capillaries; precision silica and quartz rod/tubing pieces; custom shaped rod and tubing; multilumen tubing; telecom ferrules/sleeves. Contact: Gary Edwards, edwardsg@polymicro.com.

Polytec Inc. #1512

1342 Bell Ave Ste 3A, Tustin, CA, 92780
714/850-1835; fax 714/850-1831
info@polytec.com; www.polytec.com

Polytec is the world leader in non contact, dynamic and static experimental MEMS analysis. Measurement instruments range from a new Small Structure Laser Vibrometer with through-the-lens video imaging to the advanced Micro System Analyzer that incorporates three key technologies - laser vibrometry, stroboscopic video microscopy and white light interferometry. The state-of-the-art Micro System Analyzer can measure static topography, in-plane dynamics and out-of-plane dynamics on MEMS devices. Contact: Eric Lawrence, Sales Manager, e.lawrence@polytec.com; Mario Pineda, Regional Sales Manager, m.pineda@polytec.com.



PLASMA SCREEN SPONSOR

Power Technology, Inc.

#521



PO Box 191117, Little Rock, AR, 72219-1117
501/407-0712; fax 501/407-0036
sales@powertechnology.com; www.powertechnology.com

PowerPhotonic Ltd.

#1818

Earl Mountbatten Bldg, Riccarton Campus, Edinburgh,
United Kingdom, EH14 4AS
44 131 451 3086; fax 44 131 451 3088
www.powerphotonic.co.uk

PowerPhotonic design and fabricate freeform refractive micro-optics. Their product range includes: Beam correction phaseplates that provide x2-x10 reduction in beam divergence for high power diode laser bars/stacks; beam transformers to remap coherent and incoherent beams into tailored intensity profiles; application-specific micro-optic arrays from device-scale to wafer-scale. Designed for laser applications, their optics gives low transmission loss and high damage threshold. Contact: Roy McBride, Managing Director, r.mcbride@powerphotonic.co.uk.

Praevium

#6528

5266 Hollister Ave Ste 224, Santa Barbara, CA, 93111
805/964-2463; fax 805/964-1310
info@praevium.com; www.praevium.com

New Product: 1310nm wide-bandwidth Superluminescent Diodes for OCT. Twelve color laser sources for spectroscopy.

Praevium Research, Inc is a commercial developer of radically miniaturized optically broadband sources. The company's core technology is in the chip and package-level design of semiconductor lasers, detectors and photonic integrated circuits, for application in medicine, agriculture and communications. Current commercial products include ultra-broadband sources for optical coherence tomography and miniaturized multi-wavelength laser arrays for near infrared spectroscopy. Contact: Eric Hall, Product Development, eric@praevium.com; Devin Leonard, Principal Engineer, devin@praevium.com.

Precision Asphere, LLC

#3026

48860 Milmont Dr Unit 105-C, Fremont, CA, 94538
510/668-1508; fax 510/668-1595
info@precisionasphere.com; www.precisionasphere.com

PRECISION ASPHERE, LLC. is an US company specialized in manufacturing of high precision custom aspheres. With our proprietary computer controlled technology and over 13 years of asphere manufacturing experience, PRECISION ASPHERE offers you the highest PERFORMANCE-to-COST ratio in the industry.

Precision Glass & Optics

#6340

3600 W Moore Ave, Santa Ana, CA, 92704-6835
714/540-0126; fax 714/540-1482
info@pgo.com; www.pgo.com

New Product: PG&O now offers laser marking and waterjet cutting capabilities.

PG & O combines the high volume, low cost manufacturing of the commercial glass industry with the technical precision of optical and thin film coating. This single facility approach makes us uniquely qualified to satisfy today's optical component needs. We focus on both technical needs and the cost controls so vital to customer satisfaction. Our experts will work with your staff to make the transition from prototype to production both smooth and cost-effective. Contact: Daniel Bukaty Jr., President, danjr@pgo.com; Greg Quinn, Sales, Greg@pgo.com.

Precision Optical

#2022

869 W 17th St, Costa Mesa, CA, 92627-4336
949/631-6800; fax 949/642-7501
sales@precisionoptical.com; www.precisionoptical.com

Manufacturer of laser-quality precision optical assemblies and components (VUV to IR) including prisms, mirrors, windows, retroreflectors, filters, plate-type beamsplitters, alignment cubes, polarizing and nonpolarizing cube beamsplitters and coatings. Contact: Rod Randolph, President, rrandolph@precisionoptical.com; Al Lambert, Jr., Vice President & General Manager, alambertjr@precisionoptical.com.

Precision Optics Corp.


#6131



22 E Broadway, Gardner, MA, 01440
978/630-1800; fax 978/630-1487
info@poci.com; www.poci.com

New Product: POC announces the availability of micro endoscopes to sizes as small as 0.3mm in diameter.

For 25 years, Precision Optics Corporation has provided cutting edge optics for medical and industrial applications. POC is a leading provider of custom optics solutions including high resolution micro lenses and prisms, micro endoscopes, small diameter fiberscopes and illumination assemblies. POCI designs, develops and manufactures optical systems with rapid prototyping. FDA registered, ISO 9001 certified. Products are approved for CE marking. Contact: Brian Spies, Director of Marketing, bspies@poci.com; Chuck Gerlowski, cgerlowski@poci.com.



SCIENTIFIC MATERIALS
A Division of FLIR Systems

Products & Services

Laser Gain Media

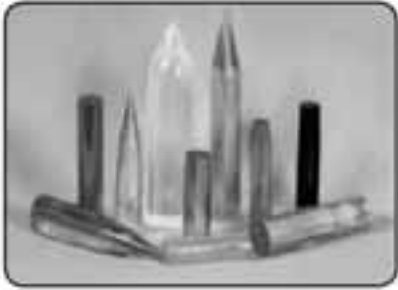
- Laser rods, slabs, disks, and bars
- Custom materials, orientations and geometries

Passive Q-switches

- Cr²⁺-YAG

Crystal Optics - Undoped YAG

- Mirror substrates
- Cylindrical lenses
- Prisms
- Windows
- Custom optics




Major Products

- Nd:YAG
- Undoped YAG
- Cr²⁺-YAG
- Er:YAG
- Yb:YAG
- YAlO₃
- LuAg

Custom Crystal Growth

- High melting point oxides
- Cost effective materials to enable development of new systems

Scientific Materials Division, FLIR Systems, Inc.
31948 East Frontage Road • Bozeman, Mt 59715
Phone: 406.585.3772 • Fax: 406.585.8606
sales@scientificmaterials.com
www.scientificmaterials.com



Photonics West Exhibitor Directory

Precision Photonics Corp.

#1709

3180 Sterling Circle, Boulder, CO, 80301
303/444-9948; fax 303/444-9951
info@precisionphotonics.com; www.precisionphotonics.com

New Product: Mirrors, polarizers and 0.1% AR's at 355 nm and 266 nm using high-energy IBS coating technology.

At Precision Photonics, your success is our focus. Whether you need 1 or 10,000 units, you can count on us for precision engineering, high-energy optical components and state-of-the-art photonic instrumentation. Our manufacturing capabilities include epoxy-free optical bonding, ion-beam-sputtered (IBS) dielectric coatings, custom etalons and high-volume micro-optics. Our line of precision instruments includes <100-fs fiber lasers (1550 and 780 nm), supercontinuum sources and servo controllers. Contact: Emily Kubacki, Manager of Technical Sales, emily.kubacki@precisionphotonics.com.

Primes GmbH

#1801

Max-Planck-Str 2, Pfungstadt, Germany, 64319
49 6157 9878 0; fax 49 6157 9878 28
info@primes.de; www.primes.de

New Product: MicroSpotMonitor. The automated focus diagnostics for microscopic laser beams.

PRIMES GmbH produces measuring devices for the production with laser radiation. Particularly, PRIMES designs, constructs and sells equipment for characterising the laser beam parameters: Power, beam profile, beam direction and beam as well as M^2 . PRIMES produces and constructs laser beam diagnostic devices for laser machine builders, beam source producers, r&d as well as laser users. Contact: Harald Schwede, Sales Manager, hschwede@primes.de.

Princeton Instruments

#1419



3660 Quakerbridge Rd, Trenton, NJ, 08619-1208
609/587-9797; fax 609/587-1970
moreinfo@piacton.com; www.piacton.com

Princeton Instruments designs and manufactures high-performance camera, spectrograph and optics solutions for the scientific research, industrial imaging and OEM markets. Continuous innovation in Research & Development and manufacturing process, coupled with a customer driven paradigm ensures our customers are always at the forefront of technology and reliability while pushing their boundaries of discovery.

Princeton Lightwave, Inc.

#6200

2555 Rte 130 S Ste 1, Cranbury, NJ, 08512
609/495-2600; fax 609/395-9113
sales@princetonlightwave.com; www.princetonlightwave.com

New Product: High power and brightness 10 watt laser package offers the lowest Cost per Joules 1450nm.

PLI applies its expertise in indium phosphide-based optical semiconductor devices, such as high power lasers and avalanche photodetectors, to design and manufacture advanced optical modules and systems for emerging applications. PLI's unique core capabilities enable it to deliver solutions offering higher performance, reduced system costs and easier deployment to our customers in the fields of optical networking, industrial processing, aerospace and defense, bio-medical instrumentation. Contact: Bouch Nessar, Vice President Sales, bnessar@princetonlightwave.com; Pete Schramm, Sales Manager US, pschramm@princetonlightwave.com.

PriTel, Inc.

#6222

PO Box 4025, 513 Weston Ridge Rd, Naperville, IL, 60567-4025
630/983-2200; fax 630/983-2260
pritel@pritel.com; www.pritel.com

New Product: Model FA-37, 37 dBm (5 Watt) High Power Optical Fiber Amplifier, with low nonlinearity.

PriTel manufactures 1550-nm Femtosecond Fiber Lasers (<100 fs to 10 ps) and SHG for terahertz generation and nonlinear optics, and for replacing bulky Ti:Sapphire lasers. High-peak-power (>10kW) and high-average-power (5W) EDFAs enable high-energy pulse generation. Ultrafast Optical Clocks and Optical Clock Multipliers permit ultrafast fiberoptic communications from 40-640 Gb/s. Femtosecond Fiber Lasers also have high value in material processing. Contact: Davida Kalina, Director of Operations, dkalina@pritel.com; K. V. Reddy, President, kvreddy@pritel.com.

Process Materials Inc.

#1440

5625 Brisa St Ste A, Livermore, CA, 94550
925/245-9626; fax 925/245-9629
sales@processmaterials.com; www.processmaterials.com

As a worldwide manufacturer and marketer of sputtering targets, evaporation materials, backing plates, bonding services and plasma spraying services, Process Materials, Inc. is focused on providing and perfecting the highest level of product performance. Our Vacuum Equipment Division specializes in Remanufacturing and Upgrading Evaporation and Sputtering Systems and Components. Contact: Steven Verley, Vice President, sverley@processmaterials.com; Pete Norlander, National Sales Manager, pnorlander@processmaterials.com.

PROMET International Inc.

#6367

4611 Chatsworth St, Shoreview, MN, 55126-5813
651/481-9661; fax 651/481-9565
info@promet.net; www.promet.net

New Product: FiBO 300 Interferometer for fiber optic endface geometry testing and micro-component inspection.

PROMET™ International provides precision opto-mechanical design, testing and manufacturing services and FiBO true phase-shifting Michelson interferometers for easy 3D/2D fiber optic connector endface testing and micro-component inspection. With experienced staff, comprehensive laboratory facilities and commitment to excellence, we satisfy aerospace, biometrics, data network, machine vision, medical, military and telecommunications customers worldwide. Contact: Jeanne Ann Zinser, Sales and Marketing Director, fibo@promet.net; Helena Mares, Communications Manager.

Pyrophotonics Lasers Inc.

#6265

275 Kesmark, Dollard-des-Ormeaux, QC, Canada, H9B 3J1
514/904-9000; fax 514/684-0400
sales@pyrophotonics.com; www.pyrophotonics.com

New Product: PyroFlex fiber lasers enable users to define pulse attributes; width, height, shape and rep rate.

Founded to drive the evolution of the industrial laser industry, PyroPhotonics utilizes patent pending technologies and internally developed innovations to meet the needs of the expanding industrial laser market and to enable entirely new applications. Disruptive technologies like the PyroFlex fiber laser platform allow users to create new processes, develop new applications, get to market faster, reduce expenses, increase yield and to quite literally shape the future. Contact: Al Eggleston, Vice President, Business Development, aeggleston@pyrophotonics.com; Richard Murison, Chief Technical Officer, rmurison@pyrophotonics.com.



CONFERENCE BAG INSERT SPONSOR

QED Technologies, Inc.

#835



1040 University Ave, Rochester, NY, 14607
585/256-6540; fax 585/256-3211
townell@qedmrf.com; www.qedmrf.com

QED's optics manufacturing solutions provide companies with breakthrough productivity and results that generate greater profits and customer satisfaction. MRF® finishing has become the industry standard for finishing flat, spherical or aspheric optics in the precision and mainstream optics markets. The SSI® and SSI-A™, our precision metrology systems, provide the ability to measure most optical parts, including aspheres, in your shop. www.qedmrf.com. Contact: Mike DeMarco, Sales Manager, demarco@qedmrf.com; Marc Tricard, Director of Business Development, tricard@qedmrf.com.



LANYARDS/ GENERAL REFRESHMENT SPONSOR

Qioptiq Group

#1227



25 Avenue Pierre de Coubertin, Paris Cedex 13, France, 75647
33 1 44 16 01 10; fax 33 1 44 16 01 11
info@qioptiq.com; www.qioptiq.com

The Qioptiq Group is a global leader in high-precision optical components, subassemblies and modules for commercial and defense applications. Polymer/micro/aspheric/diffractive/non-conformal optics, prisms, mirrors, beam splitters, filters, polarizers, positioning/bench systems, electro-optics, optomechanics, CCD lenses, macro/micro imaging, x-ray, night vision, holographics, domes, specialty coatings/diamond-turning/polishing/grinding & custom solutions. Contact: Scott Orr, Director of Marketing Communications, scott.orr@ny.qioptiq.com; Mark Hutcheson, Business Division Manager, mark.hutcheson@linos.com.

QPC Lasers, Inc.

#5037



15632 Roxford St, Sylmar, CA, 91342
818/986-0000; fax 818/698-0428
info@qpcasers.com; www.qpc.cc

New Product: BrightLase® High Power Fiber Coupled Module with output power >100W from 200um fiber at 976nm.

QPC Lasers, Inc. is a world leader in the commercialization of a new generation of high brightness high power semiconductor lasers for industrial, defense and medical markets. Founded in 2000, QPC is vertically integrated from epitaxy through packaging and performs all critical fabrication processes at its facility in Sylmar, California. Contact: Mayer Engel, Director of Worldwide Sales, engel@QPCLasers.com; Ed McIntyre, Director of Marketing, emcintyre@QPCLasers.com.

QPhotonics, LLC

#6065

3830 Packard Rd Ste 280, Ann Arbor, MI, 48108
734/477-0133; fax 734/477-0166
info@qphotonics.com; www.qphotonics.com

QPhotonics is a specialist supplier of semiconductor light emitting devices in wavelength range 660nm-1700nm for research, development and production. You will find a large variety of laser diodes, superluminescent diodes and semiconductor optical amplifiers in our webstore. Individual devices can be selected from stock and purchased online.

Quality Thin Films, Inc.

#636

141 Burbank Rd, Oldsmar, FL, 34677
813/855-1900; fax 813/855-5580
sales@qtf.com; www.qtf.com

Quality Thin Films, Inc., is a supplier of optics and thin-film coatings. We specialize in high-performance coatings on laser optics and crystals, from the UV to the IR. Methods include IAD, E-beam, Reactive and Resistive evaporation. In-house fabrication also allows us to control surface finish, critical to high laser damage threshold coatings. Our expanded polishing department provides optics as well as crystal fabrication and polishing. Contact: Karl George Jr., Vice President, karljr@qtf.com.

Quanta Tech Inc.

#6090

1 23rd St16 W, New York, NY, 10011
646/375-2452; fax 866/978-2682
sales@quanta-tech.com; www.quanta-tech.com

New Product: New fiber pigtailed polychromatic modulation system. More information at sales@quanta-tech.com.

QuantaTech is specialized in providing acousto-optic solutions in USA, Canada and South America. This includes the widest range of standard acousto-optic components and radio frequency drivers covering wavelength range from deep UV (180 nm) to far infrared (11 μm), as well as frequency drivers up to 3 GHz, 500 Watts CW. Contact: Franck Darde, Sales Director, franck.darde@quanta-tech.com.

Quantel USA

#527

601 Haggerty Ln, Bozeman, MT, 59715
406/586-0131; fax 406/568-2924
info@quantelusa.com; www.quantel-laser.com

QUANTEL is a leader in the design and manufacturing of advanced flash-lamp pumped Nd:YAG lasers, diode-pumped solid-state lasers, intense pulsed light instruments, ultra-sound diagnostic products, and fiber-laser solutions for a variety of industrial, scientific, medical, military, and aerospace applications. QUANTEL also offers laser damage testing services. The USA subsidiary of QUANTEL was previously named Big Sky Laser Technologies and is now QUANTEL USA. Contact: Neal Montgomery, Inside Sales, nmontgomery@quantelusa.com.

Quantronix Corp.

#1407

41 Research Way, E Setauket, NY, 11733-3454
631/784-6100; fax 631/784-6101
qinfo@quantronixlasers.com; www.quantronixlasers.com

New Product: Ti-Light: Compact, Mode-Locked Broadband Ultrafast Ti:Sapphire Oscillators.

Manufactures industrial, scientific and OEM ultrafast Ti:sapphire lasers and amplifiers, tunable ultrafast optical parametric amplifiers (OPA), diode-pumped and lamp-pumped Nd:YAG, Nd:YLF and Nd:YVO₄ lasers in IR, second, third and fourth harmonics. Industrial micromachining, marking and deep engraving systems. Offers complete computer control and system integration. Contact: Shelley Wojtkiewicz, Marketing Communications, swojtkiewicz@quantronixlasers.com; Jeffrey Wojtkiewicz, Product Manager, jwojtkiewicz@quantronixlasers.com.

Quantum Composers Inc.

#6080

PO Box 4248, Bozeman, MT, 59772
406/582-0227; fax 406/582-0237
info@quantumcomposers.com; www.quantumcomposers.com

New Product: Models 9520 & 9530 series Digital Delay Pulse Generators offer advanced synchronization capabilities.

Quantum Composers is an internationally recognized technology pioneer in pulse, delay and synchronization technology. Other core competencies include development, engineering and design from concept to market. We offer a competitive edge with innovative fast prototyping techniques in optical, mechanical and optical design. Contact: Alex Palm, Director of Business Development, apalm@quantumcomposers.com.

Photonics West Exhibitor Directory

Quebec Photonic Network

#6098

1111 rue Lapierre, Local 1.845 BP 128, LaSalle, QC,
Canada, H8N 2J4
514/368-1677; fax 514/368-2098
jacques@quebecphotonic.ca; www.quebecphotonic.ca

New Product: Service for Technology and Products Commercialization.

Quebec Photonic Network is the only officially mandated organization representing the photonics industry in the province of Quebec, Canada. Our mandate is designed for the advancement of all photonic technologies by insuring all necessary applicable actions in promoting the commercial and scientific capabilities of its members on a global scene with networking and marketing events and venues. Contact: Jacques Labelle, General Manager; Francoise Lee, Member Relations, francoiselee@quebecphotonic.ca.

R&D Magazine

#6218

100 Enterprise Dr Ste 600, Rockaway, NJ, 07866
973/292-7000; fax 973/920-7546

R. Mathews Optical Works, Inc.

#3001

26280 Twelve Trees Ln, Poulsbo, WA, 98370
360/697-6160; fax 360/697-7417
bob@mathewsoptical.com; www.mathewsoptical.com
Manufacturer of custom precision aspheric lenses utilizing all glass types. Diameters from 10mm to 250mm. Contact: Bob Mathews.

Radiant Dyes GmbH

#1927, 2027

Friedrichstr 58, Wermelskirchen, Germany, 42929
49 2196 81061; fax 49 2196 3422
monika@radiant-dyes.com; www.radiant-dyes.com

New Product: Ti:Sapphire Laser.

Our new pulsed Ti:Sa laser is based on the resonator concept of our reliable and well developed NarrowScan dye laser. This grazing incidence concept guarantees stable operation and excellent bandwidth <0.06 cm⁻¹ over the whole tuning range (695-905nm). With add. SHG the tuning range can be extended from 350 to 450nm. Two more Ti:Sa crystals are used as pre- and three-pass main amplifier, allowing high conversion efficiencies (>15%) even at high pump energies (~600mJ @ 532nm). Contact: Monika Thomas.

Raicol Crystals Ltd.

#5065

15 Giron St Industrial Zone, Yehud, Israel, 56217
972 3 936 7412; fax 972 3 906 8969
info@raicol.com; www.raicol.com

New Product: 1) RTP Q-SWITCH for 500KHz Repetition Rate; 2) PPSLT.

Raicol Crystals - a leading manufacturer of NLO materials, provides High quality KTP crystals and robust HGTR KTP elements for high average power SHG @ 1064 nm. Raicol's patented technology of PPKTP produces nonlinear elements for applications from visible to mid-infrared. Raicol also provides PPSLT and MgO:PPLN crystals, RTP Q-Switch operating at 500KHz Repetition Rate, High quality BBO and LBO crystals, Cr: YAG Passive Q-switch, BN crystals and Laser Rods. Contact: Moshe Shapira, Marketing and Sales Manager, moshe@raicol.com.



Free Popcorn

Popcorn carts will be located in the back of Exhibition Hall 3 and South Hall 1 and will be open from 11:00 am to 3:00 pm, Tuesday through Thursday.

Rainbow Research Optics, Inc.

#1710

4880 Ironton St Unit K, Denver, CO, 80239
303/371-3000; fax 303/371-1333

New Product: 150mm Zero-Order Waveplates; Double BBAR Coating for 3-5µm and 8-12µm.

Rainbow Research Optics is an optics manufacturer and coating facility located in Denver, Colorado. Our products include windows, lenses, mirrors, beamsplitters and prisms. Coatings range from 193nm to 16microns. Optics up to 17inch. We offer prototype to production quantities with fast delivery, high quality and low price. Contact: Hollie Marinecz, Sales Manager, sales@rroptics.com; Shay Dunne, Sales Engineer, sales@rroptics.com.

RAPT Industries, Inc.

#6290

46535 Fremont Blvd, Fremont, CA, 94538
510/933-1000; fax 510/661-9227
sales@raptindustries.com; www.raptindustries.com

RAPT Industries has pioneered the development and implementation of highly precise plasma-based tools for precision surface engineering. We apply our patented technology in select areas of optics and semiconductor device manufacturing, where rapid damage-free material removal or chemical modification of surfaces improves yields and performance. RAPT Industries' office in Freeport, PA produces advanced silicon carbide optics for defense, aerospace and semiconductor applications. Contact: Kevin Carr, Director of Optics Business Development.

Raylase AG

#6228

Argelsrieder Feld 2-4, Wessling, Germany, 82234
49 8153 8898 0; fax 49 8153 8898 10
info@raylase.de; www.raylase.de

New Product: FOCUSHIFTER - 3 axis scanner with Z shift of up to ±40mm.

RAYLASE is an international pioneer in developing modular components and manufacturing subsystems (deflection units or scan heads) for laser beam deflection, modulation and control including creative software & electronics. Scan heads come in apertures 7, 9, 10, 14, 15, 20, 25, 30 mm. Contact: Werner Grünwald, Head of Sales, w.gruenwald@raylase.de; Harnesh Singh, Marketing Manager, h.singh@raylase.de.

Redfish Photonics

#5067

5460 Skylane Blvd, Santa Rosa, CA, 94503
707/545-4181; fax 707/545-5113
info@calsensors.com; www.calsensors.com

Supplier of solid-state heat pumps (thermoelectric coolers) and provides quality packaging services of coolers assembled with temperature sensors, optical materials and customer furnished sensor chips. We provide sub-assemblies and for companies specializing in the manufacture of sensor chips, our in-house capability to provide hermetically sealed packages results in having one supplier for all your assembly requirements. Stop by our booth to discuss our new metalized cap/window assemblies. Contact: Patricia Elias, Manager, Sales and Marketing, patti@redfishphotonics.com; Will Whitehorn, Sales Engineer, will@redfishphotonics.com.

Redondo Optics, Inc.

#6502

SPiE CONSUMER

811 N Catalina Ave Ste 1100, Redondo Beach, CA, 90277
310/406-1295; fax 310/406-1297
ckempen@redondooptics.com; Connie Kempen

Remtec, Inc.

#6155

100 Morse St, Norwood, MA, 02062
781/762-9191; fax 781/762-9777
sales@remtec.com; www.remtec.com

New Product: Submounts with "NO PULL BACK" metalization of 50 micron thick copper on BeO and AlN.

Remtec manufactures cost effective ceramic substrates with PCTF® (Plated Copper on Thick & Thin Film) metallization for thermal management applications. Products include high performance laser and photo diodes submounts, optoelectronics circuits and spacers. Alumina, BeO and AlN ceramics with 50 micron copper accept gold tin soldering and are gold wire bondable. Metalization exhibits reliable adhesion during die attach and assembly. Specialty feature is "NO PULL BACK" copper metalization. Contact: Nahum Rapoport, Director of Sales and Marketing; Dena DeSimone, Sales Coordinator.

Research Electro-Optics, Inc.

#1604



5505 Airport Blvd, Boulder, CO, 80301
303/938-1960; fax 303/447-3279
sales@reoinc.com; www.reoinc.com

REO is an integrated supplier of precision optics, assemblies and laser products as well as design services and full manufacturing capabilities that enable rapid and cost effective implementation of optical systems for industrial markets such as defense, aerospace, semiconductor production, telecommunications and medical instrumentation. Contact: Mark Damery, Vice President of Sales, markd@reoinc.com; Ed Youssef, Sales Manager, edy@reoinc.com.

Reynard Corporation

#6349

1020 Calle Sombra, San Clemente, CA, 92673-6227
949/366-8866; fax 949/498-9528
sales@reynardcorp.com; www.reynardcorp.com

New Product: Customizable Bullseye™ Apodizing Filters eliminate undesirable intensity variations.

Reynard Corp. provides custom & stock optical components & thin film coatings from 0.2µm to 25µm (UV to far IR). In-house services include glass & mechanical fabrication, photolithography and component sub-assembly. We continually strive to advance technological development in markets which include military, space, commercial, telecommunication, medical and general R&D, through research partnerships, commercial development programs, SBIR programs and internal research and development. Contact: Beth Kinchyk, Sales Manager, beth@reynardcorp.com; Ed McCartney, Sales Executive, ed.mccartney@reynardcorp.com.

Rising Electro-Optics Ltd.

#6420

1st Fl Bldg 24 JinShan, FuWan Industrial Park No 869 PanYu Rd, Fuzhou, China, 350002
86 591 8334 9016; fax 86 591 8330 0646
marketing@rising-eo.com; www.rising-eo.com

New Product: Precision micro lenses and IR lenses.

Rising Electro-Optics Ltd., located in China, was founded in 2001 with the aim of developing the use of lenses, coatings and assembly for military, commercial and consumer products industries. We always offer high quality but low price products with prompt delivery and design-through-production for our customers. And our advanced technology & extensive experience & high performance/price ratio, secure & convenient trade make us are your reliable buddy and your best assistant. Contact: Bruce Chen, General Manager, bruce@rising-eo.com; Nancy Wang, Sales Engineer, nancy@rising-eo.com.

SQS
VLÁKNOVÁ OPTIKA

FIBEROPTIC PRODUCTS
Precise Connection

SQS Vláknová optika a.s. - manufactures wide assortment of fiberoptic and optoelectronic products, both standard and custom, with the priority focus on the highest quality and good price.

- PLC Splitters**
 - PLC Splitters 1x128
 - 1xN PM Planar Splitters
 - PLC Asymmetric Splitters
 - PLC Multiple Monolithic Splitters
- Y-Grooves & Fiber Arrays**
 - high precision of fiber core position
 - PM fiber
 - custom types available
- Hermetic Fiber Feedthrough**
 - hermetically sealed jumpers
 - number of fiber 1 to 4 standard and new version for 32 fibers.

SQS
VLÁKNOVÁ OPTIKA, 602 00000 optika a.s., Komořanská 203, 250 02 Hrást, Czech Republic, 2004-2006

High Quality Products

RMI Laser, LLC

#911



106 Laser Dr Bldg 2, Lafayette, CO, 80026
303/664-9000
sales@rmico.com; www.rmidpslasers.com

New Product: Compact, air-cooled, DPSS lasers at 532 & 1064nm, ns pulses, Q-switched up to 200kHz at 0.1 - 15W.

RMI Laser is a United States manufacturer of compact, air-cooled Nd:YVO4 based DPSS lasers. The Q-switched lasers operate at repetition rates up to 200 kHz at 1064 and 532 nm wavelengths. Contact: Orri Jonsson, Product Manager, orri.jonsson@rmico.com; Jensen Huddleston, Sales Manager, jensen.huddleston@rmico.com.

Rochester Precision Optics LLC

#6091

850 John St, W. Henrietta, NY, 14586
585/292-5450; fax 585/292-5459
sales@rpoptics.com; www.rpoptics.com

Manufacturer and designer of precision molded glass aspherical lenses and optical assemblies for Defense, Imaging, Industrial and Medical industries. Vertically integrated manufacturing for prototype and high volume. The latest automated optical manufacturing, diamond turning, advanced thin film coating and precision machine centers based on over 25 years of development and production experience at Kodak Optical Imaging Systems. Visible to Infrared molded aspherics from 1mm to 60mm diameters. Contact: Edward Patton, Director Sales and Marketing, epatton@rpoptics.com; Matt Pembroke, mpembroke@rpoptics.com.

Photonics West Exhibition

Photonics West Exhibitor Directory

Rockwell Laser Industries

#6321



7754 Camargo Rd, Cincinnati, OH, 45243
513/271-1568
info@rli.com; www.rli.com

New Product: Lazan 5.0. RLI is proud to offer a Certified Safety Testing Laboratory for individual laser testing.

For over twenty-eight years, Rockwell Laser Industries has been synonymous with laser safety training, consulting and product needs. We take pride in our complete line of laser safety eyewear, barriers and curtains, interlock systems, LAZAN hazard analysis software, CD-ROM training, measurement equipment, windows, manuals and standards, signs and labels and much more. For more information, visit our website at www.rli.com or call us toll free at 1-800-94-LASER. Contact: Pat Cogan, Sales Manager, pcogan@rli.com; Linda Follette, Customer Service, lfollette@rli.com.



GENERAL REFRESHMENTS SPONSOR

Rocky Mountain Instrument Co.

#911



106 Laser Dr, Lafayette, CO, 80026
303/664-5000; fax 303/664-5001
sales@rmico.com; www.rmico.com

New Product: Optics, Coatings & Assembly Solutions for UV-VIS-NIR-FIR applications. CVD ZnSe production.

Rocky Mountain Instrument is an ISO 9001:2000 certified manufacturer of full spectrum (UV through IR) Optics, Coatings & Assemblies for Laser and Imaging applications. New for 2008: Rocky Mountain Instrument will begin in-house production of CVD ZnSe for complete Infrared solutions. Co-exhibitor RMI Laser, LLC is a manufacturer of DPSS Nd: YVO₄, Q-Switched Lasers in 1064nm 532nm & 355nm. These air-cooled, high repetition rate systems are ideal for scribing, etching and marking applications. Contact: Debbie Hunt, Vice President of Sales, Debbie@rmico.com; Steven Hahn, Vice President, shahn@rmico.com.

Roithner Lasertechnik GmbH

#6326

Wiedner Hauptstr 76, Vienna, Austria, 1040
43 1 586 52 43 0; fax 43 1 586 52 44
office@roithner-laser.com; www.roithner-laser.com

Rolyn Optics Co.

#1041

706 Arrowgrand Cir, Covina, CA, 91722-2199
626/915-5707; fax 626/915-1379
sales@rolyn.com; www.rolyn.com

RoMack, Inc.

#5072



PO Box 615, Lightfoot, VA, 23090
757/258-4805; fax 757/258-4694
contact@romackfiberoptics.com; www.romackfiberoptics.com

We will be exhibiting our line of exclusively fiberoptic dip probes and will also have on display other types of fiberoptic assemblies and components specifically tailored for spectroscopic applications. Products include: probes, fiberoptics, connectors, adapters, patchcords, bundles, arrays, collimators, couplers, tapers and filter packages. We routinely take concept to product, creating solutions for the most difficult problems. Contact: Lisa Young, Manager Executive Sales, lyoung@romackfiberoptics.com.

RPC Photonics, Inc.

#337



330 Clay Rd, Rochester, NY, 14623
585/272-2840; fax 585/272-2845
info@rpcphotonics.com; www.rpcphotonics.com

RPC Photonics, Inc. manufactures precision micro-optical components - optical diffusers, beam shapers, microlens arrays & diffractive optics - for illumination, display, solid state-lighting, semiconductor, medical, military & space applications. Products can be made in fused silica, silicon, polymer replicas, IR materials, CaF₂ or injection-molded polymers. Complete solutions from design to manufacturing of unique low-volume components and high-volume replicated and injection-molded optics. Contact: Rose Peet, Contracts Manager, peet@RPCphotonics.com.

RPMC Lasers, Inc.

#2039



203 Joseph St, O'Fallon, MO, 63366
636/272-7227; fax 636/272-3909
julie@rpmclasers.com; www.rpmclasers.com

New Product: Miniature Q-Switched Oscillator. Short pulsed, high rep rate, AA battery-sized laser head.

RPMC offers high power multimode and single mode laser diodes from 622nm through >2300nm. We also offer collimated modules, high brightness and high power fiber coupled modules. RPMC also offers 500kHz picosecond micromachining lasers, custom nanosecond lasers from 213nm - 10µm and 2 and 5 nanosecond air cooled industrial lasers. Contact: Chuck Ratermann, President, rpmc@rpmclasers.com; Dean Micke, Vice President, Dean@rpmclasers.com.



WIFI/CONFERENCE BAG INSERT/GENERAL REFRESHMENTS SPONSOR

RSoft Design Group, Inc.

#907



400 Executive Blvd Ste 100, Ossining, NY, 10562
914/923-2164; fax 914/923-2169
luann@rsoftdesign.com; www.rsoftdesign.com

RSoft Design Group is the worldwide leader in photonics design automation software and serves several industries including optical communication, optoelectronics and semiconductor manufacturing. Within optical communications, RSoft is the only company to provide a full range of design, optimization and planning tools. Within the physical layer, RSoft provides the most extensive collection of award-winning design tools for passive and active optoelectronics components and subsystems.

Rubicon Technology, Inc.

#227



9931 Franklin Ave, Franklin Park, IL, 60131
847/295-7000; fax 847/295-7555
sales@rubicon-es2.com; www.rubicon-es2.com

Plan to Attend

FREE Exhibitor Product Demonstrations

Refer to pages 8-18 for complete time, schedules, and locations.

S.D.S Systems Development & Solutions #314

5 bvd de Créteil, Saint-Maur-des-Fossés, France, 94100
33 1 43 97 65 04; fax 33 1 48 85 82 70
contact@sdsdv.com; www.sdsdv.com

New Product: DA and DE Series deliver up to 6W from 1 to 6 kV with 15 and 24V inputs in a tiny metal shield case.

Manufacturer since 1985 of DC-DC and AC-DC high-voltage converters and power supplies. Voltages: 0-100V through 0-50kV. Powers: 0.1W to 400W. Inputs: 5V to 24V or universal 85-264Vac. Standard and Custom Products! Applications: light detection with PMTs, APDs, HPDs, MCPs; Q-Switching with Pockels Cells; capacitor charging. For integration into electron microscopes, gamma cameras, gas and particle analyzers. Available in racks, bench-tops, non-instrumented blocks and miniature pcb-mountable modules. Contact: Amandine DeBloudts, Project Manager, a.debloudts@sdsdv.com; Bernard Leibovici, Managing Director.

S1 Optics GmbH #1801

Lauterstr 18, Nuertingen, Germany, 72622
49 7022 6002 677; fax 49 7022 6002 788
sebastian.wittig@s1optics.com; www.s1optics.com

New Product: We will find the right path from your idea to your product. Challenge us!

S1 Optics GmbH is a coating service provider - we develop and produce optical function layers. As a service provider we do not only offer the coating as a core competence but also moreover the development of an integrated solution for light source, transmission networks and receptors. Contact: Sebastian Wittig, Dipl.-Ing. (FH).

Sabeus, Inc. #6275

26610 Agoura Rd, Calabasas, CA, 91302
818/737-7700; fax 818/737-7704
sales@sabeus.com; www.sabeus.com

Sabeus provides precise, reliable, cost effective fiber optic sensing solutions for rugged environments in oil & gas sensing, defense and homeland security and telecommunications applications. The company's products include FieldSense downhole oil & gas sensing systems, Precision Advantage lasers and gain flattening filters for signal conditioning and acoustic monitoring arrays for defense and security applications. The company is ISO 9000 certified and Telcordia qualified. Contact: Jack Angel, Vice President of Sales & Marketing, jangel@sabeus.com; Jay Hong, Sales Director, jhong@sabeus.com.

Sacher Lasertechnik GmbH #1927, 2027



Rudolf-Breitscheid-Str 1-5, Marburg, Germany, 35037
49 6421 3050; fax 49 6421 305 299
contact@sacher.de; www.sacher-laser.com

New Product: A 750mW high power 852nm MOPA System is introduced. Applications incl. Cs clocks, Cs BEC.

SACHER LASERTECHNIK is leading manufacturer of single mode, high power, narrow linewidth, motorized tunable diode laser systems in Littrow and Littman/Metcalf configuration. Available wavelength range from 370nm up to 1700nm with a maximum output power of 1000mW in the 780nm-1060nm regime. The product range includes benchtop laser diode controllers with GPIB USB control, wavelength lockers, reference gas cells, MOT cells, DFB, DBR laser diodes, tapered amplifiers and AR coated laser diodes. Contact: Joachim Sacher; Icksoon Park, contact@sacher-laser.com.

SAES Getters USA, Inc. #1707

1122 E Cheyenne Mtn Blvd, Colorado Springs, CO, 80906
719/576-3200; fax 719/576-5025
www.saesgetters.com

New Product: LuYAP & LuAP - high quality crystals for radiation detection & advanced scintillation applications.

At Photonics West the SAES Getters Group - a 60 year expertise in material science and thermal processes - displays its advanced optical crystal product line for electro-optic devices and solid-state lasers, including congruent lithium niobate and tantalate, YAG-based laser rods and Lu(Y)AP-based scintillating crystals. As well as extra-cavity optical components for solid state and diode lasers that includes beam expanders, collimator and F-theta lenses. Contact: Mario Musolino, Business Area Manager, mario_musolino@saes-group.com; Mabel Chan, Market Research Analyst, mmc@saes-group.com.

Safety Manufacture Ltd. #1938, 1939

A2208/08 Yantze Plaza, 46 Yingwu Ave Hanyang District, Wuhan, China, 200120
86 021 54776139; fax 86 021 54778138
adpks@163.com;

Saint-Gobain Crystals/Alpine Research Optics #537

750 S 32nd St, Washougal, WA, 98671
360/835-2001; fax 360/835-9848
keith.heikkinen@saint-gobain.com;
www.photonics.saint-gobain.com

New Product: Saint-Gobain Crystals is now home of Alpine Research Optics.

Want to optimize performance or need help with your next technical challenge? Saint-Gobain Crystals offers a variety of high performance single crystals. Materials include doped YAG, Ruby and Ti doped Sapphire; Saphikon EGF TM sapphire tubes/rods/windows; X-ray monochromators; Epi-ready Sapphire and Garnet substrates; CLASS TM sapphire sheets. For high performance optics, Saint-Gobain Crystals is home of Alpine Research Optics (ARO). Contact: Keith Heikkinen, Inside Sales Manager; Katie White, kwhite@arocorp.com.

Salem Distributing - Salem Vision #2005



Photonics Div, 5901 Gun Club Rd, Winston-Salem, NC, 27103
336/766-1104 ext. 262; fax 336/766-1119
sales@salemldist.com; www.salemldist.com

Salvador Imaging #6419

5061 N 30th St Ste 103, Colorado Springs, CO, 80919
719/598-6006; fax 719/598-6556
sales@salvadorimaging.com; www.salvadorimaging.com

New Product: 1280 x 960 EMCCD camera running at 50 fps for your low-light applications.

Salvador Imaging has earned a reputation for supplying low-noise, high-speed CCD, EMCCD and CMOS imaging systems to the most technically demanding customers. For over 15 years, our staff has provided innovative camera solutions for a variety of high-performance imaging applications ranging from color night vision to semiconductor, printed circuit-board and flat-panel inspection to medical imaging, laser-beam profiling and ballistic imaging. Standard products and custom designs are available. Contact: Kevin Heher, Director of Sales, kheher@salvadorimaging.com; David Gardner, President, dgardner@salvadorimaging.com.

Photonics West Exhibitor Directory

San Jose City College

#3009

2100 Moorpark Ave, San Jose, CA, 95128
408/288-3781; fax 408/288-9023
lasertechnology@sjeccd.cc.ca.us; www.sjcc.edu

New Product: San Jose City College offers courses, a certificate and an associate degree in Laser Technology.

Courses taught include Solid State Laser Technology, Laser Matrix Optics, Laser Theory, Optics Principles and Laser Beam Performance and Final Tests. Contact: Sydney Sukuta, Laser Technology Professor, sydney.sukuta@sjcc.edu; Kathy Werle, Dean of Applied Science and Technology, Kathy.werle@sjcc.edu.

Sandia National Laboratories

#5069

1515 Eubank SE, Albuquerque, NM, 87125-1081
800/417-2634; fax 505/284-6262
www.sandia.gov

Santec USA Corp.

#6157

433 Hackensack Ave, Hackensack, NJ, Japan, 07601
201/488-5505; fax 201/488-7702
info@santec.com; www.santec.com

New Product: Santec developed a new optical tunable filter with both wavelength and bandwidth tuning.

Santec is a leading manufacturer of Optical Components, Tunable Lasers and Optical Light Sources and Optical Test and Measurement Products. Optical Components include Variable Attenuators, Tap Photodetectors, Wavelength Lockers, WDM filters, Mux/Demux products, etc. Test and Measurement Products include Benchtop Tunable Lasers, Tunable Filters, Ultra-Wide Band Sources and more. Contact: Max Chang, Sales Engineer, max@santec.com; Jonathan Evans, Sales Engineer, jonathan@santec.com.

Sarnoff Corp.

#241

201 Washington Rd, Princeton, NJ, 08540
609/734-2000; fax 609/734-2040
www.sarnoffimaging.com

Specializing in Custom and OEM development of image sensors and cameras, Sarnoff Imaging Systems meets the needs of aerospace, defense, semiconductor, biomedical and scientific instrumentation communities. With the ability to design and manufacture high-speed sensors, high-performance digital imaging cameras and user friendly software, Sarnoff is the only source of back illuminated CMOS and CCD sensors that simultaneously deliver anti-blooming, high frame rate, 100% fill factor and high QE. Contact: Mike Melle, Business Director Imaging Systems, bd@sarnoff.com.

Satisloh North America Inc.

#447



N116 W18111 Morse Dr, Germantown, WI, 53022
262/255-6001; fax 262/255-6002
www.satisloh.com

New Product: SPM/S 60 360° multi-functional swivel head with 2-tool spindle technology & process flexibility.

The Satisloh line includes generators, polishers, laser centering and coating machines (with a PDS option) for all applications. A supplier of diamond wheels and pellets, spherometer rings and spare parts, we offer a complete range of consumable products - including distribution of Mueller Diamonds, Desmopan and Desmoflex polishing pads and Borer Chemical ultrasonic cleaning products. Contact: Tom Godin, tom.godin@satisloh.com; Lori Heller, lori.heller@satisloh.com.

Savimex

#1313

Parc Industriel des Bois de Grasse, BP 85262, Grasse, France, F-06131
33 4 93 70 41 31; fax 33 4 93 70 77 21
anita.lemesle@savimex.fr; www.savimex-fr

New Product: Optical components, Mould for injected components, panoramic camera.

SAVIMEX was founded in 1954. The company moved to Grasse in 1981, where it now employs about 70 people. Gradually, SAVIMEX has become one of the leading European companies in the transformation of plastic to produce high precision components and more precisely optics. More than 20 tons/month of thermoplastic polymer materials are transformed. The annual turnover is over 8M€, where export represents 50%, mainly made with European countries but also in America and Australia. Contact: Coyon Laurent, Chief Executive Officer, laurent.coyon@savimex.fr; Houbre François, Technical Director, francois.houbre@savimex.fr.

SCANLAB America, Inc.

#234



2020 Calamos Ct Ste 250, Naperville, IL, 60563
630/799-1553; fax 630/799-1551
info@scanlab-america.com; www.scanlab-america.com

New Product: iDRIVE technology, PC Interface Board RTC 5, SCANcube 14, intelliSCAN series, intelliDRILL.

Manufactures high performance galvanometer scanners & galvanometer-based scanning systems for deflection and positioning of laser beams in up to three dimensions. Offers solutions for industry, science and medicine, and is an OEM supplier of complete units and subassemblies. The product range includes standard and high-end scan heads (>1.200 cps), scan systems for kW-range lasers, customized systems, control electronics for on-the-fly processing and laser accessories. Contact: Dale Sabo, Vice President.

SCD-SemiConductor Devices

#6316

PO Box 2250, Haifa, Israel, 31021
972 4 990 2535; fax 972 4 990 2627
marketing@scd.co.il; www.scd.co.il

New Product: High power diode laser vertical and horizontal stacks with efficient regular water cooling.

SCD is a well established company developing and producing a range of infra red detectors for thermal imaging and high power diode lasers. Devices are produced in a vertically integrated facility from crystal growth and wafer processing to complete characterization. SCD's high power diode lasers are field proven in a variety of defence and commercial applications. The company also offers fast axis collimated modules as well as fiber coupled devices. Contact: Salomon Risemberg, Marketing Manager and Business Development, risemberg@scd.co.il; Marina Shkedi, Marketing Coordinator, marina_p@scd.co.il.

Schleifring und Apparatebau GmbH

#1801

Am Hardtanger 10, Fürstentfeldbruck Bavaria, Germany, 82256
49 8141 403 0; fax 49 8141 403 45
sales@schleifring.de; www.schleifring.de

New Product: Multi pass micro-optical rotary joint Multi and Single Mode for the transmission of optical signals.

SCHLEIFRING GmbH, a medium-sized company with nearly 400 employees and facilities in Germany, UK and USA, covers all sectors of the worldwide requirement for highly sophisticated fiber optical rotary joints for high data rate transmission <10 GBit/sec. Contact: Gregor Popp, Senior Manager Research & Development Optics, gpopp@schleifring.de; Maren Isert, Project Manager Sales, misert@schleifring.de.

Ramboss Micro Raman Measurement System



DONGWOO OPTRON Co., Ltd.
21Century Leader in Optical Technology

611-5, MaeSan-RI, Opo-Eup, Gwangju-SiGyunggi-Do, 464-893, Korea. Tel: 82-31-765-0300 Fax: 82-31-765-0222 <http://www.dwoptron.com> E-mail: dos@optron.co.kr

- **"MonoRa"** imaging monochromator / spectrographs, focal length 150mm to 750mm - **"Ramboss"** Confocal Micro Raman Measurement system
- **"Maple"** Micro/Macro Photoluminescence Mapping system - **"ComRam-320"** Dispersive NIR Raman measurement system
"DongWoo is Drawing Wavelength"

You can see our products and performance at PhotonicsWest 2008, concourse area-Booth#5083, in San Jose, Jan. 22-24

Features

- Low cost / High performance Raman measurement system.
- Easy alignment & operation system.
- Low noise TE cooled CCD system.
- Compact design & High resolution.
- Wide Raman shift range measurement.

Applications

- Raman spectroscopy
- Chemical systems & processing
- Pharmaceuticals
- Biological & medical systems
- Fuel & forensic applications

Specifications

- Excitation source :
 - 25mw, 488nm, 514nm, 633nm, 639nm, and 785nm (not available)
- Laser Line bandpass filter and rejection Edge Filter for Raman.
- Laser beam spot resolution : 1um spot size available.
- with 100x air glass lens @ 700nm mode 10um spot size with 10x magnify lens.
- Turn resolution XY stage for imaging.
- DMBS, imaging spectrograph for High resolution, 1.2m-1 @180g/mm, grating @180mm.
- TE cooled CCD detector, 1024x128 pixels, 25um size, min. temp. -190C.
- RS232 & USB interface.



Schmidt & Bender Optics Ltd.

#6507

Fehér út 10 3 épület, Budapest, Hungary, 1106
36 1 434 21 00; fax 36 1 577 20 31
rfq@schmidt-bender.hu; www.schmidt-bender.hu

Located in the heart of Europe, Schmidt & Bender is an experienced supplier to the optics and electronics industry. We produce on client's specifications lenses, polished flat optics, prisms, filters and thin-film vacuum coatings. Available materials include a variety of optical glasses, Pyrex, Borofloat, fused silica, low expansion materials (Zerodur, ULE) and filter glasses. A state-of-the-art machine park and large, flexible production capabilities ensure both availability and timely delivery. Contact: Kurt Buchrieser, k.buchrieser@schmidt-bender.hu.

Schneider Optics, Inc.

#536

SPIE Corporate Member
285 Oser Ave, Hauppauge, NY, 11788-3609
631/761-5000; fax 631/761-5090
industrial@schneideroptics.com; www.schneideroptics.com

Schneider Optics designs, develops and manufactures high performance lenses for machine vision & other image processing applications. Standard products include Compact C-mount lenses, Bilateral Telecentric lenses, a modular Macro system, large format lenses (area & line scan), 3-CCD lenses and industrial filters. Custom lens solutions are also available. Key markets include Machine Vision, Document & Parcel Scanning, Industrial Inspection, 2D/3D Metrology, Surveillance & Hyperspectral Imaging. Contact: Jim Sullivan, Sales & Marketing Manager, jsullivan@schneideroptics.com; Stuart Singer, Vice President, Industrial Optics, ssinger@schneideroptics.com.

STAIRWAY STRIPS SPONSOR

SCHOTT North America, Inc. - Advanced Optics

#809

SPIE Corporate Member
400 York Ave, Duryea, PA, 18642-2036
570/457-7485; fax 570/457-7330
info.optics@us.schott.com; www.us.schott.com

Advanced Optics, a part of SCHOTT North America offers a broad range of cutting-edge components & materials for optical & lithographic applications & is a leading manufacturer of calcium fluoride crystals, fused silica, "ZERODUR" glass ceramics, filters, optical & i-line glass. Contact: Marlene Deily, Promotions Manager, marlene.deily@us.schott.com; Steve Sokach, Sales Director, steve.sokach@us.schott.com.

Sciencetech, Inc.

#1701

5649 Arapahoe Ave, Boulder, CO, 80303-1332
303/444-1361; fax 303/444-9229
inst@sciencetech-inc.com; www.sciencetech-inc.com

Scientific Materials (SMC)

#2018

31948 E Frontage Rd, Bozeman, MT, 59715
406/585-3772; fax 406/585-8606
sales@scientificmaterials.com; www.scientificmaterials.com

New Product: Low loss laser crystals; Nd:YALO, Yb:YAG, YAG and Nd:YAG.

Scientific Materials, a FLIR Systems Company, grows high purity, low loss boules and fabricates components for the opto-electronics industry. Scientific Materials primary products are rods, bars, slabs and optical components. Key materials include Nd:YAG, YAG (undoped), Cr4+:YAG, Er:YAG, Nd/Tm:YALO and LuAg. Contact: Zachary Cole, zachary.cole@flir.com.

Photonics West Exhibitor Directory

SCIOPT Enterprises

#3014

PO Box 20637, San Jose, CA, 95160-0637
408/268-8934; fax 408/268-9050
ghsciopt@ix.netcom.com; www.sciopt.com

New Product: A new release of PARAXIA-Plus laser design software features new capabilities and more examples.

SCIOPT Enterprises has developed innovative optics software for over 26 years. First in DOS and first in Windows, the award winning OPTEC family helped optical design techniques evolve. Now Paraxia-Plus does the same for laser design. Contact: Regina Hearn, Sales Manager.

Scottish Development International

#1818

Atlantic Quay, 150 Broomielaw, Glasgow, United Kingdom, G2 8LU
44 141 248 2700; fax 44 141 228 3712

david.crossan@scotent.co.uk; www.sdi.co.uk

Scottish Development International (SDI) is the international arm of the lead economic development agency for Scotland and as such assists Scottish organizations to internationalize their products and services. We also provide assistance to any overseas organizations seeking to establish a physical presence in Scotland or looking for potential joint venture, licensing or agency partners. Contact: David Crossan, Head, Optoelectronics & Nanotechnology, david.crossan@scotent.co.uk.

Scottish Optoelectronics Association

#1818

Geddes House, Kirkton N, Livingston, United Kingdom, EH54 6GU
44 1506 497228

chris.gracie@optoelectronics.org.uk;

www.optoelectronics.org.uk

Scottish Optoelectronics Association (SOA) members are drawn from both Academia and Industry in Scotland. Scotland has 85 companies, 25 University departments and 12 Bridging Organizations (Interfacing between Industry & Academia) operating in various areas of Optoelectronics. SOA also operates the ACCORD scheme buying pre market components from companies for Research projects at European Universities. Connect with Scotland by visiting us. Contact: Chris Gracie, Chief Executive Officer, chris.gracie@optoelectronics.org.uk.

SEDI Fibres Optiques

#6150

6 Rue Jean Mermoz, Courcouronnes, France, 91080

33 1 69 36 64 00; fax 33 1 69 36 64 19

slobadzian.p@sedi-fibres.com; www.sedi-fibres.com

New Product: The « 4 POWER » a new fiber optic connector for very high optical power with a 4 mm copper ferule.

Serving the special applications fiber optic market for more than 20 years SEDI Fibres Optiques offers a unique range of optical fibers and cables and manufacture components (connectors, couplers, hermetic feedthroughs, WDM, collimators, filters). SEDI Fibres Optiques is a specialist of custom designed assemblies for applications including high temperature, high pressure, biocompatibility, radiation resistance, vacuum chambers, severe chemical environment, power lasers, UV, IR, PM devices, etc. Contact: Pascal Slobadzian, Export Director.

Seiwa Optical America Inc.

#6709

3042 Scott Blvd, Santa Clara, CA, 95054

408/844-8008; fax 408/844-8944

takashima@seiwaamerica.com; www.seiwaamerica.com

Semrock, Inc.

#339

3625 Buffalo Rd Ste 6, Rochester, NY, 14624

585/594-7000; fax 585/594-3898

filters@semrock.com; www.semrock.com

New Product: Superb selection of hard-coated fluorescence, Raman & laser optical filters in stock.

Semrock manufactures advanced hard-coated optical filters that set the standard for biotech and analytical instrumentation. These include the highly acclaimed BrightLine fluorescence filters, high-performance filters for Raman spectroscopy and unique laser system optics. Semrock's innovative products are built on the latest optical coating technology. Founded in September 2000, Semrock is based in Rochester, New York and has offices across the country. Visit Semrock at www.semrock.com.

SensL

#6345



Lee House, Riverview Business Park, Blackrock Cork, Ireland

353 21 4350442; fax 353 21 4350447

info@sensl.com; www.sensl.com

New Product: SensL's SPMMini combines the benefits of silicon photodiodes with the performance of PMTs.

SensL provides a range of solid-state low light sensing, photon counting, and imaging products. SensL's Silicon Photomultiplier (SPM) is an excellent alternative to glass PMT detectors. SensL's products are ideal for applications such as biodiagnostics, medical analysis, radiation detection, cell imaging, LIDAR, and environmental protection. Contact: Joseph O'Keeffe, Chief Commercial Officer, jokeeffe@SensL.com.



PLASMA SCREEN SPONSOR

Sensors Unlimited, Inc., part of Goodrich Corporation

#1344



Bldg 12, 3490 US Rte 1, Princeton, NJ, 08540-5914

609/520-0610; fax 609/520-1663

sui_info@goodrich.com; www.sensorsinc.com

Sensors Unlimited, Inc., part of Goodrich Corporation, manufactures a complete line of shortwave infrared (SWIR) imaging and detection products for defense and commercial applications. Our innovative InGaAs-based product offerings include fast framing and high resolution cameras, linescan imagers, focal plane arrays and more. Our imaging products feature easy-integration, use standard glass optics and require no cooling. Consult Sensors Unlimited to learn how SWIR products can meet your imaging needs at sui_sales@goodrich.com. Contact: Bob Struthers, Director, Sales & Marketing, sui_sales@goodrich.com; Johanna Soyars, Sales & Marketing Assistant.

Sensovation

#5063

Ludwigshafenerstr 29, Stockach, Germany, 78333

49 7771 87390; fax 49 7771 873939

info@sensovation.com; www.sensovation.com

New Product: LumiSens - OEM Fluorescence Microscope for biochip or microarray detection in diagnostics & Biotech.

Sensovation is focused on the development and production of high performance CCD-cameras and miniaturized electro-optical modules for fluorescence and other low light level detection. Our product line includes a range of cooled, high sensitivity and high throughput cameras for spectroscopy as well as for high resolution imaging applications. The cameras and miniaturized measurement modules are used for Biotechnology, Diagnostics, Point of Care (POC) and Medical Technology applications. Contact: Hanswilly Mueller, Marketing Mgr., hanswilly.mueller@sensovation.com.

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Virtual Industries, Inc.	1702
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Precision Photonics Corp.	1709
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Colorado is home to almost 300 photonics companies, seven universities with photonics programs/research, four federally funded labs with photonics facilities, three Nobel Physics prize winners for photonics research, and the only Advanced Photonics Technology Center in the United States.

Check out the wide range of components, systems, instruments and services that Colorado companies have to offer. Not sure which one will help you?

Visit CPIA at booth 1706 for a complete directory.

Colorado Cluster Organized by:

CPIA
COLORADO PHOTONICS
INDUSTRY ASSOCIATION



Alpine Research Optics Corp.	433
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Research Electro-Optics, Inc.	1604
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Kimmon Electric US, L.P.	6524

Booth 1706

Photonics West Exhibitor Directory

Sens-Tech Ltd.

#6364

Bury St, Ruislip, Middlesex, United Kingdom, HA4 7TA
44 1895 630771
info@sens-tech.com; www.sens-tech.com

New Product: New and improved multi-channel high voltage power supplies for photomultiplier tubes.

The X-ray detection systems and photodetector modules business of Electron Tubes Ltd has become Sens-Tech Ltd. Sens-Tech manufactures X-ray Detection and Data acquisition systems, Photodetector Modules and High Voltage Power Supplies. The new company brings together the existing applications and systems design expertise with the single focus of providing customers with total sensor solutions. Contact: Mike Avery, Sales Manager - USA, mike.avery@sens-tech.com.

SenterNovem/I.O.P. Photonics Devices #6278

PO Box 93144, Den Haag, The Netherlands, 2509 AC
31 70 373 5810; fax 31 70 373 5100
www.senternovem.nl

The Dutch government aims to make the research world more accessible to industry, stimulating the formation of strong networks between these two parties. The innovation-oriented research programme (IOP) Photonic Devices gives an extra impulse to research within this theme, in which the industry is actively involved. This programme focuses on two specific areas of expertise: Advanced light sources & detection systems and Applications of photonic devices in health & medicine.

Servometer/PMG, LLC #6315



501 Little Falls Rd, Cedar Grove, NJ, 07009
973/785-4630; fax 973/785-0756
info@servometer.com; www.servometer.com

New Product: Servometer Precision Integral Baffled Electroforms for use in Electro-Optic Applications.

Servometer - PMG, LLC manufactures custom metal bellows & assemblies, bellows type flexible shaft couplings, gold plated bellows contacts and light weight Electroforms. Servometer bellows are flexible, leak tight and can be used as springs and flexible seals. Electroforms are structurally rigid hollow metal shells that can be made with integral baffles; perfect for use as radiation or coldshields in Electro-optical applications. Electroforms can be made with an internal optical blackening. Contact: Ed Gajewski, Technical Support Engineer, edg@servometer.com; Jim Barkand, Technical Support Manager, jim@servometer.com.

SGS Slicing Solutions, Inc. #6002

309 Route 94, Columbia, NJ, 07832
908/496-8999; fax 908/496-8998
sales@sgs-inc.com; www.sgs-inc.com

SGS Slicing Solutions is the exclusive North American Agent for Meyer Burger AG of Switzerland, offering sales, service, support, spare parts as well as process development for all Meyer Burger equipment. Meyer Burger is a world renowned machinery manufacturer, specializing in slicing equipment for the Semiconductor, Solar, Optical, Ceramics, Medical imaging or any industry that need to slice hard or brittle materials. Wire saws, Band saws Cropping Saws, I.D. Saws, O.D. Saws. Contact: Rick Baarck, Sales Manager, rbaarck@sgs-inc.com.

Shanghai Optics #124



12 Paris Ave, Edison, NJ, 08820
732/321-6915; fax 732/875-0298
sales@shanghai-optics.com; www.shanghai-optics.com

New Product: CaF₂, MgF₂, ZnSe, Silicon, and Ge optics and blanks for IR and UV applications.

Shanghai Optics is a full service manufacturer of high precision optical flats, lenses, beamsplitters, light pipes, telecom filters, precision laser optics and filters for digital imaging, aspheric surfaces, plastic optics, miniature optics and excimer laser optics. Materials include: fused silica, BK7, crystal quartz, sapphire, CaF₂, MgF₂, GaAs, Germanium, Zinc Selenide, Zinc Sulfide, Silicon and more. Contact: Joanna Lee, Vice President Sales & Marketing, jlee@shanghai-optics.com; Brad Lewis, Director of Mid-West Sales, blewis@shanghai-optics.com.

Sheaumann Laser Inc. #6396



140 Locke Dr, Marlborough, MA, 01752
508/970-0600; fax 508/970-0610
sales@sheaumann.com; www.sheaumann.com

New Product: SheauPac Plus: Making Higher Power Possible.

Sheaumann Laser Inc. manufactures high-power, high-brightness fiber-coupled laser modules in small form factor packages. Sheaumann began with their cornerstone product; the SheauPac- a 2 pin laser module. They now offer the PowerPac- a combined laser package that delivers up to 7 times the power of the SheauPac. Sheaumann has expanded their product line to include various wavelengths from 795 nm to 1850 nm as well as many fiber and connector options. Custom configurations are also possible. Contact: Ken Clifford, Director of Sales and Marketing, kclifford@sheaumann.com.

Shimadzu / Kuroda Electric U.S.A #6521

3333 Bowers Ave Ste 151, Santa Clara, CA, 95054
408/235-8951; fax 408/235-8952
acho@kuroda-electric.com; www.kuroda-electric.co.jp

Showa Optronics Co., Ltd. #6508

3-5-3 Shinmach, Setagaya-ku, Tokyo, Japan, 154-8506
81 3 5450 5133; fax 81 3 5450 5960
sales@soc-ltd.co.jp; www.soc-ltd.co.jp

Showmark, LLC #6609



131 Wallace Ave Unit 4, Downingtown, PA, 19335
610/518-9262; fax 610/518-9296
email@showmarkcorp.com; www.showmarkcorp.com

Showmark manufactures a range of winding and spooling machines for optical fiber, fine wire and other fine filaments. Machines are used for general purpose respooling or for precision winding applications such as EDFA's, Fiber Delay Coils, Fiber Bragg Gratings and Fiber Optic Gyros. Showmark also provides a range of contract Spooling Services. Contact: Scott Markovitz, General Manager, scott.markovitz@showmarkcorp.com.

SiC Processing USA #6002

6949 N Cutter Cir, Portland, OR, 97217
503/345-0326; fax 503/285-5602
d.doelger@sicprocessing.com; www.sicprocessing.com

Sierra Precision Optics

#5126

12830 Earhart Ave, Auburn, CA, 95602
530/885-6979; fax 530/885-1037

jstimpson@sierraoptics.com; www.sierraoptics.com

Plano, Filters, Panels, Windows, Mirrors, Beam Splitters, Wedges, Prisms, Spherical and Cylindrical lenses, Excimer laser components, UV/VIS/NIR optics, Flow Tubes, 1/20th wave metal polishing of Invar and stainless steel. Materials: Standard and special optical glasses within UV, Visible, Near IR UV Fused Silica, BK7, Pyrex, SF grade Color Filter Glass, Samarium, Crystal Quartz, Calcium & Magnesium Fluoride, Zerodur, Yag, Silicon, Zinc Sulfide and Germanium. Coating of optics available. Contact: Jim Stimpson, Sales & Marketing Manager, jstimpson@sierraoptics.com; Steve Bennion, Engineering Manager, sbennion@sierraoptics.com.

SIFAM Fibre Optics Ltd.

#1013

A Gooch and Housego Co, Broomhill Way, Torquay Devon, United Kingdom, TQ2 7QL

44 1803 407 893; fax 44 1803 407 786
sales@sifamfo.com; www.sifamfo.com

New Product: Cleveland Crystals, NEOS, Gooch & Housego UK and SIFAM are now called Gooch & Housego.

Gooch & Housego is a new company, which has integrated the five former businesses of Gooch & Housego UK Ltd, Cleveland Crystal Inc, NEOS, Landwehr Electronic GmbH (LE) and SIFAM. The combined product portfolio offers a broad range of optical components which act as enabling technologies for photonics-based systems in industries such as laser, automotive, aerospace, environmental sensing, imaging, energy research, scientific and medical. Contact: Paul Ellis, pellis@sifamfo.com.

Silios Technologies

#6251

ZI Peynier-Rousset, Rue Gaston Imbert Prolongee, Peynier, France, 13790

33 4 42 53 8960; fax 33 4 42 53 8959
mj.mannini@silios.fr; www.silios.com

New Product: DOE for homogenization of SHG lasers pumping Ti:Sapphire crystal of very intense femtosecond lasers.

SILIOS Technologies is an SME specialized in the designing, manufacturing, testing and characterization of micro-optics, diffractive optics, miniaturized spectrometry and optical instrumentation. The targeted applications' fields of SILIOS Technologies' realizations go from laser machining to astronomy via medical and scientific lasers, waste water treatment, petrol analysis and quality control of microelectronics process. Contact: Thierry Berthou, Sales Manager, thierry.berthou@silios.fr.

Sill Optics GmbH & Co., KG

#1446



Johann Hoellfritsch Str 13, Wendelstein, Germany, 90530
49 9129 9023 0; fax 49 9129 9023 23
info@silloptics.de; www.silloptics.com

New Product: Laser Optics, F-Theta lenses, Telecentric Lenses, CCD Lenses, Illumination.

Sill Optics develops and manufactures a wide range of telecentric lenses, Illumination Systems, CCD-Lenses with C-mounts, either of the shelf or customized manufactured. Scanlenses for Printing, Beamexpanders, Yag Focussing Optics, Profile Projector Lenses are in the programm including. Custom made Optical Systems and components for Prototypes and series. Contact: Konrad Hentschel, Research & Quality Assurance Manager, konrad.hentschel@silloptics.de; Markus Klahr, Sales Manager, markus.klahr@silloptic.de.

Sinclair Manufacturing

#6012

12 S Worcester St, Chartley, MA, 02712
508/222-7440; fax 508/226-0517

sales@sinclairmfg.com; www.sinclairmfg.com

Sinclair manufactures hermetic packages for microelectronic, fiber-optic, microwave and optical applications. We specialize in high-quality, custom machined or stamped packages. With our state of the art CNC machining centers, precision tooling and inspection systems, we can produce your designs rapidly. Contact: Michael O'Keefe, Vice President Marketing & Sales, mokeefe@sinclairmfg.com; Jane Koppen, Sales Associate, jkoppen@sinclairmfg.com.

SIOS Messtechnik GmbH

#238

Am Vogelherd 46, Ilmenau, Germany, 98693
508/634-6688; fax 508/634-6868

usa@piezोजना.com; www.sios.de

Siskiyou Corp.

#1815



110 SW Booth St, Grants Pass, OR, 97526
541/479-8697; fax 541/479-3314

sales@siskiyou.com; www.siskiyou.com

Siskiyou Corporation manufactures motion control devices with manual and computer interfaced controllers, translation stages, mirror mounts, lens positioners, adjustment screws, construction hardware, fiber grippers and other opto-mechanical components for use in research and manufacturing. Siskiyou Corporation will also custom tailor devices to fit your needs. Contact: Robert Hodge, President, rshodge@siskiyou.com; Mark Mittelstaedt, Sales Manager, mmittelstaedt@siskiyou.com.

SMA Optical Technologies, Inc.

#6295



150 Lucius Gordon Dr, West Henrietta, NY, 14586
585/214-2435; fax 585/292-6953

info@smaoptical.com; www.smaoptical.com

Contract developer of illumination and imaging systems. Specializing in biomedical, machine vision and LED illuminators, SMA offers sophisticated development and design services, prototyping and even production through their partner companies. Contact: Stephen Arnold, President, sarnold@smaoptical.com; Kimball Straw, Engineering Manager, kstraw@smaoptical.com.

Snake Creek Lasers, LLC

#128

1 Technology Dr, RR 2 Box 2753, Hallstead, PA, 18822
570/879-4992; fax 570/879-0912

sales@snakecreeklasers.com; www.snakecreeklasers.com

New Product: Extended-Temperature-Range options for our MiniGreen Series-world's highest power-density laser.

Snake Creek Lasers a world leader in the manufacture of miniature solid-state lasers with wavelengths of 1064nm, 532nm and 473nm. Our product offerings include our MicroGreen™ laser the world's smallest DPSS green laser, which produces up to 30mW of output power and the MiniGreen™ laser, the highest density commercial DPSS green laser, which produces greater than 200mW of output power. Our green lasers are suitable for alignment, biofluorescence, laser displays and illumination applications. Contact: Sten Tornegard, Marketing Manager, STornegard@snakecreeklasers.com.

Photonics West Exhibitor Directory

Solid State Cooling Systems

#5071

20 Pleasant View Rd, Pleasant Valley, NY, 12569
845/635-5500; fax 845/635-8081
kanderson@sscooling.com; www.sscooling.com

Since 1994, SSSC has manufactured solid state temperature control products which are compact, quiet, vibration-free, reliable and energy-saving. Our family of thermoelectric products (chillers, heat exchangers, power supplies and cold plates) provide precise temperature control for low light CCD cameras, diode lasers, fiber lasers, laser medical applications, SEM's, small enclosures and therapeutic heating/cooling. Contact: Mark Logan, Vice President of Sales, mlogan@sscooling.com; Kelly Anderson, Marketing Assistant.

Special Optics, Inc.

#517



315 Richard Mine Rd, Wharton, NJ, 07885-1659
973/366-7289; fax 973/366-7407
sales@specialoptics.com; www.specialoptics.com

New Product: 100 mm Large Output Beam Expander and 1-4X Motorized Zoom Beam Expander.

Special Optics effectively designs, develops and manufactures Custom, OEM and Catalog diffraction-limited optical assemblies including Beam Expanders, Scanning and Imaging Lenses and Polarization optics for applications such as vision correction, military reconnaissance, semiconductor inspection and laser engraving. Contact: Brian Weinberg, Director of Sales and Marketing, bweinberg@specialoptics.com; Steven Morales, Sales Manager, smorales@specialoptics.com.

Spectral Instruments, Inc.

#533

420 N Bonita Ave, Tucson, AZ, 85745
520/884-8821; fax 520/884-8803
info@specinst.com; www.specinst.com

Spectral Instruments specializes in the development and manufacture of cooled CCD cameras for demanding low-light applications. We provide the finest low noise $3e^{-}$, high sensitivity, -110C cooling, 16-bit CCD cameras that current technology can offer. Optical inputs can include windows with custom coatings through fiber optic tapers or faceplates. Readout options are designed to be flexible and customized to the application. Custom CCD designs and OEM camera production are available. Contact: Kevin Toerne, Systems Specialist, ktoerne@specinst.com.

Spectral Systems

#6409

35 Corporate Park Dr., Hopewell Junction, NY, 12533
845/896-2200; fax 845/896-2203
www.spectral-systems.com

New Product: Large Volume Crystals polishing Capacity. Modulator Final Assembly, Testing. Hollow Retroreflectors.

Spectral Systems offering solutions to your outsourcing troubles. A United States based manufacturing facility including optics, thin film deposition and final instrument assembly and test. Specializing in FTIR spectrometer modulator assembly and ATR accessories. Covering applications from UV to FIR, we are committed to intelligently discussing your opportunity. Contact: Carlos Guajardo, Sales Manager, cguajardo@spectral-systems.com; Frank Wesley, Head of Engineering, fwesley@spectral-systems.com.

Spectralus Corp.

#6403



2953 Bunker Hill Ln Ste 400, Santa Clara, CA, 95054
408/282-3658; fax 408/282-3501
gnemet@spectralus.com; www.spectralus.com

Spectra-Mat, Inc.

#1042

100 Westgate Dr, Watsonville, CA, 95076
831/722-4116; fax 831/722-4172
sales@spectramat.com; www.spectramat.com

New Product: CTE-Matched Microchannel Coolers for laser diodes and other power GaAs semiconductors.

Spectra-Mat, Inc. (SMI) specializes in wafer and chip level thermal management solutions for optoelectronic applications. Incorporating our unique metal-matrix based materials; we manufacture submounts, carriers and wafers with low CTE and excellent thermal conductivity. Our lithography grade wafer scale substrates are available up to 150mm diameter. Optimal thermal performance can be achieved with our proprietary CTE-matched liquid-cooled designs available in early 2008. Contact: Sandra Petznick, Sales & Marketing Manager, spetznick@spectramat.com; Greg Rudd, Chief Technologist, grudd@spectramat.com.

Spectra-Physics/A Division of Newport Corporation

#817

1335 Terra Bella Ave, Mountain View, CA, 94043
650/961-2550; fax 650/968-5215
sales@newport.com; www.newport.com

Spectrogon US Inc.

#235

24B Hill Rd, Parsippany, NJ, 07054
973/331-1191; fax 973/331-1373
sales.us@spectrogon.com; www.spectrogon.com

SPECTROGON specializes in the design and manufacture of optical filters, thin film coatings and components, for analytical, medical and scientific instruments. Spectrogon is the world leader in the manufacture and design of Holographic Diffractions Gratings for Laser Compression/Stretcher applications, tuning and spectroscopic instruments. Spectrogon offers a huge inventory of filters, available on our website (www.spectrogon.com) that can be delivered from stock. Contact: Sam Ponzo, Sales Manager; Kelly Koerber.

Spectrolab, Inc.

#6438

12500 Gladstone Ave, Sylmar, CA, 91342
818/365-4611; fax 818/838-7474
www.spectrolab.com

New Product: InGaAs PIN arrays, Laser Power Converters, InGaAs APD Arrays.

Spectrolab a world leader in solar cells and illumination products now offers high performance InGaAs PIN and avalanche photodiode (APD) array products operating in the short-wavelength infrared (SWIR) region of 0.9 to 1.6 micron and high efficiency laser power converter products operating at 810 nm. We design, develop and manufacture these products at our facility in Sylmar California. These products are also available in packages. Spectrolab is a Boeing Company. Contact: Rengarajan Sudharsanan, Director of Sensor Products, rsudharsanan@spectrolab.com; Dorothea Taylor, Senior Marketing Engineering Coordinator.



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CPC

Carolinas Photonics Consortium



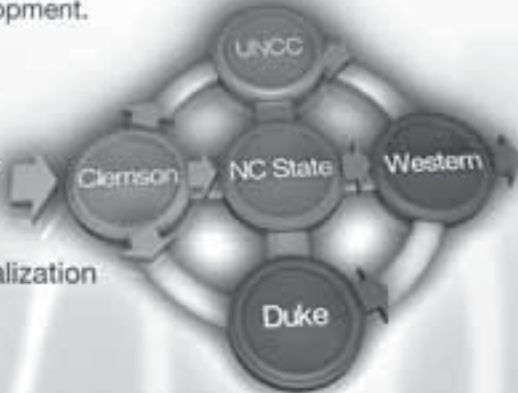
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The South is Rising Again!

Five Universities Collaborating to bring you Tremendous Research and Commercialization Capabilities.

The Carolinas Photonics Consortium (CPC) is a collaboration of five universities - **Clemson, Duke, NC State, UNC Charlotte, and Western Carolina**. CPC has over **\$300M of photonics-based investments**, and has core capabilities serving broad photonics applications. CPC is focused on commercializing the research from the five campuses. The Carolinas Photonics Consortium provides a link between campus research, industrial needs, and regional economic development.

Clemson: Materials
UNCC: Integrated Optics
NCSU: Imaging / IT
Duke: Bio-Photonics
WCU: Rapid Product Realization



Mission

Provide resources and to proactively interface between key stakeholders in the region (universities, companies, economic development, government agencies, investment groups) to commercialize CPC university photonic technologies.

Goals

To create new knowledge, processes, and products for the photonic industry capitalizing on talent that has self assembled in the Carolinas;
To graduate highly educated students to support the development and manufacturing of the photonic materials, devices, systems and software necessary for tomorrow's communication and computing networks.

So ya'll come on down and sit a spell.

www.CarolinasPhotonics.com

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CLEMSON
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Duke
UNIVERSITY

NC STATE
UNIVERSITY

UNC CHARLOTTE

WESTERN
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SOUTH CAROLINA

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Spectroscopy Magazine

#6243

Advanstar Communications, Bldg F 1st Fl 485 Route 1 South, Iselin, NJ, 08830
732/596-0276; fax 732/225-0211
www.spectroscopyonline.com

Spectroscopy is the only publication dedicated exclusively to the spectroscopic sciences, providing peer-reviewed technical and applications-oriented information to the largest audited circulation of spectroscopists in the United States. With its focus on techniques like Raman, X-ray, MS, ICP-MS, FT-IR, *Spectroscopy's* unique editorial content enables substantial productivity improvement in the laboratory, while facilitating the exchange and flow of information throughout the scientific community. Contact: Ed Fantuzzi, Publisher, efantuzzi@advanstar.com; Jim Colford, East Coast Sales Representative, jcolford@advanstar.com.

Spectrum Detector Inc.

#6127

5825 Jean Road Center, Lake Oswego, OR, 97035
503/697-1870; fax 503/697-0633
dond@spectrumdetector.com; www.spectrumdetector.com

New Product: Low uncertainty Optical TRAP USB Instrument UV to Near IR.

Design and manufacture Broadband Pyroelectric Detectors and Radiometers, Optical Power Meters, Laser Joulemeters, Optical and Thermal TRAP Detectors and THz sensors. Products are used to measure from pW to W, fJ to J from 0.1 μm to 3000 μm . Products include NIST traceable calibration. See many new products at Photonics West. Contact: Don Dooley, President; Ruth Stout, ruths@spectrumdetector.com.

Spectrum Scientific, Inc.

#6076



16692-A Hale Ave, Irvine, CA, 92606
949/260-9900; fax 949/260-9902
sales@ssioptics.com; www.ssioptics.com

Manufacturer of holographic diffraction gratings, including blazed and standard types, mirror surfaces including parabolic, on and off axis, ellipsoidal and hollow cube retroreflectors. Custom grating designs available upon request and welcomed. Spectrum Scientific's proprietary blazing technique yields 10x better lower stray light and significantly higher efficiency than ion etched blazed holographic gratings. UV as low as 120nm, as well as VIS/NIR applications. Contact: Daphnie Chakran, daphnie@ssioptics.com; David Cook, david.cook@ssioptics.com.



GENERAL REFRESHMENTS SPONSOR

Spectrum Thin Films Corp.

#446



135 Marcus Blvd, Hauppauge, NY, 11788
631/589-3502; fax 631/589-3514
info@spectrumthinfilms.com; www.spectrumthinfilms.com

New Product: STF has a Hydrophobic Coating that gives a protective coating that will resist water & water vapor.

Manufacturers of high quality optics and optical coatings. Spectrum Thin Films Inc.'s line of optical coatings ranges from simple cost effective coatings to complex state of the art. Our coatings range from 0.193 to 20 Microns. In house testing includes UV-VIS-IR Spectrophotometers and Envio chambers to meet or exceed MIL specs. Contact: Wayne Griffith, General Manager, wayne@spectrumthinfilms.com; Harry Sudwischer, Technical Specialist, Harry@spectrumthinfilms.com.

SphereOptics LLC

#6006



One Horseshoe Pond Ln, Concord, NH, 03301
603/746-2000; fax 603/225-3089
sphereoptics@sphereoptics.com; www.sphereoptics.com

SPI Lasers

#6408

3 Wellington Park, Tollbar Way Hedge End, Southampton Hampshire, United Kingdom, SO30 2QU
44 1489 779 0696; fax 44 1489 779 698
sales@spilasers.com; www.spilasers.com

Spica Technologies, Inc.

#1841

18 Clinton Dr #3, Hollis, NH, 03049
603/882-8233; fax 603/882-8614
mgentile@spicatech.com; www.spicatech.com

Spica Technologies provides test and measurement services to the manufacturers and end users of optical and fiber components. Our 17 years of laser based test experience including laser damage measurements, optical transmission testing and environmental exposure provides a unique qualification for the performance of both specialized and production fiber testing. Contact: Michele Turner, Office Administrator.

SPIE Industry Resources

#6143

PO Box 10, Bellingham, WA, 98227
360/676-3290; fax 360/647-1445
customerservice@spie.org; www.spie.org

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Spitfire Semiconductors Ltd.

#6604

57 O'Rorke Rd, Auckland, New Zealand, 1061
64 3 326 4721; fax 64 3 326 4722
paul@spitfirenz.com; www.spitfirenz.com

New Product: Bulk-grown HgCdTe (MCT) 15mm wafers or 15mm x 20mm planks, 500um thick. Cut-on from 3 to 18 micron.

The only independent supplier of bulk-grown MCT (II-VI) semiconductor to infrared detector manufacturers. Contact: Paul Zwaan, Chief Executive Officer; Elena Verheul, Exhibition Coordinator, Sales@spitfirenz.com.

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SQS Vlákvná Optika A.S.

#6406

304 Komenského, Nova Paka, Czech Republic, 509 01
420 493 765 111; fax 420 493 721 017
public@sqqs-fiber.cz; www.sqqs-fiber.cz

New Product: PM Planar Splitters, PM Fiber Arrays, Low wavelength passive optical components, Hermetic sealing.

SQS Vlákvná optika a.s. is a Czech manufacturing company, also having its own R&D department. SQS Vlákvná optika a.s. manufactures and supplies a wide assortment of fibre optic products as well as being able to assist in technologic modifications as requested by customers to these products. Contact: Rouben Antanian, Director of Business Development, rouben.antanian@sqqs-fiber.cz; Zdenek Zach, Director of Sales, zdenek.zach@sqqs-fiber.cz.

SRICO, Inc.

#6050

2724 Sawbury Blvd, Columbus, OH, 43235
614/799-0664; fax 614/799-2116
judith@srico.com; www.srico.com

Srico makes integrated optical waveguide components and optoelectronic subsystems for telecommunications, sensing, test instrumentation, frequency conversion, chemical & biological sensor systems and physiological monitoring. Products are external modulators; PPLN devices; frequency converters; electric field, voltage & current sensors; fiber optic links; optical wavelength switches and medical devices. Srico provides research and development, custom product design and fabrication services. Contact: Sri Sriram, PhD, President & Chief Executive Officer, sri@srico.com.

SSCP USA (Formerly Luvantix Co., Ltd.) #6623

1796 Technology Dr, San Jose, CA, 95110
408/453-5000; fax 408/453-5011
timothyelark@sspcorp.com; www.luvantix.com;
http://eng.sspcorp.com

New Product: Lowest Index Cladding - PC 363 - Index of 1.363 @ 850 nm; NA of 0.5 when cladding silica.

SSCP manufactures standard UV curable primary and secondary coatings, ink and acrylate matrix for fiber ribbons and special purpose coatings for high optical power (including fiber lasers and transmission of other lasers) and high temperature applications. These special products include low index polymer claddings, which allow for NAs greater than 0.48, high glass transition temperature secondary coatings (1.370 to 1.452). New: 1.363 index. Contact: Timothy Clark, Chief Operating Officer/Marketing Director, timothyelark@sspcorp.com; Karen Namkung, Administrative Assistant, karen@sspcorp.com.

Standa

#1933

PO Box 377, Vilnius, Lithuania, 03012
370 5 2651474; fax 370 5 2651483
sales@standa.lt; www.standa.lt

Standa is best known for our wide variety of motorized positioners and motor controllers with software and our high quality precision mechanics for OEM's and researchers. Standa also produces sub-nanosecond micro lasers with 1st, 2nd, 3rd and 4th harmonics and M2 \leq 1.2. These lasers are optimal for micro-machining, spectroscopy and seeding high-energy fiber lasers. Contact: Lucian Hand, President of Altos Photonics, lucian@altosphotonics.com.

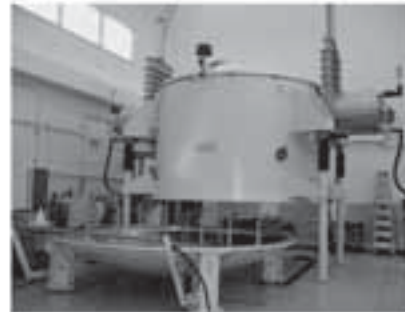
DynaVac

Vacuum Systems for Industry & Research



Products

- ◇ Precision Optical Coating Systems
- ◇ Batch and Inline Sputtering Systems
- ◇ Web Handling Equipment
- ◇ Large-Scale Systems



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- ◇ Custom engineering

www.dynavac.com • sales@dynavac.com
110 Industrial Park Road • Hingham, MA 02043
Tel: (781) 740-8600 • Fax: (781) 740-9996

Photonics West Exhibitor Directory

Stanford Computer Optics, Inc.

#2031



780 Cragmont Ave, Berkeley, CA, 94708
510/527-3516; fax 510/558-9582
info@stanfordcomputeroptics.com;
www.stanfordcomputeroptics.com

New Product: XXRapidFrame multiple framing system, gating time 0.2ns-DC, 3/6 or 4/8 channels, 100Gfps, USB.

Analog or digital intensified CCD cameras. High-speed, ultra-fast gated (0.2ns), intensified cameras with nanoLux sensitivity and high rep rate (200kHz continuous, 3.3MHz or 300ns burst). Video imaging spectroscopy software for complex data acquisition, time-resolved spectroscopy and pixel-by-pixel image analysis using SCO 4Picos/4QuikE/XXRapidFrame. Sensitivity of 1count/1photoelectron/pixel w/0.2ns gate time. MCP and diode image intensifiers and low-light cameras.

Stanford Photonics Research Center (SPRC)

#6417

AP 212, 450 Via Palou, Stanford, CA, 94305-4088
650/723-5627; fax 650/725-1822
photonics@stanford.edu; http://stanfordphotonics.stanford.edu
The Stanford Photonics Research Center builds strategic partnerships between the Stanford photonics research community and member companies. SPRC, one of the largest photonics programs in the United States, brings together approximately 200 core photonics professors, graduate students and postdoctoral research associates in the Schools of Engineering, Humanities & Sciences and Medicine. Contact: Sara Charbonneau-Lefort, Assistant Director; Tom Baer, Executive Director, tmbaer@stanford.edu.

Stanford Photonics, Inc.

#6162

1032 Elwell Ct Ste 102, Palo Alto, CA, 94303
650/969-5991; fax 650/969-5993
info@stanfordphotonics.com; www.stanfordphotonics.com

New Product: Solar Blind ICCD Cameras: 200-300nm low light imaging with fast gating/fast framing options.

Stanford Photonics, Inc. designs and manufactures electro-optic systems for remote viewing, surveillance, X-ray, photometry and low light level imaging and analysis applications. Products range from fiber-coupled image sensors and optimized light sources to light measurement systems, X-ray detectors and custom CMOS/CCD and intensified CCD cameras. Image acquisition and RAID-based streaming software is also available for further enhancing our high speed, low light ICCD/CCD imaging platforms. Contact: Steve Herlick, Sales Engineer, sherlick@stanfordphotonics.com.

Stanford Research Systems, Inc.

#1721

1290-D Reamwood Ave, Sunnyvale, CA, 94089
408/744-9040; fax 408/744-9049
info@thinksrs.com; www.thinksrs.com

Stanford Research Systems manufactures a full line of scientific and engineering test instruments, including lock-in amplifiers, delay generators, photon counters, preamplifiers, small instrumentation modules, synthesized clock generator, FFT spectrum analyzers, boxcar averagers, optical chopper, function generators, time interval/ frequency counters, high voltage power supplies, filters, LCR meters, thermocouple monitors, residual gas analyzers, ion gauge controllers, etc. Contact: Janie Du, Sales Engineer, janied@thinkSRS.com; Dave Ames, Sales Manager.

Star Tech Instruments

#134

PO Box 1822, New Fairfield, CT, 06812
203/312-0767
tatzen@att.net; www.startechinst.com

Star Tech Instruments manufactures stock and custom energy probes and imaging systems for the DUV spectral range. Contact: Bill Fricke.

Steinmeyer, Inc.

#6294

217 Middlesex Tpke, Burlington, MA, 01803
781/273-6220; fax 781/273-6602
www.steinmeyer.com

At Steinmeyer, we're dedicated to the design and engineering of precision linear and rotary stages. The stages made by Steinmeyer FMD, located in Dresden, Germany, boast some of the lowest runout accuracies available. Our expertise lies not only in appreciating the details of the application but also in knowing how to achieve the highest possible precision by choosing the best components together with understanding how specific materials react during machining. Contact: John Skaltsas, Marketing Manager, jskaltsas@steinmeyer.com; George Jaffe, Executive Vice President, gjaffe@steinmeyer.com.

Stellar Industries Corp.

#1444

50 Howe Ave, Millbury, MA, 01527
508/865-1668; fax 508/865-5016
sales@stellarind.com; www.stellarind.com

Stellar offers high performance, high power Copper on Ceramic for Laser Submounts and for RF Microelectronic hybrids. Stellar also offers vapor deposited AuSn for precision mounting and a complete line of custom ceramic machining and metalization services.

StellarNet, Inc.

#2009



14390 Carlson Cir, Tampa, FL, 33626
813/855-8687; fax 813/855-0394
contactus@stellarnet.us; www.stellarnet-inc.com

New Product: Super Range Spectrometers for UV-VIS and NIR (0.2-2.3µm).

StellarNet makes extremely ruggedized UV-VIS and NIR Spectrometers & SpectroRadiometers that measure light for lab and field applications. Since 1995 StellarNet has been shipping portable instrumentation worldwide with high performance at a surprisingly "low cost". The free SpectraWiz software makes measurements a snap and also includes customizable programs for LabView and VBA-Excel. Contact: Ryan Flaherty, Principal Scientist, ryan@stellarnet.us; Will Pierce, Chief Scientist, wpierce@stellarnet.us.

Stemmerich, Inc.

#6425

4728 Gravois Ave, St. Louis, MO, 63116
314/832-7726; fax 314/832-7799
gkobb@stemmerich.com; www.stemmerich.com

Stemmerich offers specialty glass for Optic, Display and Electronic applications. Complex configurations, precision surface finishes and edge profiles. Research & Development, Pilot and Production run quantities with quick on-time deliveries. Contact: Colleen Weber, colleenweber@stemmerich.com; Greg Koob.

StockerYale, Inc.

#1427

32 Hampshire Rd, Salem, NH, 03079-4204
603/893-8778; fax 603/893-5604
info@stockeryale.com; www.stockeryale.com

New Product: Viparr: Thermolectric system with constant laser temperature for applications demanding consistency.

StockerYale, Inc. is an independent designer and manufacturer of structured light lasers, LED modules and fluorescent illumination products, as well as phase masks and specialty optical fibers for use in a wide range of markets and industries including machine vision, industrial inspection, telecommunications, military, utilities and medical. Contact: Sales Department, lasers@stockeryale.com.

Strasbaugh

#3000

825 Buckley Rd, San Luis Obispo, CA, 93401
805/541-6424; fax 805/541-6425
info@strasbaugh.com; www.strasbaugh.com

New Product: STRASBAUGH's new 6BK Mini-CP. Designed for submerged polishing of low-angstrom optical components.

Strasbaugh is a leading provider of innovative precision surfacing equipment to the global Semiconductor, Silicon, LED, Telecommunications and Precision Optics industries. From prime wafer polishing and chemical-mechanical planarization systems to advanced wafer grinding tools, Strasbaugh has built a reputation as a world-class manufacturer of precise, reliable optical and semiconductor polishing and grinding solutions. Strasbaugh has delivered over 16,000 machine products worldwide since 1948. Contact: Gerard Pardeilhan, Product Manager, optix@earthlink.net; Scott Riedinger, Sales-Eastern USA, sriedinger@strasbaugh.com.

Stratophase Ltd.

#1527

425 Rte 206, Newton, NJ, 07860
973/300-3000; fax 973/300-3600
enquiries@stratophase.com; www.stratophase.com

Stratophase is developing a platform bio-chemical detection chip which measures refractive index at multiple wavelengths simultaneously with very high precision. Chips can detect bacteria, virus and toxins and have applications in bio-detection in the security and pharmaceutical industries. Chips can also monitor the composition of liquids, particularly in flammable environments, in industrial processes such as chemical manufacture, food processing, water processes etc. Contact: Richard Williams, richard.williams@stratophase.com.

Sumipro

#6278

Bedrijvenpark Twente 323, Almelo, The Netherlands, 7602 KL
31 546 815 141; fax 31 546 811 479
info@sumipro.nl; www.sumipro.nl

Sumipro is specialized in the manufacturing of high precision optical components and systems. Besides manufacturing we help with designing, engineering and rapid prototyping of your optical parts, like lenses, inserts for molds and mirrors for all kind of applications in all wavelength dimensions. By means of high precision diamond turning we realize these optical components in aluminium, optical grade plastics, germanium, silicon, copper, nickel, etc. with reproducible high accuracies. Contact: R. Couwenberg, Marketing & Sales, r.couwenberg@sumipro.nl; K. Nederhoff, Marketing & Sales, karin@sumipro.nl.

Impex HighTech GmbH
Impex HighTech

532-Q LASER

- > 5 μ J
- 532 nm
- 2 ns
- 0 - 20 kHz

1064-Q LASER

- > 10 μ J
- 1064 nm
- 2,4 ns
- 0 - 20 kHz

BONDED LASER CHIPS 1064 Q

- > 10 μ J
- 1064 nm
- 2 ns
- 0 - 20 kHz

Impex HighTech GmbH
Hilfsstrasse 5
48432 Rhina, Germany
Fon + 49 59 71 98 16 50
Fax + 49 59 71 98 16 55
sales@impex-hightech.de
www.impex-hightech.de

Princeton Scientific Corp.
414 Wall Street
Princeton, NJ 08540 USA
Fon + 1 609 924 30 11
Fax + 1 609 924 30 18
info@princetonscientific.com
www.princetonscientific.com

Sunex Inc.

#6399

5963 La Place Ct Ste 309, Carlsbad, CA, 92008
760/602-0988; fax 760/602-0681
sales@sunex.com; www.sunex.com

Sunex Inc. specializes in the design, development and production of miniature digital imaging lenses for CMOS/CCD image sensors. In addition to imaging lenses, Sunex manufactures optical low pass filters (OLPF), IR-Cutoff filters and Day/Night Exchangers. Sunex provides optical design services and custom product development including Tailored Distortion optical designs. Contact: Peter Allard, Director of Sales and Marketing, peter.allard@sunex.com.

Sunny Precision Optics, Inc.

#5105

5079 Glentree Dr, San Jose, CA, 95129
408/244-8972; fax 408/228-8789
market@yoptics.com; www.yoptics.com

New Product: High order aspherical lens, lamda/20 flatness surface, Corner Cube retroreflector, custom optics.

Dedicated to manufactory catalog and custom design's achromat lens, aspherical lens, cylindrical lens, laser grade high accuracy prism, beamsplitter, PBS, waveplate, filter, window, corner cube retroreflector, polarizer, Rodand etc in laser, medical equipment, defence and telecommunication industry. Material includes optical glass, BK7, Fused Silica, Germanium, Silicon, sapphire, CaF2, BaF2, MgF2 and etc. We supply to industry and research institute with excellent quality and price. Contact: Anna Liang, Marketing Manager, anna@yoptics.com.

Photonics West Exhibitor Directory

Super Optronics

#737

PO Box 2599, Redondo Beach, CA, 90278
310/516-9082; fax 310/965-0029
contact@superoptronics.com; www.superoptronics.com

New Product: PPLN, LBO Ovens & Temperature Controller Crystals, Ovens and SHG systems.

Non-linear crystals: BBO, KTP, CLBO, KD*P, LiNbO₃, LiIO₃, AgGaSe₂ and more for SHG, SFG, DFG & OPO. PPLN Oven & Temperature controller. Ultra-thin crystal for autocorrelator, etc. Laser crystals: YAG, YLF, YAP, YVO₄, Ti:Sa, NYAB etc. Photorefractive crystals: BaTiO₃, SBN, BSO, Fe:LN, etc. Crystal repair, polishing and coating service. Award-winning wavelength conversion systems for fs, ps, ns Ti:Sa and other lasers.

SUPERLUM

#5021

Unit 2G, Eastlink Business Park, Carrigtwohill, Co. Cork, Ireland
353 21 453 3666; fax 353 21 453 3026
sales@superlum.ie; www.superlumdiodes.ie

New Product: Widely tunable/swept laser source with fast wavelength-to-wavelength switching.

SUPERLUM is the leader in developing and manufacturing of Broadband Light Sources: Superluminescent Diodes for cutting edge OCT technologies, fiber-optic gyros and other fiber-optic sensors; broadband SOA and gain modules with extreme outstanding parameters; widely tunable lasers/swept sources. Contact: support@superlum.ie.

SUSS MicroOptics SA

#6179

Rue Jacquet-Droz 7, Neuchâtel, Switzerland, 2000
41 32 720 5104; fax 41 32 720 5713
info@suss.ch; www.suss-microoptics.com

New Product: New generations of Flat-Top-Generators (Square, Spots, Lines) and Random Diffusers.

SUSS MicroOptics is a leading company for high-quality micro-optics. SUSS MicroOptics comprises profound experience in optical design, micro-fabrication and metrology. We use leading edge manufacturing techniques in our microlens array fabrication, based on 200mm wafer technology in Quartz and Silicon. Our micro-optical components meet highest demands as required for applications in photolithography, optical networking and metrology. Contact: Kristina Schulz, Sales & Marketing Manager, info@suss.ch; Jürgen Rieck, rieck@suss.ch.

Sutter Instrument Co.

#219

One Digital Dr, Novato, CA, 94949
415/883-0128; fax 408/883-0572
info@sutter.com; www.sutter.com

Sutter Instrument is a leading manufacturer of precision electromechanical instrumentation for scientific research and industry. Imaging products include optical filter wheels, high speed filter switchers, xenon light source, stepper-motor controlled SmartShutter, and motorized X-Y translator. Our P-2000 is the premier NSOM fiber tip puller. With over 30 years of motor control and CNC machining experience, we are able to design and deliver versatile, robust optical products at affordable prices. Contact: Alex Cooper, Director, Sales & Marketing, alex@sutter.com; Jack Belgum, Senior Vice President, Research & Development, jack@sutter.com.

Swamp Optics, LLC

#3024

6300 Powers Ferry Rd Ste 600-345, Atlanta, GA, 30339
404/547-9267; fax 866/855-4518
linda.trebino@swampoptics.com; www.swampoptics.com

New Product: Pulse Compressor Compact Alignment-Free in Laser Focus 07-06 & Optics Express 14-10101-2006.

Swamp Optics offers compact, convenient devices for measuring ultrashort laser pulses in real time and which yield the most complete measurements ever and include the beam spatial profile and spatio-temporal distortions. Awards include an R&D100 award and a Circle of Excellence award. Swamp Optics also offers custom devices for nearly every pulse-measurement problem and its recently introduced compact pulse compressors are automatically free of distortions and very inexpensive. Contact: Linda Trebino, Co-Founder and Member.

Swift Glass Co.

#6414

PO Box 879, Elmira, NY, 14902
607/723-7166; fax 607/732-5829
quality@swiftglass.com; www.swiftglass.com

Specializing in the complete fabrication of Borofloat, Pyrex, Sapphire, Fused Silica, BK-7, B-270 and Schott and Kopp color filters. Capabilities include CNC machining, double sided lapping and polishing, edge grinding and polishing, heat tempering and chem strengthening. Contact: Charlie Burke, Vice President; Tony Speciale, Customer Service/Sales Manager, tspeciale@swiftglass.com.

Swiss Jewel Co.

#6140

Constitution PI #509, 325 Chestnut St, Philadelphia, PA, 19106
215/925-2867; fax 215/922-3055
sales@swissjewel.com; www.swissjewel.com

Swiss Jewel Company is a leading supplier of Sapphire, Ruby, Glass and Quartz components, including Windows & Lenses, Ball Lenses and Hemispheres down to 0.15mm. Rods, Tubes, Pin Hole Jewel Wafers, etc. Prototypes to OEM production with our 400 item stock list and custom manufacture to tight tolerances. Contact: Swiss Jewel Sales Team.

SwissOptic AG

#935

Heirich-Wild-Str, Heerbrugg, Switzerland, CH-9435
41 71727 3074; fax 41 71727 4686
swissoptic@swissoptic.com; http://www.swissoptic.com/
htdocs_en/home/index.html

SwissOptic, a Berliner Glas Company, offers a broad variety of precision thin-film coated optical components, electro-optical and opto-mechanical assemblies and optical systems from design to series production. The range of services comprises the whole process chain incl. clean room environment and individual measurement set-ups. Contact: Fred Doss, Sales Manager Precision Optics, fdoss@berlinerglas.com; Matthias Zimmermann, Sales and Marketing Manager, matthias.zimmermann@swissoptic.com.

Sydor Instruments LLC

#332

31 Jet View Dr, Rochester, NY, 14624
585/278-1168; fax 585/278-1169
sales@sydorinstruments.com; www.sydorinstruments.com

New Product: Compact, VCSEL optical comb generator delivers UV, Visible/IR pulses on the order of several GHz.

Sydor Instruments is a comprehensive diagnostics solutions provider. We provide our customers with custom diagnostics and ultrafast imaging systems for a variety of applications in science and industry. We specialize in streak cameras and single photon detectors where the highest resolution and accuracy is required. Contact: Michael Pavia, President, pavias@sydorinstruments.com.



Optical Technologies

made
in
Germany

GERMAN PAVILION

Photonics West 2008

22 to 24 January, 2008, San José, California

Convention Center, Booth 1801

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Photonics West Exhibitor Directory

Sydor Optics, Inc.

31 Jet View Dr, Rochester, NY, 14624
585/271-7300; fax 585/271-7309
sales@sydor.com; www.sydor.com

Manufacturer of precision, flat-surfaced, parallel and wedged optics specializing in double-sided grinding and polishing. Products include: beamsplitters, debris shields, filters, flats, grating substrates, lightpipes, light-weighted substrates, mirrors, wafers, wedges and windows. Also offering CaF₂ and MgF₂ blanks and polished components. Contact: James Sydor, President; Michael Naselaris, General Manager.



EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

Synopsys, Inc.



700 E Middlefield Rd, Mountain View, CA, 94043-4024
650/584-5000; fax 650/965-8637
info@synopsys.com; www.synopsys.com

Synopsys is a world leader in electronic design automation software for semiconductor design. The Synopsys offering includes TCAD, which is the use of computer simulation to model semiconductor processing and device operation. TCAD provides insight into the fundamental physical phenomena that impact performance and yield. The TCAD Optoelectronics solution addresses the simulation needs of optoelectronic devices such as CMOS Image Sensors, CCDs, LEDs, photo detectors, solar cells and lasers. Contact: Synopsys TCAD Team, tcad_team@synopsys.com.

Syntec Optics



7100 Junction Rd, Pavilion, NY, 14525
585/768-2513 ext. 122; fax 585/768-6099
info@syntecoptics.com; www.syntecoptics.com

Hybrid solutions that push the polymer envelope. Syntec Optics is the largest independent custom manufacturer of precision plastic optics in the United States. Capabilities consist of optical and mechanical design, including optics that combine polymer and glass; optical and opaque mold building; including fixture tooling; single-point diamond turning, including HRDTm for high refraction, high thermal optics and also plano polishing. Fully integrated custom metrology and assembly services. Contact: Paul Tolley, Vice President/General Manager, ptolley@syntecoptics.com.

Taboada Research Instruments, Inc.



1923 N New Braunfels, San Antonio, TX, 78208
210/224-8876; fax 210/224-8834
info@taboada.com; www.taboada.com

New Product: Omni Mount provides a kinematically stable, rigid mounting for a wide range of optical components.

Taboada Research Instruments, Inc. was founded in 1999 and specializes in custom research, robotic and optical instruments. TRI sells laser plane generators and structured light ribbons, both with no moving parts, for various applications. TRI provides novel optical mounts that can accommodate optics having a wide range of diameters. TRI also designs and manufactures Q-switch modifications for high powered Er glass lasers. To this day, TRI remains focused on Advancement Through Innovation. Contact: John M. Taboada, Vice President, jm@taboada.com; John Taboada, President, j@taboada.com.

#332

TATSUTA Electric Wire & Cable Co., Ltd. #5117

Nihonseimei Bldg 3F, 1-1, Minami-machi, Kawasaki-ku,
Kawasaki-City Kanagawa, Japan, 210-0015
81 44 221 7692; fax 81 44 221 7695
telecom-sales@tatsuta.co.jp; www.tatsuta.co.jp/index-e.html

We produce and develop various kind of optical fiber components including optical couplers, combiners, fiber bragg gratings. We can arrange their wavelength from short one to long one, from visible to IR. You can choice all types of fibers, SMF, MMF and PMF. Why don't you talk with us about optical fiber components? We are sure we can give you your answer about optical components.

#6067

TEC Microsystems GmbH

#1801

Schwarzschildstr 3, Berlin, Germany, 12489
49 30 6789 3314; fax 49 30 6789 3315
info@tec-microsystems.com; www.tec-microsystems.com

New Product: Thermoelectric sub-assemblies, TE micro modules in various packages.

TEC Microsystems GmbH, founded in 2007, is a growing company that is offering standard and custom thermoelectric cooling solutions for laser and optoelectronic applications. We are committed to provide maximum service to our customers, especially focus on delivery reliability, securing high-quality of the products and good communication. Contact: Alexander Hoferichter, Chief Executive Officer.

tec5USA, Inc.

#520



80 Skyline Dr, Plainview, NY, 11803
516/653-2000; fax 516/939-0555
info@tec5USA.com; www.tec5USA.com

New Product: New fast and sensitive multi-channel miniature spectrometer.

High-quality products for spectroscopy, light sources, light guides, immersion probes, spectrometer modules, operating electronics. Spectrometer systems for multiple applications in lab or process, e.g. concentration, filter transmission, color, thin film thickness. Optical instrumentation as remote control biomass detection systems. Various software support. Custom designed components and systems. Detector array electronics, CCD electronics, spectrometer, light guides, spectrometer systems. Contact: Gert Noll, General Manager, gert.noll@tec5usa.com; Arek Betlej, Technical Sales Manager, arek.betlej@tec5usa.com.

#347

Techmetals, Inc.

#6377

345 Springfield St, Dayton, OH, 45403
937/253-5311; fax 937/253-5096
info@techmetals.com; www.techmetals.com

New Product: Improved OPTAKOAT - the next generation in SPDT nickel alloys.

Techmetals Optics Department is the one stop for OPTAKOAT and nickel alloys used for SPDT and other precision machining. Deposits can be formulated to best meet individual customer, specific turning needs. Widely used in precision molding of critical optic components as well as the manufacturing lenticular, brightness enhancing and directing films. Contact: Steve Deisher, General Manager, Optics Department, sedisher@techmetals.com; Tara Schumaker, Operations Manager, Optics Department, tschumaker@techmetals.com.

Technical Manufacturing Corp.

#1611

15 Centennial Dr, Peabody, MA, 01960
978/532-6330; fax 978/531-8682
sales@techmfg.com; www.techmfg.com

New Product: Electro-Damp® PZT is a frame-mountable, extremely efficient vibration cancellation system.

Technical Manufacturing Corporation (TMC) designs and manufactures sophisticated vibration isolation systems for precision manufacturing processes and research worldwide, including optics, semiconductor manufacturing, microbiology, metrology, and academic, industrial and military research projects. Its industry-standard products include optical, laboratory and cleanroom tables; breadboards; tabletop, floor and sub-floor platforms; state-of-the-art active isolators and OEM isolator designs. Contact: Steven Ryan, Vice President, Sales & Marketing.

Technobis Fibre Technologies

#6278

Geesterweg 4b, Uitgeest, The Netherlands, 1911 NB
31 251 248432; fax 31 251 242835
www.technobis.nl

New Product: High speed multichannel / multi sensor interrogator, max sampling frequency of 19,3 kHz per sensor.

Technobis Fibre Technologies is a young company specialized in the development and supply of complex high-tech fibre interrogator modules and sensors. Contact: Pim Kat, Managing Director, pim.kat@technobis.nl; Jan Chris van Osnabrugge, janchris.vanosnabrugge@technobis.nl.

Technotrade International Inc.

#5111

7 Perimeter Rd, Manchester, NH, 03103
603/622-5011; fax 603/622-5211
sales@technotradeinc.com; www.technotradeinc.com

New Product: Deconex line of Aqueous Precision Cleaning Chemicals suitable for cleaning all Optics and metals.

Technotrade International is the stocking distributor for the Deconex line of aqueous based Precision cleaning and stripping chemicals suitable for Precision optics and all metals. With over 100 formulations and a fully staffed applications laboratory we can tailor our products to your cleaning applications Contact: Johnny Hagen, Vice President, johnny@technotradeinc.com; Albie Auwaerter, President, auwaerter@technotradeinc.com.

TecOptics, Inc.

#1136

1760 Grand Ave, Merrick, NY, 11566-3300
516/379-1203; fax 516/546-7031
info@tecoptics.com; www.tecoptics.com

Air-spaced and solid etalons. Ultrahigh damage threshold laser optics. Interferometric optics. Diode-pumped CW TEM₀₀ solid state lasers from Laser Quantum: 473nm, 523nm, 527nm, 532nm, 660nm, 1047nm, 1053nm and 1064nm wavelengths - 50mW to 6W output powers - mode-hop-free single frequency models - excellent stability and high quality at reasonable prices. Contact: Warren Gutheil, President.

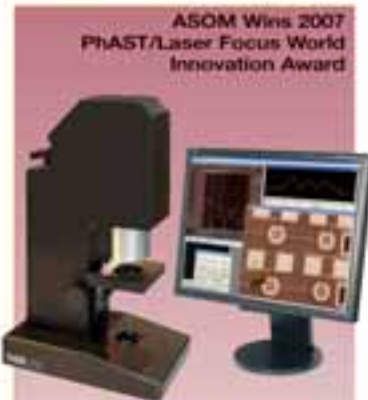
Tecport Optics, Inc.

#635

6901 TPC Dr Ste 450, Orlando, FL, 32822
407/855-1212; fax 407/855-1213
sales@tecportoptics.com; www.tecportoptics.com

Manufacturer of Vacuum Coating Systems for Precision Optics, Ophthalmic, Flat Panel Display, Imaging and Telecommunication applications. An industry leader in innovation, quality, reliability, software and service. Sophisticated yet user friendly systems employ leading edge technology such as plasma assisted deposition. Systems are custom built and pre-configured for your process and your volume. Process is pre-configured and installed systems are production-ready within one week. Contact: Joseph Kim, Vice President, jkim@tecportoptics.com; Frank Helmes, Director of Sales and Marketing.

ADAPTIVE SCANNING OPTICAL MICROSCOPE

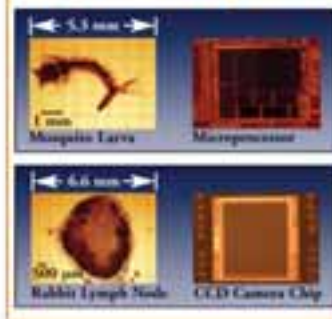


**New ASM9600 Transcends
Limit on Resolution and
Field of View**

ASOM Specifications

- Composite FOV: Ø40 mm
- Total Observable Field Area: 1250 mm² (5215 Tiles at 0.39 mm²/Tile)
- Resolution: 1.5 µm
- Static Optical Magnification: 6.5X
- Working Distance: 19 mm
- Operating Wavelengths: 490-530 nm
- Camera Shutter: 1/15 to 1/10000

Sample Large-Field Images



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Photonics West Exhibitor Directory

Teem Photonics

#1414

61 Chemin Du Vieux Chene, Meylan, France, 38240
33 476 04 05 06; fax 33 476 04 07 06
i.allegre@teemphotonics.com; www.teemphotonics.com

New Product: Fiber amplified microlasers with pulses up to 200kW peak power at 40kHz repetition rate.

Teem Photonics is the leader in passively Q-switched microlasers, which generate sub nanosecond, high peak power pulses at high repetition rates. Wavelengths of operation are in the near infrared as well as the green and ultraviolet; applications include biophotonics, instrumentation, remote sensing, as well as micro-machining and marking. Being introduced is a line of amplified microlasers with fiber delivery of pulses up to 200kW peak power at repetition rates of 40kHz. Contact: Joe Battaglia, North American Sales Manager, j.battaglia@teemphotonics.com; Isabelle Allegre, Sales Assistant, i.allegre@teemphotonics.com.

Telemark

#5048



20936 Cabot Blvd, Hayward, CA, 94545
510/887-2225; fax 510/887-2265
sales@tfi-telemark.com; www.tfi-telemark.com

New Product: Solid State E-Beam Power Supply and Digital Programmable Sweep.

Telemark offers evaporation components, including electron beam sources, e-beam power supplies, optical monitors, plasma chemistry monitors, water vapor cryotrap, quartz crystal deposition controllers and related accessories. New products recently introduced include Cheetah Switching Power Supplies with an innovative digital programmable sweep and the small TVP-1000 cryotrap. Contact: Gerald Henderson, President, garyh@tfi-telemark.com.

METER BOARD SPONSOR

Telops Inc.

#5029

100 - 2600 ave St-Jean-Baptiste, Quebec, QC, Canada, G2E 6J5
418/864-7808; fax 418/864-7843
contact@telops.com; www.telops.com

Telops markets a complete line of advanced burn-in, lifetest and characterization stations for manufacturers of optronic devices. Contact: John Tessitore, Business Development Manager, john.tessitore@telops.com; Philippe Lagueux, Business Development Manager, philippe.lagueux@telops.com.

Tempo Clean Room Foam

#5060

1227 N Miller Park Ct, Visalia, CA, 93291
559/651-7711; fax 559/651-0123
tempo@tempo-foam.com; www.tempo-foam.com

Tempotec Optics Co., Ltd.

#6019

Inside Min'an Enterprise Hongshan Science & Technology Area, 550 Industry Rd, Fuzhou Fujian, China, 350002
86 591 2837 9366; fax 86 591 2837 9366
sales@tempotec.com; www.tempotec.com

New Product: Ultra precision laser grade windows and mirrors.

Tempotec Optics is a professional optical components manufacturer. Our main products are precision optics include optical window, waveplate, filter, prism, rotator, beamsplitter, lens, etc. We are dedicated to giving our customers excellent service. "Fast delivery" "High Quality" and "Best Service" are most emphasized in our culture. With the advantage of technics and continue improvements, we have confidence to be your valuable partner in optics components. Contact: Hou Hongbo, Director, Sales & Marketing, hongbo.hou@tempotec.com; Lin Susan, Sales Representative, susan-l@tempotec.com.

TeraXion Inc.

#6193

2716 Einstein, Sainte-Foy, QC, Canada, G1P 4S8
418/658-9500; fax 418/658-9595
sales@teraxion.com; www.teraxion.com

TeraXion designs and manufactures optical components for industrial and high speed communication applications. TeraXion offers dispersion management devices and customized filtering solutions based on advanced fiber Bragg grating technology. TeraXion is the leading supplier of FBGs for high power and ultrafast fiber lasers. TeraXion also offers ultra-precise laser systems for applications where a high degree of laser accuracy and stability are required. Contact: Daniel Mailloux, Marketing Manager, dmailloux@teraxion.com; Ghislain Lafrance, Vice President Defense & Aerospace, glafrance@teraxion.com.

Termotek AG

#6018

Hardbergstr 9, Rastatt, Germany, 76437
49 7222 50580; fax 49 7222 5058 250
info@termotek-ag.com; www.termotek-ag.com

New Product: Highly reliable chillers range from 200W to 10KW cooling capacity. Rack mountable or stand-alone.

Termotek AG was founded in 1998 by Frank Domnick and incorporated into a privately held company in 2000. The company now produces high tech cooling systems on a production scale for industrial laser applications. Termotek has established itself as a global leader and founded a subsidiary in USA with full capabilities for sales, service, parts and product inventory. Our worldwide sales and service network is constantly being expanded serving customers internationally! Contact: Michael Coutant, Sales Manager, michael.coutant@termotek-usa.com; Susan Hwang, Office Manager, susan.hwang@termotek-usa.com.

Tessera North America

#727



9815 David Taylor Drive, Charlotte, NC, 28262
704/887-3100; fax 704/887-3101
info@tessera.com; www.tessera.com

Tessera North America, Inc., formerly Digital Optics Corp., is a worldwide leader in micro-optics and integrated micro-optical sub-assembly design for high-performance, small-form factor, optical solutions. Industry-leading capabilities include diffractive, refractive and wafer-level optics. Tessera provides solutions for consumer electronics, sensors, semiconductor equipment, IR systems, aerospace/defense, vision systems and more. Contact: Jessica Wargats, Sales Engineer, jwargats@tessera.com.

CONFERENCE BAG INSERT SPONSOR

Texas Instruments

#5036

6550 Chase Oaks Blvd, MS 8470, Plano, TX, 75023-2308
888/357-2984; fax 972/917-5551

New Product: The DMD Discovery 4000™ from Texas Instruments for developing products based on DLP® Technology.

The DMD Discovery™ Developer kit is designed to enable new applications utilizing DLP® Technology from Texas Instruments. DLP® technology is the same fast, high contrast, reliable spatial light modulator technology used in DLP® Projectors, TVs, and Digital Cinemas. DMD Discovery products enable the system developer to load binary data into the Digital Micromirror Device (DMD) and create fast patterns and sequences of light. For more information, contact an authorized TI distributor or visit www.dmddiscovery.com.

TGT Optoelectronic Technology

#6605

SPIE
Corporate
Member

Unit 10 3F Technology Park, 10 On Lai St, Shatin, Hong Kong, 852 852 26430595; fax 852 26401089
george-wong@tgt-tech.com; www.tgt-tech.com

New Product: BN Liner - no contamination to high purity metals.

TGT is a consumables supplier for deposition materials including chemical compound, high purity metals, sputtering targets and evaporation sources including tungsten heating filaments, liner, tungsten boat, boxes, chromed plated rod and more. Contact: George Wong, Sales Director; Annie Lan, Sales Coordinator, annie@tgt-tech.com.



METER BOARD SPONSOR

Thales Laser SA

#1543

Domaine de Corbeville - RD 128, Orsay Cedex, France, F-91401

33 1 69 33 94 48; fax 33 1 69 33 06 62

thales-laser@fr.thalesgroup.com; www.thales-laser.com

New Product: THALES LASER SAGA's family is getting larger with new SAGA 330/10 that delivers 2.5J @532 nm @10Hz.

Nanosecond and Femtosecond lasers, Ultrafast Solid-State Pulsed lasers, Turnkey systems and Custom Solutions are the core business and expertise of THALES LASER. The quality and stability of our products meet the needs of both industrial and scientific applications. Commercial Petawatt systems are now available. Contact: GHEZ Fabien, Sales Engineer, Products and Systems -Marketing Manager, fabien.guez@fr.thalesgroup.com; ANDREANI Ariane, Sales Manager, products and systems, ariane.andreani@fr.thalesgroup.com.

The China and South Optical Crystals Co.

#1938, 1939

First Industrial Zone, Songgang Boan District, Shenzhen, China, 518105

86 755 2755 3757; fax 86 755 2709 1212

sapphires@126.com; www.sapphires.com.cn

New Product: Manufacturing and Polishing Sapphire Optical Windows, Lenses, Prisms, Aspheric Lenses and so on.

The China & South Sapphires is a manufacturer of precision sapphire optical components for use in a wide variety of Infra-Red and Ultra-Violet applications including as defense, optical devices, medical, laser and industrial markets for 10 years. We produce products such as sapphire optical windows, lenses, prisms, aspheric lenses and so on. For more information about our optical components, please visit our website at <http://www.sapphires.com.cn>. Contact: Martin Ding, Manager.

Thermatron Engineering Inc.

#1917

687 Lowell St, Methuen, MA, 01844-1884

978/687-8844; fax 978/687-2477

info@thermatroneng.com; www.thermatroneng.com

Thermatron Engineering specializes in the design and manufacture of high reliability compact liquid-to-air heat exchangers and above-ambient cooling systems for demanding applications. Thermatron maintains a large inventory of designs that can cover most applications. Individualized design services are available, in most cases free of charge. Contact: James Haslam PE, Manager - Sales & Marketing, jhaslam@thermatroneng.com.

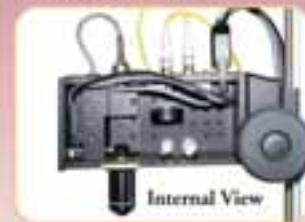
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VCM100

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Thermo Fisher Scientific

#1144



101 Commerce Blvd, Liverpool, NY, 13088-4507
315/451-9410; fax 315/451-9421
tony.chapman@thermofisher.com; www.thermo.com

New Product: Radiation hardened digital color camera, Random access scientific camera with eXtreme Dynamic Range.

Thermo Fisher Scientific manufactures high performance Charge Injection Device (CID) cameras for demanding imaging applications in machine vision, scientific imaging and radiation environments. Features include: Wide Dynamic Range, Anti-blooming, UV - NIR response and Radiation hardness. Formats include: Scientific, RS-170, Progressive, CCIR scan with intensification services for low light imaging or high speed gating. Deep UV and X-ray coating deposition services are also available. Contact: Tony Chapman, Sales and Marketing Director, tony.chapman@thermofisher.com; Michael Pilon, General Manager, michael.pilon@thermofisher.com.

Thin Film Technology

#1242

153 Industrial Way, Buellton, CA, 93427
805/688-4949; fax 805/688-8487
www.thinfilmttechnology.com

New Product: Visi-Lid™ - Custom hermetic window assembly for packaging optoelectronic devices.

Thin Film Technology (subsidiary of Williams Adv. Mat.) is a leading provider of detector level optical windows, custom hybrid microelectronic circuits and specialty thin film coating services to the photonics market. Vacuum coating technologies include e-beam evaporation, IAD, RF and DC sputtering, reactive sputtering and pulse power deposition. In house advanced photolithography, optoelectronic sub-assembly & a highly experienced engineering team allow us to provide innovative solutions. Contact: Michael Zasowski, Product Manager, michael_zasowski@beminc.com.

PLASMA SCREEN SPONSOR

Thorlabs, Inc.

#1527



435 Rt 206, Newton, NJ, 07860
973/300-3000; fax 973/300-3600
aeskilson@thorlabs.com; www.thorlabs.com

New Product: Our ASOM (Adaptive Scanning Optical Microscope) removes major limitations of traditional microscopy.

Thorlabs designs, develops and manufactures building blocks for the Photonics industry including opto-mechanic, motion control, nano-positioning, fiber alignment, fiber and optical components, laser diodes, tunable lasers and vibration isolation systems. In addition to core photonics building blocks, we now provide system level solutions including complete OCT and imaging systems, like confocal and adaptive scanning microscopes. Contact: Ying Zhao, Sales, yzhao@thorlabs.com; Tim Villeneuve, Sales, tvilleneuve@thorlabs.com.

Three-Five Epitaxial Services AG

#1801

Kekuléstr 2-4, Berlin, Germany, 12489
49 30 6392 4570; fax 49 30 6392 4573
info@tesag.com; www.tesag.com

METER BOARD SPONSOR

Time-Bandwidth Products, Inc.

#427

61 Union St, Westfield, MA, 01085
413/564-0610; fax 413/564-0611
alain.bourdon@tbwp.com; www.tbwp.com

Time-Bandwidth Products AG manufactures passively mode-locked tunable and fixed I pico and femtosecond DPSS lasers using out patented SESAM© technology. Wavelengths from 262nm to 1550nm are available at different rep rates and power levels to match your application in research or for industrial applications. www.tbwp.com United States Contact: Alain Bourdon, Vice President of Sales & Marketing.

TNO Science & Industry

#6278

PO Box 155, Stieltjesweg 1, Delft, The Netherlands, NL-2600 AD
31 15 269 2292; fax 31 15 269 2111
info@tpd.tno.nl; www.tno.nl

New Product: The presentation will focus on three spearheads: free-form optics, spectrometers and optical fibers.

TNO science & industry wants to be leading in bringing new technologies to the market. Due to the many different disciplines available, for instance optical design, precision mechanics and system engineering, we can cover the complete track from research to prototyping and testing. Contact: Nick van der Valk, Nick.vandervalk@tno.nl.

METER BOARD SPONSOR

Toptica Photonics, Inc.

#427

61 Union St, Westfield, MA, 01085-2477
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.toptica-usa.com

New Product: Highest power and performance for industrial & scientific lasers.

TOPTICA is the world leader in diode laser and femto-fiber technology for industrial and scientific markets. The capability also extends into optical data storage test and reference technology. TOPTICA offers the widest range of single mode tunable light in the 205 to 3000 nm spectral region with various accessories to measure, characterize, stabilize and analyze light. Contact: Mark Tolbert, President & Chief Executive Officer.

Toshiba Imaging Systems

#6279

9740 Irvine Blvd, Irvine, CA, 92618
602/796-7130; fax 949/4709390
imagingystems@tais.toshiba.com; www.cameras.toshiba.com

New Product: Toshiba Announces World's Smallest, HDTV Hi-Def 3CCD Camera System.

Toshiba Imaging is the premier supplier of high quality video cameras for machine vision, R&D & scientific applications. Advanced HDTV video imaging technology & high resolution cameras e.g. Toshiba's innovative 3-chip CCD color cameras and their remote head camera family have earned Toshiba Imaging Systems Division the distinctive reputation for offering the most advanced imaging solutions to the industrial and scientific communities. Visit www.cameras.toshiba.com for more information. Contact: Vince Giovinco, National Sales Manager, Vincent.Giovinco@tais.toshiba.com.

Tower Optical Corp.

#647

3600 S Congress Ave Unit J, Boynton Beach, FL, 33426
561/740-2525; fax 561/740-2518
joel@toweroptical.com; www.toweroptical.com

New Product: Optical Flats from 25 to 200mm in BK7 or Fused Silica.

Tower Optical manufactures waveplates, Achromatic waveplates, lenses, Interference filters, mirrors, Prisms, Beamsplitters, Windows, Optical flats and Lasers, in standard and custom format. Contact: Joel Kramer, Director of Sales; Ken Weinberger, Sales Engineer, KWeinberger@TowerOptical.com.

Translume, Inc.

#6375

SPIE
Corporate Member

655 Phoenix Dr, Ann Arbor, MI, 48108
734/528-6371; fax 734/528-6334
www.translume.com

New Product: Standard or custom fused silica chips with microfluidic channels and embedded optical waveguides.

Translume is a leader in femtosecond micromachining fused silica glass and offers a variety of fabrication and integration services for custom applications. Using proprietary laser writing and etching techniques, Translume creates devices that combine optical waveguides, micro fluidic components and glass micromechanical (glass MEMS) elements. Excellent for biomedical, defense and industrial applications. Contact: Eric Jacobson, Vice President, ericjacobson@translume.com.

TransMIT GmbH, Center of fiber-optics and industrial laser applications

#1801

Kerkrader Str 3, Giessen, Germany, 35394
49 6031 604 210; fax 49 6031 604 180
klein@transmit.de; www.transmit.de

New Product: UV-fibers with certificate, High-power UV-LED with Polymer Fiber, UV-spectrometer, UV gas analyses.

TransMIT works at the interface between universities and businesses, offering entrepreneurs inside information about major Research & Development activities within the Hessian universities. The different centers help to search for ideas and innovations and find contacts and partners. Our center cooperates with the University of Applied Sciences in Friedberg. Step-index waveguides will be characterized; new fiber-optic applications will be studied in respect to their commercialisation. Contact: Karl-Friedrich Klein, Professor, Karl-Friedrich.Klein@iem.fh-friedberg.de; Hanns-Simon Eckhardt, Research & Development Manager, Hanns-Simon.Eckhardt@iem.fh-friedberg.de.

Triad Technology Inc.

#5066

520 Saint Andrews Dr, Longmont, CO, 80501
720/494-0717; fax 720/494-0717
sales@triadtechno.com; www.triadtechno.com

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Trioptics GmbH

#6283



Hafenstr 35-39, Wedel, Germany, 22880
49 4103 180060; fax 41 4103 180620
info@trioptics.com; www.trioptics.com

**New Product: AspheroCheck for centring error of aspheric lens
WaveMaster to check wavefront of aspheric lens.**

Manufacturer stock/custom Optical Test Equipment focometers OptiSpheric® to test EFL, MTF, BFL, radius, FFL, MTF-Equipment UV, VIS, IR ImageMaster® lab-production testing of mobile phone -digital camera lenses, military aerospace optics, OptiCentric® centring errors, alignment, cementing/bonding assembly of lenses in mass production, Aspheric lens testers, Wavefront Sensors, PrismMaster® prism/polygon measurement, Electronic visual autocollimators, collimators, telescopes, spherometers. Contact: Simon Zilian, s.zilian@trioptics.com; Josef Heinisch, j.heinisch@trioptics.com.



HOTEL ROOM KEY/EXHIBITION MAP/RESTAURANT GUIDE SPONSOR

TRUMPF Inc.

#6130

Laser Technology Ctr, 47711 Clipper St, Plymouth, MI, 48170
734/454-7200; fax 734/354-9769
info@us.trumpf.com; www.us.trumpf.com

As a world market leader in laser technology, TRUMPF provides machine tools for laser processing, punching, forming and bending. The TRUMPF laser product portfolio comprises laser systems for cutting, welding and surface treatment of 3-D parts, high powered CO₂ lasers, as well as lamp- and diode-pumped solid-state lasers, marking lasers and laser systems. Additional business divisions also include power tools, electronics and medical technology.

TwinStar Optics

#1841

6741 Commerce Ave, Port Richey, FL, 34668
727/847-2300; fax 727/847-2304
sales@starstar.com; www.starstar.com

TwinStar is a global leader in custom, precision optics and laser crystals, including waveplates, etalons, lens ducts, prisms and high power optical coatings from the UV to the far IR. TwinStar fabricates a full range of linear and non-linear laser crystals including, Nd:YAG slabs and rods, ER:Glass and laser Ceramics. The damage threshold of TwinStar's coatings exceeds 50 J/cm², the best in the industry. Ceramic Nd:YAG, Co:Spinel and other ceramics are available. Contact: Peter Thomas, Director of Marketing and Sales; Mark Gruttadauria, General Manager, MarkG@starstar.com.

Tyxx, Inc.

#6323

3715 Haven Ave Ste 110, Menlo Park, CA, 94025
650/282-4500
info@tyxx.com; www.tyxx.com

UCM AG

#6320

Langenhagstr 25, Rheineck, Switzerland, CH-9424
41 71 886 6760; fax 41 71 886 6761
ucm@ucm-ag.com; www.ucm-ag.com

**New Product: Automated aqueous cleaning system w. IR dryer.
Enclosed, laminaor flow, sliding door to clean room.**

UCM Ultrasonic Cleaning Machines, based in Switzerland. The company designs & manufactures precision cleaning machines to customer's requirements. UCM machines are famous for quality & performance and have high reputation. The process is developed, results are guaranteed. Mostly Fully aqueous processes are used, may be combined with A-III solvents (wax & pitch removal) & with modified alcohols. As per substrate material, rinsing is done with DI-Water and infrared drying or HFE (Hydrofluorether). Contact: Hans Ulrich Hofstetter, Sales Manager, h.hofstetter@ucm-ag.com.

UK Pavilion

#1644

West Court, Enterprise Rd, Maidstone Kent, United Kingdom,
ME15 6JD
44 1622 754200; fax 44 1622 203048
info@tradefair.co.uk; www.tradefair.co.uk

Visit the UK Pavilion and find the business partners you are seeking at North America's largest laser, electro-optics, and imaging exhibition. The UK exhibitors will be demonstrating a wide range of products, services and technologies, many of which are being seen for the first time at Photonics West 2008. The companies on the UK pavilion are sponsored by Intellect, supported by UK Trade & Investment and managed by Tradefair. Contact: Melanie Pomery, Project Manager, melanie.pomery@tradefair.co.uk;

ULIS

#6249

PO Box 27 Zone Industrielle, Veurey Voroize, France, 38113
33 4 76 5374 70; fax 33 4 76 5374 80
ulis@ulis-ir.com; www.ulis-ir.com

New Product: The new detector, 384 x 288 / 25µm is well adapted for civilian low cost applications.

Created in June 2002, ULIS is a subsidiary of SOFRADIR and CEA (French Atomic Energy Agency). Its mission is to develop and produce uncooled infrared detectors indented for use in the market for low cost infrared equipments. The technology of infrared detectors used by ULIS is based on a thermometer made from amorphous silicon. ULIS products allow new applications in the fields of safety, security, medical imaging, driver vision enhancement. Contact: Dominique Bonnisseau, Sales Director, d.bonnisseau@ulis-ir.com; Jean-Louis Lauront, Area Manager, jl.lauront@ulis-ir.com.

ULM Photonics GmbH

#1827

Lise-Meitner St 13, Ulm, Germany, 89081
49 731 550194 011; fax 49 731 550194 026
hayes@laser-components.com; www.laser-components.com

New Product: Over 10 Million VCSELs Delivered for Optical Tracking Systems.

ULM Photonics, now part of Philips, is a leading edge manufacturer of VCSELs, Photodiodes and high power VCSELs for Datacom, Automotive and Sensing. Single mode VCSELs from 760nm-980nm are available as chips, arrays, TO packages and fiber coupled. Optional TEC and thermistor allows 2nm tuning. VCSELs are certified for reliability (MTTF>10E7h) and 85% RH/85C (>3000h) without hermetic sealing. Sales and support in North America by Laser Components IG, Inc. Contact: Gary Hayes, General Manager; Paul Buettner, Sales Engineer, buettner@laser-components.com.

ULTRA Tec Mfg., Inc.

#1800

1025 E Chestnut Ave, Santa Ana, CA, 92701-6425
714/542-0608; fax 714/542-0627
info@ultratecusa.com; www.ultratecusa.com

New Product: MULTIPOL 15 Lapping and Polishing Machine.

ULTRA TEC Mfg., Inc., a leading manufacturer and supplier of precision cutting, grinding and polishing equipment and supplies for the optic, optoelectronic, fiber optic and related industries. Our ULTRASLICE Saws provide controllable cuts, either as an end in themselves, or as a starting point for optical finishes on the ULTRAPOL and MULTIPOL polishing machines. Contact: Tim Hazeldine, Product Manager.

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CHINA

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Booth 1941	The China and South Optical www.sapphires.com.cn
Booth 1943	Filtech Photonics Co.,Ltd www.filtech-filters.com
Booth 1946	Chang Chun Bo Xin www.bxoptic.com
Booth 1939	Beijing Guojing Infrared www.guojing-tech.com

Visit us at South Hall 2

Booth 6617	Beijing Bodian Optical www.bd-optic.com.cn
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Photonics West Exhibitor Directory

UltraVolt, Inc.

#341

1800 Ocean Ave, Ronkonkoma, NY, 11779
631/471-4444; fax 631/471-4696
info@ultravolt.com; www.ultravolt.com

New Product: "30C" Cap-Charging Power Supply, 0 to 30kV at 60W or 125W. More information at www.ultravolt.com/8cser.htm.

UltraVolt manufactures over 450 models of standard product high efficiency high-voltage DC/DC converters. Output voltages are available in ranges from 0 to 62V through 0 to 40kV. Output power is available from 4W to 250W with nominal 12V to 24V inputs. Models are analog programmable and DAC ready. Units feature output-over-current protection with self-recovery. Ultra-low ripple is available down to <3mV. Modular and rack mount units available. Contact: Scott Wilson, Director of Business Development, csd@ultravolt.com.

Umicore Thin Film Products

#6038



4 Townsend West Unit 12, Nashua, NH, 03063
800/248-7073; fax 603/594-1538
sales.materials.na@umicore.com; www.thinfilmproducts.umicore.com

Umicore Thin Film Products is a recognized leader in the development, manufacturing, sales and recycling of materials used for thin film applications. We are committed to customer satisfaction by providing competitive, high quality products such as sputtering targets, evaporation materials and accessories that meet unique customer specifications. Our materials are suitable for coatings in the UV, visible and IR wavelength regions and come in a variety of forms and sizes. Contact: Chaffee Tran, Sales Engineer, chaffee.tran@am.umicore.com.

Unice E-O Services Inc.

#3019

Chung Li Industrial Park, 3F No 25-2 Ji Lin Rd Chung Li, Taoyuan, Taiwan, 32062
886 3 462 6569; fax 886 3 462 5586
unice1@ms4.hinet.net; www.unice.com.tw

New Product: All five axes are adjustable and could be used for a high performance multi-axis alignment system.

Unice possess all the necessary resources to offer our customers solution, from hardware, software design, detecting devices selection and then integrate all of them into an extremely powerful customized system for different applications in the lab, production line, QC line and anywhere it has been needed. Contact: Johnny Chang, President, johnnyc@email.unice.com.tw.

Union Optic, Inc.

#6016

Bldg #5-2, Guandong Science & Technology Industrial Park, Wuhan, China, 430074
86 27 87531505; fax 86 27 87531525
sales@u-optic.com; www.u-optic.com

New Product: Achromatic Waveplate, Depolarizer.

Manufacturer in Optics Valley of China, products include waveplates, polarizers, prisms, windows, lenses, color filters, beamsplitters, IR optics, micro optics, laser crystals, NLO crystals and in-house coating. ISO9001 certified. Contact: Casper Zhang, Sales Director, casper@u-optic.com; Jessica Li, Sales Engineer, jessica@u-optic.com.

Unioriental Optics Co., Ltd.

#6000

Rm 309 B Block No 11 DeWai Rd, XiCheng District, Beijing, China, 100088
86 10 6236 6258; fax 86 10 6236 3556
sales@unioriental.com; www.unioriental.com

Unioriental Optics Company is a professional manufacturer in Beijing with engineers from top China institutions. The company has 16 years' industrial experience specialized in crystal growth and fabrication. The quality assurance system maintains the traceability from finished crystals to starting materials and is certified by ISO.

Unioriental has the unique technology manufacturing LiSAF, YLF, UV/VUV CaF₂, MgF₂ and BaF₂. The company also manufactures YAG, Nd:YVO₄, BBO, KTP, KDP, KD*P, PPLN; supplies optical lenses and prisms including Sapphire, BK7, Ge, Si, Fused Silicon, Calcite; offers value-added service including repolishing, recoating and bounding.

United Lens Co., Inc.

#315

259 Worcester St, Southbridge, MA, 01550-1376
508/765-5421; fax 508/765-0500
www.unitedlens.com

New Product: Coatings, Polished flat optics, Molded and Machined Blanks. Your Source for All Your Optical Needs.

United Lens is the leading custom manufacturer of precision machined and hand molded optical blanks; polished flat optics and thin film vacuum coatings. We offer a large inventory of optical glass, Pyrex, Fused Silica, Quartz, Low Expansion Materials and Filter Glass. Flexible production capabilities ensure both competitive and timely delivery. Please Contact: Kenny Plouffe - Manager, Molding Department, kplouffe@unitedlens.com; Nancy Darbee, Manager Optical Fabrication, ndardee@unitedlens.com; Sherry Ouellette, Manger, Service Center, souellette@unitedlens.com.

Universal Photonics, Inc.

#1717



495 W John St, Hicksville, NY, 11801-1014
516/935-4000; fax 516/935-4144
info@universalphotonics.com; www.universalphotonics.com

New Product: SOMOS high-speed, double-sided lapping & polishing machines.

Specializing in developing & formulating lapping/polishing consumables & machinery for glass, plastic, crystals, infrared, semiconductor, electro, laser & fiber optics. Including polish pads & compounds, ultra-pure alumina, colloidal silicas, thermoplastic adhesives, holding foils, diamond powders, compounds & lapping film, slurries for sapphire/CaF, lens bonding material, precision pitch, waxes & cements. Machinery: Advantage & DAMA, HKS centrifuges, SOMOS Double-sided Lapping & Polishing. Contact: Justin Mahanna, Director Field Applications Engineering, justinm@universalphotonics.com; Tim Bermudez, Technical Sales, timb@universalphotonics.com.

University of Arizona, College of Optical Sciences

#417



1630 E University Blvd, Tucson, AZ, 85721-0094
520/621-4111; fax 520/626-1480
academics@optics.arizona.edu; www.arizona.edu

The College of Optical Sciences offers one of the world's foremost teaching and research programs in optics. The College's 400 students select from over 100 graduate and undergraduate optics courses and have the opportunity to participate in pioneering research programs. The College of Optical Sciences also offers distance learning opportunities for companies and individuals, including programs leading to a Master of Science or a Professional Graduate Certificate in Optical Sciences. Contact: Richard Shoemaker, Associate Dean, shoemaker@optics.arizona.edu; Will Rivera, Director of Development, rivera@email.arizona.edu.

University of Rochester, The Institute of Optics #6393

PO Box 270186, Wilmot Bldg River Campus, Rochester, NY, 14627
585/275-2322; fax 585/244-4936
gayle@optics.rochester.edu; www.optics.rochester.edu

The Institute of Optics is the original university Optics program in the United States. B.S., M.S. and Ph.D. students receive instruction in Optical Physics, Applied Optics and Optical Engineering. Industries and National Laboratories can interact with The Institute's faculty and students through The Institute's Industrial Associates Program, which meets on campus twice annually. Also of interest to Industry is the Optics Summer School Program. See www.optics.rochester.edu for more details. Contact: Wayne Knox, Director and Professor, wknox@optics.rochester.edu; Gary Wicks, Associate Director and Professor, wicks@optics.rochester.edu.

US Conec Ltd. #6164, 6165

1555 4th Ave SE, PO Box 2306, Hickory, NC, 28658
828/267-6320; fax 828/322-7120
sales@usconec.com; www.usconec.com

US Conec Ltd., headquartered in Hickory, NC, manufactures single-mode and multimode MT-style and contract multi-fiber ferrules, the MTP® connector family, Concours® optical flexible circuits and fan-outs, contract precision molded parts for optical module packages, termination equipment for multi-fiber interconnections and novel dry-cloth connector cleaning products. Applications include data center cabling and connections within routers/ROADM, medical diagnostic links. www.usconec.com. Contact: Russ Granger, OEM Products Manager, RussGranger@usconec.com.

Vacuum Engineering & Materials Co., Inc. #6066

131-B Albright Way, Los Gatos, CA, 95032
408/871-9900; fax 408/871-2900
sales@vacengmat.com; www.vacengmat.com

VEM is your High-Purity PVD Materials supplier for ALL YOUR THIN-FILM NEEDS! Products include sputtering targets and evaporation materials up to 99.9999% purity. Specialities include Single Element Metals, Oxides, Fluorides, Precious Metals and custom compounds for the entire Optical Spectrum. Other products and services include Backing Plates, PM Reclaim, E-Beam Crucible Liners and In-House Target Bonding. Many items are available from stock. Contact: Marco Garcia, Sales, MGarcia@vem-co.com; Jeanne Graziani, Sales, JGraziani@vem-co.com.

Vacuum Process Technology, Inc. #5042

70 Industrial Park Rd, Plymouth, MA, 02360
508/732-7200; fax 508/732-0317
sales@vpotec.com; www.vpotec.com

Vacuum Process Technology, Inc. (VPT) designs and manufactures precision thin film deposition systems for a wide range of applications. VPT provides physical vapor deposition systems using ion-beam, sputtering, electron-beam, thermal evaporation and plasma assisted thin film deposition technologies. Our applications laboratory is available for development and verification of coating processes. Contact: Steven Chiavaroli, Vice President, schiavaroli@vpotec.com.

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sales@dynasil.com
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Joe Howe
800-456-7070 ex. 42
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Wavelength Selection Solutions

Ayer, MA
James Falls
978-772-1700
sales@optometrics.com
visit optometrics.com

Interference Filters &
Diffraction Gratings

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Photonics West Exhibitor Directory

Valley Design Corp.

#1441

151-D Harvey W Blvd, Santa Cruz, CA, 95060
831/420-0595; fax 831/420-0592
info@valleydesign.com; www.valleydesign.com

New Product: Color glass filters in standard & custom sizes optically polished from 2mm - 200mm × 50µm - 15mm thk.

ISO 9001:2000 manufacturer of flat optical components, substrates, windows, wafers, wedges. Precision machining services: lapping, polishing, dicing, thinning, backgrinding, ultra-sonic hole drilling, slicing. Ultra-thin (< 25 microns), ultra-flat (1/10 wave), superpolishing (<5 Å), tight tolerances (±1 micron). Materials: Fused Silica, Quartz, Optical Glasses, Pyrex, Sapphire, Crystals, Ceramics, Silicon, Aluminum Nitride, 99.6% and 96% Alumina. East/West Coast facilities. Contact: Sabra Cossentine, Inside Technical Sales; Laura Taguinod, Inside Technical Sales.

Varian, Inc.

#1413



3120 Hansen Way, Palo Alto, CA, 94304
800/926-3000; fax 650/858-0480
custcare@varianinc.com; www.varianinc.com

Varian, Inc. will be displaying recent advances in UV-Vis NIR through Mid Infrared Spectroscopy products. The Cary 6000i is unmatched in performance, accessories and software for the most demanding researcher. A performance FT-IR with reflectance and transmission accessories will also be on display. Visit with our applications specialist to discuss your measurement needs. Contact: Jim Steensrud, UV Product Specialist, jim.steensrud@varianinc.com.

Varioptic SA

#6391

Bâtiment Tony Garnier, 24A/24B rue Jean Baldassini, Lyon, France, 69007
33 4 37 65 35 31; fax 33 4 37 65 35 30
contact@varioptic.com; www.varioptic.com

Varioptic is the world leader in liquid lens technology supplying liquid lens solutions to meet optical autofocus requirements for a wide range of markets. Founded in 2002, Varioptic pioneered the development of Electrowetting Technology to create revolutionary auto focus lenses with no moving parts. Liquid lenses feature several crucial advantages over traditional technologies in terms of robustness, cost, size, ease of integration, power consumption and speed. Contact: Séverine Serrano, Business Development Manager, severine.serrano@varioptic.com.

Veeco Instruments

#1334



100 Sunnyside Blvd, Woodbury, NY, 11797
516/677-0200; fax 516/677-0248
info@veeco.com; www.veeco.com

Vermont Photonics Technologies Corp.

#1047

33 Bridge St, PO Box 516, Bellows Falls, VT, 05101
802/460-1790; fax 802/460-1796
mail@vermontphotonics.com; www.vermontphotonics.com

New Product: Calibration Services

Optical testing, metrology and quality control equipment. Autocollimators, collimators, dioptrometers, alignment telescopes, focimeters, refractometers. New Tunable Terahertz radiation source. Contact: Michael Mross, President; Tom Lowell, Vice President, tlowell@vermontphotonics.com.

Verrillon, Inc.

#6159

15 Centennial Dr, North Grafton, MA, 01536
508/890-7100; fax 508/839-6688
info@verrillon.com; www.verrillon.com

Verrillon designs, customizes and manufactures a large suite of specialized fibers and fiber solutions to the oil and gas, military, industrial and communications markets including hermetic, high temperature, polarization-maintaining, rare-earth doped fibers, as well as cabled fiber solutions and fibers in metal tube (FIMT). We also offer custom combinations of fiber coatings, dimensions and waveguide designs. Contact: Margaret Sullivan, Inside Sales Manager, sullivan@verrillon.com; Gary Churchill, Sales Manager, churchill@verrillon.com.

VERTILAS GmbH

#1801

Lichtenbergstr 8, Garching Bayern, Germany, 85748
49 89 5484 2000; fax 49 89 5484 2019
sales@vertilas.com; www.vertilas.com

With the newly-developed (Buried Tunnel Junction, BTJ) Laser diode with an IR wavelength range of 1250 nm to 2300 nm, VERTILAS is one of the leading global providers in the field of long-wavelength Vertical Cavity Surface Emitting Laser diodes (VCSEL). Contact: Christian Neumeyr, Chief Executive Officer.

V-gen

#5110

1 Betzalel St, Ramat Gan, Israel, 52521
972 3 5755756; fax 972 3 5299707
eran@vgen.com; www.vgen.com

New Product: VPFL-20000: 20 Watts, 1mJ pulsed fiber laser for industrial applications.

V-gen is developing and manufacturing advanced short-pulse Ytterbium fiber-lasers for a wide array of industrial (marking, micro-machining, etc.), medical applications and very short pulse versions for LIDAR and range-finding. The lasers parameters (output power, pulse energy, repetition rate and pulse width) are user controlled. It is a sealed system all-fiber configuration and robust assembly, designed for industrial standards. Contact: Eran Inbar, Chief Executive Officer, eran@vgen.com; Hagit Damchiner, Operations Manager, hagit@vgen.com.

Videology Imaging Solutions, Inc.

#5081

37M Lark Industrial Pky, Greenville, RI, 02828
401/949-5332; fax 401/949-5276
sales@videologyinc.com; www.videologyinc.com

New Product: The i-NET STREAM single channel server, model SV11A-M4 is MPEG-4 with audio.

Videology's core competency is video camera design, development and production. Since 1991 Videology has manufactured video cameras and accessories for machine vision, biometrics, low vision, ID badging, surveillance, industrial and medical imaging OEM markets and applications worldwide. Our Greenville Rhode Island, United States of America facility is ISO9001:2000 certified and employs a team of highly trained engineers and technicians to ensure continuous quality of our products and services. Contact: J. Siwy, Marketing Specialist, jsiw@videologyinc.com.

VIGO Systems SA

#615

3 Swietlikow Str, Warszawa, Poland, PL-01-389
48 22 666 1410; fax 48 22 665 2155
info@vigo.pl

Manufacturer of stock and custom MCT IR detectors both TE cooled and uncooled with single and multiple elements. Fast detectors for laser diagnostics. Sensitive detectors for analytical instruments. Contact: Jim Melnyk, Applications Engineer, melnykeboselec.com.

Vincent Associates

#335

803 Linden Ave, Rochester, NY, 14625
585/385-5930; fax 585/385-6004
vincentassociates@uniblitz.com; www.uniblitz.com

New Product: The NS Series are compact, durable, reliable & offered in 15, 25 & 45mm apertures. Patent Pending.

Vincent Associates is the manufacturer of UNIBLITZ & UNIBLITZ II electronically programmed shutters and shutter drive systems, with standard devices (including the LS, VS and the CS series of high reliability shutter systems), the XRS (for X-ray use) series & the new N-CAS series. Standard aperture sizes ranging from 1mm - 90mm with many types of microscope and video mounting systems offered for specific shutter mounting applications. Custom configurations & OEM systems are also available. Contact: Stephen Pasquarella, Senior Vice President, spasq@uniblitz.com; Adam Lamb, Vice President Manufacturing, alamb@uniblitz.com.

Virtual Industries, Inc.

#1702

2130 Victor Pl, Colorado Springs, CO, 80915
719/572-5566; fax 719/572-5504
info@virtual-ii.com; www.virtual-ii.net

Manufacturer of vacuum handling tools and accessories. Products include self-contained vacuum tweezers, battery operated units, bench-top systems and a variety of vacuum cups and tweezer tips. Uses include the handling of electronic components, lenses, wafers or any parts ranging in size from 0.003 inches to over 12 inches. All products are manufactured in the United States of America.

VisiMax Technologies, Inc.

#3027

9177 Dutton Dr, Twinsburg, OH, 44087
330/405-8330; fax 330/405-8332
mclark@visimaxtechnologies.com;
www.visimaxtechnologies.com

Provider of precision optical coatings for both glass and polymer optics. VisiMax offers an extensive range of coating types including anti-reflection, beamsplitters, hot and cold mirrors, protective hardcoatings, ND filters, bandpass filters, metal and dielectric reflectors, as well as custom coating needs. Cleanroom coating facility with state-of-the-art coating systems and automation. Prototype volumes to full scale production. Contact: Dane Clark, dclark@visimaxtechnologies.com.

Vision Research Inc.

#6426


190 Parish Dr, Wayne, NJ, 07470
973/696-4500; fax 973/696-0560
phantom@visionresearch.com; www.visionresearch.com

New Product: The Phantom MIRO high-speed digital cameras are compact, light-weight and rugged.

Vision Research, Inc. designs and manufactures high-speed digital imaging systems used in domains including defense, automotive, engineering, scientific and medical and industrial applications. The company prides itself on the sensitivity, high-resolution and quality of images produced by its systems robust yet easy-to-use software interfaces and reliability and versatility of its camera families. Visit our website at www.visionresearch.com. Contact: Allen deMarcken, Director of National Sales, al.demarcken@visionresearch.com; Mark Doerfler, Sales, mark.doerfler@visionresearch.com.

Pico-Second Optical Pulse Source

This product is based on the result of Yokoyama Lab. at NICHE Tohoku Univ.




Feature

- High Performance and Stability
- Small and Compact
- Affordable

Application

- Multi-photon bio-imaging
- Bio-imaging in ultra-wide bandwidth, etc.

High Speed Swept Source



Feature


- High speed wavelength scanning
- Programmable
- Non-rescaling (for OCT)

Application

- OCT in medical field
- Optical spectroscopy, etc.

Photonics West : #6382

BIO5 2008 : #8534



OptoComb
Optical Comb, Inc.

Tokyo Tech, YVP W103
4259-3, Nagatsuta-cho, Midori-ku, Yokohama
Kanagawa 225-8510 Japan
TEL +81-45-982-2213 FAX +81-45-982-2215
<http://www.optocomb.com>

Vision Systems Design

#1601

98 Spit Brook Rd, Nashua, NH, 03062-5737
603/891-0123; fax 603/891-9297
judyl@pennwell.com; www.vision-systems.com

Vision Systems Design is a global media source serving engineers and engineering managers at OEMs, system integrators and end-user organizations that design, develop, manufacture and integrate components and subsystems for vision and imaging-based systems. VSD provides global coverage of vision and imaging components, subsystems and technologies and how they are integrated into leading-edge machine vision/industrial, medical, scientific and military/aerospace applications. Contact: Conard Holton, Editor in Chief, cholton@pennwell.com.

Vistec Semiconductor Systems GmbH

#1801

Kubacher Weg 4, Weilburg, Germany, 35781
49 6471 910 2403; fax 49 6471 910 2339
alexandra.zange@vistec-semi.com; www.vistec-semi.com

New Product: Vistec INH3000 DUV, the fully automated DUV OEM Microscope Module for High-End applications.

Vistec Semiconductor Systems GmbH is providing key technology used by all leading semiconductor manufacturers and many research institutes around the world. Their innovative product portfolio includes inspection systems, defect detection and classification systems, metrology systems for mask and wafer manufacturing. Their systems are used for microchip and photo mask production as well as for scientific and commercial research. Contact: Alexandra Zange, Assistant Vice President Global Sales & Service; Kirsten Greis, Assistant General Management, Sales Europe, Kirsten.Greis@vistec-semi.com.

Photonics West Exhibitor Directory

Vitex LLC

#6010

40 Galesi Dr #20, Wayne, NJ, 07470
973/837-6633; fax 973/837-6636
sales@vitex.com; www.vitexlink.com

New Product: Cables for clean, secure connection: Fiber Optic USB, Fiber Optic DVI cable, Fiber Optic HDMI cable.

Vitex provides best-in-class fiber optic solutions for communications, display and interconnection applications. Fiber optic USB, DVI, HDMI cables and optoelectronic components are presented. These products are ideal where long distance or EMI immunity is required. Applications include industrial control, medical system design, military and telecommunications.

VLOC

#426

7826 Photonics Dr, New Port Richey, FL, 34655
727/375-8562; fax 727/375-5300
info@vloc.com; www.vloc.com

New Product: VLOC is now offering stock plates shipped within 24 hours. Check out www.thewaveplatestore.com.

Manufacturer of fluoride and oxide crystals including YAG, Ceramic YAG, YLF, Ruby, LiSAF, LiSGaF and YVO₄. Nonlinear materials include KTP, KTA and KNbO₃. Components include laser cavity flow tubes, mirrors, prisms, lens duct and waveplates. Custom services include wafer fabrication, repolishing and coatings. Coatings are dielectric, metallic, ion-assisted deposition and ion-beam sputtering. Contact: Jim Keck, Director of Sales and Marketing, JKeck@vloc.com; Merry Ann Bryson, Sales and Advertising Coordinator, mbryson@vloc.com.

Voltage Multipliers Inc.

#6287

8711 W Roosevelt, Visalia, CA, 93291
559/651-1402; fax 559/651-0740
mfulley@voltage-multipliers.com; www.voltage-multipliers.com

New Product: VMI's E-Zorb diodes combines reverse power, reverse voltage, forward current and recovery time.

Voltage Multipliers, Inc. began operations in November of 1980. Initially designing and producing voltage multipliers, our product line has expanded to include high voltage diodes, high voltage power supplies and rectifier assemblies. Our sister company Calramic Technologies LLC manufactures quality high voltage ceramic capacitors suitable for applications ranging from commercial to space level. If you are looking for High Voltage components, we have the perfect solution for you. Contact: Karen Spano, Sales Administration Manager, kspano@voltage-multipliers.com; Margaret Fulleylove, Sales.

VueMetrix

#6111

960 Hamlin Ct, Sunnyvale, CA, 94089
408/734-9974; fax 408/734-7997
info@vuemetrix.com; www.vuemetrix.com

New Product: VueMetrix's DiodeGuard™ sets a new standard of diode protection for series diode pump applications.

VueMetrix Inc. is a leading supplier of laser diode control systems. Our laser diode controllers are compact, self-contained and cost-effective solutions yet they are versatile enough to satisfy the most demanding requirements. These highly-integrated systems incorporate traditional power supply plus many diode safety, monitoring and control features that give users the full functionality of a research system in an OEM form factor that is ready for design-in to commercial products. Contact: Eric Smoker, Vice President, Worldwide Sales and Marketing, eric.smoker@vuemetrix.com; Russ Lowe, Sales Manager, russell.lowe@vuemetrix.com.

Vytran LLC

#6238

1400 Campus Dr W, Morganville, NJ, 07751
732/972-2880; fax 732/972-4528
info@vytran.com; www.vytran.com

New Product: GPX-3400 Glass Processing System for the Fabrication of Fiber Laser Systems and Components.

Vytran is a pioneer in the development of innovative products and technologies related to optical fiber fusion splicing and glass processing. We specialize in high volume optical assembly and specialty fiber processing and offer many products and capabilities required to build high-power fiber laser systems. This includes cleavers, fusion splicing workstations, glass processing systems, recoaters and proof testers, for fabricating splices, tapers, mode adaptors, end-caps, lenses and combiners. Contact: Eric Mies, emies@vytran.com; Ken Nelson, knelson@vytran.com.

Wasatch Photonics

#6307

1305 N 1000 W Ste 120, Logan, UT, 84321
435/752-4301; fax 435/752-4306
info@wasatchphotonics.com; www.wasatchphotonics.com

New Product: HD 1800 l/mm @ 840 nm volume phase holographic grating (VPHG) for optical coherence tomography (OCT).

Manufacturer and designer of high-performance volume phase holographic gratings (VPHGs) and holographic optical elements (HOEs). Dichromated gelatin is used to combine high dispersion, high S and P efficiencies and polarization insensitivity for VPHGs over specific bandwidths. Applications include DWDM, spectroscopy, astronomy, optical coherence tomography (OCT), Raman Spectroscopy, spectral imaging, telecommunications and laser pulse-compression. Contact: John Straley, Purchasing/Sales Manager, john@wasatchphotonics.com; Elroy Pearson, Electro-Optical Engineer, ElroyPearson@WasatchPhotonics.com.

WaveFront Sciences, Inc.

#746

14820 Central Ave SE, Albuquerque, NM, 87123-3932
505/275-4747; fax 505/275-4749
info@wavefrontsciences.com; www.wavefrontsciences.com

New Product: WaveFront Sciences introduces the tiny, new microCLAS wavefront sensor ideal for laptop set-up.

WaveFront Sciences provides full-service design and manufacturing capabilities for micro-optics and wavefront sensor based instrumentation for lasers, optics, optometry, ophthalmology and semiconductor metrology. The CLAS-2D™ system offers a complete line of products for the analysis of visible, infra-red, continuous and pulsed lasers. CLAS-2D™ also presents advantages to most optical test requirements traditionally addressed by interferometry. Contact: Harry Skolnik, Sales Representative, hskolnik@hotmail.com; Craig Armstead, Product Manager, craig.armstead@amo-inc.com.

Wavelength Electronics, Inc.

#1914

51 Evergreen Dr Ste B, Bozeman, MT, 59715
406/587-4910; fax 406/587-4911
ward@teamwavelength.com; www.teamwavelength.com

New Product: LDTC1020 Laser Diode and Temperature Controller provide a total solution for quick design schedules.

Laser Diode Drivers and Temperature Controllers. We design and manufacture a wide range of robust controllers for OEM markets and researchers. Our high performance controllers are used widely in Biomedical, Semiconductor, Electro-Optics, Fiber optics, Spectroscopy and Military applications. If you want to save space, cost and development time contact sales@teamwavelength.com. Contact: Ward King, Applications Engineer.

Wavelength Technology Singapore Pte Ltd.

#6247

Blk 2 Bukit Batok St 24, #06-03 Skytech Building,
Singapore, 659480
65 65649624; fax 65 65643862
info@wavelength-tech.com; www.wavelength-tech.com

New Product: ZOOM IR Camera Lens 33-100mm FL F#1.0, Dual Band IR Lens for 3-5 and 8-14µm, 2-FOV IR Lens.

Wavelength Technology is company based in Singapore developing Laser optics and IR Imaging optics for medical and industrial application. Products include Scan lens, beam expanders, scanner mirrors, Infrared zoom lens, dual band, 2-FOV lens. Company works with wide range of IR material. Contact: Jenny Zhu, Chief Operating Officer, jenny@wavelength-tech.com; Robert Huang, Chief Executive Officer, bob@wavelength-tech.com.

LITERATURE SHOWCASE EXHIBITOR

Webcom Communications

#S5, 5133

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780/528-3770; fax 780/528-3771
softpub@infowebcom.com; www.infowebcom.com

Webcom Communications Corp. is an integrated media company serving advanced technology industries worldwide through its magazines, events, eNewsletters, online media, directories, buyers guides, data products and marketing services. To learn more please visit: www.infowebcom.com or call 800 803 9488. Contact: Jessi Carter, Director of Sales, jessic@infowebcom.com.

WEGU-DEVICE Inc.

#6098

2 Select Ave Unit 2, Toronto, ON, Canada, M1V 5J4
416/609-9690 ext. 21; fax 416/609-9677
info@wegudevice.com; www.wegudevice.com

New Product: A digital autofocus sensor that remains in focus when moved over the inspection surface.

WEGU-DEVICE INC. (WDI) designs and manufactures opto-electronic equipment for industrial and medical applications. A remarkable Canadian success story, in just a few short years, WDI has captured over 80% of the market for autofocus sensors used in Thin Film Transistor (TFT) repair systems. WDI has recently found success in installing its equipment in the semiconductor, solar panel, glass inspection and bio med markets. Contact: Halszka Weiss, Operations Manager, halszka.weiss@wegudevice.com; Anselm Viswasam, Manager, Business Development, anselm.viswasam@wegudevice.com.

Wells Research & Development

#6436

15 A Lewis St, Lincoln, MA, 01773
781/259-8667; fax 781/259-8675
info@wellsresearch.com; www.wellsresearch.com

Welsh Assembly Government

#1139

Llys Llywelyn, Fford Richard Davies, St Asaph, United Kingdom, LL17 0LJ
44 1745 586145; fax 44 1745 586259
www.wda.co.uk

Wales UK-leading opto-electronics technology companies supported by the Welsh Assembly Government make this region an outstanding location for European investment and collaboration. Welsh Opto-electronics Forum, a vibrant group of companies and academics dedicated to sector development in Wales will also be represented. www.WOF.org.uk. OptTIC, Opto-electronics Technology and Incubation Centre, in the heart of an existing opto-electronic cluster, offers exciting opportunities in technology collaboration and as a gateway to Europe and the United Kingdom. www.OpticTechnium.com.

The Perfect Match

VMI's E-Zorb™ High Voltage High Power Diodes



High Voltage Capacitors from CalRamic



CalRamic Technologies L.L.C.
...More than just capacitors
www.CalRamic.com
775.851.3580

High Voltage. Higher Standards.

VMI... So Much More Than Multipliers



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Opto-Couplers
Bridges

Commercial & Military
Prototype to High Volume
Standard & Custom Designs
ISO9001:2000
RoHS and Pb-free

www.VoltageMultipliersInc.com
559.651.1402
Booth #6287

Photonics West Exhibitor Directory

Western Photonics Technology

#6022



626 S Sierra Vista Ave Ste 101, Alhambra, CA, 91801
626/289-1686; fax 626/289-1048
info@wpotec.com; www.wpotec.com

New Product: Mini optics; Spherical and aspherical lens; Cylindrical lens; Prism; Borescope; IR borescope.

Develops and manufactures industrial borescopes, mini optics and lens, optics(spherical and aspherical lenses, mirrors, windows, cylindrical lenses, prisms, filters, polarizers, nonlinear crystals and fiber pigtailed etc.), micro-lenses, light fibers and image fibers, CCD and CMOS cameras and adaptors, holographic systems and products and laser(CTH:YAG etc.) and optical systems. We guarantee the best price and service in either standard or custom-made products. Contact: Roger, North American Manager.

Wiley

#245

111 River St, Hoboken, NJ, 07030
201/748-6000; fax 201/748-6088
dimus@wiley.com; www.wiley.com

Williams Advanced Materials

#1242

2978 Main St, Buffalo, NY, 14224
716/837-1000; fax 716/833-2926
www.williams-adv.com

New Product: New materials for solar applications.

Williams Advanced Materials, Inc. is a leading global supplier of thin film deposition materials, microelectronic packaging products and PVD chamber services. High purity evaporation and sputtering materials, bonding wire, solder preforms and hermetic covers including Visi-lid's for sealing of optical devices are among the many options in the Williams product line. In-house refining and shield cleaning services help to minimize costs and inventory associated with precious metal usage. Contact: Michael Tasner, Marketing Specialist, michael_tasner@beminc.com.

WISTA-MANAGEMENT GmbH

#1801

Rudower Chaussee 17, Berlin, Germany, 12489
49 30 6392 2200; fax 49 30 6392 2246
b.ludwig@wista.de; www.adlershof.de

Approximately 100 companies within Berlin Adlershof are active in the field of photonics/optical technologies/Microsystems. In supporting the Photonics sector, the STP features a 17,000-m² Centre for Photonics and Optical Technologies, which was finished in 1998, supported by EU money. Here, and in neighbouring facilities, some 55 Photonics companies currently have a turnover of some 410 Mio. €, growing at two digit rates per year. WISTA-MANAGEMENT GMBH, the development company of the STP, has helped double the number of companies within the last 10 years by attracting technology-oriented firms with new technology centres and incubators for start-ups. Three new centers are actually in preparation.

Wordingham Technologies

#333



580 Fisher Station Dr, Victor, NY, 14564
585/924-2294; fax 585/924-7660
sales@wordingham.com; www.wordingham.com

World Star Technologies

#6208



321 Lesmill Rd, Toronto, ON, Canada, M3B 2V1
416/363-3332; fax 416/363-3112
info@worldstartech.com; www.worldstartech.com

New Product: 488 & 473nm DPSS; 405, 440 & 473nm lasers. High power 532, 635 & 650nm laser modules.

World Star Technologies specializes in manufacturing ultra compact energy efficient lasers that deliver high stability and low noise. Our goal is to introduce highly compact and efficient diode pumped lasers, which will enable applications previously considered unachievable. We have recently introduced 488 nm and 473 nm blue laser module and high power (250mW) green lasers. Contact: Emily Hodgkinson, Customer Support; Cetin Karakus, Chief Technology Officer.

WT&T Inc.

#6098

5550 boulevard Thimens, Saint Laurent, QC, Canada, H4R 2K9
514/739-2200; fax 514/739-1489
sales@wttechnology.com; www.wttechnology.com

New Product: Plug and play, medium power, fiber coupled broad band sources (Visible to IR) and accessories.

WT&T Inc. specializes in research and manufacturing of fiber coupled light sources, including semiconductor lasers, LED and SLED modules, specialty micro-lensed fibers and integrated optical fiber systems. WT&T develops customized fiber optical sources/system meeting challenging requirement such as fast modulation, power, spectral and polarization stability, output beam control. Contact WT&T for the solution meeting your specific needs. Contact: Connie Wang, Director.

wzw-optics AG

#6188

Wegenstr 18, Balgach, Switzerland, 9436
41 71 722 12 14; fax 41 71 722 12 40
optics@wzw.ch; www.wzw.ch

Since 1965 WZWOPTICAG have been producing precision optics for customers all over the world. We are constantly upgrading our manufacturing capabilities with new technologies for the manufacture of high end optics and opto-mechanical parts. WZWOPTICAG recently installed a new Magnetorheological Finishing System (MRF). Our Company is the solution for all your fast proto-typing high end optical requirements. Contact: David Varrie, Sales & Marketing Manager, david@wzw.ch.

XenICs

#6525

Ambachtenlaan 44, Leuven, Belgium, 3001
32 16 38 99 00; fax 32 16 38 99 01
sales@xenics.com; www.xenics.com

New Product: High Speed InGaAs camera. Cheetah 640 × 512: shoots up to 1730 frames per second.

XenICs is Europe's only designer and manufacturer of InGaAs focal plane arrays. In addition we design and manufacture a range of advanced infrared cameras based on InGaAs, HgCdTe (MCT), InSb and other detector technologies. Contact: Luc De Brouckere, Sales Representative North America, ldb@xenics.com; Raf Vandersmissen, Sales Engineer.

YUCO Optics Corp.

#6518



30 Feldland St, Bohemia, NY, 11716
631/589-7888; fax 631/980-3878
dyu@yucooptics.com; www.yucooptics.com

Z&Z Optoelectronic Tech. Co., Ltd. #1938, 1939

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No 13 4th Section Renmin Nan Lu, Chengdu, Sichuan, China, 610041

86 28 8521 6229; fax 86 28 8525 5889

sales@zzoptic.com; www.zzoptic.com

Z & Z Optoelectronic Tech. Co., Ltd is an optical polishing company, which specialized in manufacturing high precision optical components. Its products including Germanium & Silicon components, laser components, high precision optics made of BK7, Fused Silica and other optical materials, ultra thin flats & wafers, WDM substrate super smooth polishing and reclaiming. Evaporate Germanium material. Contact: Liu Ping, Sales & Marketing Vice President.

ZC&R Coatings for Optics, Inc. #2025

1401 Abalone Ave, Torrance, CA, 90501

310/381-3060; fax 310/782-9951

info@zcrcoatings.com; www.zcrcoatings.com

ZC&R has been providing precision optical coatings for over 25 years. We are fully equipped to provide in-house coating design, comprehensive testing and production in low, high and OEM quantities. A combination of in-house processing and strategic suppliers enables ZC&R to provide complete optical components. Our coatings include designs for UV up to the far-IR. Contact: Jim Walker, Thin Film Engineer, jim@zcrcoatings.com; Robert Cabrera, General Manager, robert@zcrcoatings.com.

Zecotek Labs. Inc. #1733

6190 Agronomy Rd Ste 408, Vancouver, BC, Canada, V6T 1Z3

604/827-5212; fax 604/827-5217

info@zecotek.com; www.zecotek.com

ZEMAX Development Corp. #1540

3001 112th Ave NE Ste 202, Bellevue, WA, 98004-8017

425/822-3406; fax 425/889-4687

sales@zemax.com; www.zemax.com

ZEMAX Development Corporation publishes the ZEMAX® Optical Design Program which can be used for both sequential and non-sequential ray tracing. Our software can be used to conceptualize, design, optimize, analyze tolerance and document virtually any optical system. ZEMAX® also goes beyond the traditional limits of ray tracing software by allowing users to use diffraction calculations to propagate any arbitrary beam through an optical system. Contact: Sales Department; Technical Support, support@zemax.com.



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New Business Development Div, 4111 Bells Ln, Louisville, KY, 40211

502/775-2036; fax 502/775-2025

askzeon@zeonchemicals.com; www.zeonchemicals.com

Zeon Chemicals L.P. is a worldwide polymer & chemical manufacturer offering diverse product lines including chemicals, specialty chemicals, optical materials (cyclo-olefin polymers with excellent optical and medical purity), imaging materials and electronic chemicals. Contact: Paula Phipps, Director; Aaron Grau, Senior Sales Representative.

ZeroMicron, Inc. #6619

1482 N Fourth St, San Jose, CA, 95112

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info@zeromicron.com; www.zeromicron.com

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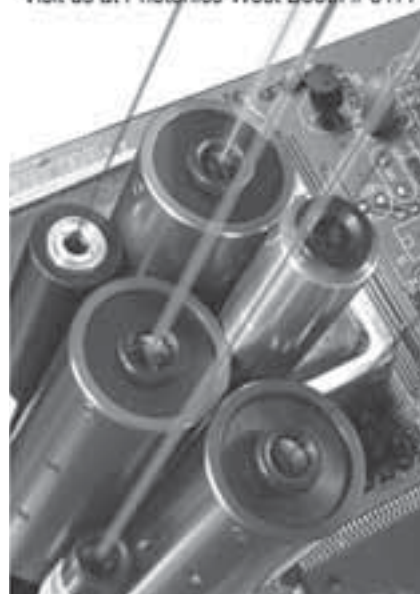
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#6206



Merzhauser Str 134, Freiburg, Germany, 79100
49 761 29644 44; fax 49 761 29644 55
info@z-laser.de; www.z-laser.com

New Product: ZQ for very stable laser projection and wavelength, important parameters adjustable by Controllerbox.

For more than 20 years, Z-LASER Optoelektronik GmbH has developed and produced Laser modules and Laser systems for industrial applications. Laser projections of dots, dot matrices, single lines, polylines or other patterns are used as structured enlightenment in combination with various camera systems in machine vision for triangulation measurement. Located in Freiburg im Breisgau the company has now developed Lasers with special properties to meet the high requirements of this industry sector.

Zomega Terahertz Corp.

#6411

1223 Peoples Ave, Troy, NY, 12180
518/833-8913; fax 518/833-6718
tongut@zomega-terahertz.com; www.zomega-terahertz.com

New Product: The mini-Z is a turnkey, portable THz Time Domain Spectrometer with wireless connectivity.

Zomega Terahertz is a manufacturer of THz systems and components for R&D and industrial applications. Systems include both Time Domain Spectrometers (TDS) and Continuous Wave (CW) transceivers, useful for point measurement or imaging in both transmission and reflection geometries. The mini-Z TDS is the first truly portable, turnkey system to offer real-time spectroscopy for real-world applications, while the Z-2 TDS offers lab-based high-dynamic range performance. Contact: Thomas Tongue, Chief Executive Officer, ttongue@z-thz.com.

Zygo Corp.

#1535, 6005



Laurel Brook Rd, Middlefield, CT, 06455-0448
860/347-8506; fax 860/347-3968
inquire@zygo.com; www.zygo.com

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Booth 6005 (South Hall 1): A leading provider of integrated electro-optical devices and components for demanding medical, defense, and commercial applications, ZYGO Optical Systems Division specializes in complex optical system design, high-precision optical component fabrication, system prototyping, Design for Manufacture and Assembly, and volume production of high-precision electro-optical devices. ZYGO's unique Product Introduction Lifecycle Management Process, proprietary optical manufacturing and assembly technologies, and ITAR and FDA compliant facilities reduce time to market and costs while enabling superior quality and performance. Contact: Matt Giza, Director of Sales & Marketing, Optical Systems Division, mgiza@zygo.com; Robert Flynn, Manager Business Operations, Optical Systems Division, rflynn@zygo.com.

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SIFAM Fibre Optics Ltd.
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 Harold Johnson Optical Labs.
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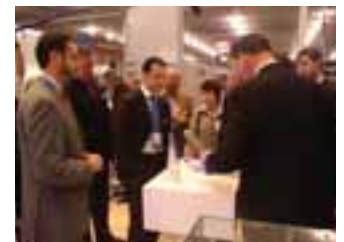
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Apollo Optical Systems, Inc.
APPLIED IMAGE Group
Applied Photon Technology, Inc.
APS Optics
Archer OptX, Inc.
Argus International, Ltd.
Argyle International Inc.
Arima Lasers Corp.
ASKION GmbH
asphericon GmbH
Astron
ATLAS PCF Ltd.
Avensys/ITF Labs.
Axcel Photonics Inc.
Ayase America, Inc.
Barr Associates Inc., Thin Films
Beijing Century Sunny Technology
Co., Ltd.
Beijing Guojing Infrared Optical
Technology Co., Ltd.
Berliner Glas KGaA
Berliner Glas US
Blue Hill Optical Technologies
Blue Sky Research
BMV Optical Technologies Inc.
Bookham, Inc.
Boston Micromachines Corp.
Brighten Optics Ltd.
Brysen Optical
BWT Beijing Ltd.
C2C Link Corp.
Canon USA, Inc.
Carl Zeiss
Casix, Inc.
CDGM Glass Co Ltd
CERAC, Inc.
Chang Chun Bo Xin Photoelectric
Co., Ltd.
Changchun New Industries
Optoelectronics Tech. Co., Ltd.

China Opto-Electro Industries,
Co., Ltd.
Chroma Technology Corp
CLASER Photonics Inc.
Cleveland Crystals, Inc.
CMPC Surface Finishes
Coastal Connections
Colorado Photonics Industry
Association
Compound Semiconductor
Technologies Global Ltd.
Computer Optics Inc.
Coresix Precision Glass, Inc.
Covega Corp.
Cristal Laser SA
Crosslight Software, Inc.
Crystal GmbH
Crystal Research, Inc.
Crystal Technology, Inc.
CRYSTECH Inc.
CVI Melles Griot-Albuquerque
CVI Melles Griot-Carlsbad
Davidson Optronics, Inc.



Dayoptics, Inc.
DenseLight Semiconductors Pte
Ltd.
Deposition Sciences, Inc
Diemat, Inc.
Diffractive Optics Ltd.
Docter Optics, Inc.
Dominar, Inc.
Doric Lenses Inc.
Dyna Technologies, Inc.
Dynamics Research Corp.
Dyoptyka
Ealing Catalog Inc.
Edmund Optics Inc.
Electro-Optics Technology, Inc.
EM4, Inc.
EMF Corp.
EXALOS AG
Excell Technology
Fairchild Imaging
Fairfield Crystal Technology, LLC
FemtoLasers, Inc.
Fersht Inc.
Fiber Optic Center, Inc.
FiberLogix Ltd.
Filtech Photonics Co., Ltd.
FLIR Government Systems, Inc.
Foctek Photonics, Inc.
Foreal Spectrum, Inc.
Fraunhofer Institute for Applied
Optics and Precision
Engineering IOF
Fraunhofer Institute for Silicate
Research ISC
Fresnel Optics GmbH
Fresnel Technologies Inc.
Fujian CASTECH Crystals, Inc.
GAGGIONE SAS
GAMDAN Optics
Gavish, Inc.

Geomatec Co. Ltd.
GfE Materials Technology, Inc.
Gist Optics Co., Ltd.
Glass Fab Inc.
Glendale, Inc.
Gooch & Housego, PLC
Grintech GmbH
G-S PLASTIC OPTICS
Gurley Precision Instruments, Inc.
Halbo Optics Ltd.
Hardin Optical Company
Harold Johnson Optical Labs.
HB Optical Technology Co., Ltd.
HC Photonics Corp.
Hellma USA, Inc.
Heptagon
Heraeus Quartz America
Hilger Crystals Ltd.
Hinds Instruments, Inc.
Holochip Corporation
HOLOEYE Photonics AG
HORIBA Jobin Yvon Inc.
Hoya Corp. USA
HTA Photomask
Huanic Corp.
IB/E OPTICS - Ing.-Büro Klaus
Eckerl
Ibsen Photonics
II-VI Infrared
IMM Messtechnologie GmbH
IMPEX HighTech GmbH
IMT Masken und Teilungen AG
Infinite Optics Inc.
Infotonics Technology Center
INGENERIC GmbH
Inlight Precision Optics Co., Ltd.
InPhenix Inc.
Intense Ltd.
ISP Optics
Isuzu Glass Inc.
JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit Optics
JENOPTIK Polymer Systems, Inc.
JML Optical Industries Inc.
Kaleido Technology
Kelvin Nanotechnology Ltd.
Kiyohara Optics, Inc.
Knowledge and Service Centre
Optronica
Kopp Glass, Inc.
Kreischer Optics, Ltd.
Kunming Institute of Physics
L-3 Communications, Tinsley
Laboratories, Inc.
Labsphere, Inc.
Landwehr Electronic GmbH
Laser Components IG, Inc.
Laser Materials Corp.
Laser Optics. a PPGI Std Company
Laser Quantum Ltd.
Laser Research Optics
Laser Zentrum Hannover e.V.
LASEROPTIK GmbH - laser optics
and coatings
Lasertel
Lattice Electro Optics, Inc.
Lattice Materials LLC
Leica Microsystems GmbH
Leister Technologies LLC
LEYSOP Ltd.
Liebmann Optical Co.
LightMachinery Inc.
LightPath Technologies, Inc.
Lightwaves2020 Inc.
LIMO Lissotschenko Mikrooptik
GmbH
Lincoln Laser Co.
LINOS Photonics, Inc.
Lionix B.V.
LT Ultra Precision Optics
Lumerical Solutions, Inc.
Lumics
Luminit LLC
Marlow Industries, Inc.
Max Levy Autograph, Inc.
Meadowlark Optics
MediVision Optics
Meller Optics, Inc.
MEMS Optical Inc.
Metavac
Micro Photon Devices
Micron Optics, Inc.
Midwest Optical Systems
Mightex Systems
Monocrystal PLC
Moore NanoTechnology Systems
LLC
Morgan Technical Ceramics
MOXTEK, Inc.
MPA Crystal Corp.
MRC a PPGI company
mso jena GmbH
Naked Optics Corp.
Nalux Co., Ltd.
Nanjing Fenghua Optical
Instrument Co., Ltd.
Nanjing Sapphire Electro-Optics
Co., Ltd.
Nanoplus GmbH
National Reconnaissance Office
Navitar Inc.
neoplas control GmbH
NEOS Technologies, Inc.
New Scale Technologies, Inc.
New Source Technology, LLC
Nextreme Thermal Solutions
Nitto Optical Co., Ltd.
nLIGHT Corp.
NM Laser Products Inc.
North American Coating Labs.
North Crystals
Northrop Grumman Synoptics
Northumbria Optical Coatings
(NOC) Ltd.
Oerlikon Optics USA Inc.
Ohara Corp.



O-m6 Technologies Inc.
Omega Optical, Inc.
Ondax, Inc.
Onyx Optics Inc.
OP Mount Instrument Inc.
OPCO Lab., Inc.
Opnext, Inc.
OptecNet Deutschland e.V.
Optical Filter Source, LLC
Optical Support, Inc.
Optics for Research, Inc. (Division
of Thorlabs)
Optics Technology, Inc.

Photonics West Product Index



Optikron GmbH
Optimax Systems, Inc.
OptiSource, LLC
Optiwave Systems Inc.
Optiworks, Inc.
Opto Diode Corp.
OptoElectronic Components
Optometrics Corp.
Optonetic LLC
Opto-Precision Pte Ltd.
OptoSigma Corp.
Optoskand AB
OSI Optoelectronics, Inc.
OXIDE/NIMS
OZ Optics Ltd.
P&P Optica
Pacific Coast Optics
Pacific Rim Optical
Pacific Silicon Sensor Inc.
PD-LD, Inc.
PerkinElmer Optoelectronics
PerkinElmer, Inc.
PFG Optics
Photon Etc Inc.
Photon Gear, Inc.
Photonic Lattice Inc.
Photonic Products Ltd.
PLX, Inc.
POG Precision Optics Gera
Polaris Electronics Corp.
Polymer Optics, LLC
Praevium
Precision Glass & Optics
Precision Optical
Precision Optics Corp
Precision Photonics Corp.
Princeton Instruments
Princeton Lightwave, Inc.
PROMET International Inc.
QED Technologies, Inc.
Qioptiq Group
Quality Thin Films, Inc.
R. Mathews Optical Works, Inc.
Rainbow Research Optics, Inc.
RAPT Industries, Inc.
Research Electro-Optics, Inc.
Reynard Corporation
Rising Electro-Optics Ltd.
Rochester Precision Optics LLC
Rocky Mountain Instrument Co.
RoMack, Inc.
RPC Photonics, Inc.
S1 Optics GmbH
Sabeus, Inc.
SAES Getters USA, Inc.
Saint-Gobain Crystals/Alpine
Research Optics
San Jose City College
Santec USA Corp.
Savimex
SCANLAB America, Inc.
Schmidt & Bender Optics Ltd.
Schneider Optics, Inc.
SCHOTT North America, Inc.
- Advanced Optics

SensL
Servometer/PMG, LLC
Shanghai Optics
Sierra Precision Optics
SIFAM Fibre Optics Ltd.
Silius Technologies
Sill Optics GmbH & Co., KG
Sinclair Manufacturing
Siskiyou Corp.
SMA Optical Technologies, Inc.
Spectral Systems
Spectralus Corp.
Spectra-Mat, Inc.
Spectrogon US Inc.
Spectrum Scientific, Inc.
Spectrum Thin Films Corp.
Spitfire Semiconductors Ltd.
SQS Vláknová Optika A.S.
SRICO, Inc.
SSCO USA (Formerly Luvantix Co.,
Ltd.)
Stemmerich, Inc.
StockerYale, Inc.
Sumipro
Sunex Inc.
Sunny Precision Optics, Inc.
Super Optronics
SUSS MicroOptics SA
Sutter Instrument Co.
Swift Glass Co.
Swiss Jewel Co.
SwissOptic AG
Sydor Optics, Inc.
Synopsis, Inc.
Syntec Optics
Taboada Research Instruments,
Inc.
tec5USA, Inc.
Techmetals, Inc.
TecOptics, Inc.
Telemark
Tempotec Optics Co., Ltd.
TeraXion Inc.
Tessera North America
The China and South Optical
Crystals Co.
Thin Film Technology
Tower Optical Corp.
Translume, Inc.
TwinStar Optics
ULM Photonics GmbH
Unice E-O Services Inc.
Union Optic, Inc.
US Conec Ltd.
Valley Design Corp.
Varioptic SA
VERTILAS GmbH
Videology Imaging Solutions, Inc.
Vincent Associates
Virtual Industries, Inc.
Vistec Semiconductor Systems
GmbH
VLOC
Voltage Multipliers Inc.
Wasatch Photonics
WaveFront Sciences, Inc.
Wavelength Technology Singapore
Pte Ltd.
Western Photonics Technology
Williams Advanced Materials
WT&T Inc.
wzw-optics AG
Z&Z Optoelectronic Tech. Co., Ltd.
Zomega Terahertz Corp.
Zygo Corp.

Optical Detectors

Abet Technologies
Analog Modules, Inc.
Andor Technology
Boston Electronics Corp.
Compound Semiconductor
Technologies Global Ltd.
Crosslight Software, Inc.
Ctr. Suisse d'Electronique et de
Microtechnique SA
Electron Tubes
Electro-Optical Systems, Inc.
Electro-Optics Technology, Inc.
EM4, Inc.
Epitaxial Technologies, LLC
Fairchild Imaging
Femto GmbH
Femtochrome Research, Inc.
Gamma Scientific, Inc.
Gentec Electro-Optics Inc.
GPD Optoelectronics Corp.
Hamamatsu Corp.
Hellma USA, Inc.
iC-Haus Corp.
id Quantique SA
Infracore Infrared LLC
InPhenix Inc.
International Light Technologies
International Radiation Detectors,
Inc.
Judson Technologies, LLC
Kunming Institute of Physics
Kyosemi Opto America Corp.
Menlo Systems GmbH
Micro Photon Devices
MRC a PPGI company
Nanoplus GmbH
Nature Publishing Group
New England Photoconductor
Corp.
New Focus, Inc.
ON-TRAK Photonics, Inc.
Ophir-Spiricon
Opto Diode Corp.
OptoElectronic Components
OSI Optoelectronics, Inc.
Pacific Silicon Sensor Inc.
PD-LD, Inc.
PerkinElmer Optoelectronics
PHASICS SA



Phoenix Infrared
Photon Gear, Inc.
Photon Inc.
Princeton Lightwave, Inc.
S.D.S Systems Development &
Solutions
SensL
Sensors Unlimited, Inc., part of
Goodrich Corporation
Sens-Tech Ltd.
Silius Technologies
Siskiyou Corp.
Spectrolab, Inc.

Spectrum Detector Inc.
Spitfire Semiconductors Ltd.
Stanford Computer Optics, Inc.
tec5USA, Inc.
Toshiba Imaging Systems
TransMIT GmbH, Center of
fiber-optics and industrial laser
applications
University of Arizona College of
Optical Sciences
VIGO Systems SA
VLOC

Optical Fibers

AFL Telecommunications
AOC Technologies, Inc.
Arden Photonics Ltd.
Avensys/ITF Labs.
Brimrose Corp. of America
BWT Beijing Ltd.
Carolinas Photonics Consortium
CeramOptec Industries, Inc.
Clemson University - COMSET
Coastal Connections
Collimated Holes, Inc.
CorActive High-Tech, Inc.
Crystal Fibre A/S
Diemat, Inc.
Draka Comteq Optical Fibre
École Polytechnique de Montréal/
Université Laval/Univalor
Fibercore Ltd.
Fiberguide Industries, Inc.
FiberLogix Ltd.
Fiberoptic Systems, Inc.
FiberTech GmbH Special Optical
Fiber Technologies
Fibertech Optica Inc.
Fraunhofer Institute for Applied
Optics and Precision
Engineering IOF
GPD Optoelectronics Corp.
Hagitec Co., Ltd.
Hellma USA, Inc.
Ibsen Photonics
IMM Messtechnologie GmbH
INO
IRphotonics
Laser Components IG, Inc.
Light Guide Optics Germany
GmbH
LightPath Technologies, Inc.
Menlo Systems GmbH
MeshTel - INTELITE
Mitsubishi Cable Industries, Ltd.
Nature Publishing Group
nLIGHT Corp.
Nuferr
OFS - Specialty Photonics Div.
O-m6 Technologies Inc.
OPCO Lab., Inc.
Optek Systems
Optiwave Systems Inc.
Optoskand AB
Photon Gear, Inc.
Point Source
Polymicro Technologies LLC
RoMack, Inc.
Schmidt & Bender Optics Ltd.
Scottish Development International
Scottish Optoelectronics
Association
SEDI Fibres Optiques

SSCP USA (Formerly Luvantix Co., Ltd.)
Sunny Precision Optics, Inc.
tec5USA, Inc.
TeraXion Inc.
The China and South Optical Crystals Co.



The Pennsylvania State University, Industrial Research Office
Thorlabs, Inc.
TNO Science & Industry
TransMIT GmbH, Center of fiber-optics and industrial laser applications
Verrillon, Inc.
Vytran LLC

Optical Materials and Substrates

3SAE Technologies, Inc.
AccuCoat, Inc.
Accuratius Corp.
Advanced Thin Films
AdvR, Inc.
Andover Corp.
Anteryon BV
APS Optics
Argus International, Ltd.
ATLAS PCF Ltd.
ATP, Applied Thin-Film Products
Barr Associates Inc., Thin Films
Beijing Guojing Infrared Optical Technology Co., Ltd.
Blue Ridge Optics LLC
Brush Ceramic Products
Brush Wellman Inc.
C2C Link Corp.
Carolinas Photonics Consortium
CDGM Glass Co Ltd
CERAC, Inc.
Chang Chun Bo Xin Photoelectric Co., Ltd.
Chroma Technology Corp
CLASER Photonics Inc.
Cleveland Crystals, Inc.
CODIXX AG
Conex Systems Technology, Inc.
Coresix Precision Glass, Inc.
Corning Incorporated
Cristal Laser SA
Crystal GmbH
Crystal Research, Inc.
Crystal Systems, Inc.
Crystal Technology, Inc.
CVI Melles Griot-Albuquerque
CVI Melles Griot-Carlsbad
Dayoptics, Inc.
Deposition Sciences, Inc
Diemat, Inc.
Dominar, Inc.
Dynasil Corp.
EKSPLA Ltd.

EMD Chemicals Inc.
EpiWorks, Inc.
Exciton, Inc.
Fairfield Crystal Technology, LLC
Foctek Photonics, Inc.
Fraunhofer Institute for Silicate Research ISC
Fresnel Technologies Inc.
Fujian CASTECH Crystals, Inc.
GAMDAN Optics
Gavish, Inc.
GfE Materials Technology, Inc.
Gist Optics Co., Ltd.
Glass Fab Inc.
Gooch & Housego, PLC
Halbo Optics Ltd.
HB Optical Technology Co., Ltd.
HC Photonics Corp.
Heptagon
Heraeus Quartz America
Hilger Crystals Ltd.
HTA Photomask
II-VI Infrared
IMPEX HighTech GmbH
Infinite Optics Inc.
Insaco, Inc.
IRphotonics
ISP Optics
Isuzu Glass Inc.
Kopp Glass, Inc.
Labsphere, Inc.
Landwehr Electronic GmbH
Laser Materials Corp.
Laser Research Optics
LASEROPTIK GmbH - laser optics and coatings
Lattice Electro Optics, Inc.
MediVision Optics
Meller Optics, Inc.
Metavac
Midwest Optical Systems
Monocrystal PLC
Morgan Technical Ceramics
MPA Crystal Corp.
MV Laboratories, Inc.
Naked Optics Corp.
Nanjing Sapphire Electro-Optics Co., Ltd.
Nature Publishing Group
NEOS Technologies, Inc.
Nitto Optical Co., Ltd.
Nivo Technology
NoIR LaserShields
Norland Products Inc.
North American Coating Labs.
North Crystals
Northrop Grumman Synoptics
NuSil Technology
Oerlikon Optics USA Inc.
Ohara Corp.
Optical Filter Source, LLC
OptiGrate
OptiSource, LLC
Optonetic LLC
OptoSigma Corp.
OXIDE/NIMS
Pacific Rim Optical
PerkinElmer, Inc.
Phoenix Infrared
Photon Gear, Inc.
Photonix Ltd.
PLX, Inc.

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Precision Glass & Optics
Precision Optical
Precision Photonics Corp.
Process Materials Inc.
Quality Thin Films, Inc.
Rainbow Research Optics, Inc.
RAPT Industries, Inc.
Remtec, Inc.
Rising Electro-Optics Ltd.
Rochester Precision Optics LLC
Rocky Mountain Instrument Co.
SAES Getters USA, Inc.
Saint-Gobain Crystals/Alpine Research Optics
SCHOTT North America, Inc. - Advanced Optics
Shanghai Optics
SIFAM Fibre Optics Ltd.
Spectralus Corp.
Spectra-Mat, Inc.
Spectrogon US Inc.
Spectrum Scientific, Inc.
Spectrum Thin Films Corp.
Spitfire Semiconductors Ltd.
SSCP USA (Formerly Luvantix Co., Ltd.)
Stemmerich, Inc.

Stratophase Ltd.
Swiss Jewel Co.
Techmetals, Inc.
Tessera North America
TGT Optoelectronic Technology
The China and South Optical Crystals Co.
Thin Film Technology
TwinStar Optics
Umicore Thin Film Products
Unice E-O Services Inc.
Union Optic, Inc.
Vacuum Engineering & Materials Co., Inc.
Valley Design Corp.
Virtual Industries, Inc.
VLOC
Wasatch Photonics
Wavelength Technology Singapore Pte Ltd.
Williams Advanced Materials
wzw-optics AG
Z&Z Optoelectronic Tech. Co., Ltd.

Photonics West Product Index

Optical Test and Measurement Equipment, Interferometer

4D Technology Corp.
Active Optics - Night N Ltd.
Advanced Fibreoptic Engineering
AF Optical Co.
AFL Telecommunications
Agilent Technologies, Inc.
AgilOptics, Inc.
APE - Angewandte Physik und Elektronik GmbH
Arden Photonics Ltd.
Asahi Spectra USA Inc.
ASML Optics
B&W Tek, Inc.
Basler Vision Technologies
Biophotonic Solutions, Inc.
Blue Ridge Optics LLC
Bristol Instruments, Inc.
Calmar Optcom, Inc.
Centellax Inc.
CODIXX AG
Colorado Photonics Industry Association
Ctr. Suisse d'Electronique et de Microtechnique SA
CVI Melles Griot-Albuquerque DataRay, Inc.
Davidson Optronics, Inc.
DongWoo Optron Co., Ltd.
Dyoptika
Engineering Synthesis Design, Inc.
Excell Technology
Femtochrome Research, Inc.
Fersht Inc.
FLIR Systems, Inc. - Thermography Division
Gamma Scientific, Inc.
General Photonics Corp.
Gentec Electro-Optics Inc.
Hinds Instruments, Inc.
Huanic Corp.
IB/E OPTICS - Ing.-Büro Klaus Eckerl
ILX Lightwave Corp.
Institute of Photonics, Univ. of Strathclyde
International Light Technologies
Kiyohara Optics, Inc.
Krell Technologies
Laser Components GmbH
Leica Microsystems GmbH
Luna Technologies
Mahr GmbH
Max Levy Autograph, Inc.
Meadowlark Optics
Metrology Concepts LLC
Micron Optics, Inc.
Mightex Systems
Mildex, Inc.
Mindready Solutions
Minus K Technology
Nanonics Imaging Ltd.
Naso Corp.
Nerac, Inc.
Novacam Technologies Inc.
Ohara Corp.
Op-Test
Optical Support, Inc.
OPTICS 1, Inc.
Optikos Corp
OptiPro Systems
Optiworks, Inc.

Optometrics Corp.
Optronic Laboratories, Inc.
OXIDE/NIMS
OZ Optics Ltd.
PHASICS SA
Photon Etc Inc.
Photon Gear, Inc.
Photon Inc.
Photonic Lattice Inc.
PI (Physik Instrumente) LP
Piezosystem Jena, Inc.
PLX, Inc.
POG Precision Optics Gera
PolarOnyx, Inc.
Polytec Inc.
Primes GmbH
Princeton Lightwave, Inc.
PriTel, Inc.
PROMET International Inc.
QED Technologies, Inc.
SGS Slicing Solutions, Inc.
Spica Technologies, Inc.
StellarNet, Inc.
Swamp Optics, LLC
tec5USA, Inc.
Teem Photonics
Telops Inc.
TNO Science & Industry
TransMIT GmbH, Center of fiber-optics and industrial laser applications
Trioptics GmbH
Unice E-O Services Inc.
Universal Photonics, Inc.
University of Arizona College of Optical Sciences
Vermont Photonics Technologies Corp.
Vistec Semiconductor Systems GmbH
VLOC
WaveFront Sciences, Inc.
WT&T Inc.
Zygo Corp.

Optical/Laser Microlithography

Applied Laser Engineering Ltd.
ASML Optics
Canon USA, Inc.
Changchun New Industries Optoelectronics Tech. Co., Ltd.
Dynamics Research Corp.
Fairfield Crystal Technology, LLC
Fraunhofer Institute for Photonic Microsystems (IPMS)
Fraunhofer Institute for Silicate Research ISC
Heraeus Quartz America
Huanic Corp.
IMT Masken und Teilungen AG
Koheras A/S
Komatsu Electronics Inc.
Laser Quantum Ltd.
LIMO Lissotschenko Mikrooptik GmbH
Logitech UK Ltd.
LTB Lasertechnik Berlin GmbH
Max Levy Autograph, Inc.
MEMS Optical Inc.
Minus K Technology
Nitto Optical Co., Ltd.
Omicron Laserage Laserprodukte GmbH

Optek Systems
Optical Research Associates
OXIDE/NIMS
Photon Gear, Inc.
POG Precision Optics Gera
Pyrophotonics Lasers Inc.
RMI Laser, LLC
SCHOTT North America, Inc. - Advanced Optics
Scottish Development International
Star Tech Instruments
Tessera North America
Toptica Photonics, Inc.
Translume, Inc.
wzw-optics AG

Optics Manufacturing

4D Technology Corp.
AccuCoat, Inc.
Accumold
Active Optics - Night N Ltd.
Advanced Microoptic Systems GmbH
Advanced Thin Films
AFL Telecommunications
Agilent Technologies, Inc.
AgilOptics, Inc.
AJ Industries
Ametek Precitech, Inc.
Andover Corp.
AOC Technologies, Inc.
Apollo Optical Systems, Inc.
Applied Surface Technologies
APS Optics
Archer OpTx, Inc.
Argus International, Ltd.
Argyle International Inc.
ASKION GmbH
ASML Optics
asphericon GmbH
Astron
ATLAS PCF Ltd.
Barr Associates Inc., Thin Films
Berliner Glas KGaA
Berliner Glas US
BMV Optical Technologies Inc.
Boston Micromachines Corp.
Brighten Optics Ltd.
Carl Zeiss
Casix, Inc.
CDGM Glass Co Ltd
Chang Chun Bo Xin Photoelectric Co., Ltd.
China Opto-Electro Industries, Co., Ltd.
Chroma Technology Corp
Cleveland Crystals, Inc.
CMPC Surface Finishes
Coastal Connections
Coastal Optical Systems, Inc.
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Computer Optics Inc.
CoorsTek Technical Ceramics
Coresix Precision Glass, Inc.
Covega Corp.
CVI Melles Griot-Albuquerque
CVI Melles Griot-Carlsbad
Deposition Sciences, Inc
Diemat, Inc.
Diffraction Optics Ltd.
Docter Optics, Inc.
Doric Lenses Inc.
Dyna Technologies, Inc.
Dynavac

Ealing Catalog Inc.
Edmund Optics Inc.
EKSPLA Ltd.
EM4, Inc.
Excell Technology
Fairfield Crystal Technology, LLC
Fianium
Fibercore Ltd.
FiberLogix Ltd.
ficonTEC Corporation
FLIR Government Systems, Inc.
Foctek Photonics, Inc.
Foreal Spectrum, Inc.
Fresnel Optics GmbH
Fresnel Technologies Inc.
GAGGIONE SAS
Gavish, Inc.
Gist Optics Co., Ltd.
Glass Fab Inc.
Glendale, Inc.
Gooch & Housego, PLC
G-S PLASTIC OPTICS
Gurley Precision Instruments, Inc.
Halbo Optics Ltd.
Hardin Optical Company
Harold Johnson Optical Labs.
HB Optical Technology Co., Ltd.
Headwall Photonics, Inc.
Hellma USA, Inc.
Heptagon
Heraeus Quartz America
Hilger Crystals Ltd.
II-VI Infrared
IMPEx HighTech GmbH
Infinite Optics Inc.
INGENERIC GmbH
Inlight Precision Optics Co., Ltd.
Insaco, Inc.
Ion Beam Milling Inc.
ISP Optics
Isuzu Glass Inc.
JDSU
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
JML Optical Industries Inc.
Kaleido Technology
Kelvin Nanotechnology Ltd.
Kiyohara Optics, Inc.
Kreischer Optics, Ltd.
Krell Technologies
Kunming Institute of Physics
L-3 Communications, Tinsley Laboratories, Inc.
Labsphere, Inc.
LaCroix Optical Co.
Landwehr Electronic GmbH
Laser Components GmbH
Laser Optics. a PPGI Std Company
Laser Research Optics
Lattice Electro Optics, Inc.
Lattice Materials LLC
Leica Microsystems GmbH
Leister Technologies LLC
Liebmann Optical Co.
Light Guide Optics Germany GmbH
LightMachinery Inc.
LightPath Technologies, Inc.
LightTrans GmbH
Lightwaves2020 Inc.
LIMO Lissotschenko Mikrooptik GmbH
LINOS Photonics, Inc.
LT Ultra Precision Optics
Luminit LLC

Meadowlark Optics
 MediVision Optics
 Meller Optics, Inc.
 MEMS Optical Inc.
 Metavac
 Midwest Optical Systems
 Mindready Solutions
 Model Optics
 Moore NanoTechnology Systems LLC
 MOXTEK, Inc.
 MPA Crystal Corp.
 MRC a PPGI company
 Nalux Co., Ltd.
 Nanjing Fenghua Optical Instrument Co., Ltd.
 Nanjing Sapphire Electro-Optics Co., Ltd.
 Navitar Inc.
 NEOS Technologies, Inc.
 Newport Corp.
 Nitto Optical Co., Ltd.
 Northrop Grumman Synoptics
 OASYS Technology, LLC
 Oerlikon Optics USA Inc.
 Onyx Optics Inc.
 OPCO Lab., Inc.
 Optical Filter Source, LLC
 Optical Support, Inc.
 Optics for Research, Inc. (Division of Thorlabs)
 Optics Technology, Inc.
 OptiGrate
 Optikron GmbH
 Optimax Systems, Inc.
 OptiSource, LLC
 Optometrics Corp.
 Optonetic LLC
 OptoSigma Corp.
 P&P Optica
 Pacific Coast Optics
 Pacific Rim Optical
 Parker domnick hunter
 PerkinElmer, Inc.
 PFG Optics
 Photon Gear, Inc.
 Photop Technologies, Inc.
 PLX, Inc.
 POG Precision Optics Gera
 Polaris Electronics Corp.
 Polymer Optics, LLC
 Precision Glass & Optics
 Precision Optics Corp
 Precision Photonics Corp.
 PROMET International Inc.
 QED Technologies, Inc.
 Qioptiq Group
 Quality Thin Films, Inc.
 Rainbow Research Optics, Inc.
 RAPT Industries, Inc.
 Research Electro-Optics, Inc.
 Reynard Corporation
 Rising Electro-Optics Ltd.
 Rochester Precision Optics LLC
 Rocky Mountain Instrument Co.
 RoMack, Inc.
 RPC Photonics, Inc.
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 San Jose City College
 Schmidt & Bender Optics Ltd.
 SCHOTT North America, Inc.
 - Advanced Optics
 Servometer/PMG, LLC

Showmark, LLC
 SIFAM Fibre Optics Ltd.
 Sill Optics GmbH & Co., KG
 Special Optics, Inc.
 Spectral Systems
 Spectralus Corp.
 Spectrogon US Inc.
 Spectrum Scientific, Inc.
 Spectrum Thin Films Corp.
 Stemmerich, Inc.
 Sumipro
 Sunex Inc.
 Swift Glass Co.
 Swiss Jewel Co.
 SwissOptic AG
 Sydor Optics, Inc.
 Syntec Optics
 Techmetals, Inc.
 TecOptics, Inc.
 Tecport Optics, Inc.
 Tempotec Optics Co., Ltd.
 TeraXion Inc.
 The China and South Optical Crystals Co.
 TNO Science & Industry
 Tower Optical Corp.
 TwinStar Optics
 UCM AG
 Unice E-O Services Inc.
 Union Optic, Inc.
 Valley Design Corp.
 Videology Imaging Solutions, Inc.
 Virtual Industries, Inc.
 VLOC
 Wasatch Photonics
 Western Photonics Technology
 wzw-optics AG
 Z&Z Optoelectronic Tech. Co., Ltd.
 Zygo Corp.

Photonics Equipment Manufacturer

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 ADE Inc.
 Aerotech, Inc.
 AJ Industries
 Ametek Precitech, Inc.
 APE - Angewandte Physik und Elektronik GmbH
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 asphericon GmbH
 Avantes, Inc.
 Axcel Photonics Inc.
 B&W Tek, Inc.
 Bid Service
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 Brimrose Corp. of America
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 Crystal Fibre A/S
 DataRay, Inc.
 Davidson Optronics, Inc.
 Daylight Solutions
 DCM Tech, Inc.
 Diamond Wire Technology
 Digilab
 DongWoo Optron Co., Ltd.
 DPSS Lasers Inc.
 DVC Co.
 Dynavac
 EKSPALA Ltd.
 Electron Tubes
 Electro-Optical Systems, Inc.
 Elliot Scientific Ltd.
 EMCO High Voltage Corp.

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 FiberLogix Ltd.
 ficonTEC Corporation
 Finetech
 FJW Optical Systems, Inc.
 Gamma Scientific, Inc.
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 Labsphere, Inc.
 Laird Technologies
 Laser Quantum Ltd.
 Laser Safety Systems
 Lionix B.V.
 LT Ultra Precision Optics
 Lumina Power, Inc.
 M Squared Lasers Ltd.
 Metrology Concepts LLC
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 Micro Laser Systems, Inc.
 MicroE Systems
 MPB Communications Inc.
 Nanonics Imaging Ltd.
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 National Aperture, Inc.
 New Focus, Inc.
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 nPoint, Inc.
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 Parker domnick hunter
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 PolarOnyx, Inc.
 PriTel, Inc.
 Raicol Crystals Ltd.
 Raylase AG
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 S.D.S Systems Development & Solutions
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 Satisloh North America Inc.
 SensL
 Sens-Tech Ltd.
 SGS Slicing Solutions, Inc.
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 Canon USA, Inc.
 CEDRAT Technologies
 CVI Melles Griot-Carlsbad
 Ealing Catalog Inc.
 Edmund Optics Inc.
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 Elliot Scientific Ltd.
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 Gurley Precision Instruments, Inc.
 iC-Haus Corp.
 Lightspeed Technologies
 LINOS Photonics, Inc.
 Mad City Labs, Inc.
 Micro Motion Technology Co., Ltd.
 MicroE Systems
 Mindready Solutions
 Nanonics Imaging Ltd.
 National Aperture, Inc.
 New Focus, Inc.
 New Scale Technologies, Inc.
 Newport Corp.
 nPoint, Inc.
 ON-TRAK Photonics, Inc.
 OP Mount Instrument Inc.
 OptoSigma Corp.
 Pacific Silicon Sensor Inc.
 PI (Physik Instrumente) LP
 Piezosystem Jena, Inc.
 PLX, Inc.
 SCANLAB America, Inc.
 Siskiyou Corp.
 Standa
 Steinmeyer, Inc.
 StockerYale, Inc.
 Sutter Instrument Co.
 Taboada Research Instruments, Inc.
 Thorlabs, Inc.
 Unice E-O Services Inc.
 Z-LASER Optoelektronik GmbH

Resist Technology and Processing

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 ATP, Applied Thin-Film Products
 Bid Service
 Carolinas MicroOptics Triangle
 Fraunhofer Institute for Silicate Research ISC
 Ion Beam Milling Inc.
 Kelvin Nanotechnology Ltd.
 Laird Technologies
 Nextreme Thermal Solutions
 Pyrophotonics Lasers Inc.

Sensor & Sensor Systems

3SAE Technologies, Inc.
 Accuratus Corp.
 Active Optics - Night N Ltd.

Photonics West Product Index

AllMotion
Analog Modules, Inc.
Andor Technology
Avantes, Inc.
Avensys/ITF Labs.
Berliner Glas KGaA
Bossa Nova Technologies
Carolinas Photonics Consortium
CEDRAT Technologies
CeramOptec Industries, Inc.
CODIXX AG
Compound Semiconductor Technologies Global Ltd.
Computer Optics Inc.
CryLaS GmbH
Ctr. Suisse d'Electronique et de Microtechnique SA
Daylight Solutions
Digilab
DRS Infrared Technologies
Dynamics Research Corp.
Electron Tubes
Electro-Optical Systems, Inc.
FastVision, LLC
Femto GmbH
FiberLogix Ltd.
FJW Optical Systems, Inc.
Framos GmbH
Fraunhofer Heinrich Hertz Institut
Fraunhofer Institute for Applied Optics and Precision Engineering IOF
Fraunhofer Institute for Photonic Microsystems (IPMS)
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Harris Corp.
Headwall Photonics, Inc.
Hellma USA, Inc.
Holochip Corporation
iC-Haus Corp.
Infotonics Technology Center
Inlight Precision Optics Co., Ltd.
Innovative Photonic Solutions
International Radiation Detectors, Inc.
Intex, Inc.
Knowledge and Service Centre Optronica
Koheras A/S
Komatsu Electronics Inc.
Kyosemi Opto America Corp.
Laser Components DG, Inc.
Laser Components IG, Inc.
Laser Safety Systems
Light Guide Optics Germany GmbH
LT Ultra Precision Optics
Luna Technologies
m2k-laser GmbH
Mahr GmbH
MegaWatt Lasers, Inc.
Metrology Concepts LLC
Micro Photon Devices
MicroE Systems
Micron Optics, Inc.
Naked Optics Corp.
Nanoplus GmbH
National Reconnaissance Office
Nature Publishing Group
neoplas control GmbH
New England Photoconductor Corp.
Novacam Technologies Inc.
NovaWave Technologies

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OFS - Specialty Photonics Div.
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Opto Diode Corp.
OptoElectronic Components
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Photon Control
Photonix Ltd.
Photron USA, Inc.
Praevium
Primes GmbH
Sabeus, Inc.
Sacher Lasertechnik GmbH
Salvador Imaging
Santec USA Corp.
Savimex
Scottish Development International
Scottish Optoelectronics Association
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Spectral Instruments, Inc.
Spectrolab, Inc.
Spectrum Detector Inc.
Spitfire Semiconductors Ltd.
SRICO, Inc.
Stanford Photonics, Inc.
Star Tech Instruments
StellarNet, Inc.
Stratophase Ltd.
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Trioptics GmbH
ULM Photonics GmbH
VERTILAS GmbH
WaveFront Sciences, Inc.
Wavelength Electronics, Inc.
WT&T Inc.
Zomega Terahertz Corp.

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AT-Fachverlag GmbH
Canadian Institute for Photonic Innovations (CIP)
Canadian Photonics Consortium - Canada Pavilion Organizer
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EDP Sciences
Enterprise Florida, Inc.
Evans Analytical Group
Florida High Tech Corridor Council
Florida Photonics Cluster
French Pavilion - UBIFrance
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Information and Communications Technology Council (ICTC)
Knowledge and Service Centre Optronica
MuAnalysis, Inc.

Nerac, Inc.
Ontario Photonics Industry Network - OPIN
OptecNet Deutschland e.V.
optics.org - Optics & Laser Europe
Photonics Industry & Technology Development Association (PIDA)
Photonics Spectra
Photonics Tech Briefs
Photonics.com/Photonics Directory
Physics Today
Praevium
Quebec Photonic Network
Rockwell Laser Industries
S1 Optics GmbH
SenterNovem/I.O.P. Photonics Devices
Spectroscopy Magazine
SPIE Industry Resources
Vision Systems Design

Software

4D Technology Corp.
Active Optics - Night N Ltd.
Archer OptX, Inc.
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tec5USA, Inc.
Videology Imaging Solutions, Inc.
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ZEMAX Development Corp.

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Dominar, Inc.
EpiWorks, Inc.

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Solid State Cooling Systems
Technotrade International Inc.
Tecport Optics, Inc.
Telemark
Vacuum Process Technology, Inc.

Wafer Handling Automation

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AJ Industries
AllMotion
Axcel Photonics Inc.
CoorsTek Technical Ceramics
Diamond Wire Technology
DongWoo Optron Co., Ltd.
Equipment Acquisition Resources, Inc.
Excell Technology
ficonTEC Corporation
GEL-PAK
MICOS USA
MicroE Systems
Steinmeyer, Inc.
Strasbaugh

X-Ray Lithography

Kaiser Systems, Inc.
L-3 Communications, Tinsley Laboratories, Inc.
UltraVolt, Inc.

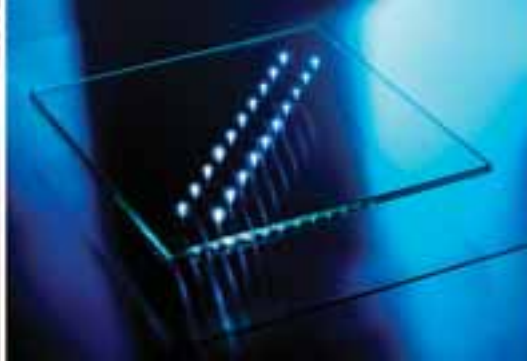


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Left/Middle Cover Photo Courtesy of SCHOTT. (Left photo: Fiber optical light guides. Drawing makes fiber optical light guides wafer-thin; Right photo: LED in flat glass. Light Points are LED's in a PVB flat glass foil laminate can be used in interiors, as glass walkways, as construction components for doors and many other products. Right Cover Photo Courtesy of Stephen Ausmus. Renewable-energy team members prepare experimental wind turbine blades for atmospheric testing. Team members pictured are ARS agricultural engineers Byron Neal (left foreground) and Nolan Clark (right foreground), and, from Sandia National Laboratories, electrical engineer Mark Rumsey and technician Donny Cagle (background).

Corporate members as of 7 December 2007

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ABET Technologies, Inc.
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Aculight Corp.
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Advanced Optowave Corp.
Aerotech, Inc./World Headquarters
AF Optical Inc.
AFL Telecommunications LLC/Corporate
AgilOptics, Inc.
Alflight, Inc.
Alpine Research Optics Corp./Headquarters
Ampex Data Systems Corp.
Amplitude Laser
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Applied Photonics, Inc.
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Aroyo Instruments
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ASML US, Inc.
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Axsis Technologies, Inc./Imaging Systems
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BaySpec, Inc.
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Carl Zeiss, Inc./Camera Lens Div.
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Lasers Optics & Coatings
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Laser Optics
Laser Physics Scientific Research
Institute
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Lasertel, Inc.
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Technology
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Nikon Precision Inc.
Nivo Technology
nLight Corp./Corporate
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OFS/Specialty Photonics Div
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Ontar Corp.
Ophir Optronics, Inc.
Opnext, Inc.
Op-Test
Optical Filter Source, LLC
Optical Research Associates
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Systems Div.
Optics for Hire
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Pavilion Integration Corp.
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Instrument-Making Co.
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Polytec, Inc.
Power Technology, Inc.
Precision Asphere LLC
Precision Glass & Optics
Precitech, Inc.
PULSAR Science Research
Institute/RC Kremniy Div.
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Ramenskoye Design Co.

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RSoft Design Group, Inc.
Rubicon Technology Inc.
Russian Chapter of Society for Info
Display Div
Russian Federal Nuclear Ctr.
Russian Social Fund TOPEC Solid
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SCANLAB America, Inc.
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Optics Div
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Aviation Equipmen
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Sill Optics GmbH & Co., KG
Siskiyou Corp.
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SphereOptics, LLC
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Step Development

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Manufacturing Co.
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Tecport Optics Inc.
Telops, Inc.

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Engineering
Vavilov State Optical Institute/All-
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