

Exhibition Guide

Biomedical Optics Exhibition:
21 – 22 January 2006

Photonics West Exhibition:
24 – 26 January 2006

San Jose Convention Center Complex
San Jose, California USA



The International Society
for Optical Engineering



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Photonics WEST

An SPIE Event

The World's Largest Optics, Optoelectronics,
Biophotonics, and Microphotonics Exhibition

Biomedical Optics Exhibition: 21–22 January 2006

Photonics West Exhibition: 24–26 January 2006

San Jose Convention Center Complex

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Biomedical Optics Exhibition

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Photonics West is an industry event sponsored by



The International Society
for Optical Engineering

General Information

Exhibition Hours

Biomedical Optics Exhibition

San Jose Convention Center, Exhibition Hall 1

Saturday 21 January 1:00 to 5:00 pm
Sunday 22 January 10:00 am to 4:00 pm

Photonics West Exhibition

San Jose Convention Center, Exhibition Halls 1-3, Exhibit foyer, and South Hall

Tuesday 24 January 10:00 am to 5:00 pm
Wednesday 25 January 10:00 am to 5:00 pm
Thursday 26 January 10:00 am to 4:00 pm

Onsite Registration and Information Hours

San Jose Convention Center, Street Level

Saturday 21 January 7:15 am to 5:00 pm
Sunday 22 January 7:15 am to 5:00 pm
Monday 23 January 7:00 am to 5:00 pm
Tuesday 24 January 7:30 am to 5:00 pm
Wednesday 25 January 7:30 am to 5:00 pm
Thursday 26 January 7:30 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.

Course Materials Desk

*Located near the SPIE Registration Area
Open during Registration hours*

If you have registered to attend a short course, please stop by the Course Materials Desk to pick up your course notes and to find out where the class will be located. You may also get a copy of the latest Education Services catalog to see the many courses SPIE has available at symposia, on video and CD-ROM, and to discover the opportunities of customized In-Company courses.

Message Center

San Jose Convention Center, located near registration

Messages will be taken during registration hours Saturday through Thursday by calling: **408-271-6000**

Product Locator Kiosk

Find your way around the Exhibition the easy way...perform a product or key word search, review the Product Spotlight Demos, 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 main entrance to the Exhibition Hall in the Convention Center and one in South Hall by the Internet Pavilion, aisle 6300.

Internet Access

Convention Center – Arcade Area, Street Level

Saturday – Wednesday 7:30 am to 6:00 pm
Thursday 7:30 am to 4:00 pm

In South Hall

Tuesday 10:00 am to 5:00 pm
Wednesday 10:00 am to 5:00 pm
Thursday 10:00 am to 4:00 pm

At each of these locations will be multiple workstations allowing attendees to access their internet e-mail during the conference, and several Ethernet connections to use with your personal laptop. There will be a 10-minute time limit per each person's internet session.

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 onsite company representatives. Individuals not complying with this policy will be asked to surrender their film and to leave the exhibition hall.

Children on the Show Floor

For safety and insurance reasons, no person under 16 years old will be allowed on the show floor during move-in and move-out. During open exhibition hours, only children over 12 years old *accompanied by an adult* will be allowed on the show floor.

WiFi Available

Complimentary WiFi access for attendees with wireless enabled laptops and PDA's will be available Saturday through Thursday in the Ballroom concourse (east end) and Almaden concourse (west end) of the convention center, and in South Exhibition Hall Tuesday-Thursday during exhibition hours.

Underage Persons on Show 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.

Photography

Personal photographs and video taping of individual booths (and their displays) is not allowed without the explicit permission from the company representative on-site. Failure to obtain consent could result in losing your film and being asked to leave the Exhibition Hall.

Visitor Information Center

A Visitor's Information kiosk is located in the main lobby of the convention center and will be open during show hours for sightseeing, shopping, and restaurant information.

Coffee Breaks

Coffee will be served at approximately 10:00 am and 3:00 pm each day.

Cash Continental Breakfast

Cash continental breakfast service will be available Saturday through Thursday in the Convention Center Foyer.

Exhibit Halls 1-3 and South Hall Concessions

Food concession booths and concession seating will be located in all the exhibit halls. Concessions will be open during exhibit hours for your convenience and serve a variety of deli-style sandwiches, salads, hot entrees, pastries, hot and cold snacks, and beverages on a cash basis.

Luggage/Package Storage/ Coat Check

Convention Center, Street Level Arcade

Saturday through Thursday 7:30 am to 6:00 pm

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

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



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<http://www.mosir950.com>

**See us at Photonics West,
Booth Number 6146.**

General Information

Sightseeing/Restaurants

The San Jose Convention and Visitors Bureau will be operating an Information Desk on the street level of the Convention Center near the main entrance. They will be open during core hours of the convention and will be able to help attendees with lodging, sightseeing, shopping, and restaurant arrangements. Many fine restaurants are located in the downtown business district of San Jose in the vicinity of the Convention Center and adjacent to the light rail system.

Visitor Information Center

A Visitor's Information kiosk is located in the main lobby of the convention center and will be open during show hours for sightseeing, shopping, and restaurant information.

Child Care

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

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,
www.2ndmom.com

Sitters Unlimited

Toll Free Phone: (408) 452-0225,
E-mail: rforosio@peoplepc.com or www.sittersunlimited.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.

Marketplace

A variety of SPIE's Publications, Distance Education, and Membership products and services will be available at the Photonics West Marketplace. A large selection of Proceedings, technical and reference books, selected papers on CD-ROM, and educational courses on videotape, CD-ROM, and DVD will be offered for sale, in addition to monogrammed premiums.

SPIE Digital Library

While attending the meeting, stop by the SPIE Marketplace to try out the new SPIE Digital Library. The SPIE Digital Library contains 175,000 full-text papers from SPIE Journals and Proceedings published since 1990. It also includes citations and abstracts for most SPIE papers published since 1995.

Photonics West Media Center

The on-site Media Center provides press conference facilities, refreshments, and convenient one-stop-shopping for press releases. Credentialed media are invited to communicate news via the provided telephone and computer connections. Registration and exhibition fees are waived for credentialed media representatives. You are encouraged to pre-register by e-mailing: name, organization, title, address, e-mail, and phone number to media@spie.org. For more information about SPIE media services, see <http://spie.org/info/media>.

SPIE Membership

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Special 2-Day Event!

spie.org



SPIEWorks Career Fair

Convention Center Street Level near Hilton Hotel

Tuesday 24 January 10:00 am to 5:00 pm
Wednesday 25 January 10:00 am to 5:00 pm

Connect with companies involved in the commercial development of optical engineering, remote sensing, materials and devices, signal and image processing, and x-ray optical technologies. This event includes the entire spectrum of light - driven technologies and attracts employers representing a wide range of industries, production processes, and products. If you're a physicist, optical engineer, applied scientist, engineer or product developer this event should be of interest.

- Network with technical staff and human resource recruiters
- Post your resume to the online Career Fair
- Search job postings online (24 hours a day)
- Interview for positions
- Learn more about employment opportunities

Membership in SPIE is not required.

Online Career Services

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 the online Career Fair being held in conjunction with Photonics West; post your resume, view jobs, or sign-up for "Job Alerts" and receive opportunities by email long after this event is over.

spieworks.com

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 23 - 29 January.

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

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- The Network Modeling family, *MetroWAND* and *Artifex*, help optical equipment manufacturers and service providers design and evaluate networks for optimal performance and cost efficiencies.
- *BroadbandSWAT* and *WirelessSWAT*, the Strategic Analysis family, enable planners, engineers, and business and marketing professionals to develop wireless, wired, and broadband network and service plans.

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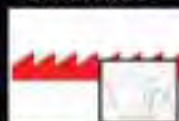
BandSOLVE™



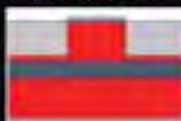
GratingMOD™



DiffractMOD™



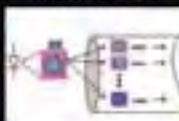
LaserMOD™



OptSim™



ModeSYS™



MetroWAND™



SWAT™ Tools



General Information

Convention Center Parking

Special event parking at the San Jose Convention Center is \$12 per day for (24 hours) with no in/out privileges. For short time parking the rate is \$1 for each 20 minutes (Maximum \$12). (With in/out privileges, the rate is \$20 per day). There are approximately 650 spaces for the public to use.

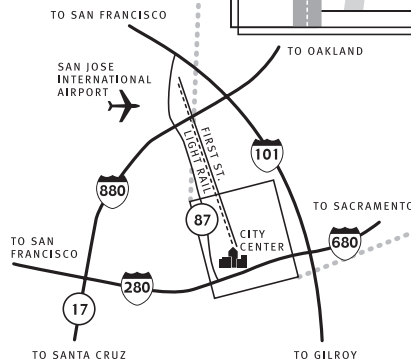
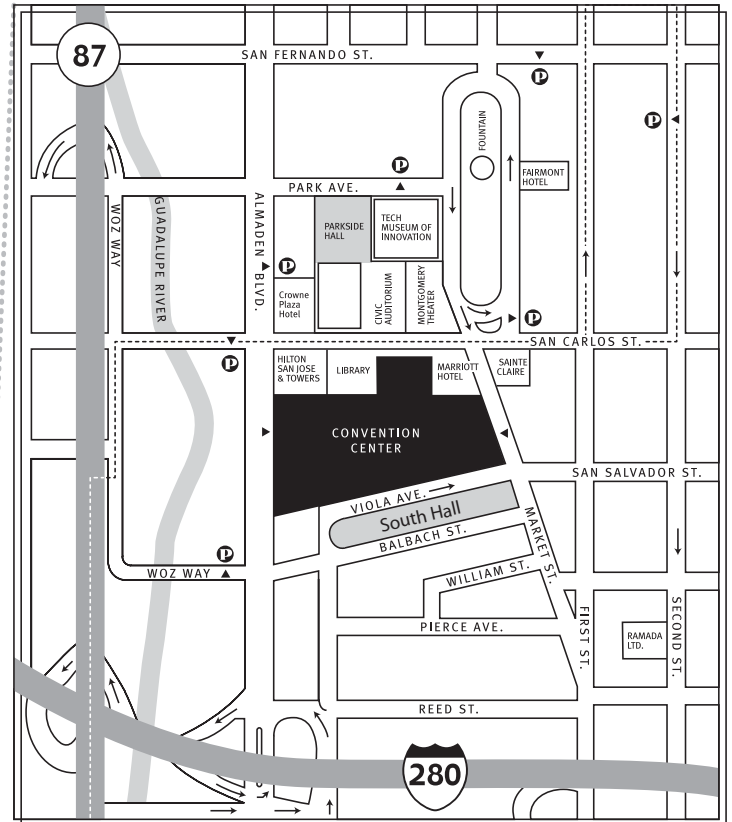
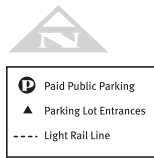
Alternate Parking Downtown San Jose

River Park Tower Garage is a privately managed parking garage located on the corner of San Carlos and Woz Way, 333 W. San Carlos St., with approximately 1,000 spaces available each day of the event. Hours of operation 6:30 am to 12:00 midnight, Monday to Friday, 8:00 am to 12 midnight Saturday; (Sunday varies). Rates are \$1.25 per 20 minutes, \$18 daily maximum. Rates and hours subject to change without notice.

For driving directions to the River Park Tower Garage, check their website www.sjdowntownparking.com and click on the area on the corner of San Carlos and Woz Way. You may also view additional parking facilities in close proximity to the convention center for lots offering convention center hourly or per day parking rates.

Parking at Individual Hotels (All rates are subject to change without notice)

- Fairmont Hotel** – Parking garage is located beneath the hotel. No self parking available. Valet parking for **overnight guests** (on space available basis) is \$22 with in/out privileges. Valet parking for **visitors** (on space available basis) – 1st 30 min is \$5, each additional 20 minutes is \$1.50, maximum per day is \$22.
- San Jose Marriott** – Parking for guests is available for \$19 per day with in/out privileges. Non-guests pay \$4.00 per hour with a maximum of \$19/day.
- Hilton San Jose & Towers** – For self parking for guests \$12 max. with in/out privileges, for non-guests \$18 max. For valet parking \$20 max. with in/out privileges. With validation at City Bar & Grille for up to 5 hours \$8.
- Crowne Plaza** – For Guests – self parking, \$12 per day (subject to change) with in/out privileges. No valet. For non-guests \$1.25 per 20 minutes, max. \$18 per day.
- The Sainte Claire** – For Guests & visitors, valet parking only with in/out privileges, \$6 for 1-3 hours, \$9 for 3-8 hours, over 8 hours is \$15, and \$18 for overnight.
- Ramada Ltd.** – Guest parking is complimentary.



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Exhibitor Product Spotlights – Opto Town Square

DEMO AREA I • San Jose Convention Center Hall 1

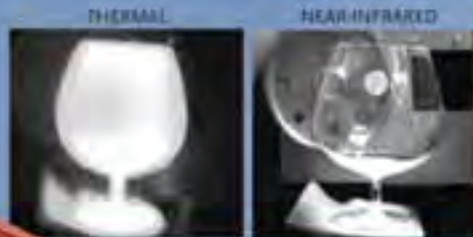
TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
10:30 am	<p>Maestro™ In-vivo Fluorescence Imaging System James Mansfield, CRI</p> <p>Maestro™ is an affordable, breakthrough system for fluorescence-based in-vivo imaging. Using multispectral acquisition and analysis, it provides dramatically improved sensitivity, multicolor flexibility and quantitative accuracy for visible and near-infrared labels.</p>	<p>The World's First Cross-platform Spectroscopy Software Platform Dr. David Landis, Ocean Optics, Inc.</p> <p>Experience the industry's first cross-platform spectroscopy software. SpectraSuite operates on Windows, Macintosh and Linux, and controls any Ocean Optics USB spectrometer and device, plus other manufacturers' USB instrumentation (using drivers).</p>	<p>Finding Answers with Scientific Infrared Cameras Dave Bursell, FLIR Systems, Inc.</p> <p>FLIR's Science-Grade infrared cameras provide the scientific and engineering communities with a robust, flexible solution for R&D applications. The new SC6000 Scientific Infrared Camera features high-speed/resolution performance in multiple wavebands.</p>
11:30 am	<p>Next Generation Diode Solutions from Coherent Semiconductor Al Yuen, Coherent Inc.</p> <p>Coherent Semiconductor group will present its new line of next-generation diode solutions. Improved efficiencies, peak power, and costs will enable new direct diode applications to expand the diode market. Both new technical and new market information will be presented.</p>	<p>V4000 Automated Bar Soldering Solution Michel Roy or John Tessitore, Telops Inc.</p> <p>The Telops V4000 brings 6-axis alignment to the laser bar soldering process to provide a defined solder thickness for efficient thermal bonding and a virtually eliminated smile for precision optical coupling.</p>	<p>Precision Molded Aspherical Lenses Helge Vogt, SCHOTT AG</p> <p>The current trend that calls for miniaturization of the optical components used in digital & cell phone cameras will continue. Aspherical lenses are taking on greater importance because a single asphere can be used to replace several spherical lenses and, thus, reduce the overall size & weight of the optics. At the same time, aspheres deliver improved image quality and higher resolution. SCHOTT AG manufactures aspherical lenses using the precision molding process based on a highly sophisticated technology developed at SCHOTT.</p>
12:30 pm	<p>High Performance Glass Polarizers from CODIXX Ken Norbrothen, Laser Components</p> <p>CODIXX announces a new high transmittance, wideband glass polarizer that covers 550 to 1500 nm with over 10,000:1 extinction. This is now available in all standard and in a HQ with low wavefront distortion version.</p>	<p>Combining AFM/SPM Systems with Micro Raman Aaron Lewis, Nanonics Imaging Ltd.</p> <p>Nanonics Imaging in its drive for integrated microscopic solutions has now been able to fully and transparently integrate the worlds of scanned probe microscopy with Raman microspectroscopy. This allows for new and exciting imaging and chemical characterization possibilities that will be discussed in this presentation.</p>	<p>Innovations in Thin Film Materials - Improved Products, Improved Performance E.J. Strother and David Sanchez, CERAC, Inc.</p> <p>The introduction of CERAC's Pre-Melted Evaporants demonstrated a commitment to providing value-added products and performance to our customers. Find out about the next product innovations coming from CERAC in 2006.</p>
1:30 pm	<p>Using MATLAB for Research and Development in Imaging Applications Bruce Tannenbaum, The Mathworks</p> <p>MATLAB provides a complete environment for image acquisition, processing, analysis, algorithm development, and application deployment. See a demonstration of The MathWork's software tools for these tasks in a microscopy application.</p>	<p>Overview of New "Cooled" 11 MP Camera Jay Kelbley, Redlake</p> <p>Presentation will overview Redlake's latest camera. This camera is a unique, actively cooled 11MP camera designed for A variety of customer applications.</p>	<p>New 4-Megapixel/Full Frame CCD for X-Ray Crystallography Applications Gloria Putnam, Eastman Kodak Company</p> <p>Performance characteristics of a new 2098(II)x 2098(V) 24µm x 24µm pixel full frame CCD will be presented showing how this device needs the needs of X-ray Crystallography and other Scientific applications.</p>
2:30 pm	<p>Measuring Total Spectral Flux of LEDs Vikrant Mahajan, Labsphere, Inc.</p> <p>Learn how an integrating sphere spectrometer can simplify complex optical measurements. A demonstration will explain how to measure the total spectral flux of a LED with Labsphere's new SLMS LED system.</p>	<p>New Piezo Motor Adds Auto Focus and Optical Zoom to Tiny Phone Cameras Dave Henderson, New Scale Technologies</p> <p>The patented SQUIGGLE® motor moves optics in incredibly small spaces to create tiny cameras with auto focus and optical zoom. Cameras with SQUIGGLE motors take better pictures, yet are smaller and use less power than cameras with electromagnetic motors.</p>	<p>Integra-c from Quantronix: For Ultrafast, High Precision Micromachining Applications Hong Q. Chen, Quantronix Corp.</p> <p>The high energy, solid state Integra-c, and all-in-one ultrafast amplifier, is an attractive option for industrial micromachining applications (such as photomask defect repair) that require high quality, accuracy, and system robustness.</p>



NIR images show fill levels, even through opaque materials.



NIR camera shows bruises on fruit, undetectable in the visible spectrum.



High speed camera measures temperature and detects hot blackbody source behind the glass surface.



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Sensors Unlimited is now part of Goodrich Corporation. Our name may have changed but our products are more innovative than ever. Take our new InGaAs-based, near-infrared (NIR) linescan camera. It's the only one of its kind and provides the most comprehensive imaging capabilities available.

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- ▶ high speed thermal events (above 120°C)
- ▶ recycling
- ▶ agricultural sorting
- ▶ biomedical analysis
- ▶ spectroscopy
- ▶ art inspection

DEMO AREA I continued

TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
3:30 pm	<p>Software for Crystal Growth and Device Engineers Sergey Karpov, Semiconductor Technology Research, Inc.</p> <p>Software products by STR, Inc. for crystal growth and device engineers are presented and their application to development and optimization of optoelectronic device fabrication processes and designs is highlighted.</p>	<p>Thin-Film Filters & Coatings - Field-Proven Stabilife® Technology Jamie Knapp, Newport Corporation</p> <p>For over a decade, Newport's Stabilife® thin-film optical coatings have been the choice of countless OEM instrument manufacturers. Features and benefits of this field-proven technology will be presented.</p>	<p>World Smallest Green DPSS Laser Dr. David Brown, Frankfurt Laser Company, Snake Creek Laser</p> <p>We will spotlight MicroGreen and MiniGreen lasers - the market smallest OEM industry grade diode-pumped solid state green laser head offering optical output in 1-5mW and 50-100mW power range.</p>
4:30 pm	<p>Liquid Lens – Autofocus and Zoom With No Moving Parts John Barber, Varioptic</p> <p>Variable focus with no moving parts gives significant benefits over mechanical systems: More robust and reliable – reduced device return rates; Cheaper; Smaller; Almost no impact on battery life; Silent operation.</p>	<p>Room Temp HgCdTe Comes of Age Fred Perry, Boston Electronics Corporation</p> <p>Advances in HgCdTe photodetector preparation result in both photovoltaic and photoconductive TE-cooled detectors for the 3 to 5 and 8 to 12 micron bands with sensitivity near the 300K background limit.</p>	<p>EXHIBITION CLOSED</p>

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Exhibitor Product Spotlights – Laser Town Square

DEMO AREA II • San Jose Convention Center Hall 3

TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
10:30 am	<p>Advances in High Power Semiconductor Lasers Paul Rudy, Quintessence Photonics Corporation</p> <p>Advances in increased spectral brightness and stability, increased spatial brightness, and reduced cost architectures at wavelengths from the near infrared to the eye-safe regime will be discussed.</p>	<p>Full Spectrum Imaging - How Reflective Objectives Can Solve UV, Visible, and IR Imaging Applications Sam Sadoulet, Edmund Optics</p> <p>Edmund Optics' reflective objectives feature near-diffraction limited performance for broadband imaging, focusing, and targeting applications. Available in 15X and 35X magnifications, the objectives are available for both infinite and finite conjugate setups, with a number of coating options.</p>	<p>New Generation of Q-Switched Lasers Matthias Schulze, Coherent Inc.</p> <p>A fundamentally extended laser portfolio from Coherent Inc to enable applications in micromachining and microelectronics. The portfolio covers IR, green and UV emission for a broad power range.</p>
11:30 am	<p>High-damage Threshold UV-Optics for Laser Application Volker Schmidt, Berliner Glas KGaA</p> <p>Berliner Glas offers high-damage threshold UV-optics with optimum scratch and dig specification and minimised surface deviations made of fused silica, sapphire and several fluorides like calcium fluoride or magnesium fluoride.</p>	<p>RLI Entryway Control System Patrick Cogan, Rockwell Laser Industries</p> <p>The RLI Sentry™ Entryway Control System gives access control for safe laser use within your facility. Product allows authorized personnel to enter designated room, while providing total protection in a fixed environment.</p>	<p>High-Efficiency, High-Brightness Single Emitter Devices Paul Crump, PhD, nLight Corporation</p> <p>Advances in high efficiency single-emitter diode laser devices provide state-of-the-art high-brightness, power and reliability. Delivering high polarization purity, excellent spectral width, and high power conversion efficiency results will be reviewed and addressed.</p>
12:30 pm	<p>Optical Filters: Semrock Sets the Standard Turan Erdogan, Semrock, Inc.</p> <p>Semrock sets the standard in optical filters for biotech and analytical instrumentation by manufacturing the brightest and most reliable filters available. This presentation focuses on new filters for laser-based fluorescence applications.</p>	<p>Micro-Optics & Diffractive Optical Elements for HPDL Helge Vogt, SCHOTT AG</p> <p>Microoptics & diffractive optical elements are becoming key elements in laser optics. Micro-optics like FAC lenses are used to collimate the highly divergence beam of high power diode lasers (HPDL) in the fast axis. HPDL systems are used as light sources for direct applications like soldering, welding or hardening of metals or polymers. The FAC lenses are aspheric micro-lenses with highly accurate shape.</p>	<p>Long Distance Laser Diode Illumination Joseph Kulakofsky, Blue Sky Research</p> <p>The elliptical beams of standard laser diodes cannot project quality spots out to distances from 100 to 10,000 meters. Blue Sky Research's Circulaser™ diodes provide a single divergence from a round beam creating quality collimation and tighter brighter spots at long distances.</p>
1:30 pm	<p>Advances in High Energy Laser Systems Dr. James Norby, Continuum</p> <p>High energy YAG laser systems have been expanding from their roots in the Scientific community to a host of emerging Industrial applications. Higher repetition rates, higher energies, ruggedized designs and improved lifetimes are all making this possible. We will focus on these developments, and highlight a number of the more interesting applications.</p>	<p>Holographic Gratings for Spectroscopic Applications Dr. Marcus Serwazi et.al., Berliner Glas KGaA</p> <p>BERLINER GLAS presents a new production line for holographic gratings and examples for applications, wavelength region between 200 and 800 nm, as a result of a joint venture with SPECTRO.</p>	<p>Lasiris™ Magnum II Laser Tony Marzilli, StockerYale Inc.</p> <p>High power laser diode line generator with increased beam pointing and focusing stabilities. Rugged industrial-grade design; bipolar thermoelectric cooler. For high-speed machine vision applications such as road/rail inspection.</p>
2:30 pm	<p>New Solid State Lasers Lisa Tsufura, Melles Griot</p> <p>Melles Griot Laser Group will discuss its most recent solid-state laser product offerings which provide critical wavelength coverage to the biomedical and life science instrument communities.</p>	<p>Next Generation Vibration Damping Technology Jim Fisher, Newport Corp.</p> <p>The new SmartTable Series from Newport, the ideal optical table for every application and budget. In 2005 Newport's SmartTable with iQ Damping technology revolutionized optical tables. In 2006, Newport will introduce its newest series of SmartTables which will make this technology available and affordable for more applications than ever!</p>	<p>Low Noise Green Diode Laser (GDL) for Laser Display Johnny Zhong, Photop Technologies, Inc.</p> <p>Low noise DPSS green laser with compact design, noise <0.5% RMS (20Hz~20MHz) and power up to 40mW. The compact laser will find applications in laser display, bio-medical instrument and laser printing.</p>

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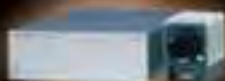


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DEMO AREA II continued

TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
3:30 pm	<p>OPO Eye-Safe Wavelength Lasers Yusong Yin, Photonics Industries International, Inc.</p> <p>The DS Series Nd:YLF based OPO eye-safe wavelength lasers enables it to operate at 10kHz in repetition rate, and in Q-switched mode at the eye-safe wavelength of 1.516µm.</p>	<p>Tracepro Bridge for Solidworks G. Groot Gregory, Lambda Research Corp.</p> <p>Tracepro bridge for solidworks is an add-in to solidworks, which enables users to define optical elements within solidworks. Complete opto-mechanical models are exported to Tracepro, an optical simulation software, for optical ray tracing and analysis.</p>	<p>Mirao, A New Generation of Deformable Mirror; HASO Wavefront Sensor: New Version software Jérôme Ballesta, Imagine Optic</p> <p>We will present new features of our wavefront analysis software. HASO .exe version 3 is now included in our wavefront sensor packages. It's including new features like network monitoring, multi user software, more robust and faster wavefront calculation.</p>
4:30 pm	<p>Sub-50fs Femtosecond Diode-Pumped Oscillator Stephane Gueguen, Amplitude Systemes</p> <p>We present a femtosecond diode-pumped oscillator with less than 50fs pulse duration. We avoid physical limits linked to amplification spectral width thanks to a compression setup with micro-structured fibers.</p>	<p>Basu Rotary Disk Laser Santanu Basu, Sparkle Optics Corporation</p> <p>Spotlight on 72-W TEM00 Q-switched laser.</p>	<p>EXHIBITION CLOSED</p>



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Exhibitor Product Spotlights – South Hall

DEMO AREA III • San Jose Convention Center South Hall

TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
10:30 am	<p>How to Use the Scratch & Dig Standards Don Bronstrop, Brysen Optical</p> <p>A mini presentation on Brysen's Surface Quality Scratch & Dig Standards and how to interpret and use them.</p>	<p>OLEDs for Optoelectronic Devices Joerg Amelung, Fraunhofer IPMS</p> <p>We will present highly efficient OLEDs integrated into silicon backplanes in the form of rows or arrays for opto electronic and microdisplay applications and transparent displays as a new type of displays to read information from both sides of the display.</p>	<p>Broad-band Optical Test Bench to Measure MTF and Transmittance of Visible and IR Optical Components Efraim Tzafir, CI Systems</p> <p>A new rugged and modular Optical Test Bench measures MTF, transmittance and other optional parameters of lenses in the visible and infrared ranges. The design allows wide band spectral coverage.</p>
11:30 am	<p>Low Cost, High Resolution Spectrometers Randall Wilcox, Lightspeed Technologies and Ivan Melnyk, Photon Control</p> <p>Photon Control's spectrometers are ideal for customers who are looking for high quality and low-cost optical devices for commercial, university, or R&D applications. Measurement ranges from 200 to 950nm with resolution to < 0.1nm.</p>	<p>Advanced Design Tools for Passive and Active Optoelectronic Devices Dr. Zhengyu Huang, RSoft Design Group</p> <p>Recent progress will be presented, which includes <i>MOST</i>, a generalized multi-variable optimization tool, <i>FemSIM</i>, a new FEM solver for PCF-like complex structures, and the new DFB/DBR modeling capability in LaserMOD.</p>	<p>Micromachining with Macro Speed Jari Sillanpaa, Corelase</p> <p>The X-LASE family is ideal for microfabrication and functional coatings on large areas. X-LASE units can be used to groove, cut, and pattern materials directly without creating large heat-affected zones, recasting problems, burr, or debris.</p>
12:30 pm	<p>High Power Diode Lasers for Industrial Defense Applications Dr. Joerg Neukum, DILAS Diodenlaser GmbH</p> <p>The presentation outlines Dilas' capabilities in the field of standard products & customized solutions for industrial, scientific & defense applications.</p>	<p>Synopsys Sentaurus Device: Optoelectronic Capabilities Wei-Choon Ng, Synopsys, Inc</p> <p>We will show how Sentaurus Device (formerly Dessis) is capable of accurately simulating strained GaN QW lasers with piezoelectric screening, photon recycling in LEDs, VCSELs, solar cells, CMOS sensors, and photo detectors.</p>	<p>SNAPWAVE™ John Koran and Gary Sharp, ColorLink, Inc.</p> <p>SNAPWAVE™, a color wheel with no moving parts! Customer defined spectrums switched on demand.</p>
1:30 pm	<p>Breakthrough Performance in Low Light Near IR Spectroscopy and Imaging Dr. Leslie Tack, Intevac, Inc.</p> <p>MOSIR is the world's first low light NIR (950-1650nm) image intensified camera for spectroscopy and imaging applications; performance far exceeds CCD and InGaAs arrays.</p>	<p>Desktop VUV Spectrometer and Excimer Lamp Systems Bill Morrow, Resonance Ltd.</p> <p>Low-cost, high power and large-area Excimer UV and VUV light sources have enormous potential for VUV Excimer assisted Photo CVD, cleaning of wafers and TFT panels.</p>	<p>What's New in ZEMAX Andrew Locke or Dr. Mark Nicholson, ZEMAX Development Corp.</p> <p>Introducing the latest and greatest features in the world's leading optical design software, ZEMAX, including afocal analysis, complex geometry creation and quantitative laser beam analysis.</p>
2:30 pm	<p>Rainbow Laser Distance Measurement Device Yuanhang Chen, Bitswave Inc.</p> <p>Rainbow laser distance measurement device is a real-time and high speed precision laser distance measurement system. It is the only laser distance device that has Ethernet wire/wireless capability.</p>	<p>Carbon Dioxide Snow Cleaning Robert Sherman, Applied Surface Technologies</p> <p>We demonstrate and discuss CO₂ Snow Cleaning, a surface cleaning process for removing particles of all sizes, down to 0.03µ, and hydrocarbon residues. Applications for optics and coatings are discussed.</p>	<p>Photometric and Optical Optimization in SolidWorks Maroun Massabki, OPTIS</p> <p>Discover the OptisWorks software directly integrated inside the SolidWorks CAD solution. A unique collaborative workspace for optical, mechanical and opto-mechanical engineers, OptisWorks offers photometric and opto-mechanical optimization directly into SolidWorks.</p>
3:30 pm	<p>Large Area High Gain APD as a Replacement for the Photomultiplier Tube Carl Jackson, SensL</p> <p>SensL will demonstrate their powerful new low light detector. This is a new generation of silicon sensor with a gain of 10⁶ – the ultimate solid state replacement for high gain PMTs.</p>	<p>Hyperspec - Integrated Hyperspectral Solutions for Commercial Applications David Bannon, Headwall Photonics</p> <p>Headwall Photonics, the leader in hyperspectral imaging solutions, announces a new line of integrated hyperspectral systems targeted for commercial applications. Hyperspec™ integrated sensors are configured for application-specific performance and provide industry-leading spectral and spatial performance.</p>	<p>Customized Liquid Crystal Tunable Filters – Non Mechanical Filter Demonstration Paul Searcy, Meadowlark Optics</p> <p>Meadowlark Optics is proud to announce the availability of a new line of customizable, precision liquid crystal tunable filters for a variety of industrial and scientific applications.</p>

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DEMO AREA III continued

TIME	Tuesday	Wednesday	Thursday
	24 January	25 January	26 January
4:30 pm	<p>Shortwave Infrared Imaging in Industrial Processing Martin H. Ettenberg and Doug Malchow, Sensors Unlimited, Inc.</p> <p>Sensors Unlimited's SWIR, InGaAs-based detectors are uniquely suited to non-destructive identification of materials in industrial processes. For manufacturing, packaging and process control, shortwave infrared cameras enable the detection of phenomenology that is invisible to the eye or other cameras.</p>	<p>Ultra High Speed Imaging for Military, Automotive and Scientific Applications Andrew Bridges, Photron, Inc.</p> <p>Photron's APX-RS is a super light-sensitive, CMOS high speed digital video camera that captures 3000 frames per second at 1024 x 1024 resolution and up to 250,000 fps at reduced resolution.</p>	<p>EXHIBITION CLOSED</p>

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Basic Optics for Non-Optics Personnel

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
- Understand 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. He has been recognized for his leadership in machine vision by the Society of Manufacturing Engineers, Automated Imaging Association, and Engineering Society of Detroit.

Course level: Introductory

WS609 CEU .20 \$100 / \$150 USD

Monday 1:30 to 3:30 pm

Intellectual Property Issues in High-Tech Business

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. He specializes in the strategic development, management and protection of intellectual property for optics, photonics and semiconductor technologies. His technical experience includes working at IBM Corporation as an optical engineer in the areas of photolithography, lens design, optical system evaluation, and semiconductor processing. He holds several patents and has authored a dozen technical papers. He has also written two books on intellectual property. He is on the Editorial Advisory Board of *Optics and Photonics News*, the news magazine of the Optical Society of America (OSA). He received his BS in Physics from Rutgers University, an MS in Optics from the University of Rochester's Institute of Optics, and his JD from Vermont Law School. He is a member of OSA and SPIE.

Course level: Introductory

WS412 CEU .35 \$270 / \$310 USD

Tuesday 8:30 am to 12:30 pm

Intellectual Property: Prior Art Searching

This course provides attendees with the basic skills needed to search for prior art when developing a patent application and/or taking your technology from R&D to production stage. The course includes a detailed presentation of the methods and tools for information retrieval, current sources of information, and modern trends in intellectual property search and analysis. The scope of this course encompasses searches of U.S. patents and published applications, foreign patents and published applications and non-patent literature. Case studies will be presented showing detailed examples of each type of search.

LEARNING OUTCOMES

This course will enable you to:

- protect your innovations by focusing on features uncovered in the prior art
- accelerate prosecution of your patent applications
- determine who your competitors are
- avoid patent infringement lawsuits
- identify material for licensing/cross-licensing
- use reliable and systematic methods to identify the building blocks of your invention, determine scope of the prior art search, and perform the search

INTENDED AUDIENCE

This material is intended for anyone who needs to learn how to perform a prior art search. Inventors who want to protect their innovations will find this course valuable, because it teaches how to avoid infringements and to accelerate prosecution of your patent. Business development managers will learn how to uncover trends in product development based on patent analysis. Scientists, engineers, and technicians may learn how to quickly access existing solutions for their tasks.

INSTRUCTOR

Nadya Reingand is a Senior Patent Analyst, a Head of Electrical Engineering and Photonics Group at Landon IP, Inc.; has Ph.D. in Photonics; the author of more than 70 scientific papers; and has been involved in patent search and analysis for over 10 years. She is a co-chair of "Practical Holography" conference within the framework of Photonics West since 1996.

Course level: Intermediate

WS758 CEU .35 \$270 / \$310 USD

Tuesday 1:30 to 5:30 pm

Pulling Property Out of Thin Air: The Optical Patent

What is a patent? What kinds of things are patentable? How do I use a patent as a business tool? What sorts of inventions should be patented, and what sorts should not? How do I make my patent dollars count? How do I make sure my attorney is patenting the inventions that give me or my company a competitive advantage? Anyone interested in finding out the answers to these questions will benefit from attending this presentation.

This will not be a legal lecture or overly technical program, but rather an informal nuts-and-bolts session giving "how to" answers. Examples of optical inventions will be used to show how common sense patenting techniques can be applied in real-world situations to maximize individual and/or corporate advantage.

INSTRUCTOR

Marshall Honeyman is a patent attorney in Kansas City, Missouri where he is Of Counsel to the law firm of Shook, Hardy, and Bacon, L.L.P. Prior to joining SHB, he worked in the U.S. Patent and Trademark Office (USPTO) as an Associate Solicitor, handling law suits brought against the USPTO as well as ex parte appeals to the Court of Appeals to the Court of Appeals for the Federal Court. Before that, Marshall served as a USPTO Patent Examiner, specializing in the examination of inventions relating to illumination technologies.

Course level: Introductory

WS487 CEU .00 \$100 / \$150 USD

Wednesday 8:30 to 11:00 am

Registration is required.
See SPIE Cashier to Register.

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FREE to all technical attendees and exhibitors.
See page 221 for details.

How to Start a Small High Tech Business Almost Anywhere

How to start and successfully operate a small high tech organization, either with a large organization or as a stand-alone entity, is an important question to many engineers, scientists and managers. This course focuses on the elements that can help minimize investment capital and the time needed to set up a viable and vibrant organization capable of functioning on its own - and growing.

It is possible to set up this type of organization within a large company; one or a handful of individuals can grow new ideas and technology into viable high tech products that can have a significant impact on the performance and ability of the company to offer a state-of-the-art edge necessary for competitiveness. These same individuals can in turn learn skills that can be used to set up small high tech businesses as spin-offs or standalone entities in such unlikely places as Troutdale, Oregon. Running a small, high tech business independently also involves sets of skills that are quite likely to be supported indirectly by the large business and these have to be developed and honed.

This course will overview the skills necessary to operate a successful high tech business within a large organization and point out how these skills can form the basis for developing a standalone business. The course will then continue by addressing the steps needed to start a small high tech business, even under less than ideal conditions. Elements that will be considered include motivation; start up planning, the types of organizations that can be operated, and the set up of structures that will greatly aid success. We'll review crucial topics such as consulting, small business contracts and subcontracts, intellectual property, licensing, product development, long term planning, and mergers/acquisitions. These topics are woven into the course structure and are intended to help attendees understand how to smooth out some of the rocky bumps associated with traversing a difficult but often wonderful road to a viable small high tech business.

LEARNING OUTCOMES

Topics include:

- Certain skills are common to individuals establishing high tech operations within a large as well as a small high tech organization, this course will outline skills that can have high payoff for both and point out ways to hone these skills
- Understand many of the advantages and pitfalls associated with operating a small high tech business in Troutdale, Oregon or virtually anywhere in the United States...many of these topics apply to businesses worldwide while some aspects are particular to the US

- Starting up a small high tech business involves a series of steps, the decision to leave a job, a vision for the new company, funding, the type of organization to be formed, a strategic and tactical plan, an operational plan, marketing...this course will lead you through a successful framework
- Intellectual property is a key area and indeed product of a small high tech business, this course will discuss how to minimize the cost of acquiring and developing an effective patent base and offsetting some of the costs by licensing/joint ventures
- Small organizations can establish leverage to developing relationships with other companies both large and small, examples of how this can be done are part of the course
- Eventually a small high tech business may decide to merge or be acquired as a means to grow, there are many pitfalls here that need to be fully understood, this course will outline a few of them in the hopes of bettering the prospects for a successful transition

INTENDED AUDIENCE

Engineers, scientists, technicians and managers in both large and small organizations can benefit strongly from this course. People operating out of large organizations can benefit from a better understanding of the advantages and disadvantages associated with small businesses that may be important partners as well as developing skills that can make their own organizations more cost effective and efficient. For individuals contemplating and engaged in starting a small business understanding the processes involved can literally be the difference between success and failure, as small differences in operation and execution can be crucial.

INSTRUCTOR

Eric Udd is President of Columbia Gorge Research, LLC. He worked at McDonnell Douglas from 1977 to 1993 as an Engineer/Scientist, Unit Chief, Manager and McDonnell Douglas Fellow, building a fiber optic sensor program that grew to a large organization-wide effort. In 1993 he left McDonnell Douglas to found Blue Road Research in Troutdale, Oregon, where he now serves as Vice President of Technology. He founded Columbia Gorge Research, LLC in 2004 as his second company and plans to "retire into it". Eric Udd has taught many courses for SPIE, UCLA Extension, OSA, Sensors Expo and other organizations. He has chaired approximately 30 international conferences, holds over 40 issued patents, has written approximately 150 papers, edited two books on fiber sensors, and is a Fellow of the SPIE. Mr. Udd is currently working on a book titled "How to Start a Small High Tech Business in Troutdale, Oregon!?!"

Course level: Introductory

WS756 CEU .35 \$270 / \$310 USD

Wednesday 1:30 to 5:30 pm

The Craft of Scientific Presentations: A Workshop on Technical Presentations

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 and science students at Virginia Tech. Alley has taught this workshop at Sandia National Labs, Los Alamos National Laboratory, and United Technologies.

COURSE PRICE INCLUDES the text *The Craft of Scientific Presentations* by the instructor.

Course level: Introductory

WS667 CEU .35 \$100 / \$150 USD

Wednesday 8:30 am to 12:30 pm

NOTE: This workshop is free to SPIE Student Members, but you must register to attend.

The Craft of Scientific Writing: A Workshop on Technical Writing

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 and science students at Virginia Tech. Alley has taught this workshop at Sandia, Lawrence Livermore, and Los Alamos National Laboratory.

COURSE PRICE INCLUDES the text *The Craft of Scientific Writing* by the instructor.

Course level: Introductory

WS668 CEU .35 \$100 / \$150 USD

Wednesday 1:30 to 5:30 pm

NOTE: This workshop is free to SPIE Student Members, but you must register to attend.

Registration is required.
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Basic Optics and Photonics

SC156 Basic Optics for Engineers (<i>Ducharme</i>) 8:30 am to 5:30 pm, \$475 / \$555	SC017 Principles of Fourier Optics and Diffraction (<i>Gaskill</i>) 8:30 am to 5:30 pm, \$560 / \$640	SC747 NEW Semiconductor Optoelectronic Device Fundamentals (<i>Linden</i>) 8:30 am to 5:30 pm, \$440 / \$520	SC206 Polarized Light: A Practical Hands-on Introduction (<i>Fisher</i>) 8:30 am to 5:30 pm, \$440 / \$520	SC040 Gratings, Monochromators, and Spectrometers (<i>Fisher</i>) 8:30 am to 12:30 pm, \$270 / \$310
SC212 Modern Optical Testing (<i>Wyant</i>) 8:30 am to 12:30 pm, \$270 / \$310	SC402 Understanding Lasers, Fiber Optics, and Photonics Components (<i>Ezekiel</i>) 8:30 am to 5:30 pm, \$440 / \$520			
	SC745 Basic Testing and Calibration of Digital Imagers (<i>Burns, Williams</i>) 8:30 am to 12:30 pm, \$270 / \$310			

Laser Safety and Product Certification

SC603 Laser Product Certification to National and International Regulations (<i>Stoev</i>) 8:30 am to 5:30 pm, \$440 / \$520	SC769 NEW Laser Safety: Principles and Accident Prevention (<i>Barat</i>) 8:30 am to 5:30 pm, \$440 / \$520
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Laser Sources and Nonlinear Optics

SC748 NEW High-Power Fiber Sources (<i>Nilsson</i>) 1:30 to 5:30 pm, \$270 / \$310	SC744 NEW Ultrafast Fiber Lasers (<i>Fermann</i>) 1:30 to 5:30 pm, \$270 / \$310	SC047 Introduction to Nonlinear Optics (<i>Fisher</i>) 8:30 am to 5:30 pm, \$440 / \$520	SC228 Fiber Laser Sources and Amplifiers for Lightwave System Applications (<i>Digonnet</i>) 8:30 am to 5:30 pm, \$440 / \$520
SC752 NEW Solid State Laser Technology (<i>Hodgson</i>) 8:30 am to 5:30 pm, \$560 / \$640			

Ultrafast Optics

SC746 NEW Introduction to Ultrafast Technology (<i>Trebino</i>) 8:30 am to 12:30 pm, \$270 / \$310	SC743 NEW Micromachining with Femtosecond Lasers (<i>Nolte, Schaffer</i>) 1:30 to 5:30 pm, \$270 / \$310
SC541 An Introduction to Femto-second Laser Techniques (<i>Mazur</i>) 1:30 to 5:30 pm, \$270 / \$310	SC744 NEW Ultrafast Fiber Lasers (<i>Fermann</i>) 1:30 to 5:30 pm, \$270 / \$310

Registration is required.
See SPIE Cashier to Register.

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Semiconductor Lasers and LEDs

SC741 NEW III-Nitride Deep UV Photonics (Jiang, Lin) 1:30 to 5:30 pm, \$270 / \$310	SC698 Quantum Dot Laser Diodes (Blood) 8:30 am to 12:30 pm, \$270 / \$310	SC052 Light-Emitting Diodes (Schubert) 8:30 am to 12:30 pm, \$320 / \$360
		SC053 Testing and Reliability of Semiconductor Lasers (Wang) 1:30 to 5:30 pm, \$270 / \$310
		SC657 Accurate Measurement of LED Optical Properties (Tirpak) 1:30 to 5:30 pm, \$270 / \$310
		SC747 NEW Semiconductor Optoelectronic Device Fundamentals (Linden) 8:30 am to 5:30 pm, \$440 / \$520

Photonic and Laser Applications

SC547 Terahertz Wave Technology and Applications (Zhang) 8:30 am to 12:30 pm, \$270 / \$310
SC656 Fundamentals of Free-Space Laser Communications (Majumdar) 1:30 to 5:30 pm, \$270 / \$310

Holography

SC688 Optical Scanning Holography (Poon) 8:30 am to 5:30 pm, \$440 / \$520

Registration is required.
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Illumination Engineering & Displays

SC011	Design of Efficient Illumination Systems (Cassarly) 8:30 am to 12:30 pm, \$270 / \$310
SC052	Light-Emitting Diodes (Schubert) 8:30 am to 12:30 pm, \$320 / \$360
SC657	Accurate Measurement of LED Optical Properties (Tirpak) 1:30 to 5:30 pm, \$270 / \$310
SC770	NEW Solid State Lighting II (Ferguson) 1:30 to 5:30 pm, \$270 / \$310

Micromachining and Microfabrication

SC437	Microfabrication Techniques for MicroFluidics & BioMEMS (Madou) 1:30 to 5:30 pm, \$270 / \$310	SC743	NEW Micromachining with Femtosecond Lasers (Nolte, Schaeffer) 1:30 to 5:30 pm, \$270 / \$310	SC699	Polymer Microfabrication (Becker) 8:30 am to 5:30 pm, \$440 / \$520
SC689	Introduction to MicroMachining Using Lasers (Schaeffer) 1:30 to 5:30 pm, \$270 / \$310				

Optical Components and Systems Design

SC552	Aspheric Optics: Design, Fabrication, and Test (Fischer) 8:30 am to 12:30 pm, \$345 / \$385	SC001	Optical System Design: Layout Principles and Practice (Smith) 8:30 am to 5:30 pm, \$510 / \$590	SC003	Practical Optical System Design (Fischer) 8:30 am to 5:30 pm, \$515 / \$595	SC700	Understanding Scratch and Dig Specifications (Boulbee) 8:30 am to 12:30 pm, \$305 / \$345	SC690	Geometrical Optics (Greivenkamp) 8:30 am to 5:30 pm, \$470 / \$550
		SC157	MTF in Optical and Electro-Optical Systems (Ducharme) 8:30 am to 5:30 pm, \$475 / \$555	SC384	The Design of Plastic Optical Systems (Schaub) 1:30 to 5:30 pm, \$270 / \$310				
		SC321	Thin Film Optical Coatings (Macleod) 8:30 am to 5:30 pm, \$440 / \$520	SC720	Cost-Conscious Tolerancing of Optical Systems (Youngworth) 8:30 am to 12:30 pm, \$270 / \$310				
				SC010	Introduction to Optical Alignment Techniques (Ruda) 8:30 am to 5:30 pm, \$845 / \$990				

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Optomechanics

SC220 Optical Alignment Mechanisms (Guyer) 8:30 am to 12:30 pm, \$270 / \$310	SC015 Structural Adhesives for Optical Bonding (Daly) 8:30 am to 12:30 pm, \$270 / \$310	SC386 Advanced Thermal Management Materials for Optoelectronic and MEMS/MOEMS Packaging (Zweber) 8:30 am to 5:30 pm, \$440 / \$520
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Nanophotonics and Photonic Crystals

SC608 Photonic Crystals: A Crash Course in Designer Electromagnetism (Johnson) 1:30 to 5:30 pm, \$270 / \$310	SC742 NEW Nano-Photonics: Physics and Techniques (Scherer) 8:30 am to 12:30 pm, \$270 / \$310	SC727 Nanoplasmonics (Stockman) 8:30 am to 5:30 pm, \$440 / \$520
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Ophthalmic Applications

SC702 Optics and Optical Quality of the Human Eye (Roorda) 1:30 to 5:30 pm, \$270 / \$310

Tissue Optics

SC029 Tissue Optics (Jacques) 1:30 to 5:30 pm, \$270 / \$310	SC768 NEW Optoacoustic Systems for Medical Imaging: From Principles to Clinical Applications (Oraevsky) 1:30 to 5:30 pm, \$270 / \$310
SC749 NEW Diffuse Optical Spectroscopy and Imaging of Tissues (Toronov) 8:30 am to 5:30 pm, \$440 / \$520	
SC750 NEW Optical Clearing of Tissue and Blood (Tuchin) 8:30 am to 12:30 pm, \$270 / \$310	

Registration is required.
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Biomedical Spectroscopy and Imaging

SC312 Principles and Applications of Optical Coherence Tomography (Fujimoto) 8:30 am to 12:30 pm, \$270 / \$310	SC751 Vibrational Spectroscopy: From Physics to Medicine (Petrich) 1:30 to 5:30 pm, \$270 / \$310	SC768 Optoacoustic Systems for Medical Imaging: From Principles to Clinical Applications (Oravsky) 1:30 to 5:30 pm, \$270 / \$310	SC040 Gratings, Monochromators, and Spectrometers (Fisher) 8:30 am to 12:30 pm, \$270 / \$310
SC693 Spectral Imaging for Biology and Medicine (Mansfield, Levenson) 8:30 am to 12:30 pm, \$270 / \$310			
SC749 Diffuse Optical Spectroscopy and Imaging of Tissues (Toronov) 8:30 am to 5:30 pm, \$440 / \$520,			

Fluorescent Sensing and Diagnostics

SC309 Fluorescent Markers: Usage and Optical System Optimization (Levi) 8:30 am to 12:30 pm, \$270 / \$310	SC696 Bioluminescence for Food and Environmental Safety (Brovko) 8:30 am to 12:30 pm, \$270 / \$310	SC695 Noninvasive in vivo Biosensing Based on Color Fluorescent Proteins for Drug Design and Screening (Savitsky) 8:30 am to 5:30 pm, \$440 / \$520
SC461 Bio-Optical Detection Systems (Levi) 1:30 to 5:30 pm, \$270 / \$310		

Biophotonics and Microbiochips

SC259 Biochips: Fundamentals, Fabrication, and Applications (Nicolau) 1:30 to 5:30 pm, \$270 / \$310	SC742 Nano-Photonics: Physics and Techniques (Scherer) 8:30 am to 12:30 pm, \$270 / \$310	SC727 Nanoplasmonics (Stockman) 8:30 am to 5:30 pm, \$440 / \$520
SC437 Microfabrication Techniques for MicroFluidics & BioMEMS (Madou) 1:30 to 5:30 pm, \$270 / \$310		
SC463 Biophotonics (Prasad) 8:30 am to 5:30 pm, \$530 / \$610		
SC532 Microfluidics: Technology and Application (Gaertner) 8:30 am to 12:30 pm, \$270 / \$310		

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Workshops: Basic Optics

<p>WS609 Basic Optics for Non-Optics Personnel (Harding) 1:30 to 3:30 pm, \$100 / \$150</p>
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Workshops: Business, Patents, and IP

<p>WS412 Intellectual Property Issues in High-Tech Business (Gortych) 8:30 am to 12:30 pm, \$270 / \$310</p>	<p>WS487 Pulling Property Out of Thin Air: The Optical Patent (Honeyman) 8:30 to 11:00 am, \$100 / \$150</p>
<p>WS758 Intellectual Property: Prior Art Searching (Reingand) 1:30 to 5:30 pm, \$270 / \$310</p>	<p>WS756 How to Start a Small High Tech Business Almost Anywhere (Udd) 1:30 to 5:30 pm, \$270 / \$310</p>

Workshops: Professional Development

<p>WS667 The Craft of Scientific Presentations: A Workshop on Technical Presentations (Alley) 8:30 am to 12:30 pm, \$100 / \$150</p>
<p>WS668 The Craft of Scientific Writing: A Workshop on Technical Writing (Alley) 1:30 to 5:30 pm, \$100 / \$150</p>

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Saturday, 21 January . . . 1:00 pm – 5:00 pm

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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 58–61, 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 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.

Exhibit List as of 19 December 2006

PLEASE NOTE:

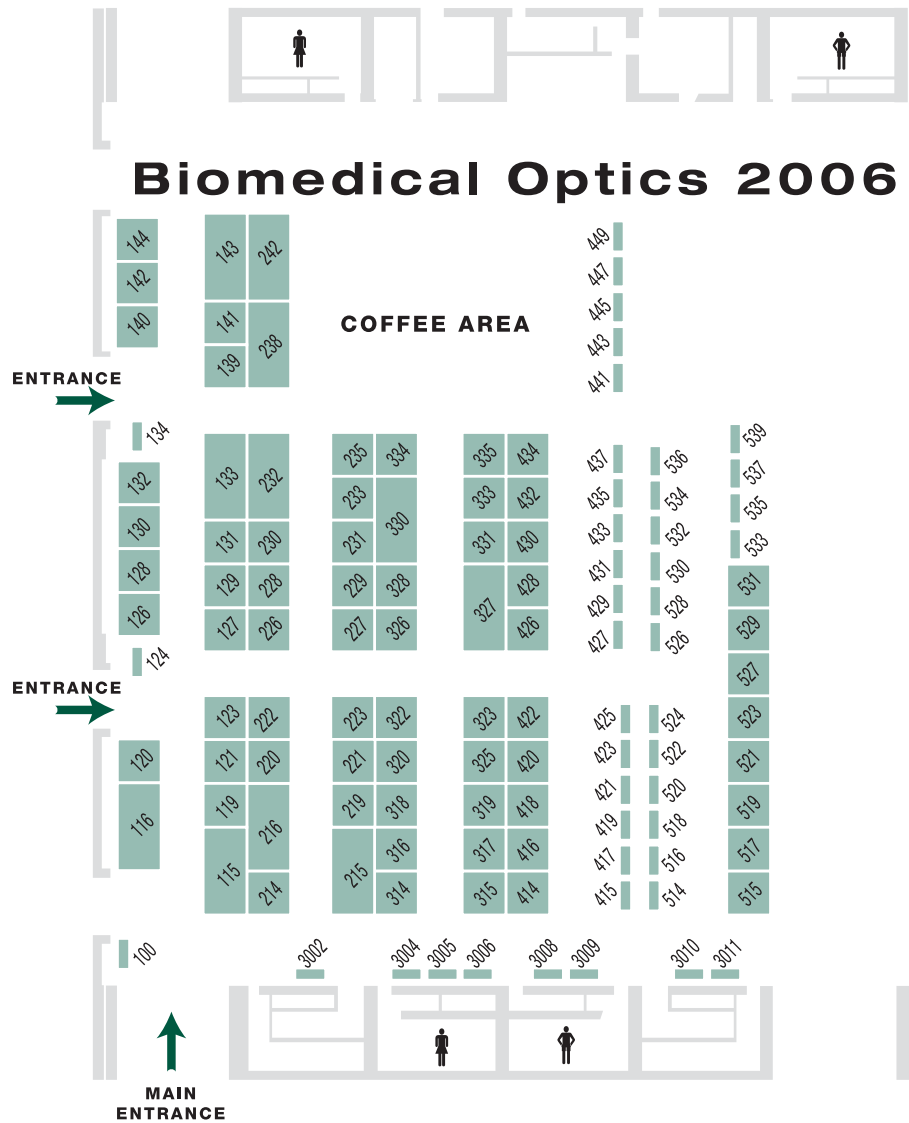
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#430

SPIE Corporate Member

11805 N Creek Pkwy S Ste 113, Bothell, WA, 98011-8803
425/482-1100; fax 425/482-1101
info@aculight.com; www.aculight.com

Aculight provides quality, innovative and cost effective laser systems for our customers in national defense, aerospace and medical applications. Aculight has strong capabilities in basic research through development and manufacture of components and systems in the ultraviolet through mid-infrared. Aculight is currently working with customers on research that will lead to future therapies and medical laser devices. The latest innovative medical research device is an optical nerve stimulator. Contact: Mark Bendett, Director of Product Development, mark.bendett@aculight.com; Jim Webb, Sr. Scientist, jim.webb@aculight.com.

AF Optical Inc.

#536

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

American Society for Laser Medicine & Surgery, Inc.

#516

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

The American Society for Laser Medicine and Surgery is the world's largest scientific organization dedicated to promoting research, education and high standards of clinical care in the field of medical laser applications. The Society has taken the lead in formulating standards and guidelines for establishing safe, effective laser programs in hospitals and other institutions, and has recommended standards for medical laser training programs.

AMPLITUDE SYSTEMES

#431

6 allée du doyen Georges Brus, Pessac, France, 33600
33 5 5646 4060; fax 33 5 5646 0694
info@amplitude-systemes.com;
www.amplitude-systemes.com

New Product: t-Pulse tunable diode-pumped femtosecond laser.

Amplitude Systemes manufactures diode-pumped femtosecond lasers. T-Pulse oscillators are very powerful for multiphoton microscopy. They are perfect substitutes to Ti:Sa lasers because they are compact, reliable, easy to use and could be TUNABLE. Amplitude Systemes also manufactures amplified diode-pumped femtosecond laser which are very powerful for micromachining and laser ablation. Added features: Femtosecond diode-pumped tunable laser, pulse-picker. Contact: Stephane Gueguen, Sales Manager, sgueguen@amplitude-systemes.com; Eric Mottay, Chairman, emottay@amplitude-systemes.com.

Andor Technology

#320

SPIE Corporate Member

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

New Product: Andor Revolution provides a range of modular or complete live-cell confocal microscopy solutions.

Andor Bio-imaging Division (ABD) provides solutions for low light microscopy and bioimaging applications. We integrate Andor's ultra-low light, EMCCD cameras into bio-imaging laboratories to tackle demanding applications, with powerful, flexible and cost-effective technology solutions. Our dedicated team specialize in system solutions that are ideal for demanding dynamic live-cell applications such as Multi-dimensional (4/5D) Time-Lapse Microscopy, Intracellular Ion Signalling, GFP and FRET. Contact: Mark Browne, Market Development Manager, m.browne@andor.com; Scott Phillips, Application Specialist, s.phillips@andor.com.

APPLIED IMAGE Group

#428

SPIE Corporate Member

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

New Product: The IMAGE ANALYSIS (IAM) Series of vision standards for calibration & testing.

"Your Single Source Photonics Solution Provider" dedicated to innovative Opto-Imaging Photonics Products & Services; Test Targets, Calibration Scales, Imaging & Vision Standards, Sinusoidal Arrays, Ronchi Rulings, Reticles, Bar Codes, Encoders and other imaged components, all on a wide variety of substrates. APPLIED IMAGE provides worldwide custom and "off the shelf" answers to today's complex optical & photonics requirements. Contact: Luke Hobson, Sales, Lhobson@appliedimage.com; Paul Anderson, Sales, Panderson@appliedimage.com.

Asahi Spectra USA Inc.

#317

SPIE Corporate Member

23505 Crenshaw Blvd Ste 225, Torrance, CA, 90505
310/530-5855; fax 310/325-8974
info@asahi-spectra.com; www.asahi-spectra.com

New Product: Six-channel filter polychromator, Laser line bandpass filter FWHM1.5nm, Xenon light source 100W/300W.

Asahi Spectra supplies high-end optical filters and instruments for biomedical optics, fluorescence microscopy, Raman research, any lasers, lithography or astronomy. Six-channel filter polychromator is used as a flow cytometer or fluorescence measuring unit. Laser line bandpass filter (FWHM:1.5nm) has extremely narrow and high transmission, and completely blocks noise arising at the next nanometer. Xenon light source 100W/300W can emit intensive light of specific wavelength with optical filters.

Avantes, Inc.

#535

SPIE Corporate Member

9769 W 119th Dr, Broomfield, CO, 80021
303/410-8668; fax 303/410-8669
info@avantes.com; www.avantes.com

New Product: AvaSpec-3648 Spectrometer - high resolution, 200-1100 nm - short integration, Bluetooth® & USB2.

Avantes manufactures portable spectrometer systems for UV, VIS & NIR measurement from 200 to 2200 nm. Systems include choice of 7 detector arrays and communication options including USB, USB2, Bluetooth® and RS232. We also offer light sources, fiberoptic cables & probes and accessories. We welcome your custom engineering questions and OEM inquiries. Avantes has thousands of spectrometers in the field and has experienced Application Engineers to help you find your Solutions in Spectroscopy®. Contact: Sales Manager.

Avo Photonics, Inc.

#517

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

New Product: Avo Photonics has added 500 sq ft of class 100 capable clean space for medical manufacturing.

Avo Photonics provides advanced contract manufacturing services for customers in the communications, military, medical and industrial markets. With state-of-the-art equipment and design expertise for optical & RF products, we support product development from concept through production. Prototyping through volume manufacturing, electro-optic performance testing, high-value design, qualification testing for ruggedness, reliability and lower-cost manufacturing are part of Avo's standard offerings. Contact: Paul A. Magill, Chief Technical Officer, pmagill@avophotonics.com; Mike Vinson, Vice President of Business Development, mvinson@avophotonics.com.

B&W Tek, Inc.

#334

SPIE Corporate Member

825 Dawson Dr Ste 1, Newark, DE, 19713
302/368-7824; fax 302/368-7830
info@bwtek.com; www.bwtek.com

New Product: NIR (InGaAs) TECooled Array Spectrometer .9-1.7 or 1.1-2.2 μ m, H-dyn Range sensitivity modes, USB1.1/2.0.

B&W TEK, INC specializes in medical OEM manufacturing and engineering of Medical Lasers, highly integrated Bio-photonic Instruments, and Diagnostic Devices. B&W Tek is also well known as a "total solution provider" of vertically integrated services developed for their OEM customers. B&W Tek will help you complete your entire project, all the way from design and development of highly complicated instruments, to low cost and large quantity manufacturing. BWT is high quality manufacturer with ISO9001/ISO13485 certification.

Barr Associates Inc.

#233

SPIE Corporate Member

2 Lyberty Way, Westford, MA, 01886
978/692-7513; fax 978/692-7443

barr@barrassociates.com; www.barrassociates.com

Barr Associates, Inc. offers custom optical interference filters and coatings over the spectral range of 200nm to 30 microns, for use in a wide variety of applications including clinical/analytical, biotechnology, spectroscopy, semiconductor processing, metrology, environmental monitoring, color measurement, aerospace, defense, astronomy, and telecommunications. For fluorescence-based applications Barr offers high performance EX and EM filters, dichroic-beamsplitters, and rugate-notch laser reflection and laser rejection filters. For Raman-based applications Barr can provide steep edge laser rejection filters, beamsplitters, and laser bandpass filters. Contact: George Minott, Manager, Commercial Group, gminott@barrassociates.com.

Becker & Hickl GmbH

#238

Nahmitzer Damm 30, Berlin, Germany, D-12277
49 30 787 5632; fax 49 30 787 5734
b_and_h@becker-hickl.de; www.becker-hickl.de

New Product: Simple-Tau, complete TCSPC and detector control, cooled fast PMT, compatible with PC laptops.

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, devaney@boselec.com.

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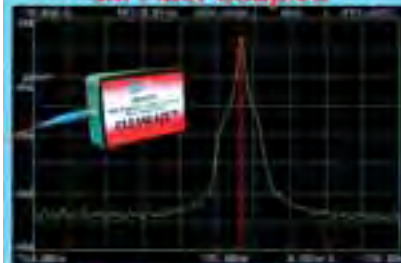
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0.02 nm FWHM @ 785 nm SM Fiber Coupled



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- * Up to 1200 mW @ 0.25 nm FWHM
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Phone: (302) 368-7824 Website: www.bwtek.com

Biomedical Photometrics Inc./ GeneFocus #534

A12-550 Parkside Dr, Waterloo, ON, Canada, N2L 5V4
519/886-9013; fax 519/886-5300
info@confocal.com; www.confocal.com

The TISSUEScope™, based on patented MACROscope® confocal laser scanning technology, is an integrated confocal laser scanning system for fluorescence, brightfield and reflected light digital imaging of tissue and tissue microarrays at submicron resolution. BPI and GeneFocus® products are used around the world by leading organizations in genomics, proteomics and laboratory medicine for imaging of microarrays, tissue sections, cells, and live specimens. Visit www.confocal.com for product specifications.

Biophotonics International #435

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

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: David Dover, Associate Publisher, sales@photonicsgroup.com; Nancy Lamontagne, Senior Editor, biophotonics@laurin.com.

Bioptigen Inc. #128

SPIE Corporate Member
PO Box 13569, Durham, NC, 27709
828/495-5100; fax 919/572-6584
ebuckland@bioptigen.com; www.bioptigen.com

New Product: High speed FD-OCT systems for biomedical imaging at 820 nm and 1310 nm.

Bioptigen is advancing 3D optical imaging systems for pre-clinical pharma, biotech and biomedical applications. Bioptigen's non-invasive designs are uniquely suited to in vivo, volumetric, real-time imaging of small animal models at tissue-level resolution. Bioptigen's technology significantly reduces the need for surgical histology in pre-clinical drug efficacy and toxicology testing and offers unmatched dynamic imaging capabilities for functional genomics and tissue engineering research. Contact: Eric Buckland, President and Chief Executive Officer.

Breault Research Organization #422

SPIE Corporate Member
6400 E Grant Rd Ste 350, Tucson, AZ, 85715-3862
520/721-0500; fax 520/721-9630
info@breault.com; www.breault.com

New Product: ASAP 2005: the capability, flexibility, speed and accuracy to turn visions into products.

Breault Research Organization (BRO) is a full-service optical engineering firm providing software, engineering services and training to turn creative visions into working prototypes. BRO's Advanced Systems Analysis Program (ASAP) is the time-proven industry standard in optical engineering software. Over 20 years of continuous development allows ASAP to simulate the physics of more optical systems than any other program available. Contact: Jennifer Kuhlman, Software Sales Representative, jkuhlman@breault.com; Michael Frate, Engineering Services Sales Representative, mfrate@breault.com.

Cambridge Technology, Inc. #120

SPIE Corporate Member
109 Smith Pl, Cambridge, MA, 02138
617/441-0600; fax 617/497-8800
info@camtech.com; www.camtech.com

Cambridge Technology, Inc. is the global technology and market leader in closed loop galvanometer based optical scanners. Our customer base encompasses a wide range of industries and applications including laser marking, cutting and drilling, biomedical systems and other applications where fast, accurate laser beam steering is required. Check out our 62xxH Line of closed loop galvanometer based scanners, for the performance you need at a price your budget can afford. Contact: Amanda Dobbins, West Coast Regional Sales Manager, adobbins@camtech.com; David Freihofer, Asia and Major Accounts Sales Manager, dfreihofer@camtech.com.

Center for Biophotonics Science & Technology #524

2700 Stockton Blvd Ste 1400, Sacramento, CA, 95817
916/734-8600; fax 916/452-2034
www.cbst.ucdavis.edu

Funded by the National Science Foundation, the Center for Biophotonics is devoted to the study of light and radiant energy in biology and medicine. Over 100 researchers are developing new products and applications using biophotonics in partnership with industry, our education partners and the community. Contact: Ralph Jacobs, Associate Director, Industry & Professional Society Outreach, jacobs6@llnl.gov.

CeramOptec Industries, Inc. #133

515 A Shaker Rd E, East Longmeadow, MA, 01028
413/525-0600; fax 413/525-1112
info@ceramoptec.com; www.ceramoptec.com

New Product: Bundles and assemblies for spectrometers- deep UV to NIR wavelengths.

Leader in specialty all silica, high NA, UVNS (non-solarizing), plastic-clad silica, hard polymer-clad silica optical fibers; capillary tubing; bundles and assemblies for UV, VIS and IR transmission, laser delivery, sensors, and spectroscopy. Optran Ultra silica/silica high NA fibers exhibit exceptional transmission from 350-2200nm. Optran UVNS (UV Non-solarizing) fibers are available in finished assemblies and bundles for applications requiring long term performance from 190-1200nm. Contact: Cheryl Smith, Sales Engineer, cheryl.smith@ceramoptec.com; Kevin Bakhshpour, Director Industrial & OEM Sales, kevinb@ceramoptec.com.

General Refreshment Sponsor

Boston Electronics Corp. #238

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

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.

Chroma Technology Corp.

#316

SPIE Corporate Member

PO Box 489, 10 Imtec Ln, Rockingham, VT, 05101
802/428-2500; fax 802/428-2525
sales@chroma.com; www.chroma.com

Chroma is an employee-owned company that designs and manufactures precision optical filters and coatings from 220-2600nm for myriad applications. We provide application engineering support and short cycle times and are as comfortable designing and manufacturing custom filters as we are our catalog items; regularly offering custom filters at catalog prices.

Coherent Inc.

#414

SPIE Corporate Member

5100 Patrick Henry Dr, Santa Clara, CA, 95054
408/764-4000; fax 408/764-4646
tech.sales@coherent.com; www.coherent.com

Manufacturer of photonics-based products for a wide range of commercial/industrial, medical instrumentation 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. High reliability, high performance product lines include CO₂, continuous-wave, diode, diode module, diode-pumped solid-state, ion, tunable-dye, YAG, YLF and ultrafast lasers. Contact: Aaron Johnson, Njomele Hong, Advanced Technical Sales.

Covega

#130

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

CRI, Inc.

#235

SPIE Corporate Member

35-B Cabot Rd, Woburn, MA, 01801
781/935-9099; fax 781/935-3388
sales@cri-inc.com; www.cri-inc.com

New Product: Maestro™ In-vivo Fluorescence Imaging System.

CRI, Inc. (Cambridge Research and Instrumentation, Inc.) develops and manufactures high-performance instruments that exploit multispectral and polarized-light microscopy and in-vivo detection for life sciences and pharmaceutical drug discovery. CRI also offers a broad array of tunable solid-state optical components and modules for use in wavelength selection and light modulation in digital imaging applications. Contact: Cathy Boutin, Sales & Marketing Manager.

CrystaLaser LC

#220

4750 Longley Ln #205, Reno, NV, 89502
775/348-4820; fax 775/348-7047
sales@crystalaser.com; www.crystalaser.com

CVI Laser LLC

#227

SPIE Corporate Member

200 Dorado Pl SE, Albuquerque, NM, 87123
800x/296-9541; fax 505/298-9908
sales@cvilaser.com; www.cvilaser.com

New Product: For imaging applications, ask for CVI QuantaGlas™ lenses, AR coating incl. 1000+ ready to ship.

CVI is a leading manufacturer of optical components, mounts and assemblies providing engineering, rapid prototype delivery, high volume production and system integration for the most challenging optical requirements. CVI has an extensive catalog of optical components for biomedical optics including High OD Filters, interference filters, dichroic beamsplitters, lenses, prisms and mounts. Contact: Rich Drake, Sales Manager, rdrake@cvilaser.com; Joe Jordan, Account Manager, jjordan@cvilaser.com.

Davin Optronics Ltd.

#533

15 Greycaine Rd, Watford Herts, United Kingdom, WD24 7LN
44 1923 206800; fax 44 1923 234220
sales@davinoptronics.com; www.davinoptronics.com

New Product: Davin will be exhibiting PEARL our new Microtitre Plate Fluorescence Reader.

Davin design and manufacture optical and mechanic assemblies for a wide industrial base, reflecting objectives and filters. Contact: Barney Mitchell, Sales Executive, barney@davinoptronics.com.

Edinburgh Instruments Ltd.

#238

2 Bain Sq, Kirkton Campus, Livingston,
United Kingdom, EH54 7DQ
44 1506 425 300; fax 44 1506 425 320
bsp@boselec.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

#119

SPIE Corporate Member

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

Edmund Optics is a manufacturer and distributor of optical and imaging components for OEM and research applications. Products include lenses, prisms, filters, mirrors, opto-mechanical equipment and lasers, imaging lenses, electronics and systems. Edmund's engineers also provide a variety of application, design and manufacturing services to assist customers with specialized needs. Visit us at Photonics West Booth #1018. Contact: Edmund Optics Sales Team, sales@edmundoptics.com.

Engineering Synthesis Design, Inc. #520

SPIE Corporate Member

310 S Williams Blvd Ste 210, Tucson, AZ, 85711-4483
520/296-3068; fax 520/296-2897
sales@engsynthesis.com; www.engsynthesis.com

New Product: Quantum 5 Scatterometer: Real-time measurements over the entire hemisphere.

ESDI's metrology expertise has evolved into the development of new products for bio-diagnostic applications. The company's latest release, the Quantum 5 Scatterometer makes real-time scattered light measurements over the entire hemisphere with 14 bit dynamic range and 0.2 degree resolution. Contact: Raymond Castonguay, President.

Evaporated Coatings, Inc. #127

2365 Maryland Rd, Willow Grove, PA, 19090-1708
215/659-3080; fax 215/659-1275
evapsales@evapcoat.com; www.evapcoatings.com

New Product: Bandpass filters.

ECl is a custom manufacturer of vacuum-deposited thin films including mirrors, anti-reflection, beamsplitters, low reflection attenuation, solderable films, transparent conductive, dental curing filters, LWP/SWP and bandpass filters. We are specialists at coating temperature sensitive substrates including plastics, semiconductor materials and fiberoptic components such as fiber assemblies for surgical laser delivery systems, fiberends, ferrule assemblies, laser bars and ball lenses. Contact: Stephen Schaffer, Vice President.

EXALOS AG #514

SPIE Corporate Member

Technoparkstr 1, Zurich, Switzerland, CH-8005
41 43 444 60 90; fax 41 43 444 60 99
info@exalos.com; www.exalos.com

EXALOS is a pioneer in developing and selling advanced Superluminescent Light Emitting Diodes (SLEDs) to optical coherence tomography, fiber optic gyroscope, fiber optic test equipment and sensor applications. EXALOS SLEDs being the most reliable devices in the market achieve following performance factors: Wavelengths from 740 to 1700 nm, very high optical output power, ultra-wide optical bandwidth, low ripple, TELCORDIA and MIL qualified. Contact: Anthony Abdilla, Director of Sales, abdilla@exalos.com; Micaëla Raschle, Marketing Manager, raschle@exalos.com.

Foreal Spectrum, Inc. #129

SPIE Corporate Member

2380 Qume Dr Ste F, San Jose, CA, 95131
408/433-5558; fax 408/433-5595
sales@forealspectrum.com; www.forealspectrum.com

New Product: Hi-Performance BioTech Filters (Stock, OEM, Custom): Fluorescence Filters Sets, Laser Line, Bandpass.

Foreal is the biotech leader for ultimate performance, cost-effective optical components using its proprietary coating technologies. Foreal produces bandpass filters (8nm FWHM from 340 to 820nm), fluorescence filter sets (passband>92%, blocking OD>6, low fluorescence) and laser line filters (peak T>90%, FWHM <0.3%, steep slopes) for stock, OEM and custom applications. Contact: Claire Nippres, Director of Sales & Marketing; Dan Cifelli, Vice President of Sales & Marketing, danc@forealspectrum.com.

Frankfurt Laser Co. #115

SPIE Corporate Member

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

Frankfurt Laser Company presents a laser system for medical and photodynamic therapy use. It is a plug and play system, no special laser experience is necessary for operation. Available wavelengths are: 635, 650, 660, 675, 690, 750, 760, 770, 808, 830, 850 and 980, others on request. The output power ranges from 500 mW to 3 W for the visible red and 500 mW to 30 W for the infrared. The system is equipped with a foot panel to control the laser radiation. It provides different operation modes, CW, Pulsed, repeat/stand-by, which can be controlled on the display of the user friendly front panel.

Fresnel Technologies Inc. #123

SPIE Corporate Member

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

Fresnel Technologies manufactures molded plastics Fresnel lenses and related optical components, 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 E. Claytor, President; Donald Combs, Diamond Machining Specialist, dcombs@fresneltech.com.

Global Laser #445

Technology Centre, Cwmtillery Industrial Estate,
Abertillery, United Kingdom, NP13 1LZ
44 1495 212213; fax 44 1495 322322
sales@globallasertech.com; www.globallaser.co.uk

New Product: 50mW Green lasers, Acculase and many other products.

Global Laser is a manufacturer of Laser Diode Modules and customized laser solutions. Contact: Paul Butler, New Business and Marketing Director, paulb@globallasertech.com; Gary Rees, Sales Executive, garyr@globallasertech.com.

 General Refreshment Sponsor

FemtoLasers, Inc. #140

SPIE Corporate Member

239 Stow Rd, Harvard, MA, 01451
971/456-9920; fax 971/456-9922
infofli@femtolasers.com; www.femtolasers.com

Femtolasers provides state-of-the-art ultrafast lasers, including the compact, turn-key Integral™, including the INTEGRAL-OCT with >120nm bandwidth. Our dispersive mirror (DM) platform allows for prism-free oscillators giving the most stable and highest performance available, ideal for research or clinical applications. The company also provides a complete line of optics; the new dispersion mirror sets support sub-20fs pulses after focusing optics. Contact: Andreas Isemann, General Manager, andreas.isemann@femtolasers.com; Andreas Stingl, General Manager, andreas.stingl@femtolasers.com.

Grintech GmbH

#141

SPIE Corporate Member

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

New Product: 0.85mm diameter objective lenses for imaging fiber bundles.

GRINTECH manufactures gradient index (GRIN) lenses and lens systems for applications in medical imaging, sensors, laser diode beam shaping and telecommunication.

G-S PLASTIC OPTICS, A Germanow-Simon Co.

#314

SPIE Corporate Member

408 St Paul St, Rochester, NY, 14605
585/295-0200; fax 585/232-2314
iannfo@gsoptics.com; www.gsoptics.com

G-S PLASTIC OPTICS manufactures optics for a variety of photonics applications including imaging, scanning, and detection. We are your experts for integrating optical and mechanical features into a single element using the most sophisticated optical resins available in the market. We provide injection molded spherical and aspheric lenses, mirrors, Fresnel or diffractive optics in quantities that range from prototypes to high volume production. Contact: William Beich, Director of New Business Development, wbeich@gsoptics.com; Nick Turner, Application Engineer/Program Manager, nturner@gsoptics.com.

Hamamatsu Corp.

#232

360 Foothill Rd, Bridgewater, NJ, 08807-2932
908/231-0960; fax 908/231-1539
usa@hamamatsu.com; www.hamamatsu.com

Hamamatsu is the proven leader in the photonics industry. For more than 50 years, Hamamatsu has been unsurpassed in innovations and dedication to research and development. Hamamatsu offers a vast range of devices for the generation and detection of light. Hamamatsu is known for quality, reliability and the ability to customize to meet specifications for companies that rely on photonic components and systems. There isn't another company you can rely on more than Hamamatsu.

Headwall Photonics, Inc.

#100

SPIE Corporate Member

601 River St, Fitchburg, MA, 01240
978/353-4010; fax 978/348-1864
information@headwallphotonics.com;
www.headwallphotonics.com

High Power Devices, Inc.

#449

1200-A Airport Rd, North Brunswick, NJ, 08902
732/249-2228; fax 732-249-8139
sales@hpdinc.com; www.hpdinc.com

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sales@engsynthesis.com www.engsynthesis.com

High Q Laser (US), Inc.

#335

SPIE Corporate Member

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

High Q Laser is a leading manufacturer of ultrafast all-diode-pumped, solid state pico- and femtosecond oscillators, cavity-dumped oscillators and regenerative amplifiers. All lasers are based on direct diode-pumping and semiconductor saturable absorber (SESAM) modelocking. Covering 266nm to 1340 nm, 1 kHz to 1.5Ghz and more than 10W, the set-up of High Q Laser systems is compact and modular operation and installation is easy. Sealed-off technology leads to long life times and reliability. Contact: Wolfgang Seitz, Sales & Technical Support Manager, wolfgangseitz@highq-us.com; Daniel Kopf, President & Chief Executive Officer, danielkopf@highqlaser.at.

High Tech Photonics

#3002

SPIE Corporate Member

23 Alafaya Woods Blvd Ste 213, Oviedo, FL, 32765
800/335-5582; fax 888/335-5587
jim@jtingram.com; www.jtingram.com

HORIBA Jobin Yvon

#321

3880 Park Ave, Edison, NJ, 08820-3012
732/494-8660; fax 732/549-5157
fluorescence@jobinyvon.com; www.jobinyvon.com

New Product: The new DynaMite is a lifetime, mapping microscope system.

Molecular dynamics on the microscopic scale. HORIBA Jobin Yvon is the ONLY company supplying both pulsed (TCSPC) and phase fluorescence lifetime systems, it has the World's Most Sensitive Spectrofluorometers proving it against all competitors. The new DynaMite is a lifetime, mapping microscope system, options run the uv (protein and cell studies), the visible (quantum dots). Other instruments work in the IR for Nanotech. Of course, HORIBA Jobin Yvon has a full line of spectrofluorometers. Our Raman Spectroscopy Division is the World's leading supplier of Raman Microscopes and Systems. Contact: Chad Nichols, Fluorescence Sales Engineer, isachad@aol.com; John Enterline, Sales Manager Fluorescence Division, john.enterline@jobinyvon.com.

id Quantique

#238

Chemin de la Marbrerie 3, Carouge/Geneva, Switzerland, CH-1277
41 22 301 83 71; fax 41 22 301 83 79
melynk@boselec.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 Melynk, Applications Engineer, melynk@boselec.com.

IMRA America, Inc.

#226

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 with wavelengths near 780, 1560 or 1045 nm. 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. With a track record of more than 6 years, IMRA provides lasers suitable for OEM use and easy to incorporate in lab setups. Contact: Robert A. Kunkle, Sales Manager, lasers@imra.com; Bob Yazell, Western Regional Sales Manager, byazell@imra.com.

Infotonics Technology Center

#142

5450 Campus Dr, Canandaigua, NY, 14424
585/919-3000; fax 585/919-3001
pam.sims@infotonics.org; www.infotonics.org

New Product: Minimally invasive clinical systems & mini-hyperspectral imaging improving diagnostics/patient care.

As a collaborative, world-class Center of Excellence in photonics and microsystems, Infotonics develops and prototypes microsystems concepts at our comprehensive in-house design, microfabrication and device packaging facility. Accelerating microsystems commercialization, we provide complete solutions for product development, reducing financial risk & expense often associated with the development process and increasing the probability of commercial success. Contact: Pam Sims, Analyst, pam.sims@infotonics.org; Mark Boysel, Principal Scientist, mark.boysel@infotonics.org.

Infrared Fiber Systems, Inc.

#432

SPIE Corporate Member

2301-A Broadbirch 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.

Innovative Photonic Solutions

#134

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

New Product: High Power, Ultra Narrow Linewidth (<0.1 nm) Spectrum Stabilized Raman Laser Source.

Manufacturer of high performance semiconductor light source systems. Specializing in spectrum stabilized lasers for Raman spectroscopy, gas sensing, direct diode frequency doubling and laser seeding & pumping applications. Products include multi-mode and single frequency lasers in fiber coupled and open-beam configurations, and 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, srudder@innovativephotonics.com.

InPhenix Inc.

#441

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

New Product: Inphenix's IPSDSXXXX-S/L series modules feature high power, broadband SLEDs in a compact housing.

InPhenix is a manufacturer of InP and GaAs based active optoelectronic chips, devices and modules for the telecom, datacom, defense, biomedical and industrial markets. InPhenix's products include SOAs, SLEDs, Lasers and Photodetectors. These products are available for customer evaluation and volume production. InPhenix's team of experts offer complete design and manufacturing capability, as well as outstanding technical and product development support. InPhenix is ISO 9001:2000 certified. Contact: Gene Covell, Vice-President of Sales and Marketing, gcovell@inphenix.com; Ken Chang, Sales Manager, kchang@inphenix.com.

JDS Uniphase

#144

SPIE Corporate Member

1768 Automation Pkwy, San Jose, CA, 95131
408/546-5000; fax 408/546-4300
www.jdsu.com

JT Ingram Sales & Marketing #3002

SPIE Corporate Member

316 Harlequin Ct, Oviedo, FL, 32765
800/335-5582; fax 561/276-3402
jim@jtingram.com; www.jtingram.com

Broad Spectrum Fiber Optic solutions from the UV to 18um, Metalized Fiber Optics including Gold, copper and Al, High Temperature Fiber Optics, Fiber coupling, High Power Fiber Optic Delivery, Medical Probes, Fiber Coupled Detectors (UV-18um), High Power Fiber Coupled LED sources, FTIR accessories, Fiber Optic CO₂ Laser delivery, Fiber Optic Vacuum Feedthroughs Contact: Jim Ingram, Marketing Manger, Jim@jtingram.com.

Koheras A/S #418

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

LaCroix Optical Co. #229

SPIE Corporate Member

PO Box 2556, Batesville, AR, 72503
870/698-1881; fax 870/698-1880
sales@lacroixoptical.com; www.lacroixoptical.com

LaCroix Optical Co. is a manufacturer of 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.

Lambda Research Corp. #219

SPIE Corporate Member

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 latest releases of TracePro, OSLO and the NEW Add-In, TracePro Bridge for SolidWorks.

Lambda Research, leading developer of optical software provides optical engineering solutions through software products and consulting. Software includes TracePro and OSLO, which are used for optical simulation, design and analysis of medical products based on optical technologies. TracePro simulates light interaction with human tissue by simulating bulk scatter and tracking volume absorption in tissue. Applications include noninvasive diagnostics, tissue optics, PDT and medical instruments design.

Lambda Research Optics Inc. #426

SPIE Corporate Member

1695 W MacArthur Blvd, Costa Mesa, CA, 92626
714/327-0600; fax 714/327-0610
lambda@lambdac.com; www.lambdac.com

New Product: Lens assembly, Optically contacted polarizers and LaseRemap; diffractive laser shaping module.

Lambda Research Optics has been serving the biophotonics industry for over a decade. Excimer cavity optics, extra cavity optics such as bending and scanning mirrors, UV polarizers and waveplates are some of the optics that are available customized or standard. LaseRemap; Diffractive laser shaping module for 532nm is also offered. Contact: Jae Oh, Sales Engineer, joh@lambdac.com; James Choi, Sales Engineer, jchoi@lambdac.com.

LASER COMPONENTS IG, Inc. #419

SPIE Corporate Member

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
info@laser-components.com; www.lasercomponents.com

New Product: LCIG Inc. has added sputtering for a higher coating density for even higher damage threshold.

Provides high power laser optics for 193nm-10.6um. IR leadsalt diode lasers, SPECILAS diode lasers in range of 750-2050nm-VSELS/DFBs. Quantum Cascade Lasers and Flexpoint miniature laser modules available. Glass polarizing filters, fiberoptic assemblies, color sensors. Spectroscopic instrumentation including NIR Spectrometers and Echelle spectrum analyzers. Avalanche Photodiodes and Pulsed Laser Diodes in stock. Contact: Gary Hayes, Chief Executive Officer/General Manager, hayes@laser-components.com; Valerie King, Sales/Marketing, king@laser-components.com.

Laser Neurotherapy Development Labs., Inc. #318

5061 N 30th St Ste 105, Colorado Springs, CO, 80919
719/266-1161; fax 719/548-8289
riggsjm@aol.com; www.laserneurotherapy.com

Liebmann Optical Co. 531

1 Industrial Parkway, East Hampton, MA 01027
413/527-0079; fax 413/527-5132

Contact: Robert Bush, Sales Manager, robert.bush@liebmann.com.

Light Age, Inc. #327

SPIE Corporate Member

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

Light Age, Inc. develops, manufactures and sells uniquely versatile high power, pulsed and cw tunable solid-state lasers. Light Age has internal capabilities in order to provide laser design, manufacturing and regulatory support for your application. We excel in working with customers from R and D to OEM supply. Our products include alexandrite, a robust solid-state laser material and Nd:YAG laser systems for many applications. Lasers, UV laser, solid-state, alexandrite, OEM. Contact: Brian Pryor, Vice-President, Business Development, bpryor@lightage.com; Rick Frost, Vice-President, Sales and Marketing, rfrost@lightage.com.

Lightspeed Technologies #124

SPIE Corporate Member

90 Hardy Ave, Campbell, CA, 95008
408/761-0062; fax 408/378-3629
info@light-speed-tech.com; www.light-speed-tech.com

New Product: Low cost, high resolution spectrometers. Optical Tweezer systems in various configurations.

Lightspeed Technologies distributes quality photonic products including spectrometers from Photon Control, products from Elliot Scientific including Optical Tweezer systems, fiber launchers, flexured stages, translation and rotation stages and automated alignment systems. Laser products include fiber lasers from SPI for scientific and biomedical applications. Engineering services include user specified configurations of the listed items as well as other product development. Contact: Randall Wilcox, Sales Manager, randall.wilcox@light-speed-tech.com.

Biomedical Optics Exhibitor Directory

Lightwaves2020 Inc.

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

#526



General Refreshment Sponsor

Mindrum Precision, Inc.

#216

SPIE Corporate Member

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

New Product: LaserAce LM150 and LaserAce LM 300. Eye Safe Distance Measuring Lasers.

Now Celebrating our 50th Anniversary in the Industry as a custom manufacturer of glass, quartz, ceramic and exotic material components. 5 axis capabilities in drilling and shaping. Special products include dampers, window assemblies, flow cells and optical filters. Flat, cylindrical and custom lenses including Super Polishing to Sub Angstrom on some materials and shapes. Glass and Quartz Blowing. Prototype to Production. Contact: Todd Van Son, Sales, Sales@mindrum.com; Adam Pohl, Sales, Sales@mindrum.com.

Mad City Labs, Inc.

#330

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

New Product: Nano-Z500 is a high precision nanopositioner suitable for high throughput microscopy & imaging.

Mad City Labs, Inc. manufactures high speed, high precision nanopositioning systems with sub-nm resolution. Our products feature integrated position sensors, closed loop feedback, low noise high linearity and true flexure guided motion. Products: High speed Z axis, focussing elements, tip/tilt and rotational actuators, lowest profile nanopositioners, integrated positioning solutions, vacuum compatible models. Contact: Jenice Con Foo, Technical Sales, jenice@madcitylabs.com; Dale Baldwin, Technical Sales, dbaldwin@madcitylabs.com.

Medical Laser Report/PennWell

#415

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

Medical Laser Report is the only publication which offers timely reporting of the medical-laser industry. In addition to late-breaking news, you'll gain insights into the latest medical-laser technologies. Get the inside analysis of FDA clearance and other regulations. Contact: Jayne Sears-Renfer, Circulation Database Administrator, jaynesr@pennwell.com.

Mesophotonics Ltd.

#420

Chilworth Science Park, 2 Venture Rd,
Southampton Hampshire,
United Kingdom, SO16 7NP
44 23 8076 3752; fax 44 23 8076 3757
info@mesophotonics.com; www.mesophotonics.com

Metavac

#532

SPIE Corporate Member

4000 Point St, Holtsville, NY, 11742
631/447-7700; fax 631/447-7715
info@metavac.com; www.metavac.com

Micro Laser Systems, Inc.

#443

SPIE Corporate 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: Turnkey High Performance Diode Lasers.

Manufacturer of diffraction limited diode lasers, free space or fiber coupled from 375nm to 1550nm. Turnkey or OEM versions have narrow linewidths, high stability with circular Gaussian beams. Specialized lasers for Raman Spectroscopy, Ophthalmology, Confocal Microscopes and Tight Focus applications. Accessories for expanding, focusing, filtering the beam and mounts. Custom laser/optical assemblies routinely done. Contact: Norma Adachi, Marketing Manager, norma@microlaser.com.

Model Optics, Inc.

#126

SPIE Corporate Member

10 Dixon Ave, Woodstock, NY, 12498
845/679-7386; fax 845/679-7449
info@modeloptics.com; www.modeloptics.com

Fabricate custom, precision optical components & assemblies. Biomedical, Aerospace, Automotive, Semiconductor, Telecom & Entertainment industry customers. Manufacture optical components, full up optomechanical assemblies to customer specifications. Inhouse optical coating svcs, optical design, optomechanical design & Class1000 Clean room facility. Specialize in fast, economical prototype to medium production volumes. Double sided lapping capability supports medium volumes of precision plano windows. Contact: Larry Kim, President, lkim@modeloptics.com.

MPA Crystal Corp.

#231

SPIE Corporate Member

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

New Product: Sapphire optics, quartz, optical glass, non-linear crystal optics and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specifications. Also provides optics made of quartz, optical glass, fused silica and non-linear crystal (BBO, KTP, Nd: YVO₄, AgGaS₂ and AgGaSe₂). Coating is available as well. Products include windows, substrates, lenses, prisms, rods, spheres, cylinders and more. Contact: Pauline Liang, Chief Executive Officer, pmpa@mpa-crystal.com.

Multimode Fiber Optics, Inc.

#3005

9A Great Meadow Ln, East Hanover, NJ, 07936
973/781-1602; fax 973/781-1603
info@multimodefo.com; www.multimodefo.com

Multiwave Photonics

#416

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

New Product: Broadband sources for medical (OCT) applications: tabletop instruments and OEM modules.

Multiwave Photonics develops and sells fiber-based modules (laser diode drivers), optical sources (lasers and broadband sources) and sensing systems for the instrumentation, medical (OCT) and industrial markets. Contact: Jose R. Salcedo, Chief Executive Officer, jsalcedo@multiwavephotonics.com.

Nanjing Saifei Electro-Optics Co., Ltd.

#231

Hong Tu Office Tower Ste 1001, 219 N Zhong Shan Rd, Nanjing Jiangsu, China, 210009
415/681-2185; fax 415/681-0787
mpa@mpa-crystal.com; www.saifei.com

New Product: Sapphire optics, quartz, optical glass, non-linear crystal optics and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specifications. Also provides optics made of quartz, optical glass, fused silica and non-linear crystal (BBO, KTP, Nd: YVO₄, AgGaS₂ and AgGaSe₂). Coating is available as well. Products include windows, substrates, lenses, prisms, rods, spheres, cylinders and more. Contact: Pauline Liang, Chief Executive Officer, mpa@mpa-crystal.com.

Newport Corp.

#242

SPIE Corporate Member

1791 Deere Ave, Irvine, CA, 92606-4814
949/863-3144; fax 949/253-1680
info@newport.com; www.newport.com

Visit our Booth #242 at BIOS to see our high-precision optics, opto-mechanics, spectrometers, photonics instruments, filters, light sources, vibration control and motion control technologies, diffraction gratings and the wide range of Spectra-Physics Lasers. Newport's innovative products are designed to enhance productivity for precision manufacturing, engineering and research applications. The combined company offers more innovative products, more solutions and more expertise than ever before. Contact: Jason Eichenholz, jason.eichenholz@newport.com.

Nikon Instruments Inc.

#322

1300 Walt Whitman Rd, Melville, NY, 11747-3012
631/547-8500; fax 631/547-8652
www.nikonusa.com

Nikon Instruments Inc. is exhibiting advanced live cell imaging technologies including the TE2000 Perfect Focus Inverted Research Microscope, delivering constant focus correction for long term time lapse experiments. R&D award winning new White Light TIRF and laser TIRF2 fluorescence system. - The C1si "true spectral" confocal laser scanning microscope - Nikon Eclipse 90i, fully automated upright microscope for digital imaging applications with new NIS-Elements control and analysis software. Contact: biosales@nikon.net.

Noliac A/S

#330

Hejreskovvej 18, Kvistgaard, Denmark, 3490
45 4912 5030; fax 45 4912 5031
sales@noliac.com; www.noliac.com

New Product: Multilayer piezoelectric actuators are co-fired ceramic components with up to 100 ceramic layers.

Noliac designs, develops and manufactures advanced multi-layer Piezoelectric solutions - in any shape, size or configuration. Noliac devices deliver the highest displacement per unit size, have the lowest voltage requirements in the industry and can be manufactured to meet the exact specifications of our customers' applications. Contact: Ole Wibom, Sales Director, ow@noliac.com; John Klausen, Area Sales Manager, jk@noliac.com.

Nanopositioning Systems



*Picometer Precision
Low Noise
Closed Loop
True Parallel Motion*

*Metrology
Life Sciences
Photonics
Industrial*



*Innovative Solutions
Superior Customer Support*

MCL
MAD CITY LABS INC.

sales@madcitylabs.com www.madcitylabs.com

**BIOS Booth #330
Photonics West Booth #6219**

Biomedical Optics Exhibitor Directory

Novacam Technologies Inc.

#528

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: dOCTor-8 fast Optical Coherence Tomography detector for bio-medical applications.

Novacam Technologies is manufacturer of Optical Coherence Tomography detectors used in bio-medical applications and fiber-based profilometers used for non-destructive testing, metrology, surface mapping and inspection, process control, measuring film thickness, deposition and etching measurements and profilometry in inhospitable environments and restricted spaces. Novacam also provides system integration, consulting and contract R&D for industrial and medical imaging. Contact: Bartulovic Vuk, President, sales@novacam.com.

NP Photonics, Inc.

#434

9030 S Rita Rd Ste 120, Tucson, AZ, 85747
520/799-7400; fax 520/799-7403
www.npphotonics.com

New Product: 1 Micron ASE Module.

NP Photonics leverages its expertise in advanced micro fiber technology to design, manufacture and deliver a new class of photonics modules and systems for fiber optic sensing, spectroscopy, LIDAR and nanophotonics applications. Major markets served are: biomedical, oil & gas, utilities, homeland security, and R&D. Contact: Philippe Brak, Vice-President, Sales & Marketing, pbrak@npphotonics.com; Anthony Pisano, Regional Sales Manager, apisano@npphotonics.com.

Nutfield Technology, Inc.

#429

SPIE Corporate Member

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

New Product: New QS-10 galvo for 8-15mm mirrors offers superior scanning speed and accuracy in a compact package.

Nutfield Technology, Inc. (NTI) designs and manufactures the most advanced galvanometer-based optical scanners, scan heads, control electronics and software products available. NTI's people include many scanning industry veterans - possessing a wealth of applications and product knowledge - allowing us to offer strong solutions for a wide variety of applications. Our broad product line positions NTI as your one-stop source for complete scanning solutions. Contact: Jim Hart, Vice President Sales & Marketing, jhart@nutfieldtech.com.

Ocean Optics, Inc.

#319

SPIE Corporate Member

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

New Product: The back-thinned QE65000 is a high-sensitivity spectrometer for fluorescence and Raman analysis.

From the creator of the world's first miniature fiber optic spectrometer comes an array of spectroscopy products ideal for applications such as biomedical diagnostics, life sciences and laser characterization. In addition to fluorescence, Raman, UV-Vis and NIR spectrometers, Ocean Optics offers OEM optical-sensor coating services for development of chemical-sensing instrumentation. Among the new stuff on display: SpectraSuite, the industry's first modular, cross-platform spectroscopy software. Contact: Rob Waterbury, OEM Sales Manager, Rob.Waterbury@oceanoptics.com; Mike Morris, President, Mike.Morris@oceanoptics.com.

OEC

#515

28 Des Lilas, Kirkland, QC, Canada, H9J 4A7
514/694-0336; fax 514/694-8535
nick.bertone@optoecomponents.com;
www.optoecomponents.com

New Product: Solid state single photon counting module with less than 50ps timing resolution.

Supplier of single photon counting module for visible and 1064nm, custom design and assemblies, ex: high gain low noise detector module. Contact: Nick Bertone, President; Natalie Raymond, Marketing, Natalie.Raymond@optoecomponents.com.

Omega Optical, Inc.

#214

SPIE Corporate Member

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

Omega Optical manufactures filters from UV to the near IR, including bandpass, longpass, shortpass, rejection band, neutral density, laser line, analytical, astronomy & fluorescence filters. Our filters are being used in the next generation of life science & industrial optical instruments. In addition, we manufacture an extensive selection of dye-specific filter sets for single & multilabel fluorescence microscopy applications.

Oplink Communications, Inc.

#447

46335 Landing Pky, Fremont, CA, 94538
510/933-7200; fax 510/933-7300
info@oplink.com; www.oplink.com

New Product: Light sources, Laser Accessories, Fiber Optic Components, Optics manufacturing, Optical Subsystems.

Oplink is a leading photonic foundry providing design, integration and Optical Manufacturing Solutions (OMS) for optical networking components and subsystems. We offer expert OMS for the production and packaging of highly integrated optical subsystems and turnkey solutions. Our technology portfolio includes solutions for next-generation, all optical Wavelength-Division-Multiplexing, Amplification, Switch-routing, Monitoring/Conditioning, Dispersion Management and Transmission Applications. Contact: River Gong, Vice President of Sales, riverg@oplink.com; Jin Hong, Vice President of Technology, jhong@oplink.com.

Optiphase, Inc.

#121

7652 Haskell Ave, Van Nuys, CA, 91406
818/782-0997; fax 818/782-0999
sales@optiphase.com; www.optiphase.com

Opto & Laser Europe

#423

IOP Publishing Ltd., Dirac House Temple Back, Bristol, United Kingdom, BSI 6BE
44 117 929 7481; fax 44 117 930 1178
info@optics.org; www.optics.org/ole

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"Imagination will often carry us to worlds that never were. But without it we go nowhere."

Carl Sagan, Public Welfare Medal, National Academy of Sciences, 1994

Helix Nebula NGC 7293, the NASA Hubble Space Telescope

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OXXIUS

#437

4 Rue 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: SLIM-473, up to 50 mW&SLIM-532 up to 150 mW; single longitudinal mode DPSS lasers.

Oxxius is an early-stage company focused on developing innovative solid-state laser solutions for industrial and scientific applications. The Oxxius product line features compact laser modules with wavelengths in the visible and near-ultraviolet spectrum, which combine outstanding optical performance with low-cost volume production. The lasers are used in biophotonics, spectroscopy, metrology and other instrumentation applications. Contact: Athanasios Kokorakis, Vice-President, Sales, akokorakis@oxxius.com; Nicolas Féat, Product Line Manager, nfeat@oxxius.com.

OZ Optics Ltd.

#421

SPIE Corporate Member

219 Westbrook Rd, Ottawa, ON, Canada, K0A 1L0
613/831-0981; fax 613/836-5089
sales@ozoptics.com; www.ozoptics.com

New Product: RGB (Red/Green/Blue) Combiner/Delivery Systems combining Red-Green-Blue light sources into one fiber.

Turnkey UV/VIS/IR Light Sources, RGB Sources/Combiners, High Power CW/Pulsed Fiber Lasers, Optical Amplifiers, Laser to Fiber Delivery Systems, High Power Patchcords, Laser/ Laser Diode/Photo Diode to Fiber Couplers, Collimators/Focusers, Line Generators, U-Brackets, Vacuum/Hermetic Feedthroughs, Optical Delay Lines, Polarization Maintaining Patchcords, Polarizing/Polarization Maintaining Splitters/ Combiners, Polarization Rotators/Controllers/ Analyzers, Powermeters, Optical Taps/Power Monitors Contact: Omur Sezerman, President & Chief Executive Officer, Jamie Hackett, Marketing Manager.

Pavilion Integration Corp.

#3004

201 Helado Rd, Fremont, CA, 94539
408/453-8801; fax 408/453-8802
sales@pavilionintegration.com;
www.pavilionintegration.com

New Product: W11-111-30 635nm W12-111-25 532nm W21-111-20 408nm dualcolor 635X532 RG module fiber delivery option.

Founded in 2003 by former JDS-Uniphase management to provide complete light engine solutions including fulltime low noise RGB laser modules and optical subsystems on cost-effective platform to meet just-in-time needs for biotech/medical instrumentation, graphics, projection display, inspection/metrology plus other industrial, military and consumer applications. Fully integrated in a compact package, PIC WhisperITTM series includes highly reliable red, green, purple or multicolor lasers. Contact: Ningyi Luo, President & Chief Executive Officer, ningyi.luo@pavilionintegration.com.

Photek, Ltd.

#3006

SPIE Corporate Member

26 Castleham Rd, St Leonards-on-Sea, E Sussex, United Kingdom, TN38 9NS
44 1424 850 555; fax 44 1424 850 051
sales@photek.com; www.photek.co.uk

Photon Engineering, LLC

#132

SPIE Corporate Member

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 is the premier proven optical engineering solution for biomedical applications.

FRED 5.20 has major improvements to enable biomedical engineers to analyze and design optical products in the biomedical market. FRED is a virtual prototyping CAD environment to visualize how light propagates through any optical system. FRED's powerful easy to use interface lets you create or import CAD biomedical models directly in FRED. The program also has full analysis capability, plots, paths information, reports and textual information. Contact: Michael Gauvin, Vice President of Sales, mikeg@photonengr.com; Donna Hart, Sales Manager, donnah@photonengr.com.

Photon Inc.

#3010

SPIE Corporate Member

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: USBeamPro:CMOS, portable camera, USB 2.0 interface with high dynamic range.

Photon manufactures precision beam profilers that provide measurement data from light sources such as lasers, LDs, LEDs, and VCSELs on several parameters. The NanoScan provides nanometer accuracy beam pointing and width for fast and precise optical alignment and component assembly. The High-Power NanoScan allows for direct measurement of focused lasers used in industrial applications. We also manufacture patented far-field profilers for divergent sources, and a variety of camera-based profilers. Contact: Allen Cary, Sales and Marketing Manager, acary@photon-inc.com; Derrick Peterman, Sales Engineer, dpeterman@photon-inc.com.

Photonic Products Ltd.

#417

SPIE Corporate Member

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

New Product: New 635nm and 650nm Compact Laser Diode Modules.

Photonic Products, established in 1995, is a manufacturer of optical sub-assemblies and standard and custom laser diode modules including TE cooled laser modules, green DPSS laser modules, pigtailed and receptacle packaged laser diodes and fibre-coupled laser modules. Photonic Products is also a specialist distributor of high performance industrial laser diodes and precision optical lenses, with sales offices in USA, UK and Germany offering competitive prices and fast worldwide delivery. Contact: David Stephen, Sales Manager USA salesusa@photonic-products.com; David McGuinness, Technical Sales Manager, sales@photonic-products.com.

Photonicsonline.com

#433

5 Walnut Grove Ste 320, Horsham, PA, 19044
215/675-1800; fax 215/675-4880
erupp@vertmarkets.com; www.photonicsonline.com

The leading online destination for optical engineers since 1998. Contact: Ed Rupp, Publisher, erupp@vertmarkets.com.

PI (Physik Instrumente) LP

#323

SPIE Corporate Member

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

PI is the global leader in nano precision motion control & piezo actuation systems for OEM + R&D. Products: Nanofocus Devices & Ultrafast Steering Mirrors: Resolution Enhancement; Piezo Nanopositioning Stages: Scanning Microscopy/Imaging; PICMA® Longlife Piezo Actuators; Ultrasonic Linearmotors, Piezo Drivers & Controllers; NanoAlignment Systems; Micromanipulation Actuators, Stages & Motion Controllers; Hexapod Robots for Automated 3D to 6D Alignment; ISO 9001, 30+Years Experience. Imaging Contact: James Gareau, Eastern North America Sales Manager, info@pi-usa.us; David Steinberg, Western North America Sales Manager, info@pi-usa.us.

Picarro, Inc.

#527

480 Oakmead Pkwy, Sunnyvale, CA, 94085
408/962-3900; fax 408/962-3200
info@picarro.com; www.picarro.com

PicoQuant GmbH

#315

Rudower Chaussee 29, Berlin, Germany, 12489
49 30 6392 6560; fax 49 30 6392 6561
sales@toptica-usa.com; www.picoquant.com

PicoQuant is the leading supplier of picosecond pulsed diode lasers and intensity modulated diode lasers up to the GHz range and instrumentation for time-correlated single photon counting. Based on these core technologies, PicoQuant also builds complete systems for fluorescence lifetime measurements in sensitive analysis down to the single molecule. T.P.I. is our U.S. distributor. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com. Contact: Uwe Ortmann, Sales & Marketing, photonics@pq.fta-berlin.de.

Piezosystem Jena, Inc.

#116

SPIE Corporate Member

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

PolarOnyx, Inc.

#230

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

New Product: High energy femtosecond fiber lasers.

Leading company in high energy/high power femtosecond pulsed and narrowline width (kHz) fiber lasers. Wavelength ranges cover from VIS to IR. Contact: Jian Liu, President, jianliu@polaronyx.com.

Polymicro Technologies LLC

#223

SPIE Corporate Member

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 aluminum buffers; solarization resistant 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: Polymicro Technologies, LLC.

Power Technology, Inc.

#523

SPIE Corporate Member

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

Precision Optics Corp., Inc.

#221

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

Semrock, Inc.

#326

SPIE Corporate Member

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

Semrock manufactures high-performance thin-film optical filters for the biotech & analytical instrumentation markets. Products include the highly acclaimed BrightLine® series of fluorescence filters for microscopy, flow cytometry and other fluorescence-based instrumentation, exceptional filters for Raman spectroscopy and unique biomedical laser system optics.

SensL Technologies Ltd.

#143

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

New Product: SPMMini Silicon Photomultiplier as a replacement for PMTs.

SensL is showing the world's first silicon alternative to photomultiplier tubes for low light detection & photon counting applications. This technology is enabling new generation products for analytical equipment, fluorescence imaging, microscopy & low light imaging. Unlike PMTs these devices are immune to damage from stray light & have a low operating voltage whilst achieving comparable detection area size and gain. Photon Counting APD Avalanche Photodiode Silicon Photomultiplier Tube TCSPC. Contact: Joe O'Keefe, Chief Commercial Officer, jokeefe@sensl.com.

Sensovation

#328

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

New Product: M3 Miniaturized Measurement Module - sensitive area-detection of fluorescence for diagnostics & POC.

Sensovation is focused on the development and production of high sensitivity 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: HW. Mueller, Director of Marketing; Barry Weinstein, Director of Business Development.

Biomedical Optics Exhibitor Directory

Spectrum Laser & Technologies, Inc. #318

2270 Garden of the Gods Rd Ste 103,
Colorado Springs, CO, 80907
719/264-7632; fax 719/548-8289
riggsjm@aol.com; www.spectrumlaser.com

Spectrum Laser & Technologies, Inc. (SLT) is a contract engineering and manufacturing company specializing in aerospace, medical, military, industrial, and commercial electronic assemblies. Founded in 1997, SLT provides services to many of the aerospace companies throughout the United States and is a registered medical device manufacturer with a quality system that is ISO 9001 and 13485 registered. From design through production, SLT specializes in highly reliable electronics to include printed wiring boards, wiring harnesses, and electro-mechanical assemblies. Medical device manufacturer and hi-rel electronic assemblies for medical, aerospace, military, and commercial markets.

SPI

SPIE Corporate Member

3 Wellington Park, Tollbar Way Hedge End, Southampton,
United Kingdom, SO30 2QU
44 1489 779 660; fax 44 1489 779 698
info@spioptics.com; www.spioptics.com

New Product: 1550nm Compact Fiber Laser Module System (5-10W) - Laser Tweezers - Biomedical - Medical Aesthetic.

SPI develops and manufactures high power CW modulated & pulsed fiber lasers with powers ranging from mWs to kW. Broad number of industrial applications including Scutting, welding, sintering, micro machining, graphic and image processing materials processing, ablation, marking and engraving. Stability, reliability and a lower cost of ownership are the major benefits of industrial fiber laser deployment. Contact: John Tinson, Vice-President, Sales, john.tinson@spioptics.com; Silke Pflueger, US Sales Director, silke.pflueger@spioptics.com.

Spiricon, Inc. #425

SPIE Corporate Member

60 W 1000 N, Logan, UT, 84341
435/753-3729; fax 435/753-5231
sales@spiricon.com; www.spiricon.com

Manufactures beam profilers & universal power/energy meters for lasers & optical devices from UV - FIR. Instrumentation provides real-time beam profile display & numerical calculations in digital, analog bar or time graph. Products include software, frame grabbers, full spectrum cameras and portable meters with dual inputs for thermopile, pyroelectric & semiconductor probes for power/energy or temp measurements. Features: SD card for logging, USB control to LabVIEW on Windows, Mac & Linux. Contact: Josh Atkinson, Northwest Regional Sales Manager, josh@spiricon.com; Kenneth Ferree, Sales Manager.

Stanford Computer Optics, Inc. #3009

SPIE Corporate Member

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, based on 4Picos or 4QuikE camera, up to 100.000.000.000fr/s.

Analog or digital intensified CCD cameras. High-speed, ultra-fast gated (200 picosecond), 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's 4Picos/4QuikE/XXRapidFrame. Sensitivity of 1count/1photoelectron/pixel w/200 pico second gate times. MCP and diode image intensifiers and low-light cameras.

Stanford Photonics, Inc. #331

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

New Product: The Onyx-DT™ desk top black box imaging system for real time luminescence and fluorescence.

Stanford Photonics, Inc. designs and manufactures digital CCD and Image Intensified (ICCD) cameras for photon-limited life science imaging applications. Mega-pixel resolution and frames 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: Mike Buchin, President, mbuchin@stanfordphotonics.com; Steve Herlick, Sales Engineer, sherlick@stanfordphotonics.com.

StockerYale, Inc. #228

32 Hampshire Rd, Salem, NH, 03079-4204
603/893-8778 ; fax 603/893-5604
sales@stockeryale.com; www.stockeryale.com

New Product: COBRA™ Linescan Backlight, Magnum II Laser, Model 21DC F.O. Illuminator, Model 6 Fluo Circular.

StockerYale, Inc. is a leading developer of high-quality illumination and optical products. We manufacture Lasiris™ structured light lasers, LED (light emitting diode) based technologies and fiber optic and fluorescent lighting systems, as well as specialty optical fibers for industry leading OEMs. We are at the forefront of delivering innovative solutions to a wide range of high-tech markets including machine vision, medical, microscopy, industrial inspection, telecommunications and sensors. Contact: Luc Many, Senior Vice-President, Sales/Marketing - Illumination, lasers@stockeryale.com; Paul Jortberg, Senior Vice-President, Sales/Marketing - Optical, opticalsales@stockeryale.com.

Sunex Inc. #522

5963 La Place Ct Ste 104, 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 lens for CMOS/CCD image sensors. Products include optical low pass filters, IR-Cutoff filters and systems for CMOS/CCD image sensors. Sunex also provides optical design services and custom product development. Contact: Peter Allard, Director of Sales and Marketing, peter.allard@sunex.com.

Superlum Diodes #529

Nathan House, Lavitts Quay, Cork, Ireland,
353 21 4275176; fax 353 21 4277305
sales@superlum.ie; www.superlum.ie

Swamp Optics, LLC #3008

6300 Powers Ferry Rd Ste 600-345, Atlanta, GA, 30339
404/547-9267; fax 770/541-6472
www.swampoptics.com

Swamp Optics offers inexpensive, compact and easy-to-use devices for measuring ultrashort laser pulses, specializing in frequency-resolved optical gating (FROG). Swamp Optics' devices yield the most complete measurement of such pulses available with the least effort. Contact: Linda Trebino, Co-Founder & Member, Linda.Trebino@swampoptics.com.

Taboada Research Instruments, Inc.

#3011

1923 N New Braunfels, San Antonio, TX, 78208
210/224-8876; fax 210/224-8834
info@taboada.com; www.taboada.com

New Product: Custom Research Instruments, Omni Laser Line, Q-switched Er Glass Lasers, 5-axis Remote Positioner.

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 Taboada, President, j@taboada.com; John M. Taboada, Vice President, jm@taboada.com.

TauTec LLC

#518

9140 Guilford Rd Ste O, Columbia, MD, 21046
301/725-7441; fax 301/725-2941
info@tautec.com; www.tautec.com

New Product: TriMScope: Real-Time 3D Fluorescence Microscopy system based on multifocal multiphoton excitation.

TauTec offers ultrahigh rep. rate, picosecond gated, gain modulated ICCD cameras, ultrafast readout CCD cameras, multifocal multiphoton microscope workstations for real-time 3D fluorescence microscopy with time-lapse, ratio imaging, FLIM, FRET, FRAP, anisotropy, second harmonic and spectral imaging modes, Bioanalyzer Gel based on native fluorescence imaging, TauScope for fluorescence lifetime imaging microscopy and customized optical and time-gated Raman imaging and spectroscopy systems.

Tempo Foam Boxes for Optics

#427

1227 N Miller Park Ct, Visalia, CA, 93291
559/651-7711; fax 559/651-0123
tempo@tempo-foam.com; www.tempo-foam.com

Thorlabs, Inc.

#222

435 Rt 206, Newton, NJ, 07511
973/579-7227; fax 973/300-3600
feedback@thorlabs.com; www.thorlabs.com

New Product: OCT (Optical Coherence Tomography Microscope Spectral Radar OCT system Swept laser OCT source.

Thorlabs develops and manufactures equipment and tools for the photonics industry. Thorlabs recently launched several Optical Coherence Tomography products: OCT microscope, Spectral radar OCT system and an OCT swept laser source. This is in addition to the existing product lines of positioning equipment, motion control tools, optics, instrumentation, laser diodes and vibration isolation equipment. Contact: Sales at Thorlabs.

Time-Bandwidth Products AG

#315

SPIE Corporate Member

Halle Zeppelin 1 OG, Zurich, Switzerland, CH-8005
41 1 445 3120; fax 41 1 445 3121
sales@toptica-usa.com; www.tbwp.com

Toptica Photonics, Inc.

#315

SPIE Corporate Member

94 N Elm St Ste 101, Westfield, MA, 01085
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.toptica-usa.com

New Product: New Products: 2mW @ 200 - 532nm, cw and single mode lasers.

TPI is the exclusive US distributor for Toptica, PicoQuant and Time Bandwidth which are leading European manufacturers of lasers sources and instrumentation including cw, pico and femto laser sources to address the many applications such as semiconductors, spectroscopy and microscopy, single photon, fluorescence lifetime, single molecule and imaging studies. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com.

Trinity Technologies

#333

4110 Central Ave NE Ste 101, Minneapolis, MN, 55421
763/788-8278; fax 763/788-8283
info@lasersafety.com; www.lasersafety.com

Trinity Technologies designs and manufactures a complete line of laser safety and ionizing radiation protection products including eyewear, viewing windows, viewing sheets/windows, barrier systems, laser training and laser safety publications. Contact: Jeremy Erickson, Sales Manager, jeremy@lasersafety.com; Amy Wollberg, Sales Associate, amy@lasersafety.com.

unique-m.o.d.e. AG

#139

SPIE Corporate Member

Felsbchstr 7, Jena, Germany, 07745
49 3 641 5750; fax 49 3 641 675 535
info@unique-mode.de; www.unique-mode.de

New Product: 7W Highpower Diodelaser - aiming beam (1mW@635nm) incl driver - 2 photodiodes - 2 fiber-detectors.

High power diode laser systems with highest brightness. unique-mode is a German OEM manufacturer of high-power diodelasers and diodelaser systems especially for advanced applications in medical treatment, pumping, instrumentation and processing. Pumping sources for fiber lasers - Pumping sources for Raman amplifiers - Lasers for CtP and flexo CtP - Pumping sources for micro solid state lasers - Lasers for micro material processing - medical OEM lasers for ophthalmology and dentistry. Contact: Anja Habermann, Sales Assistance, a.habermann@unique-mode.de; Torsten Scheller, Chief Executive Officer, t.scheller@unique-mode.de.

Varian, Inc.

#215

SPIE Corporate Member

3120 Hansen Way, Palo Alto, CA, 94304
800/926-3000; fax 650/213-8200
customercare@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.

Volga Technology Ltd.

#530

SPIE Corporate Member

11 Clos Castell Newydd, Bridgend,
United Kingdom, CF31 5DR
44 1656 767545; fax 44 7005 864073
owenpc@volgatechnology.com; www.volgatechnology.com

Biomedical Optics Product Index

Astronomy

Asahi Spectra USA Inc.
B&W Tek, Inc.
Edmund Optics
Evaporated Coatings, Inc.
JT Ingram Sales & Marketing
LASER COMPONENTS IG, Inc.
Mindrum Precision, Inc.
Model Optics, Inc.
NP Photonics, Inc.
Ocean Optics, Inc.
OEC
Omega Optical, Inc.
Photonicsonline.com
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SensL Technologies Ltd.
Sensovation
Stanford Computer Optics, Inc.

Cameras and CCD Components

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Photonicsonline.com
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Sensovation
Spiricon, Inc.
Stanford Computer Optics, Inc.
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Sunex Inc.
TauTec LLC

Chemical & Biological Sensing

Andor Technology
Asahi Spectra USA Inc.
Avo Photonics, Inc.
B&W Tek, Inc.
Center for Biophotonics Science & Technology
Edmund Optics
Engineering Synthesis Design, Inc.
Evaporated Coatings, Inc.
Infotonics Technology Center
Innovative Photonic Solutions
JT Ingram Sales & Marketing
LASER COMPONENTS IG, Inc.
Lightspeed Technologies
Mindrum Precision, Inc.
Multiwave Photonics
Novacam Technologies Inc.

NP Photonics, Inc.
Ocean Optics, Inc.
OEC
Photon Engineering, LLC
Photonicsonline.com
Polymicro Technologies LLC
Sensovation
Taboada Research Instruments, Inc.

Clinical, Chemical and Biological Instrumentation

Andor Technology
Asahi Spectra USA Inc.
B&W Tek, Inc.
Bioptigen Inc.
Breault Research Organization
Davin Optronics Ltd.
Edinburgh Instruments Ltd.
Edmund Optics
Engineering Synthesis Design, Inc.
Evaporated Coatings, Inc.
HORIBA Jobin Yvon
IMRA America, Inc.
Infotonics Technology Center
JT Ingram Sales & Marketing
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Lightspeed Technologies
Mad City Labs, Inc.
Mindrum Precision, Inc.
Multiwave Photonics
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Photonicsonline.com
Polymicro Technologies LLC
Semrock, Inc.
SensL Technologies Ltd.
Sensovation
Sunex Inc.
Taboada Research Instruments, Inc.
TauTec LLC

Communications

Avo Photonics, Inc.
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Breault Research Organization
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Fresnel Technologies Inc.
Infotonics Technology Center
Mindrum Precision, Inc.
NP Photonics, Inc.
OEC
Photonicsonline.com
Polymicro Technologies LLC
Thorlabs, Inc.

Displays

Avo Photonics, Inc.
B&W Tek, Inc.
Center for Biophotonics Science & Technology
Evaporated Coatings, Inc.
LASER COMPONENTS IG, Inc.
Photonicsonline.com

Electron-Beam Lithography

B&W Tek, Inc.
LASER COMPONENTS IG, Inc.
Mad City Labs, Inc.
Photonicsonline.com

Electronic Imaging Components, Equipment, Systems

Avo Photonics, Inc.
B&W Tek, Inc.
Breault Research Organization
Edmund Optics
Fresnel Technologies Inc.
Infotonics Technology Center
LASER COMPONENTS IG, Inc.
Novacam Technologies Inc.
NP Photonics, Inc.
Photonicsonline.com
SensL Technologies Ltd.
Spiricon, Inc.
Stanford Photonics, Inc.
Taboada Research Instruments, Inc.
TauTec LLC
Thorlabs, Inc.

Electronics, Signal Analysis Equipment

Avo Photonics, Inc.
B&W Tek, Inc.
Becker & Hickl GmbH
Boston Electronics Corp.
Edinburgh Instruments Ltd.
LASER COMPONENTS IG, Inc.
Lightspeed Technologies
Photonicsonline.com
Polymicro Technologies LLC
Spiricon, Inc.
Taboada Research Instruments, Inc.

EUV Lithography

B&W Tek, Inc.
CVI Laser LLC
JT Ingram Sales & Marketing
Mad City Labs, Inc.
Photonicsonline.com

Fiber Optic Components, Equipment, Systems

APPLIED IMAGE Group
Avo Photonics, Inc.
B&W Tek, Inc.
Breault Research Organization
CeramOptec Industries, Inc.
Davin Optronics Ltd.
Edmund Optics
Evaporated Coatings, Inc.
EXALOS AG
Hamamatsu Corp.
IMRA America, Inc.
Infrared Fiber Systems, Inc.
Innovative Photonic Solutions
InPhenix Inc.
JT Ingram Sales & Marketing
LASER COMPONENTS IG, Inc.
Lightspeed Technologies
Micro Laser Systems, Inc.
Mindrum Precision, Inc.
Model Optics, Inc.
MPA Crystal Corp.
Multiwave Photonics
Nanjing Saifei Electro-Optics Co., Ltd.
Novacam Technologies Inc.
NP Photonics, Inc.
Ocean Optics, Inc.
OZ Optics Ltd.
Photonic Products Ltd.
Photonicsonline.com
PolarOnyx, Inc.
Polymicro Technologies LLC
StockerYale, Inc.
Thorlabs, Inc.
unique-m.o.d.e. AG
Varian, Inc.

Finished Optics, Filters, & Coatings, Optical Fabrication Equipment

Asahi Spectra USA Inc.
Avo Photonics, Inc.
B&W Tek, Inc.
Barr Associates Inc.
CVI Laser LLC
Davin Optronics Ltd.
Edmund Optics
Evaporated Coatings, Inc.
FemtoLasers, Inc.
Foreal Spectrum, Inc.
Fresnel Technologies Inc.
G-S PLASTIC OPTICS, A Germanow-Simon Co.
JT Ingram Sales & Marketing
Lambda Research Optics Inc.
LASER COMPONENTS IG, Inc.

Lightspeed Technologies
 Micro Laser Systems, Inc.
 Mindrum Precision, Inc.
 Model Optics, Inc.
 MPA Crystal Corp.
 Nanjing Saifei Electro-Optics Co., Ltd.
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 Taboada Research Instruments, Inc.
 Thorlabs, Inc.

High Speed Imaging and Sensing

Andor Technology
 Avo Photonics, Inc.
 B&W Tek, Inc.
 Biotigen Inc.
 Center for Biophotonics Science & Technology
 EXALOS AG
 Infotonics Technology Center
 LASER COMPONENTS IG, Inc.
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Illumination Engineering

Asahi Spectra USA Inc.
 Avo Photonics, Inc.
 B&W Tek, Inc.
 CeramOptec Industries, Inc.
 Edmund Optics
 Lambda Research Corp.
 LASER COMPONENTS IG, Inc.
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 PolarOnyx, Inc.
 Polymicro Technologies LLC

Stanford Photonics, Inc.
 StockerYale, Inc.
 Taboada Research Instruments, Inc.
 unique-m.o.d.e. AG

Infrared Sources, Detectors, Systems

AMPLITUDE SYSTEMES
 Avo Photonics, Inc.
 B&W Tek, Inc.
 Boston Electronics Corp.
 Breault Research Organization
 Edmund Optics
 EXALOS AG
 FemtoLasers, Inc.
 Fresnel Technologies Inc.
 Global Laser
 Hamamatsu Corp.
 id Quantique
 Innovative Photonic Solutions
 JT Ingram Sales & Marketing
 LASER COMPONENTS IG, Inc.
 Lightspeed Technologies
 Multiwave Photonics
 Newport Corp.
 Novacam Technologies Inc.
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 OEC
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 Spiricon, Inc.
 Taboada Research Instruments, Inc.
 Thorlabs, Inc.
 unique-m.o.d.e. AG
 Varian, Inc.

Ion-Beam Lithography

B&W Tek, Inc.
 OZ Optics Ltd.
 Photonicsonline.com

Lasers and Other Light Sources, Laser Accessories, Laser Systems

Aculight Corp.
 AMPLITUDE SYSTEMES
 Andor Technology
 Asahi Spectra USA Inc.
 Avo Photonics, Inc.
 B&W Tek, Inc.
 Becker & Hickl GmbH
 Boston Electronics Corp.
 Breault Research Organization

Cambridge Technology, Inc.
 Center for Biophotonics Science & Technology
 CeramOptec Industries, Inc.
 Coherent Inc.
 Edinburgh Instruments Ltd.
 Edmund Optics
 EXALOS AG
 FemtoLasers, Inc.
 Global Laser
 Hamamatsu Corp.
 High Q Laser (US), Inc.
 IMRA America, Inc.
 Innovative Photonic Solutions
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 Lambda Research Optics Inc.
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 Light Age, Inc.
 Lightspeed Technologies
 Micro Laser Systems, Inc.
 Mindrum Precision, Inc.
 Multiwave Photonics
 Newport Corp.
 NP Photonics, Inc.
 Nuffield Technology, Inc.
 Ocean Optics, Inc.
 Oplink Communications, Inc.
 OXXIUS
 OZ Optics Ltd.
 Pavilion Integration Corp.
 Photonic Products Ltd.
 Photonicsonline.com
 PolarOnyx, Inc.
 Polymicro Technologies LLC
 SPI
 Spiricon, Inc.
 StockerYale, Inc.
 Taboada Research Instruments, Inc.
 TauTec LLC
 Thorlabs, Inc.
 Toptica Photonics, Inc.
 Trinity Technologies
 unique-m.o.d.e. AG

Law Enforcement Technologies

B&W Tek, Inc.
 Edmund Optics
 Infotonics Technology Center
 LASER COMPONENTS IG, Inc.
 Ocean Optics, Inc.
 OZ Optics Ltd.
 Photonicsonline.com
 Polymicro Technologies LLC
 Taboada Research Instruments, Inc.

Life Sciences

Aculight Corp.
 Andor Technology
 Asahi Spectra USA Inc.
 B&W Tek, Inc.
 Center for Biophotonics Science & Technology

CRI, Inc.
 Edmund Optics
 Fresnel Technologies Inc.
 Grintech GmbH
 LASER COMPONENTS IG, Inc.
 Light Age, Inc.
 Mad City Labs, Inc.
 Micro Laser Systems, Inc.
 Multiwave Photonics
 Nikon Instruments Inc.
 NP Photonics, Inc.
 Ocean Optics, Inc.
 OZ Optics Ltd.
 Photonicsonline.com
 Stanford Photonics, Inc.
 Taboada Research Instruments, Inc.
 TauTec LLC
 Thorlabs, Inc.
 Varian, Inc.

Metrology, Inspection and Process Control

Avo Photonics, Inc.
 B&W Tek, Inc.
 Biotigen Inc.
 Edmund Optics
 Engineering Synthesis Design, Inc.
 EXALOS AG
 G-S PLASTIC OPTICS, A Germanow-Simon Co.
 Innovative Photonic Solutions
 JT Ingram Sales & Marketing
 Lightspeed Technologies
 Mad City Labs, Inc.
 Novacam Technologies Inc.
 Ocean Optics, Inc.
 OZ Optics Ltd.
 Photonicsonline.com
 PolarOnyx, Inc.
 Polymicro Technologies LLC
 Stanford Computer Optics, Inc.

Nanotechnology

APPLIED IMAGE Group
 B&W Tek, Inc.
 Biotigen Inc.
 Center for Biophotonics Science & Technology
 Fresnel Technologies Inc.
 HORIBA Jobin Yvon
 Infotonics Technology Center
 Mad City Labs, Inc.
 Mindrum Precision, Inc.
 Noliac A/S
 Novacam Technologies Inc.
 NP Photonics, Inc.
 Ocean Optics, Inc.
 Photonicsonline.com
 PI (Physik Instrumente) LP
 Sensovation

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Barr Associates Inc.
Boston Electronics Corp.
Cambridge Technology, Inc.
CVI Laser LLC
Davin Optronics Ltd.
Edinburgh Instruments Ltd.
Edmund Optics
Evaporated Coatings, Inc.
EXALOS AG
Foreal Spectrum, Inc.
Fresnel Technologies Inc.
Grintech GmbH
G-S PLASTIC OPTICS, A
Germanow-Simon Co.
id Quantique
Innovative Photonic Solutions
InPhenix Inc.
JT Ingram Sales & Marketing
LaCroix Optical Co.
Lambda Research Optics Inc.
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Mindrum Precision, Inc.
MPA Crystal Corp.
Nanjing Saifei Electro-Optics Co.,
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Oplink Communications, Inc.
Photonic Products Ltd.
Photonicsonline.com
Polymicro Technologies LLC
Semrock, Inc.
Spiricon, Inc.
StockerYale, Inc.
Sunex Inc.
Taboada Research Instruments,
Inc.
Thorlabs, Inc.

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Andor Technology
Asahi Spectra USA Inc.
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Becker & Hickl GmbH
Boston Electronics Corp.
Center for Biophotonics Science
& Technology
Edinburgh Instruments Ltd.
Edmund Optics
Hamamatsu Corp.
id Quantique
LASER COMPONENTS IG, Inc.
Lightspeed Technologies
Newport Corp.

Nikon Instruments Inc.
Novacam Technologies Inc.
OEC
Photonicsonline.com
SensL Technologies Ltd.
Sensovation
Spiricon, Inc.
Thorlabs, Inc.
Varian, Inc.

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Avo Photonics, Inc.
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Edmund Optics
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JT Ingram Sales & Marketing
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Photonicsonline.com
Polymicro Technologies LLC
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Asahi Spectra USA Inc.
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CVI Laser LLC
Edmund Optics
Foreal Spectrum, Inc.
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MPA Crystal Corp.
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Engineering Synthesis Design,
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EXALOS AG
High Q Laser (US), Inc.
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Foreal Spectrum, Inc.
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Lambda Research Optics Inc.
LASER COMPONENTS IG, Inc.
Model Optics, Inc.
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Sunex Inc.
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Inc.

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B&W Tek, Inc.
Bioptigen Inc.
Edinburgh Instruments Ltd.
IMRA America, Inc.
Innovative Photonic Solutions
Newport Corp.
Novacam Technologies Inc.
Nutfield Technology, Inc.
Ocean Optics, Inc.
OEC
OZ Optics Ltd.
Photonic Products Ltd.
Photonicsonline.com
Spiricon, Inc.
Stanford Photonics, Inc.
StockerYale, Inc.
Taboada Research Instruments,
Inc.
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Resist Technology and Processing

B&W Tek, Inc.
LASER COMPONENTS IG, Inc.
Photonicsonline.com

Sensor & Sensor Systems

Avo Photonics, Inc.
B&W Tek, Inc.
Bioptigen Inc.
Boston Electronics Corp.
Center for Biophotonics Science
& Technology
Davin Optronics Ltd.
Edmund Optics
EXALOS AG
Hamamatsu Corp.
Infotonics Technology Center
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Polymicro Technologies LLC
SensL Technologies Ltd.
Sensovation
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Services and Publications (Including Professional Societies)

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Photonicsonline.com

X-Ray Lithography

B&W Tek, Inc.
Photonicsonline.com



Exhibition Hours:

Saturday, 21 January . . . 1:00 pm – 5:00 pm

Sunday, 22 January . . . 10:00 am – 4:00 pm

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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 201–220 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 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.

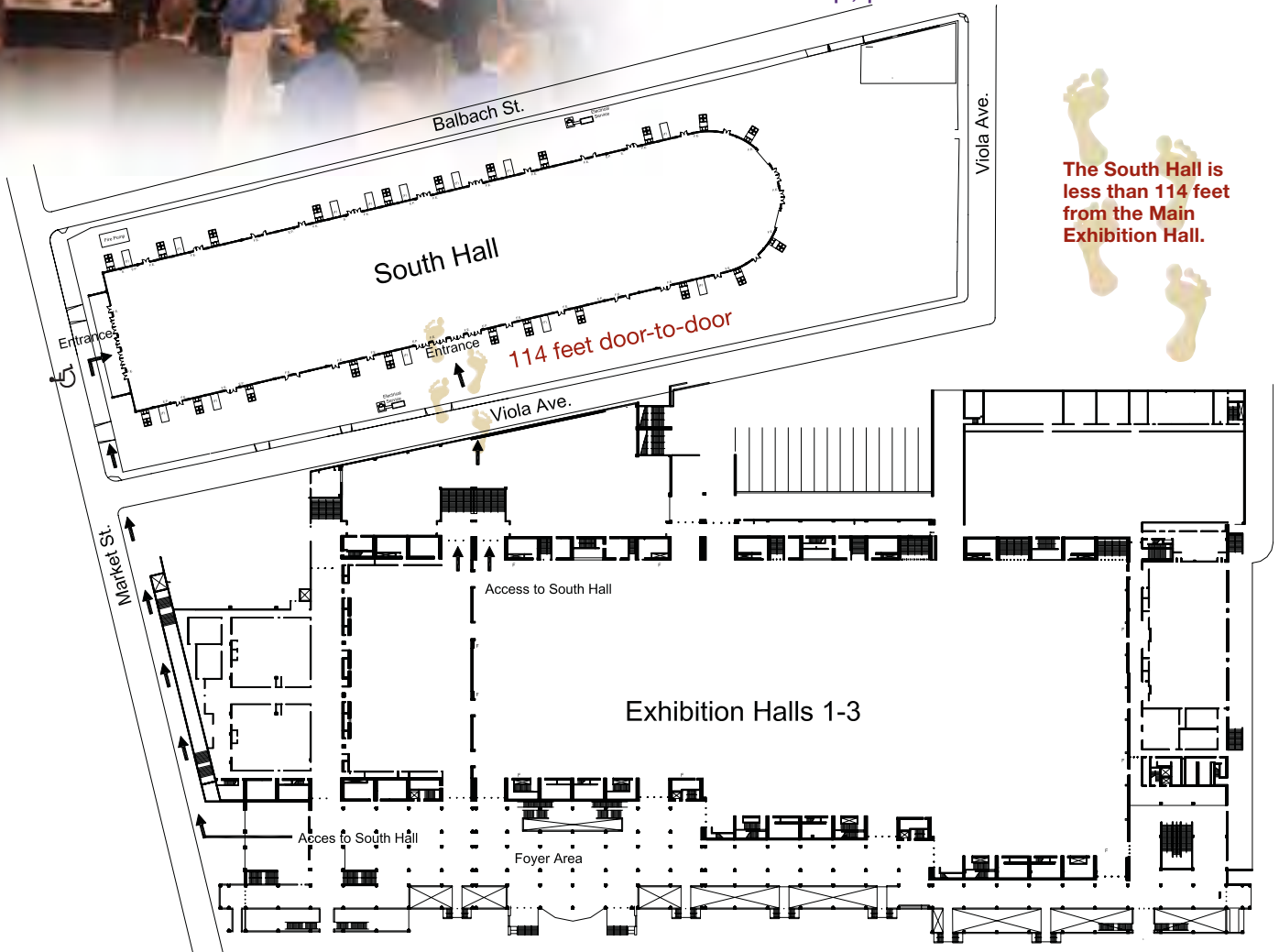
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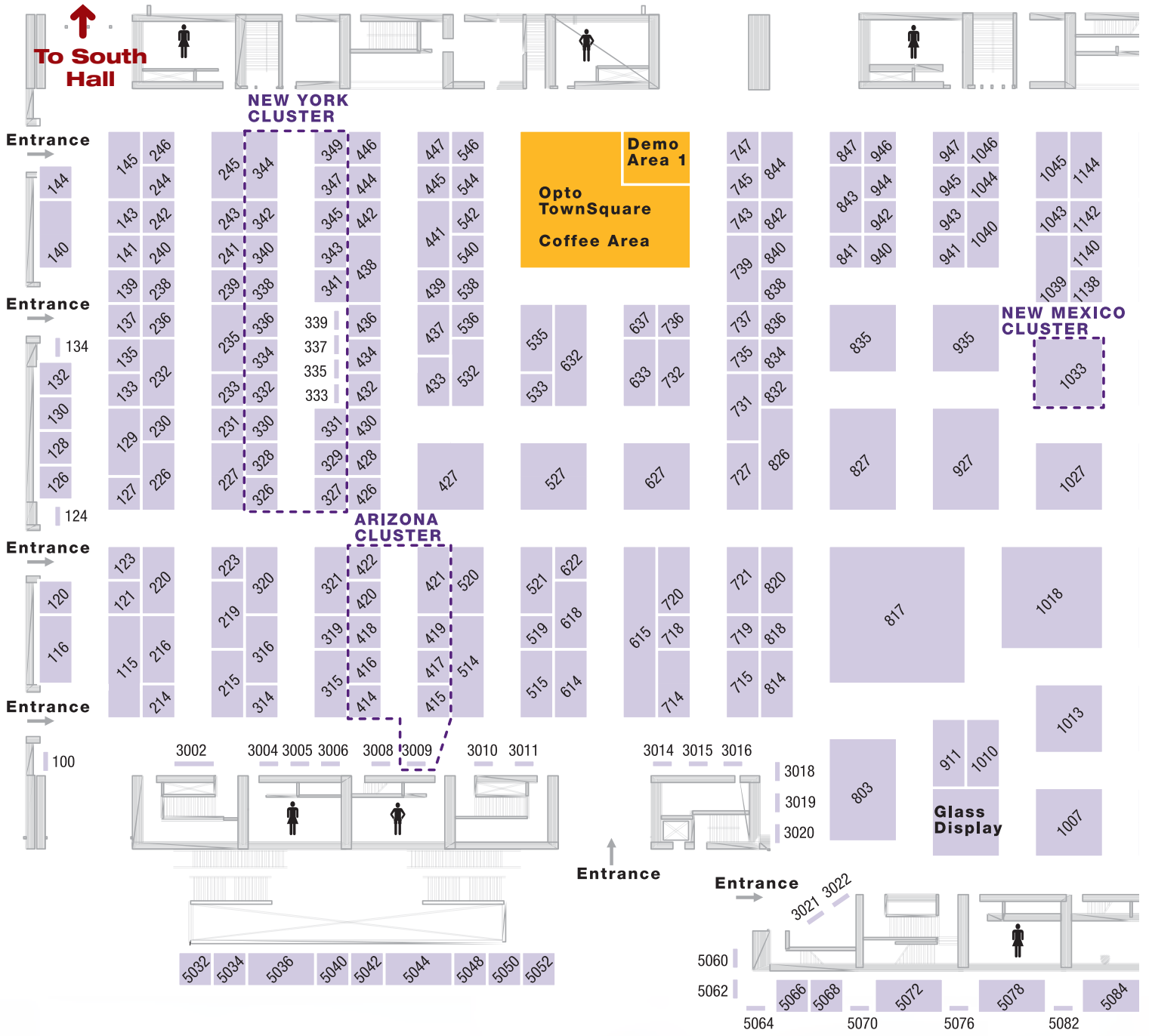
The South Hall is less than 114 feet from the Main Exhibition Hall.

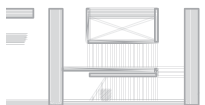
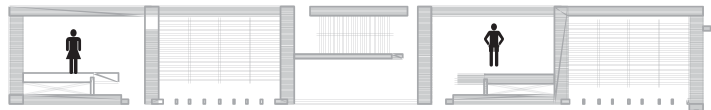
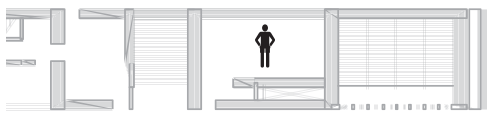
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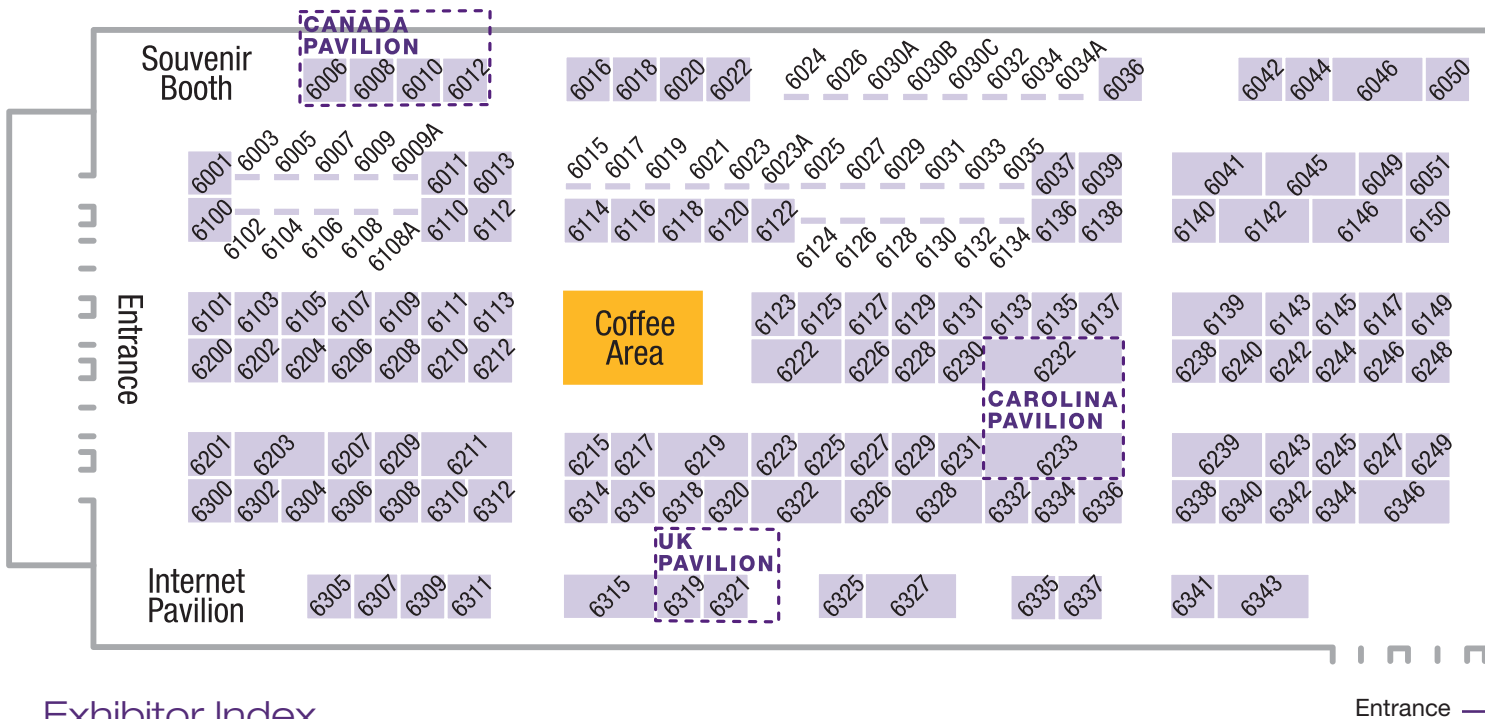
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San Jose Convention Center





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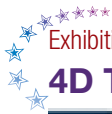
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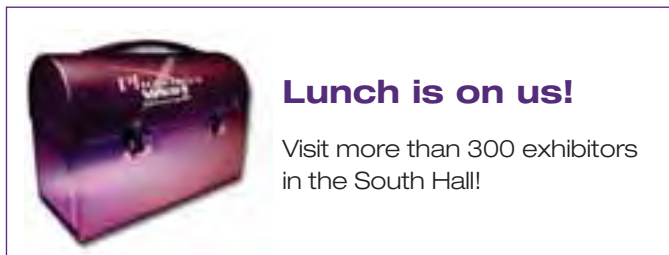
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1430 E 130th St, Chicago, IL, 60633-2399
773/646-3400; fax 773/646-3919
info@ade-usa.com; www.ade-usa.com

#6067

Advance Reproductions Corp

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

#6183

New Product: Large Area Photomasks.

Advance Reproductions is a leading supplier of large area chrome on glass photomasks. We can generate glass plates up to 32 inches (800MM) with line widths down to 2 microns. We also provide film phototools up to 32 X 36 inches. Contact: Steve Alaimo, Sales Manager, stevea@advancerepro.com; Donald Robinson, Sales, drobinson@advancerepro.com.



General Refreshment /IBIOS Technical Group Sponso

Adimec

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

#6287

New Product: Rugged Megapixel Cameras; Shock, vibration, & temperature qualified CCD cameras; COTS; Tailorable.

Adimec is a leading supplier of high performance industrial cameras with over 13 years experience partnering with major OEMs around the world. We have the distinction of serving industry leading companies in three application areas; machine vision, medical and defense imaging. Our experience allows us to produce cameras that have superior image quality, speed and reliability, and deliver a performance advantage to high-end systems. Contact: Gretchen Alper, Sales and Marketing Associate.

Advanced Imaging Magazine

#6270

Cygnus Publishing, 3 Huntington Quadrangle Ste 301W, Melville, NY, 11747
631/845-2700; fax 631/845-2736
questions@advancedimagingpro.com;
www.advancedimagingmag.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.

Advanced Microoptic Systems GmbH

#5089

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

New Product: New flat top homogenizer, periodical/aperiodical performance.

Design, development and fabrication of the refractive microoptics like microlenses, microlens arrays and systems. Contact: Vladimir Leleko, Sales Manager, leleko@amus.de.

Advanced Photonic Crystals #6232, #6233

377 Carowinds Blvd Ste 207, Fort Mill, SC, 29708
803/547-0881; fax 803/547-0723
www.apcrystal.com

New Product: Hydrothermal production of non-linear optical crystals and laser-active ion crystals.

Contact: John Egan, Chief Executive Officer, jegan@apcrystal.com.

Advanced Photonix, Inc.

#315

1240 Avenida Acaso, Camarillo, CA, 93012-8754
805/987-0146; fax 805/484-9935
sales@advancedphotonix.com;
www.advancedphotonix.com

API is a leading supplier of optoelectronic solutions and Terahertz instrumentation to a worldwide OEM customer base. We are a vertically integrated global leader in the development and manufacturing of advanced optoelectronic components, sub-systems and systems for the defense, homeland security, industrial, medical and telecom markets. Our solutions are based on Si,GaAs, InGaAs semiconductor technologies, with Military and Telcordia qualified hybrid packaging for standard and custom products. Contact: Mark Nicklas, Vice President Sales & Marketing, mnicklas@advancedphotonix.com; Adam Tabakian, Director of Sales, atabakian@advancedphotonix.com.

Advanced Thin Films

#1606

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

New Product: ATFilms now offers lithographically patterned optical coatings.

Advanced Thin Films specializes in high quality custom optics and ion beam sputtered optical coatings. We supply edge filters, mirrors, polarizers and crystal coatings for OEM applications. Our products provide superb optical performance in the wavelength range of 200 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 60 years of experience in IBS coatings. Contact: Rob Patterson, Vice-President of Sales, rob@atfilms.com; Ramin Lalezari, President, ramin@atfilms.com.

AEMtec GmbH

#1801

Carl-Scheele-Str 16, Berlin, Germany, 12489
49 30 639273 00; fax 49 30 639273 00
sales@aemtec.com; www.aemtec.com

Aerotech, Inc.

#1627

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

New Product: Ensemble stand-alone motion controller.

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

AF Optical Co.

#542

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

New Product: Celebrating our 10th year anniversary, we are giving away a free Optoform mount at the show.

Manufacturer of Optoform, an erector set for rapid optical setups and prototypes. Manufacturer of wafer inspection microscopes and AFM workstations. Contact: Pam Azevedo, Sales, pam@afoptical.com; Ali Afshari, Chief Executive Officer, ali@afoptical.com.

AFL Telecommunications

#6232, #6233

PO Box 3127, Spartanburg, SC, 29304
864/433-0333; fax 864/433-5363
sales@aftele.com; www.aftele.com

AFL is an industry leading manufacturer of advanced fiber optic terminations required for communications systems and components. AFLs connectivity product portfolio includes lensed fiber tail assemblies, hermetic fiber assemblies, tap couplers and WDM couplers, PLC splitters and fusion splice sleeves. AFL also provides high end Polarization Maintaining (PM) and Single-mode Jumpers and pigtails. Contact: Jay Borer, Business Development, jay.borer@aftele.com; Christy Turner, Customer Service, christina.turner@aftele.com.

Agilent Technologies

#6232, #6233

395 Page Mill Rd, Palo Alto, CA, 94303
800/829-4444; fax 650/752-5000
www.agilent.com

Agilent delivers critical tools and technologies that sense, measure and interpret the physical and biological world. Our innovative solutions enable a wide range of customers in communications, electronics, life sciences and chemical analysis to make technological advancements that drive productivity and improve the way people live and work.

 General Refreshment Sponsor

Agilent Technologies, Inc.

#6362

5301 Stevens Creek Blvd, Santa Clara, CA, 95051-7201

New Product: Small, light weight, high precision, multi-axis monolithic interferometers and beam manipulators.

Agilent has been developing state of the art Laser Interferometer products for over 35 years. As the leader in this industry, we have continually advanced our capabilities in the design and production of opto-mechanical assemblies with a specific focus on the manufacturing of plano optics. These industry leading capabilities are now available to you. Agilent can help bring your designs to market quickly with expertise at every step in the design process from concept to volume production. Contact: Bruce Gallay, US Sales Manager, Bruce_Gallay@Agilent.com.

AgilOptics, Inc.

#1140

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

AI Technology

#6162

70 Washington Rd, Princeton Junction, NJ, 08550-1012
609/799-9388; fax 609/799-9308
ait@aitechnology.com; www.aitechnology.com

New Product: Universal Waffle Pack.

AI Technology manufactures flexible "Stress-free" adhesives, films, pastes and thermal films, gels/grease. Adhesives are electrically conductive or insulating, applicable for die-attach, lid sealing, BGA, multichip modules and wafer lamination. Other products include custom carriers, wafer and UV dicing tapes and UV curing adhesives for optical bonding. The latest developed product is an epoxy flex substrate that is 1/3 the cost of typical high temperature flex circuits. Contact: Tony Bandiero, Sales & Marketing Manager, tbandiero@aitechnology.com.

AIM Specialty Materials

#240

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

Air-Vac Engineering Co., Inc.

#6367

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

New Product: The Onyx29 is our Multifunctional, 2 micron, Semi-Automatic Assembly System.

A manufacturer of high precision assembly systems for the Opto, Photonic, MEMS, RF and Semiconductor markets. The Onyx series of overhead, robotic work stations can be semi or fully-automatic (vision). Upper and lower heated stages are available. One micron resolution (placement). Pick, place, dispense, cure and bond capabilities. Contact: Howard Lasto, West Coast Manager.

AIXTRON-Thomas Swan

#6370

Kackertstr 15-17, Aachen, Germany, 52072
49 241 89090; fax 49 241 890940
info@aixtron.com; www.aixtron.com

AIXTRON is the world-leading manufacturer focusing exclusively on MOVPE and CVD equipment for the deposition of compound semiconductor, multi-component oxides, metals, SiGe and organic materials. Thomas Swan Scientific Equipment is a leading manufacturer of vertical MOCVD equipment. The unique Close Coupled Showerhead MOCVD reactors are available for the manufacture of GaN, GaAs, InP and related materials. Contact: Rainer Beccard, Director Marketing, r.beccard@aixtron.com.

Alfaight, Inc.

#245

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

New Product: Combined Power Module II (CPM-II). Up to 25W output power at 976nm.

Alfaight, Inc. is a technology innovator and manufacturer of high-power diode lasers for industrial, defense and telecommunications markets worldwide. Alfaight's advanced Aluminum-Free Active region (ALFA) diode lasers provide industry-leading efficiency, reliability, power and brightness. Alfaight's current product line includes free-space and fiber-coupled single emitters as well as fiber-coupled multi-emitter pump modules. For more information, visit www.alfaight.com.

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Phone: 858.876.3133

sales@dmp Photonics.com

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Alpes Lasers

#632

Champveyres 2, Neuchatel, Switzerland, CH-2008
41 878 803 041; fax 41 878 803 042
info@alpeslasers.ch; www.apleslasers.com

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.

Alpine Research Optics Corp.

#622

6810 Winchester Cir, Boulder, CO, 80301
303/444-3420; fax 303/444-1680
sales@arocorp.com; www.arocorp.com

Alpine Research Optics, now offering on-line mirrors & polarizers, supplies high performance laser optics & has developed a reputation for manufacturing excellence since 1991. We support a wide range of applications in the areas of Semi, Research & Development, LASIK, Energy Research and Micromachining. Our capabilities in optical fab and optical thin film coatings include: Laser Windows, Laser Mirrors, Partial Reflectors, Polarizers, Beamsplitters, Spherical lenses and Cylindrical lenses. Contact: Rod Schuster, Marketing Manager, rschuster@arocorp.com; Katie White, Inside Sales Manager, kwhite@arocorp.com.

Altos, Inc.

#6222,

#6249

19462 Jasper Hill Rd, Trabuco Canyon, CA, 92679
949/216-9012; fax 949/363-8637
sales@altos-inc.com; www.altos-inc.com

AlumiPlate, Inc.

#6309

8960 Springbrook Rd, Minneapolis, MN, 55433
763/786-3788; fax 763/786-8518
info@alumiplate.com; www.alumiplate.com

Ambios Technology, Inc.

#5139

100 Pioneer St Ste A, Santa Cruz, CA, 95060
831/429-4200; fax 831/427-1160
sales@ambiosotech.com; www.ambiosotech.com

Amplification Technologies, Inc.

#345

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

AMPLITUDE SYSTEMES

#1421

6 allée du doyen Georges Brus, Pessac, France, F-33600
33 5 5646 4060; fax 33 5 5646 0694
info@amplitude-systemes.com; www.amplitude-systemes.com

Amplitude Systemes manufactures a new generation of ultrafast lasers, using direct diode-pumping of Ytterbium doped materials. Main features are small size, ease of use and high reliability. Products include femtosecond oscillators from 20 nJ to 200 nJ (t-Pulse series), as well as high repetition rate femtosecond amplifiers (s-Pulse series). Amplitude Technologies manufactures high energy Ti:Sapphire femtosecond amplifiers, with the highest peak power available today. Contact: Eric Mottay, President; Stephane Gueguen, Sales Manager, gueguen@amplitude-systemes.com.

Analog Modules, Inc.

#1635

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

New Product: AMIs Polyphase Laser Diode Driver is designed to power pulsed high current laser diodes.

Founded in 1979, Analog Modules is an ISO 9001 certified company located in Longwood, (Orlando) FL 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. Laser Diode Driver, quadrant detector. Contact: Tim Ayres, Product Manager, ami@analogmodules.com; Kelly Pacy, Sales Support Manager, ami@analogmodules.com.

Andor Technology

#1107

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

New Product: The Andor Luca is a high performance cost-effective EMCCD camera suitable for many applications.

Andor Technology plc develops and manufactures instruments for the global spectroscopy and scientific imaging markets. Our range of scientific camera imaging systems are used throughout the world for academic, industrial and government research; they are used to monitor and control industrial processes. We manufacture and integrate CCDs, EMCCDs, Spectrographs and accessories into total solutions. In 2006 Andor is launching a new products and accessories catalog. Contact: Chris Calling, US Sales Director, c.calling@andor.com; Aislinn Rice, RoW Sales Director, a.rice@andor.com.

Andover Corp.

#1833

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

New Product: Hard, first-surface bandpass filters.

Andover Corporation is a leading manufacturer of optical interference filters and optical coatings. Products include narrowband and wideband filters, dichroics, neutral density filters, longwave and shortwave pass filters, hot and cold mirrors, color additive and subtractive filters, image quality filters, filters for astronomical observations and many more. Visit www.andcorp.com. Contact: Mark Kfoury, Sales Manager, sales@andcorp.com.

Anson Optical Products Co., Ltd.

#5133

Rm 1 9F Cheung Tat Ctr, 18 Cheung Lee St, Chaiwan, Hong Kong,
852 27570168; fax 852 27962568
info@ansonoptical.com.hk; www.ansonoptical.com.hk

New Product: Aspheric, fresnel & cylindrical type lens.

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

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Anteryon BV

#441

RU-p Rm 118, Zwaanstr 2a, Eindhoven, The Netherlands, NL-5651 CA
31 40 278 3257; fax 31 40 278 4515
info@anteryon.com; www.anteryon.com

New Product: New ring laser module.

Anteryon has a history of over 20 years on the edge of technology. It has proven product development and manufacturing capability. Due to a combination of three key technologies; replication technology; opto-mechanical assembly and surface finishing technology. Anteryon is able to provide innovative solutions in the product/market segments industrial optics, imaging & display and data & telecom. Contact: Gerard Dohmen, Vice President, Optical Devices, gerard.dohmen@anteryon.philips.com.

Apogee Instruments, Inc.

#242

11760 Atwood Rd Ste 4, Auburn, CA, 95603-9075
530/888-0500; fax 530/888-0540
sales@ccd.com; www.ccd.com

Apollo Instruments, Inc.

#840

18019 Sky Park Cir Ste F, Irvine, CA, 92614
949/756-3111; fax 949/756-9166
contact@apolloinstruments.com;
www.apolloinstruments.com

New Product: High power, high brightness turnkey fiber-coupled or collimated laser diode system, S1500-xxx-10.

Manufacturer and supplier of high-power, high-brightness fiber-coupled or collimated laser diode systems (up to 1.5KW) 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, Vice-President of Marketing, pwang@apolloinstruments.com.

Apollo Optical Systems, LLC

#6175

330 Clay Rd, Rochester, NY, 14623
585/272-6173; fax 585/272-6177
gerringer@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, Vice President of Manufacturing, Tribastone@ApolloOptical.com.

APPLIED IMAGE Group

#426

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

New Product: New QA-77 Digital Camera High Res chart, based on the ISO-12233, has higher resolution needed today.

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Applied Optronics

#1138

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

Applied Surface Technologies

#5088

15 Hawthorne Dr, New Providence, NJ, 07974
908/404-6675; fax 908/404-7475
info@co2clean.com; www.co2clean.com

We demonstrate precision cleaning using the CO2 Snow Jet, a safe & 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 below 0.05 micron) and organic residues. CO2 Snow cleans substrates, optical and laser parts, fiber-optics 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.

Applied Technology Associates

#1033

1300 Britt St SE, Albuquerque, NM, 87123
505/767-1200; fax 505/768-1379
sales@aptec.com; www.aptec.com

New Product: Compact Optical IRU with 70 nano-radian stability for precision line-of-sight optical stabilization.

Applied Technology Associates (ATA) is a leader in precision sensing, measurement and controls, pointing & tracking. ATA produces space qualified sensors, optical inertial reference units stable to 20 nano-radians and high performance fast steering mirrors for directed energy and laser com. ATA offers sensors/subsystems for vibration and jitter measurement to <35 nano-radians. Aerospace testing services include inertial test, thermal cycling, EMI/EMC, environmental and space qualification. Contact: Jerry Harris, Director Strategic Marketing, jharris@aptec.com; Steve Dolbey, Director Integration and Test Services, dolbey@aptec.com.

APS Optics

#3031

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

New Product: Ophthalmic optics, quartz channel rods.

Optical systems design and production, lens for microscope with resolution less than 1 micron, optical components production, opto-mechanical unit, metal substrates for mirrors, Gonio lenses and prisms. Contact: Arkadiy Farberov, General Manager, apsoptics@usa.net.

Arasor Corp.

#6376

411 Clyde Ave, Mountain View, CA, 94043
650/988-9500; fax 650/314-1709
mrleehuang@arasor.net; www.arasor.net

Archer OpTx, Inc.

#3025

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

Arden Photonics Ltd. #6232, #6233

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

Arden Photonics manufactures and sells innovative products and services to the Photonics industry, including wavefront sensor for optical and surface metrology; laser beam profiler; high magnification interferometer for small objects such as optical fibre ends; a modal profiler for measuring MPD and Encircled Flux in multimode optical fibres; multimode fiber optic patchcords for controlling modal launch conditions. Services include Market research, Optical design, Data analysis. Contact: David Robinson, david@ardenphotonics.com.

Arges GmbH #6037

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

Argyle International Inc. #818

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

Argyle International supplies optical components from lenses to light pipes, windows to prisms. Custom designs are our specialty. We can supply production quantities and at the same time get your prototypes in a week. Argyle International, a US corporation, runs its own factory in China. We have many years of experience in all aspects of optics and can deliver on time high quality components at extremely good prices and low anxiety. Contact us in Princeton, NJ and get the real deal. Contact: Arthur Gillman, President, agillman@ArgyleOptics.com; Lian Shentu, Vice President, lshentu@ArgyleOptics.com.

Ariel Optics, Inc. #5105

6935 N Slocum Rd, Ontario, NY, 14519
315/524-8211; fax 315/524-9662
info@arielloptics.com; www.arielloptics.com

Ariel Optics specializes in the manufacture of precision and ultra plano optical components. Products include Prisms, Wedges, Light Pipes, Beam Splitters, Mirrors and Reference Flats with dimensions ranging from 1mm to 500mm. Quantities from prototype to mid-volume production. Average lead times are less than 4 weeks with expedited deliveries on request Contact: Robb Sawyer, Marketing Manager, robb@arielloptics.com.

**Army Research Lab.,
EO&P Div.** #6232, #6233

2800 Powder Mill Rd, Adelphi, MD, 20783
301/394-5798; fax 301/394-2273
wchang@arl.army.mil; www.arl.army.mil

Arrayed Fiberoptics #6005

1267 Borregas Ave, Sunnyvale, CA, 94089
408/745-1900; fax 408/228-8772
info@arrayedfiberoptics.com; www.arrayedfiberoptics.com
New Product: Fiber Arrays-linear/2D, singlemode, multimode, PM. Collimator Arrays-linear/2D configurations.

Arrayed Fiberoptics Corporation has developed and patented a revolutionary technology for producing a variety of fiberoptic components with dramatically better performance, size, reliability and cost. Products include Fiber Arrays, Collimator Arrays and additional integrated components. Configurations available in linear, 2-Dimensional, singlemode, multi-mode, polarization maintaining, high-power and other custom configurations. Contact: Ben Connors, Executive Vice President, ben.connors@arrayedfiberoptics.com.

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Asahi Spectra USA Inc.

#6340

23505 Crenshaw Blvd Ste 225, Torrance, CA, 90505
310/325-5511; fax 310/325-8974
info@asahi-spectra.com; www.asahi-spectra.com

New Product: Six-channel filter polychromator, Laser line bandpass filter FWHM1.5nm, Xenon light source 100W/300W.

Asahi Spectra supplies high-end optical filters and instruments for biomedical optics, fluorescence microscopy, Raman research, any lasers, lithography or astronomy. Six-channel filter polychromator is used as a flow cytometer or fluorescence measuring unit. Laser line bandpass filter (FWHM:1.5nm) has extremely narrow and high transmission, and completely blocks noise arising at the next nanometer. Xenon light source 100W/300W can emit intensive light of specific wavelength with optical filters.

ASI/Applied Scientific Instrumentation

#6001

29391 W Enid Rd, Eugene, OR, 97402
541/461-8181; fax 541/461-4018
john@asiimaging.com; www.asiimaging.com

New Product: Dig-Buster(c) Thin-Film Inspection System automatically flags potential defects/scratches and digs.

ASI manufactures systems for automated inspection of thin film coatings. We also provide solutions for: Micropositioning & microscope automation. Our products include: Closed-loop DC servomotor XYZ stages, stages with integrated piezos for ultra-precise Z stacks, laser feedback systems for maintaining focus stability, high-speed filterwheels, shuttering devices, monochromators, video-based autofocus systems, cameras, micromanipulators, and custom solutions for OEM's and end users. Contact: John Zemek, john@asiimaging.com; Spencer Doidge, spencer@asiimaging.com.

ASML

#5052

8555 S River Pky, Tempe, AZ, 85284
480/383-4422; fax 480/383-3985
infomation@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, Sales, ASML Optics.

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: Off-axis parabolic reflectors and axicons.

asphericon, located in Jena/Germany, produces complex optical components such as aspheres, parabolic reflectors and axicons, using CNC machinery. The basis of the production process is a technology which simulates polishing operations and controls CNC grinding and polishing machines. This process enables to make high level aspheres for high standard optical devices as well as high quantity production for mass market applications. Contact: Tobias Moeller, Key Account Manager, t.moeller@asphericon.com; Alexander Zschaebitz, Commercial Director, a.zschaebitz@asphericon.com.

ATI Optique

#1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
knorbrothen@laser-components.com;
www.lasercomponents.com

New Product: ATI Optique has a range of PM patchcords/ assemblies, Fiber Collimators and Fiber Tap Couplers.

ATI Optique offers a unique choice of technologies passive components for optical fibers with a strong proprietary knowledge base in the manufacturing of couplers and Wavelength Division Multiplexers (WDM). Introduction of WDM networks puts ATI in a strategic position in the marketplace. Whatever the application we are able to identify the solution best suited for the fiber optic user. Contact: Ken Norbrothen, Sales Engineer, knorbrothen@laser-components.com; Gary Hayes, Chief Executive Officer, hayes@laser-components.com.

attocube systems AG

#1801

Koeniginstr 11 a, Muenchen, Germany, 80539
49 89 28 77 80 90; fax 49 89 28 77 80 919
info@attocube.com; www.attocube.com

New Product: The world's smallest nano-rotation stage.

attocube systems AG manufactures and distributes a complete line of easy-to-use scanning probe microscopes and nanopositioning systems for temperatures ranging from 300K down to 10mK! The innovative nanopositioners are also compatible with HV and UHV environments as well as high magnetic fields up to 15T. Contact: Angelika Kueng, angelika.kueng@attocube.com.

Auxora Inc.

#6186

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

New Product: UV, Visible and IR Optical Spectral Filters and Beamsplitters.

Auxora manufactures and supplies high-performance optical components for the Telecom, military/security, and sensing/monitoring industries. Auxora provides highly reliable and cost effective product solutions and engineering services unique to customers' application based on expertise and capability enabled by its proprietary NanoCode™ thin film technology.

Avantes, Inc.

#1509

9769 W 119th Dr, Broomfield, CO, 80021
303/410-8668; fax 303/410-8669
info@avantes.com; www.avantes.com

New Product: AvaSpec-3648 Spectrometer - high resolution, 200-1100 nm - short integration, Bluetooth® & USB2.

Avantes manufactures portable spectrometer systems for UV, VIS, & NIR measurement from 200 to 2200 nm. Systems include choice of 7 detector arrays and communication options including USB, USB2, Bluetooth®, and RS232. We also offer light sources, fiberoptic cables & probes, and accessories. We welcome your custom engineering questions and OEM inquiries. Avantes has thousands of spectrometers in the field and has experienced Application Engineers to help you find your Solutions in Spectroscopy®. Contact: Sales Manager, info@avantes.com.

Avo Photonics, Inc.

#6178

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

New Product: Avo has added 500 sq ft of class 100 clean space to its 6,000 sq ft for advanced manufacturing.

Avo Photonics provides contract manufacturing services for photonic and microelectronic customers in the communications, military, aerospace; medical markets. With state-of-the-art equipment and design expertise for optical and RF products, we can support product development from concept through production. Prototyping through volume manufacturing, electro-optic performance testing, design, qualification and reliability testing; lower-cost manufacturing are all part of Avo's standard offerings. Contact: Paul A. Magill, Chief Technical Officer, pmagill@avophotonics.com; Mike Vinson, Vice President of Business Development, mvinson@avophotonics.com.

Axcel Photonics Inc.

#6101

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

New Product: 10 Watts of power from a single 400µm emitter.

Axcel Photonics, Inc. is an optical component company specializing in the development, manufacturing and marketing of high power diode lasers. Our product lines include single-mode and multi-mode 980nm pumps and multimode lasers for solid-state laser pumping, medical, imaging and spectroscopy applications in wavelengths from 785-1064nm and power ranges from 200mW to 10W. The lasers are available as chips, chips on submount and packaged modules. Contact: Kelly Crampton, Director of Sales and Marketing, krcrampton@axcelphotonics.com; Tom Yang, Director of Asian Sales/Product Manager, tyang@axcelphotonics.com.

Axometrics, Inc.

#135

515 Sparkman Dr, Huntsville, AL, 35763
256/704-3332; fax 256/704-6002
info@axometrics.com; www.axometrics.com

Axometrics manufactures precision polarimeters for characterizing optical elements, including LCOS and LCD components. The AxoScan Mueller matrix polarimeter provides rapid measurements of retardance, polarizer properties and depolarization effects, including circular effects. Measurements on LCD panels include cell gap, twist angle, pre-tilt angle and rubbing direction. These systems are ideally suited for both laboratory and manufacturing environments. Contact: Charles Davis, Chief Executive Officer/President, charles.davis@axometrics.com; Matthew Smith, Chief Technical Officer, matt.smith@axometrics.com.



Axsys Technologies

#6251

2909 Waterview Dr, Rochester Hills, MI, 48309-4600
248/293-2900; fax 248/293-2968
info@axsys.com; www.axsys.com

Axsys Technologies is a vertically integrated supplier of precision optical and motion control components and assemblies for high-technology applications serving the aerospace, defense, semiconductor, graphic arts, and health imaging markets. Products include Precision Mechanical Stages, Air-Bearing Scanners, Infrared Optical Assemblies, lightweight Telescope Optics, Fast Steering Mirrors and Laser AutoFocus sensors. Contact: Anne Ruby, Customer Service Manager, aruby@axsys.com.



Ayase America, Inc.

#6078

2880 Zanker Rd Ste 203, San Jose, CA, 95134
408/954-7340; fax 408/954-7341
info@ayaseamerica.com; www.ayaseamerica.com

New Product: Announcing extremely small form factor laser diodes with internal automatic power control circuits.

Ayase America, San Jose, CA and subsidiary Ayase Japan, representing quality manufacturers based in Asia, offer complete lines of semiconductor laser diodes, molded optics, mirrors and fully integrated electro-optic assemblies. At Photonics West 2006, see the revolutionary APC Laser Diodes with APC circuits integrated into 5.6mm and 3.3mm TO packages. Contact: Kevin M. Wells, Director of Sales, kwells@ayaseamerica.com; Michiko Toyama, Sales Administrator, mtoyama@ayaseamerica.com.

Azure Photonics Co.

#6382

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



General Refreshment Sponsor

B&W Tek, Inc.

#731

825 Dawson Dr Ste 1, Newark, DE, 19713
302/368-7824; fax 302/368-7830
info@bwtek.com; www.bwtek.com

BW Tek is a manufacturer of OEM and end user lasers and spectroscopic instrumentation for analytical, bio-medical, industrial, and other applications. Products include UV/VIS/NIR/fluorescence/Raman spectrometers, diode-pumped solid-state lasers, and high power diode/fiber lasers. Output power of 1 mW - 200 W in 300 - 2500nm is available. Custom spectroscopic system design and development is also available. We are ISO9001 & ISO13485 certified. For more information, please visit our website: www.bwtek.com

Bandwidth Semiconductor, LLC

#6177

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

Barr Associates, Inc.

#233

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

Barr Associates, Inc. offers custom optical interference filters and coatings over the spectral range of 200nm to 30 microns, for use in a wide variety of applications including clinical/analytical, biotechnology, spectroscopy, semiconductor processing, metrology, environmental monitoring, color measurement, aerospace, defense, astronomy, and telecommunications. In addition to providing all of the standard optical filter types, other custom types offered include excitation/emission, steep edge/laser-rejection, array, linear-variable, patterned, rugate-notch, RGB, color-correction, ultra-narrow bandpass, solderable-metallized, and image-quality. Barr deploys a wide range of coating deposition technologies and manufacturing capacities to service the leading companies and innovators across diverse markets, in both small prototype quantity and large production volume. As the world's largest independent designer and manufacturer of precision thin film coatings and optical filter solutions, Barr has an unmatched heritage of success spanning over 30 years. Let Barr's engineering expertise help you find the best optical filter solution for your application. Contact: George Minott, Commercial Group Manager, gminott@barrassociates.com.

Becker & Hickl GmbH

#632

Nahmitzer Damm 30, Berlin, Germany, D-12277
49 30 787 5632; fax 49 30 787 5734
b_and_h@becker-hickl.de; www.becker-hickl.de

New Product: Simple-Tau, complete TCSPC and detector control, cooled fast PMT, compatible with PC laptops.

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, devaney@boselec.com.

Beijing Century Sunny Technology Co., Ltd.

#6091

No 65 Jiancai W Rd, Xi Sanqi Haidian, Beijing, China, 100096
86 10 82951637; fax 86 10 82930969
century-sunny@263.net; www.century-sunny.com

At present, high-speed optical scanner series, laser scanning control card series, control, software series and solid laser supply series are the main products of our company.

Beijing Delfa Optoelectronics Inc.

#6080

Rm 808 Bldg 8 Xinqidianjiayuan, No 5 Changchungqiao Rd,
Haidian District Beijing, China, 100089
86 10 82561778; fax 86 10 82563358
sales@delfa.com.cn; www.delfa.com.cn

Beijing Delfa is a leading manufacturer of optical components to industry and commercial, which includes visible and infrared elements and systems & coatings.

Berliner Glas KGaA

#1745

Waldkraiberstr 5, Berlin, Germany, 12347
49 30 609050; fax 49 30 60905 100
info@berliner Glas.de; www.berliner Glas.de

New Product: High-damage threshold UV-Optics for laser application.

Berliner Glas offers a broad variety of precision thin-film coated optical components, electro-optical assemblies, opto-mechanical modules and complex 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. Shortest product introduction phases. In addition, Berliner Glas offers housing technology for MEMS, Interposer and innovative display front panels for various applications. Contact: Fred Doss, Sales Manager—Precision Optics, fdoss@berliner Glas.de; Armin Althaus, Management Board—Photonics Division, Marketing and Sales, althaus@berliner Glas.de.

Berliner Glas US

#1745

117 Underwood Rd, Williamsburg, VA, 23185
757/229-9368; fax 757/229-5213
mwenzler@berliner Glas.de; www.berliner Glas.com

New Product: UV Optics for laser application.

Berliner Glas US, a company in the BERLINER GLAS GROUP, offers a broad variety of precision thin-film coated optical components, electro-optical assemblies, opto-mechanical modules and complex optical systems from design to series production. The range of services comprises the whole process chain incl. clean-room environment and individual measurement set-up. For shortest product introduction phases. In addition, BERLINER GLAS GROUP offers wafer-level packaging of MEMS/MOEMS. Contact: Fred Doss, Sales manager Precision Optics, fdoss@berliner Glas.de; Martin F. Wenzler, Senior Manager, mwenzler@berliner Glas.com.

Bid Service

#3028

225 Willowbrook Rd, Freehold, NJ, 07728
732/863-9500; fax 732/863-1255
sales@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, bobm@bidservice.com; Roger Shupe, General Manager, roger@bidservice.com.

Big Sky Laser Technologies, Inc. #215

601 Haggerty Ln, Bozeman, MT, 59715
406/586-0131; fax 406/568-2924
info@bigskylaser.com; www.bigskylaser.com

New Product: Centurion diode pumped pulsed Nd:YAG laser. 45mJ, 100Hz, 1064nm plus all harmonics. Air-cooled.

North American headquarters of the Quantel group. Manufactures pulsed solid-state lasers and accessories for scientific and OEM industrial, medical and military applications. Applications include PIV, LIBS, LIF, semiconductor processing, ICP sample generation and many others. Contact: Neal Montgomery, Sales and Marketing, neal@bigskylaser.com.

Biomedical Photometrics Inc./ GeneFocus #6008

A12-550 Parkside Dr, Waterloo, ON, Canada, N2L 5V4
519/886-9013; fax 519/886-5300
info@confocal.com; www.confocal.com

The TISSUEScope™, based on patented MACROscope® confocal laser scanning technology, is an integrated confocal laser scanning system for fluorescence, brightfield and reflected light digital imaging of tissue and tissue microarrays at submicron resolution. BPI and GeneFocus® products are used around the world by leading organizations in genomics, proteomics and laboratory medicine for imaging of microarrays, tissue sections, cells, and live specimens. Visit www.confocal.com for product specifications.

Bioptigen Inc. #6107

PO Box 13569, Durham, NC, 27709
828/495-5100; fax 919/572-6584
ebuckland@bioptigen.com; www.bioptigen.com

New Product: High speed FD-OCT systems for biomedical imaging at 820 nm and 1310 nm.

Bioptigen is advancing 3D optical imaging systems for pre-clinical pharma, biotech and biomedical applications. Bioptigen's non-invasive designs are uniquely suited to in vivo, volumetric, real-time imaging of small animal models at tissue-level resolution. Bioptigen's technology significantly reduces the need for surgical histology in pre-clinical drug efficacy and toxicology testing and offers unmatched dynamic imaging capabilities for functional genomics and tissue engineering research. Contact: Eric Buckland, President and Chief Executive Officer, info@bioptigen.com.

Bitswave, Inc. #6226

4411 Bluebonnet Dr Ste 106, Stafford, TX, 77477
281/277-8689; fax 281/277-8677
rl@bitswave-us.com; www.bitswave-us.com

Bitswave, Inc., founded in 2001 in Houston, Texas, is a world leader specializing in optical equipment, embedded system, and RF devices development. Bitswave products include high-speed laser distance sensors (up to 265 kpsps) with Ethernet and wireless connectivity, wireless data communication networks, Ethernet-based data acquisition device, and moisture/dielectric measurement systems. Bitswave also designs and manufactures customized optical distance sensors and various RF data transmission devices with operating frequency from 27 MHz to 12 GHz.

BIZI International #6104

300 Potash Hill Rd, Tyngsboro, MA, 01879
978/649-0722; fax 978/649-7862
www.bizitestequipment.com

New Product: A Global Exchange for Quality Pre-owned Test and Measurement Equipment.

BIZI International's Test & Measurement division is a resource for resellers, integrators, maintenance organizations and commercial accounts that want to buy, sell or trade used test and measurement products. We carry a full range of used test equipment from manufacturers such as Agilent / HP, Tektronix, Fluke, Advantest, Keithley, Rohde & Schwarz, Fujikura, GN NetTest, Instek, California Instruments, LeCroy, Acterna / TTC and others.

Blue Hill Optical Technologies #6230

480 Washington St #7, Norwood, MA, 02062
781/255 1064; fax 781/255-1065
info@bluehilloptical.com; www.bluehilloptical.com

Blue Hill is a highly motivated and effective photonics product distributor located near Boston. We are dedicated to strong sales & technical support of optical products & services across North America. Our portfolio includes solid state, gas & diode lasers, Picosecond lasers, standard & custom coatings & turnkey optics, scan products, power and energy measurement products, laser compliance consulting services & more. Please stop by with your questions & see innovative products in action. Contact: Phil Barrows, President, pbarrows@bluehilloptical.com.

Blue Sky Research #515

1537 Centre Pointe Dr, Milpitas, CA, 95035
408/941-6068; fax 408/941-6069
sales@blueskyresearch.com; www.blueskyresearch.com

New Product: Chromalase 532™ - featuring predictable, noise of < 0.5% from a 20mW, 532nm laser or 10mW ex-fiber.

Blue Sky manufacture high performance VPSL Circulaser® product line featuring circular beam, low-divergence, high brightness laser diodes in industry standard TO cans. We produce collimated laser assemblies and single-mode fiber coupled devices. Wavelengths from 375nm up to 980nm including red and I.R. lasers. Blue Sky, Instrument Lasers expand on our VPSL lasers to provide excellent power and beam quality from free-space or fiber coupled laser instruments for violet, blue, green, red and I.R. Contact: Chris Gladding, President, cgladding@blueskyresearch.com; Cara Prunty, Sales Executive, cara@blueskyresearch.com.

Bookham, Inc. #1727

3640 Westwind Blvd, Santa Rosa, CA, 95403
707/636-1100; fax 707/636-1119
sales@bookham.com; www.bookham.com

Bookham offers ColorLoc™ thin-film optical components for use in Projection Display devices. Products include color wheels, UV/IR filters, light pipes, dichroic filters and LED RGB recombine-filters. Bookham is the only company using fully automated robotics to produce and assemble color wheels for improved performance, reliability-of-supply and better balanced wheel/motor using SILKulv (ultra-low-vibration) technology. Our patented AED (advanced energetic deposition) process enables next generation optics.

Bookham, Inc.

#1727

Binzstr 17, Zurich, Switzerland, 8048
41 44 455 8787; fax 41 44 455 8559
highpower@bookham.com; www.bookham.com

New Product: 7W MM Pump, SHG Pump, 4W CaTV Pump, 20% fill factor conduction cooled bars, 2.4kW 9xxnm Stack.

With over 20 years' experience of developing and manufacturing large volumes of laser diodes, Bookham is leading the market regarding power, brightness and reliability. The offering ranges from high brightness single emitters and modules to high power bars and stacks for pumping Fiber Lasers, Disc Lasers, Nd:Yag Lasers and Frequency Doubling, as well as Direct Diode Systems. These products are utilized for the most demanding applications in industrial, medical, printing, defense and aerospace.

Boston Electronics Corp.

#632

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

New Product: New Si APD for photon counting.

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.

Boston Micromachines Corp.

#6399

108 Water St, Watertown, MA, 02472
617/926-4178; fax 617/926-7996
info@bostonmicromachines.com;
www.bostonmicromachines.com

Boulder Nonlinear Systems, Inc.

#1604

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
520/721-0500; fax 520/721-9630
info@breault.com; www.breault.com

New Product: ASAP 2005: the capability, flexibility, speed and accuracy to turn visions into products.

Breault Research Organization (BRO) is a full-service optical engineering firm providing software, engineering services and training to turn creative visions into working prototypes. BRO's Advanced Systems Analysis Program (ASAP) is the time-proven industry standard in optical engineering software. Over 20 years of continuous development allows ASAP to simulate the physics of more optical systems than any other program available. Contact: Jennifer Kuhlman, Software Sales Representative, jkuhlman@breault.com; Michael Frate, Engineering Services Sales Representative, mfrate@breault.com.

Brewer Science, Inc.

#5101

2401 Brewer Dr, Rolla, MO, 65401
573/364-0300; fax 573/458-4372
smdinfo@brewerscience.com; www.brewerscience.com

An integrated, global company, Brewer Science manufactures chemicals and equipment for the optoelectronic, microelectronics and MEMS industries. Materials include lift-off layers, temporary etch protective coatings, optical coatings, electron beam resists, anti-reflective coatings (ARC) for advanced lithography processes. Equipment includes spin coaters, bake/cure equipment, wafer processing systems and contact planarization technology. Prototype/moderate volume coating services are offered. Contact: Alex Smith, Account Manager, asmith@brewerscience.com; Lindell Widger, Sales & Marketing Manager, Equipment Business Group, lindell.widger@brewerscience.com.

Bright Crystals Technology, Inc.

#6085

PO Box 733 No 1 Hongsongyuan, Dongba Chaoyang Dist, Beijing, China, 100018
86 10 6549 2965; fax 86 10 6549 2173
ma@brightcrystals.com; www.brightcrystals.com
Crystals: Quartz, Ktp, Cr: LiSAE, YVO4, MgF2, CaF2, CaF2, Polycrystalline SPINEL, etc.

Bright Solutions SRL

#5071

Via Artigiani 27, Cura Carpignano, Italy, 27010
39 0382 583091; fax 39 0382 583690
g.piccinno@brightsolutions.com; www.brightsolutions.it
New Product: Our Luce offers 10-100kHz, 1064nm Harmonics for marking and micromachining.

High power fiber coupled modules with output power up to 100W in wavelengths of 808nm, 915nm, 940nm and 980nm. Production, air-cooled nanosecond 1µm lasers with 1MW of peak power, such as the Wedge laser, used for specialty marking and micromachining and the Luce laser that is a short pulsed marking laser. Contact: Giuliano Piccinno, President, info@rpmclasers.com.

Brighten Optics Ltd

#231

#150-11880 Hammersmith Way, Richmond, BC, Canada, V7A 5C8
604/241-9586; fax 604/729-6283
sales@brightenoptics.com; www.brightenoptics.com

Provides high precision off-shelf and custom optics and design services for laser, medical and fiber optics industry. Offers sphere and asphere lenses, prisms, filters, cylindrical lenses, wave plates, wedges, fiber pigtailed collimators and DPSS lasers. Dimension: 1mm-400mm. Material used: quartz, LiNbO3, YVO4, Ge, Si, MgF2, CaF2, ZnS and ZnSe. Contact: Benjamin Chen, President, ben@brightenoptics.com; Lynn Wang, Sales, lynn@brightenoptics.com.

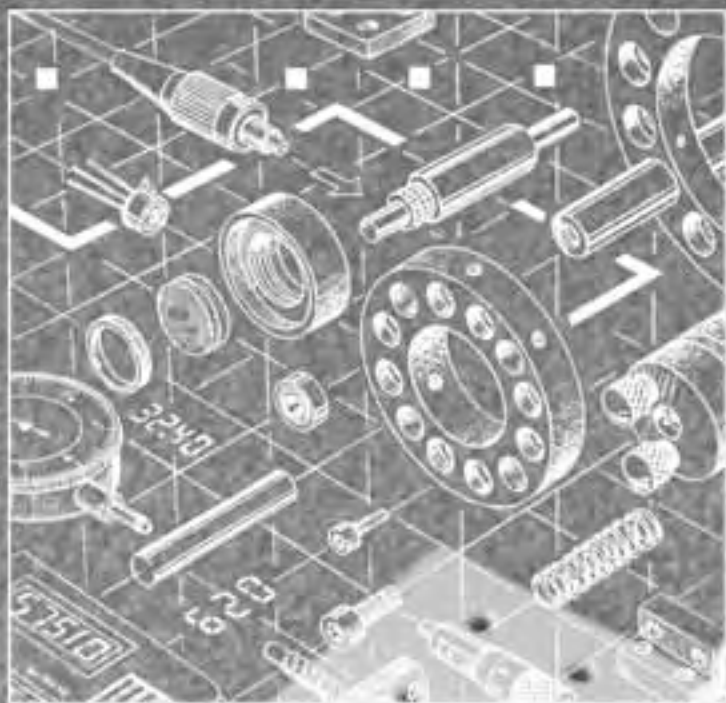
Optoform

THE OPTOMECHANICAL ERECTOR SET

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Come and play with our latest gadgets

Now Hiring



BOOTH 542



AF OPTICAL INC.

45268 Industrial Drive, Fremont, CA 94538 web: <http://www.optoform.com>
(510) 623-9716 Phone (510) 623-9726 Fax email: sales@afoptical.com

Brimrose Corp. of America

#533

Hunt Valley Loveton Center, # 19 Loveton Circle,
Sparks, MD, 21152-9201
410/472-7070; fax 410/472-7960
office@brimrose.com; www.brimrose.com

Active components: Tunable Filters, Modulators, Deflectors, Frequency Shifters, QSwitches, Mode-lockers & Cavity Dumpers. Telecommunications: Optical Switches, Fiber Pigtailed Modulators, Frequency Shifters, Recirculating Loop Systems, Fiber Collimators and Focusers. Other: AOTF Imaging Systems, Imaging & NIR Spectrometers, Miniature Green/YAG Laser, Temperature Stabilized DPSS Green and 1064nm Laser series. Newest Product: Laser Vibrometer measuring amplitude and frequency of vibrations. Contact: Jolanta I. Rosemeier, Manager AO Division, jsoos@brimrose.com; Daniel Yang, Manager AO Sales Division, zyang@brimrose.com.

Bristol Instruments, Inc.

#6110

10 E Main St, Victor, NY, 14564
585/924-2620
info@bristol-inst.com; www.bristol-inst.com

New Product: The 621A wavelength meter is the most advanced system available with an accuracy of +/- 0.2 ppm.

Bristol Instruments is a company founded in January, 2005 by former Burleigh employees. Its products include the most advanced laser wavelength meter available, with an accuracy as high as +/- 0.0002 nm over the wavelength range of 350 to 4000 nm. Lower priced systems are also available, accurate to +/- 0.001 nm and +/- 0.01 nm. Bristol Instruments also offers various accessories for Burleigh RC series Fabry-Perot interferometers, including mirrors. Contact: Brian Samoriski, President, bsamoriski@bristol-inst.com.

Brush Ceramic Products

#416

6100 S Tucson Blvd, Tucson, AZ, 85706
520/746-0699; fax 520/794-8906
information@brushceramics.com; www.brushceramics.com

New Product: BW1000, now available in large substrate form, offers higher strength and improved surface finish.

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. Available in standard and custom configurations. Contact: Krista Lynch, Sales & Marketing Representative, klynch@brushceramics.com; Lee Vandermark, Sales & Marketing Manager, lee_vandermark@brushceramics.com.

Brysen Optical Corp, A Division of FLIR Systems, Inc.

#6315

946 Main St, Safety Harbor, FL, 34695
727/726-0555; fax 727/726-2362
info@brysenoptical.com; www.brysenoptical.com

Brysen Optical, a division of FLIR Systems, designs & manufactures optical components. Capabilities include coating design & production of windows, filters, mirrors from 180 nm to 25 um including antireflection, bandstop, bandpass, dichroic, metal, dielectric, dark mirrors and durability coatings. Also do reticles, patterned optics & solderable edge metalizations for hermetic sealing applications. Manufacturer of Surface Quality Standards Scratch & Dig sets conforming to US Army drawing 7641866. Contact: Dan Bronstrop, Sales Manager, dbronstrop@brysenoptical.com; Brett Lombardo, Business Development, blombardo@brysenoptical.com.

BTW Beijing Ltd.

#6092

Fengtai District, 5th No 4 A Hangfeng Rd, Beijing,
China, 100070
86 10 83681051; fax 86 10 83681077
http://www.bwt-bj.com.cn

BWT is a Chinese-American joint venture, a manufacturer, which is specially dedicated in coupling package of semiconductor laser to optical fiber. BWT integrates design, development, manufacture and sale together and also provides specialized products for customers and OEM services.

BURLE INDUSTRIES, INC.

#5110

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717/295-6888; fax 717/295-6096
burlesls@burle.com; www.burle.com

With the acquisition of DEP BV and BURLE INDUSTRIES, PHOTONIS (Brive, France) becomes the 2nd world leader in design, development and production of devices for detecting and amplifying very low levels of radiation (image intensifiers, photomultipliers, micro channel plates, nuclear gas detectors, power tubes & cavities, power supplies and flexible fiber optics). Contact: Herk Rintz, Manager Marketing Conversion Tube Products, rintzh@burle.com; Paul Mitchell, Senior Member Technical Staff, Product Development, mitchellp@burle.com.

Burleigh Product Line (EXFO)

#6129

400 Godin Ave, Vanier, QC, Canada, G1M 2K2
418/683-0211; fax 418/683-2170
isales@exfo.com; www.exfo.com

Cabot Microelectronics Corp./ Engineered Surface Finishes

#6366

870 N Commons Dr, Aurora, IL, 60504
630/375-2525; fax 630/978-3033
sales@ensurfin.com; www.ensurfin.com

New Product: Advanced Nanoscale Surface Technology - services designed to achieve Angstrom level finishes on photonic materials.

From the world's leading supplier of chemical mechanical planarization materials and processes for the semiconductor industry, Engineered Surface Finishes provides state-of-the-art finishing, polishing, cleanroom and metrology services. ESF leverages a large portfolio of patents and the expertise of 150 scientists and engineers to offer advanced technology and custom fabrication services. These are designed to deliver Angstrom level breakthroughs on glass, metals and many other materials. Contact: Dan McMullen, Director of Business Development, daniel_mcmullen@ensurfin.com; Susan Wilson, Senior Optical Engineer, engineering@ensurfin.com.

Cal Sensors, Inc.

#5072

5460 Skylane Blvd., Santa Rosa, CA, 94503
707/545-4181; fax 707/545-5113
info@calsensors.com; www.calsensors.com

Celebrating its 20th year, we are a manufacturer of standard & custom infrared detectors, sources & accessories. Lead sulfide & lead selenide detectors packaged in standard or custom assemblies with thermoelectric coolers, optics & electronics. Now available from stock: 256 element multiplexed linear arrays in a standard 28 pin package with intelligent interface electronics for spectroscopy to 5µm, providing a low cost, high performance alternative to InGaAs arrays. Contact: Suneet Deol, East Coast and Foreign Non-Distributor Sales Manager, suneet@calsensors.com; Weylin Pigg, West Coast Sales Manager, weylin@calsensors.com.

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#5066

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

New Product: Chirp pulse amplification system to provide ultra short pulse and high pulse energy.

Leading designer and manufacturer of high-speed fiber lasers. Compact, low noise, high stability. 0.4~45GHz 1~15ps actively mode-locking in 1550/780nm bands; 10~100MHz, 0.1~20ps passively mode-locked fiber laser in 1550/1060/780nm bands; wavelength tunable over 1600~1900nm; Bit Rate Multiplier 640GHz pulses; Gain switched laser; Ultra broadband source 1200~1900nm; Low dispersion, PM, high power EDFA; Pulse compressor; Optical comb generator; Chirp pulse amplification system, pulse energy >1J. Contact: Peter Hu, Director of Product Development, phu@calmaropt.com; Claire Chen, Vice-President of Marketing and Sales, Claire@calmaropt.com.

Cambridge Lasers Labs., Inc.

#6013

853 Brown Rd, Fremont, CA, 94539
510/651-0110; fax 510/651-1690
info@camlasers.com; www.cambridgelasers.com

New Product: 35 mW Helium-Neon Laser.

Manufacturer of ion laser systems and replacement plasma tubes. Sole manufacturer of recently acquired Model 127 HeNe product line from Spectra-Physics, in addition to previous purchase of S-P glass-ceramic line. Sole manufacturer of Lexel™ laser products, including deep UV lasers systems. Contact: Brian Bohan, President, brian@camlaser.com.

Cambridge Technology, Inc.

#614

109 Smith Pl, Cambridge, MA, 02138
617/441-0600; fax 617/497-8800
info@camtech.com; www.camtech.com

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Canadian Photonics Consortium #6008

2625 Queensview Dr Ste 200, Ottawa, ON, Canada, K2B 8K2
613/828-6274
www.photonics.ca

Canadian Photonics Fabrication Centre-CPFC

#6012

1200 Montreal Rd Bldg M-50, Ottawa, ON, Canada, K1A 0R6
613/991-1143; fax 613/990-7203
info@cpfc.ca; www.cpfc.ca

New Product: Unique North America based custom photonic fabrication and prototyping center based at the NRC.

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Carolinas MicroOptics Triangle

#6232, #6233

Burson 135A, 9201 University City Blvd, Charlotte, NC, 28223-0001
704/687-6078; fax 704/687-6077
cmot@uncc.edu; www.carolinamicroopticstriangle.org

The Carolinas MicroOptics Triangle takes advantage of the three technology platforms: optical materials at Clemson, integrated optics and modeling at UNCC, and rapid product realization at WCU. As a combined alliance, CMOT has a vertically integrated capability to provide fertile ground for product innovation and technology development. The collective resources include 225,000 square feet (\$57M) of new building space, \$29M in equipment, 37 Professors and 30 Staff. Contact: Jeff Conley, Business Manager, jcon@charter.net.

Cascade Technologies Ltd.

#632

141 St James Rd, Glasgow, United Kingdom, G4 0LT
44 141 303 8382; fax 44 141 552 3886
melnyk@boselec.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: Fred Perry, President, fsp@boselec.com.

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#1640

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Center for Biophotonics Science & Technology

#3029

2700 Stockton Blvd Ste 1400, Sacramento, CA, 95817
916/734-8600; fax 916/452-2034
www.cbst.ucdavis.edu

Funded by the National Science Foundation, the Center for Biophotonics is devoted to the study of light and radiant energy in biology and medicine. Over 100 researchers are developing new products and applications using biophotonics in partnership with industry, our education partners and the community. Visit us at: <http://cbst.ucdavis.edu/index.html>. Contact: Ralph Jacobs, Associate Director, Industry & Professional Society Outreach, jacobs6@lilnl.gov.

Centre for Integrated Photonics

#2036

Bldg B55, Adastral Park Martlesham Heath, Ipswich, United Kingdom, IP5 3RE
44 1473 663176; fax 44 1473 663295
neil.weston@ciphotonics.com; www.ciphotonics.com

CIP is a UK based photonics research and development company. Utilising 500 years of experience in photonics CIP designs, develops and manufactures pilot quantities of photonic devices. Facilities include 3/5 material design, growth and coating, micromachining, hybrid integration of photonic components and manufacture of Planar Lightwave Circuits. CIP also has extensive glass machining, workshop and optical test facilities all targeted at providing customers with truly innovative photonic products. Contact: Neil Weston, Vice President—Sales & Marketing, neil.weston@ciphotonics.com.

CERAC, Inc.

#2016

PO Box 1178, Milwaukee, WI, 53201-1178
414/289-9800; fax 414/289-9805
info@cerac.com; www.cerac.com

New Product: Pre-Melted Oxide Evaporants: Longer coating runs, reduced cycle times.

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CeramOptec Industries, Inc.

#1921

515 A Shaker Rd E, East Longmeadow, MA, 01028
413/525-0600; fax 413/525-1112
info@ceramoptec.com; www.ceramoptec.com

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Changchun New Industries Optoelectronics Tech. Co., Ltd.

#124

No. 140 Renmin St, Changchun, Jilin, China, 130022
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Charlotte Chamber

#6232, #6233

330 S Tryon St, Charlotte, NC, 28202
704/378-1370; fax 704/338-5466
chicks@charlottechamber.com;
www.charlottechamber.com

Economic Development organization for Charlotte/Mecklenburg County. Contact: Catherine Hicks, Vice President, Industry Relations, chicks@charlottechamber.com.

Chengdu SWOC Industries Co., Ltd.

#6089

PO Box 708, 95 Huapaifang Ave, Chengdu Sichuan, China, 610031
86 28 8766 9088; fax 86 28 8766 8660
swoc@swicoptics.cn; www.swicoptics.cn

SWOC, a professional optics company in China, providing design, various optical components (spherical, aspherical, plano, coating, in plastic and optical glass material by moulding and polishing), assembly parts and service. All parts base on ISO 9000. Contact: Margaret Zhang

China Daheng Group Inc.

#1238

PO Box 8618 #A9 Shangdi Xinxliu, Haidian District, Beijing, China, 100085
86 10 682782668; fax 86 10 62960597
cdhcgds@public3.bta.net.cn; www.cdhcorp.com

China Daheng Group Inc. is a leader in optical industry in China. It offers comprehensive, high quality, off-the-shelf products ranging from optical, mechanical as well as electronic components at competitive prices. It is also capable to design and customize for requirements to produce OEM modules and systems with quick prototyping and mass production. Its products cover a large range of applications including optical systems for digital projectors. Contact: Yu Lei, Deputy Director.

China MLOPTIC Corp. (Moonlight Optics)

#6207

398 Pu Gang St, Jiang Ning Economic Development Zone,
Nanjing Jiangsu, China, 211102
86 25 84436288; fax 86 25 84433188
info@moonlight-optics.com; www.moonlight-optics.com

China OEC

#6094

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#6095

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meyer892003@yahoo.com.cn; www.electronics-haihui.com

New Product: We produce laser diode modules, laser line markers, laser auto level markers.

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Chroma Technology Corp

#434

PO Box 489, 10 Imtec Ln, Rockingham, VT, 05302
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#6245

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us@ci-systems.com; www.ci-systems.com

CI Systems develops and manufactures sophisticated standard and customized electro-optical test and measurement systems for defense, industrial and scientific markets worldwide. This includes blackbodies, collimators, complete range of remote sensing systems, early warning and countermeasure testing products, automatic testing software, boresight units and laser test systems. Contact: Garrick Matheson, Manager, North America Operations; Tim Owens, Sales & Marketing.

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864/656-1035; fax 864/656-1099
jballat@clemson.edu; http://comset.clemson.edu

Cleveland Crystals, Inc. #1207

A Gooch & Housego PLC, 676 Alpha Dr, Highland Heights, OH, 44143
216/486-6100; fax 440/461-1538
sales@clevelandcrystals.com; www.clevelandcrystals.com

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Coast Electro Optics #6124

186 Savannah Way, Windsor, CA, 95492
707/836-1112; fax 707/836-1111
jim.coast_eo@earthlink.net

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Coastal Connections #6025

2368 Eastman Ave, Ventura, CA, 93003
805/644-5051; fax 805/644-5355
sales@coastalcon.com; www.coastalcon.com

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Coastal Connections is a leading supplier of custom fiber optic cables and pigtails. We engineer and build solutions for all wavelengths with 3-1000um core fibers and all standard connectors. We offer singlemode, multimode, polarization maintaining, high power and reference cables. We build fiber optic pigtails for medical, industrial and military applications. We assemble fiber bundles with 2 to 570 fibers in a single connector. All products are assembled in our California Facility. Contact: Andy Devine, Business and Product Development, andy@coastalcon.com.

Coastal Optical Systems, Inc. #145

Custom Lens Div, 4480 S Tiffany Dr, West Palm Beach, FL, 33407
561/881-7400; fax 561/881-1947
sales@coastalopt.com; www.coastalopt.com

Coastal Optical Systems (www.coastalopt.com) specializes in rapid design and manufacture of custom precision lens assemblies and sensor integration for machine vision, aerospace and defense, biomedical, astronomical research, telecom and 3-D entertainment markets. Design, optical fabrication, assembly, system alignment and optical testing are performed in-house in W. Palm Beach, FL. Coastal distributes Jenoptik's JENfizar™ interferometer accessories and JENmetar™ machine vision lenses in the U.S. Contact: Ray Malcom, Vice President of Sales/Marketing, Ray.Malcom@coastalopt.com; Michele Rhode, Inside Sales, Michele.Rhode@coastalopt.com.



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Cobolt AB #5114

Kräftriket 8, Stockholm, Sweden, S-104 05
46 8 5459 1230; fax 46 8 5459 1231
info@cobolt.se; www.cobolt.se

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Codixx AG #1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
knorbrothen@laser-components.com;
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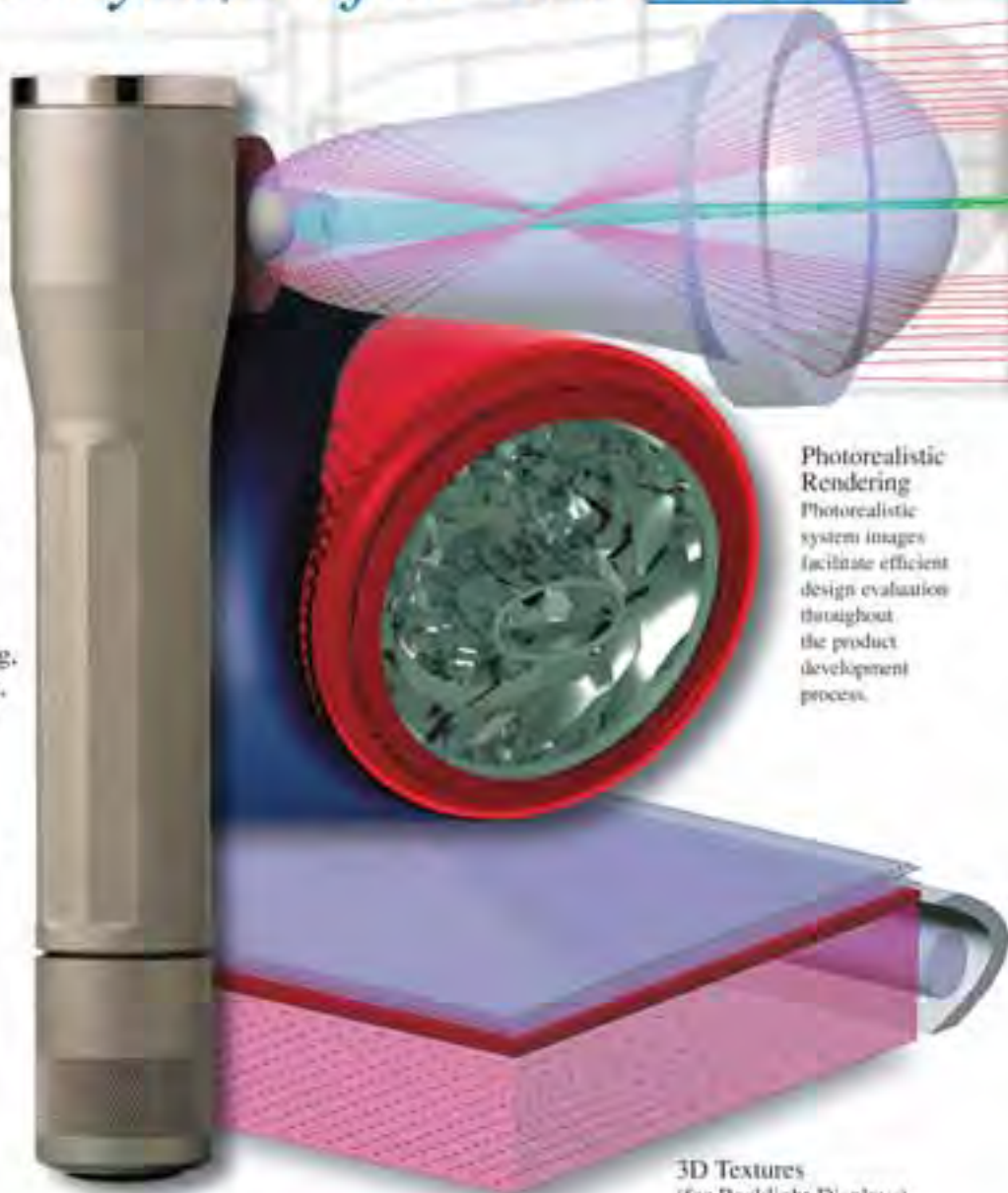
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Cohu, Inc.

#1631

PO Box 85623, San Diego, CA, 92186-5623
858/277-6700; fax 858/277-0221
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chi_2000@pacbell.net; www.collimatedholes.com

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Colorado Photonics Industry Association

#1603

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ggorsuch@meadowlark.com; www.coloradophotonics.org

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colorlink@colorlink.com; www.colorlink.com

New Product: A color wheel with no moving parts! Customer defined spectrums switched on demand.

ColorLink consults, designs, prototypes and manufactures active and passive components for polarization control. Products include light valves, compensators, rotators and retarders demonstrating either precision or achromatic performance. ColorLink Inc. and ColorLink Japan are manufacturers and worldwide suppliers of color management components for consumer electronics projection display systems. Contact: Gary Sharp, Chief Technology Officer, sharp@colorlink.com; John Korah, Product Development Engineer, korah@colorlink.com.

Compact Laser Solutions GmbH

#1801

Bülowstr 66D2, Berlin, Germany, 10783
49 302 355 540; fax 49 302 355 540
tp@compactlaser.de; www.compactlaser.com

COMSOL, Inc.

#6275

1 NE Executive Park Ste 350, Burlington, MA, 01803
781/273-3322; fax 781/273-6603
info@comsol.com; www.comsol.com

COMSOL puts you on the front line! COMSOL Multiphysics comprises a unique environment for modeling and simulating photonics, wave propagation and AC/DC electromagnetics in 2D and 3D. It applies the latest technology in multiphysics modeling to your expertise in computational photonics and electromagnetics. Key features include: simultaneous solving of an arbitrary number of coupled nonlinear PDEs and state-of-the-art solvers for linear and nonlinear stationary and time-dependent problems. Contact: Tim Niu; Bjorn Sjodin.

Conex Systems Inc.

#1831

4900 Hopyard Rd #100, Pleasanton, CA, 94588
925/735-8825; fax 925/735-8824
crystals@best.com; www.castech-us.com

A world leader in manufacturing and supplying nonlinear optic crystals fiber optic materials for Laser, medical, science. Products include low cost high quality patented LBO, BBO, White KTP, BIBO. Crystals and YVO4 LiNbO3 Nd:YVO4, KTP, KD*P, Waveplates Nd:YAG, LiTaO3 and more. Excellent technical services and satisfies guarantee for our products. Contact: Lily Wang, Vice President.

Continuum

#1721

3150 Central Expy, Santa Clara, CA, 95051-0816
888/532-1064; fax 408/727-3550
continuum@continuumlasers.com;
www.continuumlasers.com

New Product: The new Continuum Inlite PIV system offers a solid foundation, expanded control and maximum uptime.

Continuum is a global leader in innovative high energy YAG lasers, OPOs, dye lasers and custom systems for scientific, commercial and industrial applications. Standard lasers range from 25mJ/pulse to 3J/pulse; tunable accessories range from 205nm to 2650nm. Custom lasers include Macropulse (<100µsec), large glass lasers (>300J) and novel Nd:YAG configurations. Contact: Steve Benda, Director of Sales, s.benda@continuumlasers.com.

The Cooke Corp.

#1800,#6036

6930 Metroplex Dr, Romulus, MI, 48174
248/276-8820; fax 248/276-8825
info@cookecorp.com; www.cookecorp.com

Booth 1800:

New Product: pco.camera series which features high resolution digital cameras from 1.3Mpixel to 11Mpixel.

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 1.3 to 11Mpixel resolution, up to 14-bit dynamic range, and high frame rates. Our high speed 1.3Mpixel 10-bit CMOS camera features 50ns exposure time and frame rates >40,000fps. OEM versions of our CCD cameras are available. Cameras feature Firewire or Camera Link outputs and come complete with software. Also exhibiting the Interfire II line of IR test interferometers for development, test and production facilities in booth 6036 in the South Hall. Contact: Murad Karmali, VP, Sales, murad.karmali@cookecorp.com

Booth 6036:

Infrared interferometers perform routine quality monitoring tests for optical components and systems in the infrared region of the spectrum. Available in 850nm, 3 - 5µm and 10.6µm. The new Interfire II features a choice of lasers operating in the above spectral ranges allowing fringes to be obtained rapidly with excellent signal-to-noise. Also exhibiting a line of CCD/CMOS camera systems for life sciences, physical sciences, and machine vision applications located at booth 1800 in the Convention Center. Contact: Steve Daicos, President, steved@cookecorp.com.

CorActive High-Tech, Inc.

#6139

2700 Jean-Perrin Ste 121, Quebec, QC, Canada, G2C 1S9
418/845-2466; fax 418/845-2609
sales@coractive.com; www.coractive.com

CorActive manufactures Specialty Optical Fiber products for OEM customers serving the telecommunications, sensor, defense, security, industrial, medical and aerospace industries. CorActive offers a full line of standard SOF products including erbium doped, double clad, Mid-IR fiber, ultra violet sensitive and attenuating optical fiber, plus custom fiber development services for specific applications. Contact: Claude-Adrien Noel, President and Chief Executive Officer, adrien.noel@coractive.com; David Beiko, Sales Director, david.beiko@coractive.com.

Core by Indigo, A Division of FLIR Systems, Inc.

#6317

70 Castillian Dr, Goleta, CA, 93117
805/964-9797; fax 805/685-2711
www.corebyindigo.com

Corelase Oy

#6369

Vesiroineenkatu 3, Tampere, Finland, 33721
358 20 769 9900; fax 358 20 769 9901
sales@corelase.fi; www.corelase.com

Corelase Oy specializes in laser technology and develops laser systems that are revolutionizing a wide variety of material processing applications. Our laser systems are designed for industrial use and offer competitive and cost effective solutions for micro and macro machining of materials. Our product lines include fiber coupled diode laser systems, continuous wave and ultra short pulse modelocked fiber laser systems and components such as diode lasers. Contact: Jari Sillanpaa, Director of Sales and Marketing, jari.sillanpaa@corelase.fi.

LASER DIODE ONLINE STORE
WWW.QPHOTONICS.COM

Click on dots at wavelength and power of your interest for laser diodes and superluminescent diodes that we supply.

QPhotonics, LLC
1435 Crossways Blvd., Ste. 101
Chesapeake, VA 23320, USA
Phone: 757-213-0560
FAX: 757-213-0563
E-mail: info@qphotonics.com

Corion Filters

#1307

8 E Forge Pky, Franklin, MA, 02038-3148
508/528-4411; fax 508/520-7583
sales@newport.com; www.newport.com

Corion and Spectra-Physics are now a part of the complete solution offered by Newport. To learn more about how we will bring you more innovative products, more solutions and more expertise than ever before...from a single source, visit Newport #1307. Contact: Ken Pihl, ken.pihl@spectra-physics.com.

Corning Inc.

#344

One Riverfront Plaza, Corning, NY, 14831
607/974-9000; fax 607/974-7210
photonicsmaterials@corning.com; www.corning.com

Corning Incorporated (www.corning.com) is a global, diversified technology company. The company provides unique specialty glass and related materials solutions for a broad spectrum of industry applications utilizing its world leading materials science and process expertise. At Photonics West 2006, Corning's optical and other component solutions are being highlighted through key innovations from Corning's Technical Materials, Ophthalmic, Tropel and NetOptix operations. Contact: Jessica Baker, Bakerj2@corning.com.

Corning NetOptix

#344

69 Island St, Keene, NH, 03431-3552
603/357-7662; fax 603/357-7764
www.corningnetoptix.com

Corning NetOptix is known as a leading optical/opto-mechanical solution provider; from prototype through production; reflective (mirror) and refractive (lens) solutions (in non-ferrous metals, in IR crystals and in plastics); and from very small optics through very large optics. Corning NetOptix offers vertical integration in house; design, blank fabrication, electro less nickel plating, diamond machining, post polish, optical coating, assembly and metrology. We serve a variety of markets; mil/aerospace (tactical, remote sensing, space borne, targeting and surveillance); commercial (instrumentation, medical, analytical, semiconductor and telecommunications); and molds (ophthalmic, sportswear and display). Corning NetOptix works closely with our customers to provide them with a total solution.

Corning Tropel

#344

60 O'Connor Rd, Fairport, NY, 14450
585/388-3500; fax 585/377-6332
optics_info@tropel.com; www.tropel.com

Corning Tropel is recognized around the world as a leading manufacturer of precision optical systems and non-contract metrology instruments. For over fifty years, Corning Tropel has been providing custom optical solutions for the most challenging problems facing semiconductor, optical data storage, inspection and flat panel display equipment manufacturers. Our metrology instruments provide complete and rapid form and roughness analysis with sub-micron accuracy for flat and cylindrical surfaces. Tropel[®] Metrology Instruments enable our customers to monitor and refine their manufacturing processes, allowing them to meet stringent specifications and tolerances required by precision component manufacturers.

Covega

#6105

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

Covega

#6105

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

New Product: High power, high bandwidth BOA from 1050 to 1850 nm for medical OCT applications.

COVEGA, a leading supplier of Lithium Niobate and Indium Phosphide based products, offers a complete range of modulators, sources and amplification devices for optical systems. The Covega product range includes Lithium Niobate based 10 Gb/s and 40 Gb/s modulators and Indium Phosphide based Gain Chip, Lasers, Semiconductor Optical Amplifiers and Super-luminescent Diodes, for applications in Telecoms, Datacoms, Military, Medical, Test Equipment and Sensing markets. Contact: Daryl Eigen, Director of Sales, West Coast and Asia, deigen@covega.com; Brian Groft, Director of Sales, East Coast and Europe, bgroft@covega.com.

CRC Press-Taylor & Francis Group LLC

#6281

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Pry NW Ste 300, Boca Raton, FL, 33487
561/998-2507; fax 561/998-2559
nlogal@crcpress.com; www.crcpress.com

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CRI, Inc.

#430

35-B Cabot Rd, Woburn, MA, 01801
781/935-9099; fax 781/935-3388
sales@cri-inc.com; www.cri-inc.com

New Product: MaestroTM In-vivo Fluorescence Imaging System.

CRI, Inc. (Cambridge Research and Instrumentation, Inc.) develops and manufactures high-performance instruments that exploit multispectral and polarized-light microscopy and in-vivo detection for life sciences and pharmaceutical drug discovery. CRI also offers a broad array of tunable solid-state optical components and modules for use in wavelength selection and light modulation in digital imaging applications. Contact: Cathy Boutin, Sales & Marketing Manager.

Crisel Instruments, SRL

#6277

87 Hibernia Ave, Rockaway, NJ, 07866
973/664-9381
glano@tceus.com; www.crisel-instruments.com

New Product: Linear "Z" axis Galvo for focus compensation.

Selex(ex Alenia) - LiNbO3 Foundry Service, IOC for the scientific, industrial and telecommunication markets. Galvoline - Galvanometers and scanning Kits for Laser Marking, Light Shows and Medical Applications. Contact: Vincenzo Ricco, President, ricco@crisel-instruments.it.

 Exhibition Map/Restaurant Guide Sponsor

Cristal Laser SA

#1421

32 Rue Robert Schumann, Messein, France, F-54850
33 3 83 47 01 01; fax 33 3 83 47 22 72
mail@cristal-laser.fr; www.cristal-laser.fr

New Product: An RTP Pockels cell performs an effective Q-switch at low voltages and high repetition rate.

Cristal Laser specializes in crystal growth, fabrication and distribution of components for applications in non-linear optics. Our product range includes KTP, KTA, RTP and LBO crystals, which are being used in OPO's as well as harmonic generation of laser radiation. Our state-of-the-art manufacturing tools also enable us to offer cut/polishing services on non house-made materials. Contact: Herve Albrecht, US Sales Executive, herve@cristal-laser.fr; Marc-André Herrmann, Sales & Marketing Engineer, ma.herrmann@cristal-laser.fr.

Crosslight Software, Inc. #6132

206-3993 Henning Dr, Burnaby, BC, Canada, V5C 6P7
604/320-1704; fax 604/320-1734
info@crosslight.com; www.crosslight.com

New Product: Laser, LED, photo-detector, amplifier, QWIP, QDOT laser simulators.

Crosslight Software Inc. is an international company headquartered in Vancouver, Canada, which for over a decade has been dedicated to providing state-of-the-art CAD tools and in-depth physical models of semiconductor devices to technical and scientific communities around the world. Crosslight Software (Formerly Beamtek Software) was the first commercial company providing CAD tools for electrical and optical modeling of laser diodes (LD). Contact: Z.Q. Li, Vice President of Engineering, zqli@crosslight.com.

CryLaS GmbH #1133

Ostendstr 2-14, Berlin, Germany, 12459
49 30 538817 0; fax 49 30 5350436
sales@crylas.de; www.crylas.de

New Product: FTSS355-50µJ is a pulsed 355 nm with a repetition rate between 1 and 200 Hz.

Crylas GmbH is a spin off from Crystal GmbH, which was founded in 1991 to design and manufacture diode-pumped solid-state lasers in the UV and VIS for OEM-use with applications in biotechnology, analytics, imaging, sensor systems and micromachining. Contact: Helmut Spanner, Chief Executive Officer, helmut.spanner@crylas.de; Philip Crowley, Sales Director, phil@markettechinc.net.

Crystal Fibre A/S #1934

Blokken 84, Birkerød, Denmark, DK-3460
45 4348 2800; fax 45 4348 2801
contact@crystal-fibre.com; www.crystal-fibre.com

New Product: DC-200-41-PZ-Yb, high absorption polarizing fiber for high peak power fiber amplifiers.

Yb and Er: Yb airclad double clad fibers for high power lasers and amplifiers. High pumping NA, high power handling and large mode areas are unique features and the fibers are also available as single polarizing or polarization maintaining fibers. All-fiber fiber laser sub-assemblies are also available. The passive fiber product range includes single mode, multimode, high numerical aperture, airguiding, polarization maintaining and nonlinear fibers. Custom designed fibers is our specialty. Contact: René Engel Kristiansen, Sales Manager, rek@crystal-fibre.com; Cato Fagermo, Sales Manager, caf@crystal-fibre.com.

Crystal GmbH #1801

Ostendstr 2-14, Berlin, Germany, 12459
49 30 53 88 17 0; fax 49 30 535 04 36
info@crystal-gmbh.com; www.crystal-gmbh.com

Crystal Systems, Inc. #1243

27 Congress St, Salem, MA, 01970-5575
978/745-0088; fax 978/744-5059
sales@crystalsystems.com; www.crystalsystems.com

Manufacturer of Sapphire, Ti:Sapphire and Silicon, for use in optics, IR applications, large windows, domes, laser rods, lenses, prisms, filters, substrates and other optical and non optical applications. Crystal Systems can provide a wide range of material grades to meet customers' requirements. Material ranges from economical to the highest quality sapphire available for demanding applications in Defense, Laser Technology, Electronics, Life Sciences and Research. Contact: Kurt Schmid, Vice-President Operations & Director of Sales, kurt@crystalsystems.com; William Ripley, Sales Engineer, bill@crystalsystems.com.

Crystal Technology, Inc. #1928

1040 E Meadow Cr, Palo Alto, CA, 94303
650/354-0129; fax 650/354-0173
crystal-sales.pa@epcos.com; www.crystaltechnology.com

New Product: New for 2006 are our 8, 4 and single channel direct digital synthesizers.

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.

CrystaLaser #941

4750 Longley Ln #205, Reno, NV, 89502
775/348-4820; fax 775/348-7047
info@crystalaser.com; www.crystalaser.com

New Product: Ultra-compact Yellow Solid State Laser.

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: Tianfeng Jin, Vice President, Sales Manager, sales@crystalaser.com; Gale Weng, Operation Manager, Sales Engineer, gale@crystalaser.com.

CRYSTECH Inc. #6368

177 Zhuzhou Rd, Qingdao, China, 266100
86 532 8703717; fax 86 532 8701077
sales@crystech.com; www.crystech.com

New Product: KTA RTP BIBO diffusion bonded YVO4, diffusion bonded YAG.

CRYSTECH Inc. was established in May 2000 and located in one of the most beautiful coastal cities in China, Qingdao. Being a world leading manufacturer and inventor in the Crystal, Optics and Opto-Electronics field, it intends to develop and manufacture excellent crystals and optical components especially the NLO crystals and laser crystals. Contact: Hovey Song, Sales & Marketing Engineer and Director; Kalinda Yang, Sales Manager.

CSEM SA #6293

Badenerstr 569, Zurich, Switzerland, CH-8048
41 44 497 14 11; fax 41 44 497 1400
www.csem.ch

New Product: 3D-cameras, low-power digital image sensors, high-speed line sensors, diffractive and refractive microoptical elements, OLEDs.

CSEM, Centre Suisse d'Electronique et de Microtechnique (Swiss Centre for Electronics and Micro-technology), founded in 1984 is a private research and development centre, which has specialised in microtechnology, nanotechnology, microelectronics, photonics, system engineering and communications technologies. It offers its customers and industry partners tailor-made innovative solutions based on its technological expertise. In excess of 200 highly qualified and specialised employees from various scientific and technical disciplines work for CSEM in Neuchâtel and the two subsidiaries in Zurich and Alpnach. They represent more than 20 nationalities and constitute the basis of the company's creativity, dynamism and innovation potential. Further information is available at www.csem.ch. Contact: Dr. Nicolas Blanc, Vice-President Photonics, nicolas.blanc@csem.ch; Evelyn Schmid, Head of Corporate Communications, evelyn.schmid@csem.ch.

CSIRO Australian Centre for Precision Optics #6120

Bradfield Rd, Lindfield, Sydney, NSW, Australia, 2070
61 2 9413 7000; fax 61 2 9413 7200
roger.netterfield@csiro.au; www.cip.csiro.au/acpo

New Product: Super-polished sapphire substrates.

Supply of precision custom optics in a range of materials. Facilities include fabrication, metrology and coatings. Products include: High precision flats, long radii surfaces to $\lambda/500$, spheres to 30nm asphericity, cube corners, beam-splitters, LiNbO₃ etalon tunable narrow band filters, custom coatings, photonics components. New products include: Standard precision flats to 8" diameter, super-polishing of sapphire and miniature etalons for photonics. Contact: Bob Oreb, bob.oreb@csiro.au; Roger Netterfield.

Curamik Electronics Inc. #5108

3770 Arapaho Rd, Addison, TX, 75001
214/615-1533; fax 214/615-1540
info@curamikusa.com; www.curamikusa.com

New Product: Isolated, CTE-matched micro-channel coolers for SS laser diodes.

Curamik® Electronics GmbH makes Direct Bond Copper substrates (pure copper, eutectically bonded to ceramic) on alumina and aluminum nitride ceramics. We are a leading supplier of micro-channel coolers for high-power laser diodes. Our products are used for packaging bare, high-power semiconductor devices. We also produce hermetic packages, liquid cooled substrates and micro-channel coolers using the DBC technology. Curamik is a subsidiary of Electrovac Holdings. Contact: Ken Credle, General Manager, kcredle@curamikusa.com; Andreas Utz-Kistner, Technical Sales, akistner@curamikusa.com.

CVI Laser LLC #1521

200 Dorado Pl SE, Albuquerque, NM, 87123
800/296-9541; fax 505/298-9908
sales@cvilaser.com; www.cvilaser.com

New Product: Optically Contacted Beamsplitting Cubes; IR Lenses, Mirrors, Filters and Windows; Fiber Laser Mirrors.

CVI is a leading manufacturer of optical components, mounts and assemblies providing engineering, rapid prototype delivery, high volume production and system integration for the most challenging optical requirements. Headquartered in Albuquerque, New Mexico, CVI operates manufacturing facilities in New Mexico, California, the Isle of Man and South Korea, with sales representatives and distributors located worldwide. Contact: Tony Brandiger, Sales Manager, tbrandiger@cvilaser.com; Maria Lopez, Infrared Sales Account Manager, mlopez@cvilaser.com.

CVI Optical Components #1521

1175 E Edna Pl, Covina, CA, 91724-2508
626/967-5281; fax 626/967-2513
www.ocioptics.com

New Product: Infrared windows, lenses, mirrors and filters now available for ordering online.

(Formerly) Optical Components, Inc. is now part of CVI Laser. CVI Optical Components is a world leader in optically contacted prisms, cubes and complex optical assemblies. CVI's infrared product line has been added to the CVI print and online catalogs. Contact: Maria Lopez, Account Manager, mlopez@cvilaser.com; Chuck Holt, Account Manager, cholt@cvilaser.com.

DataRay, Inc. #940

605 Stapp Rd, Boulder Creek, CA, 95006
831/338-9055; fax 831/338-9098
info@dataray.com; www.dataray.com

New Product: USB 2.0 Laser Profiling Cameras; WinCamD-HR High Resolution 5.2 μm , and WinCamD-HS High Speed.

New: USB 2.0, WinCamD-UCM-HR High Resolution 5.2 μm^2 and the HS High Speed camera for single pulse capture from lasers with PRR up to 40 kHz, port-powered, auto-exposure, synchronous shutter. DataRay's innovative and unique beam intensity profiling and imaging solutions simplify beam measurement, from microns to tens of mm, BeamMap series scanning slit systems measure X, Y and Z profiles, focus, divergence, pointing and M2 in real-time. Beam'R and BeamScope for economical X, Y profiling. Contact: John Wilson, Sales and Marketing Manager, jwilson@dataray.com.

Davidson Optronics, Inc. #536

2223 Ramona Blvd, West Covina, CA, 91790
626/962-5181; fax 626/962-5188
sales@davidsonoptronics.com;
www.davidsonoptronics.com

Davin Optronics Ltd. #1945

Greycaine Rd, Watford Herts, United Kingdom, WG24 7GW
44 1923 206800; fax 44 1923 228335
sales@davinoptronics.com; www.davinoptronics.com

Davin Optronics designs and manufactures precision optical systems and components for laser, thermal imaging, defence, simulation, machine vision and medical markets. We have comprehensive, in-house capabilities, including optical, mechanical, electronics and software design, precision optics manufacturing, thin film coating and opto-mechanical assembly and test. On display will be laser scanning lenses, opto-mechanical assemblies and customized machine vision camera systems. Contact: Horace Vincent, Catalogue Sales Manager, horace@davinoptronics.com; Debbie Harper, Sales Office Manager, sales@davinoptronics.com.

DCM Tech, Inc. #6269

4455 Theurer Blvd, Winona, MN, 55987
507/452-4043; fax 507/452-7970
interest@dcm-tech.com; www.dcm-tech.com

DCM-Tech manufactures grinding machines for a multitude of applications including glass, ceramic and specialty alloys. U.S. manufacture and modular design enable DCM to rapidly provide both "off the shelf" and custom grinders to suit specialized customer requirements. Contact: Skip Green, Technical Sales, skipgreen@dcm-tech.com.

Decade Optical Systems, Inc. #1033

3809 Academy Pkwy S NE, Albuquerque, NM, 87109
505/345-8808; fax 505/344-8155
dosinc@sslasers.com; www.sslasers.com

Decade Optical provides solutions for government and industrial sectors in the research and development, design, assembly and automated production of advanced high-power laser diode arrays, solid-state laser systems and related components and subsystems, as well as services. Contact: Fred Way.



mirrors in motion

positioning and focusing laser beams



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 35,000 installed systems worldwide.

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.

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



Del Mar Photonics, Inc.

#6158

4119 Twilight Ridge, San Diego, CA, 92130
858/876-3133; fax 858/630-2376
sales@dmphotonics.com; www.dmphotonics.com

New Product: Ti:sapphire laser system with oscillator and DPSS pump, Multi-Pass Amplifier, Short-Pulse SPIDER.

Del Mar Photonics offers ultrafast laser products for research and industrial applications. DMP's products include the Trestles Ti:sapphire and Mavericks Cr: forsterite lasers and amplifiers, pump-probe systems, fluorescence measurement systems and accessories including autocorrelators, SPIDER phase measurement systems, wavelength conversion, pulse pickers and faraday isolators. DMP lasers are used in scientific research, micromachining, biomedical imaging, spectroscopy and defense markets. Contact: Andy Carson, Engineer; Charlie Barnes, Engineer.

Del Mar Ventures

#6158

4119 Twilight Ridge, San Diego, CA, 92130
858/755-6727; fax 858/630-2376
info@dmphotonics.com; www.dmphotonics.com

Del Mar Ventures is involved in the development of femtosecond lasers, sensors and ultrafast optic products. Del Mar Ventures is committed to working closely with scientists, researchers and technology companies to develop and expand products for the photonics market. Contact: Sergey Egorov, sales.dmv@femtosecondsystems.com.

Deltronic Crystal Industries, Inc.

#6210

60 Harding Ave, Dover, NJ, 07801-4710
973/361-2222; fax 973/361-0722
info@deltroniccrystal.com; www.deltroniccrystal.com

New Product: Stoichiometric Lithium Niobate/Lithium Tantalate Periodically Poled Crystals Mgo:PPLN; PPSLT.

Manufacturer of optical grade single-crystal products including lithium niobate, lithium tantalate and periodically poled crystals. Stoichiometric and congruent crystals available. Company has in-house fabrication, polishing and high power coating. End products include Q-Switches, wafers, bulk crystals and PPLN/LT. Sister division, Isowave, manufacturers high performance optical isolator products. Contact: Stuart Samuelson, President, SSamuelson@deltroniccrystal.com; Glenn Nosti, Product Manager, GNosti@deltroniccrystal.com.

DenseLight Semiconductors Pte Ltd.

#5077

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

New Product: Latest 1310nm SLED (DL-CS3159A)-High power (>15mW), wide bandwidth (>80nm) for OCT applications.

DenseLight Semiconductors is a leading solutions provider and manufacturer of Indium-Phosphide (InP) photonics devices for Test & Measurements, Communications, Biomedical Imaging and Industrial Sensing applications. In addition to Superluminescent LEDs, other products include GPON Transceivers, Laser Diodes, ELED and Integrated Modules. DenseLight Semiconductors is an ISO9001:2000 certified company and is headquartered in Singapore. Contact: Sunil Phatak, Vice President (Technical Marketing), phatak@denselight.com; Daniel Hung, Technical Sales Manager, dhung@denselight.com.

Denton Vacuum, LLC

#1700

1259 N Church St, Moorestown, NJ, 08057
856/439-9100; fax 856/439-9111
info@dentonvacuum.com; www.dentonvacuum.com

Denton Vacuum is a leading manufacturer of production evaporation systems. The Coating Division supplies coating services under contracts with the government and industry. The Integrity and Infinity production evaporators are used to deposit moisture stable optical thin films as well as metals. The Discovery sputtering systems provide cost-effective tools for both research and small lot production requirements. Small research and deposition systems are based on the Explorer 14 for university research and the Desk series of deposition systems for electron microscopy needs. Contact: James Colbridge, Sales & Marketing Manager, jcolbridge@dentonvacuum.com; Vijaya Kosaraju, Coating Department Manager, vkosaraju@dentonvacuum.com.

Diacut, Inc.

#1932

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.

Diamond Wire Technology

#1039

1605 S Murray Blvd, Colorado Springs, CO, 80916
719/570-1150; fax 719/570-1176
info@diamondwiretech.com; www.diamondwiretech.com

New Product: World's Most Competitive Multi-Wire Saw. Diamond Wire produces the smallest kerf.

Diamond Wire Technology is the world's largest and oldest manufacturer of Diamond Wire and Diamond Wire Saws. Our patented tangential cutting combined with diamond wire allows the highest degree of cutting precision with the lowest kerf in the market. Diamond Wire provides conversion projects that allow you to convert your existing Slurry saws to the Diamond Wire for faster and better quality cuts, while lower cutting cost. Diamond Wire. Being Better Tomorrow, Than you are Today! Contact: Cynthia Christensen, Director Sales/Marketing, cynthiac@diamondwiretech.com.

Diemat, Inc.

#3032

19 Central St, Byfield, MA, 01922
978/499-0900; fax 978/499-8484
info@diemat.com; www.diemat.com

New Product: DM6030HK-SD epoxy with high thermal conductivity, ideal for mounting LEDs and laser diodes.

Diemat produces high-performance materials for packaging semiconductors, optoelectronics and photonics. Low-temperature sealing glasses hermetically seal optical fibers, lids, windows and lenses to packages and wafers in wafer-level packaging. Our die-attach adhesives offer unmatched thermal conductivity, up to 65 W/m-K, which exceeds solder and allows processing at lower temperatures in standard atmosphere. Contact: Roy Harvey, Manager, Sales & Marketing, R-Harvey@diemat.com; Stephanie Appell, Sales Coordinator, S-Appell@diemat.com.

Diffraction Optics

#6160

Unit 216-7 Photonic Centre, Hong Kong Science Park NT, Hong Kong,
852 2793 5976; fax 852 2793 1696
manfok@diffraction-optics.com; www.diffraction-optics.com

New Product: Diamond turning, Electroforming, Diffraction/Aspheric lens, Freeform optics, Light-weighted mirrors.

Diffraction Optics Ltd is an independent manufacturer of precision optical components and modules for imaging, illumination and solar concentrators. Our in-house diamond turning with free-form capability and advanced metrology guarantee our quality supply of metal or electroformed optics. Our high volume compression-injection molding capacity offer customers low-cost solutions with diffraction/aspheric polymer lenses for demanding projects. Diamond turning. Diffraction/aspheres. Electroformed mirror. Freeform optics. Solar concentrator. Contact: Man Fok, Managing Director, manfok@diffraction-optics.com; Jordan Xu, Operation Director, jordan@diffraction-optics.com.



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Dilas Diodenlaser GmbH

#6328

Galileo-Galilei-Str 10, Mainz-Hechtsheim, Germany, 55129
49 6131 9226 0; fax 49 6131 9226 253
sales@dilas.de; www.dilas.de

New Product: The MMF-Module is a conduction cooled, fibre coupled laser diode module up to 100W.

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408/496-0508; fax 408/496-0910
dominar@sbcglobal.com; www.dominar-inc.com

New Product: Extra wide band AR coating.

Dominar, Inc. specializes in the design and manufacture of optical thin film coatings. Now combined with Ellis Optical Technology, Dominar offers expertise for fiber optic light guides and imaging, optical design and testing, and illumination engineering. We coat crystals, AMTIR and semiconductors, as well as glasses and silica, from UV to IR. Our optical test lab includes an interferometer, Beamscan and spectrophotometer. We quote on prototype or production quantities. Contact: John Ellis, Chief Operating Officer, dominar@sbcglobal.net; Dale Hansen, President, Dale@dominar-inc.com.

Dongwoo Optron Co., Ltd. #2025

611-5 Maesan-ri, Opo-Eup, Gwangju-si, Gyunggi-do, Korea, 464-893
82 31 765 0300; fax 82 31 765 0222
optron@optron.co.kr; www.optron.co.kr

New Product: Maple (Macro PL Mapping system) Ramboss (Macro Raman Measurement system) Monochromator/Spectrographs.

We are focused on Spectroscopy application, like photoluminescence, Raman and concerned optical spectroscopy. Also, we are supplying our own spectrometers, from 150mm to 750mm focal length. Contact: DongHyun Kim, Director/Optical Sales Department.

Dot Metrics Technologies #6232, #6233

Charlotte Research Institute, 9201 University City Blvd, Charlotte, NC, 28223
704/687-2727
www.dotmetricstech.com

DPSS Lasers Inc. #6346

2525 Walsh Ave, Santa Clara, CA, 95054
408/988-4300; fax 408/988-4305
alaymon@dpss-lasers.com; www.dpss-lasers.com

New Product: NEW 473 and 532 nm MicroSeries Lasers. Low Power, CW, TEM₀₀, Single Frequency, Low Noise < 0.3 % RMS.

DPSS Lasers Inc. manufactures diode-pumped solid state (DPSS) laser systems. Ultraviolet (355 nm) pulsed lasers from 100 mW to 3.0 W with rep. rates from 30-150 kHz used for Stereolithography, MicroMachining, Medical Diagnostics and other applications. Low cost MicroSeries Blue (473 nm) and Green (532 nm) lasers are also available for Microscopy, Spectroscopy, Gene Tagging, DNA Sequencing and other applications. Power levels at 473 nm to 10 mW, and 532 nm to 50 mW. TEM₀₀, CW, Noise < 0.3% RMS. Contact: Alex Laymon, President, alaymon@dpss-lasers.com.

DRS Infrared Technologies #6140

PO Box 740188, Dallas, TX, 75374
877/377-4783

DTI-Nanotech #6007

2201 Cantu Ct Ste #116, Sarasota, FL, 34232
941/371-1777; fax 941/377-7713
info@discovtech.com; www.discovtech.com

New Product: Nanopositioning stages with long travel 10-100 mm; Robomate - angular-linear motorized positioning.

DTI-NanoTech is a division of Discovery Technology International. NTS NanoDirect is a unique piezoelectric translation stage with nanometer resolution and long travel distance (10-100 mm) using proprietary rotary motor in synchronized closed and open loop modes. RoboMate is the world's first combined angular-linear motorized positioning system - the first of its kind to allow the probe/tool to be precisely positioned at variable angles (2 arc sec resolution) with respect to the target sample. Contact: Dr. Valentin Zhelyaskov, Vice President, Technical Sales, valentin@discovtech.com.

DVC Co. #6308

10200 Hwy 290 W, Austin, TX, 78736
512/301-9564; fax 512/288-2961
sales@dvcco.com;

DVC Company is a manufacturer of high-performance digital cameras for scientific and industrial applications. Products are available in high-resolution monochrome and color, with optional TE cooling, enhanced visible and near-IR quantum efficiency, Gen III intensification and software-controlled multispectral capture. DVC cameras are available with FireWire, CameraLink or LVDS interfaces and are supplied with DVCView, a full-featured capture and control software. Contact: Paul Thomas, Director, Sales & Marketing.

Dynamics Research Corp. #5050

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#715

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sales@electrontubes.com; www.electrontubes.com

New Product: DM0020 photon counting module with RS232 interface.

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#632, #6336

PO Box 650441, Fresh Meadows, NY, 11365
718/997-8100; fax 718/997-8102

sales@eopc.com; www.eopc.com

New Product: Motorized filter selector, transition time filter to filter 40mSec, Oscillating mode 0.1Hz to 10Hz.

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Electro-Optical Systems, Inc.

#3015

1039 W Bridge St, Phoenixville, PA, 19460-2279
610/935-5838; fax 610/935-8548

sales@eosystems.com; www.eosystems.com

New Product: Quadrants and PSD detectors continue to be the most active product area. Components and receivers.

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#6122

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Elliot Scientific Ltd.

#1141

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EMF Corp.

#341

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#5090

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#6182

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Epion Corp.

#6263

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978/670-1910; fax 978/670-9119
info@epion.com; www.epion.com

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Andernacher Str 29 B, Nürnberg, Germany, 90411
49 911 3600 474; fax 49 911 3600 430
mail@eschenbach-optik.de; www.eschenbach-optik.de

New Product: High precision plastic lenses.

Eschenbach Optik GmbH & Co's Technical Optics division offers extensive production and development expertise for customer-specific optical components made of technical plastics. In 1997 the specialist departments of optical mould design and construction, ultra-precision processing, injection moulding, surface finishing, assembly and development/engineering were amalgamated in one state-of-the-art factory at the Nuremberg site. Contact: Marcus Walter, Dipl.-Ing, marcus.walter@eschebach-optik.de.

ESE Embedded Systems Engineering GmbH

#6318

Ludwigshafener Str 29, Stockach, Germany, 78333
49 7771 9166 0; fax 49 7771 9166 18
info@ese-gmbh.de; www.ese-gmbh.de

New Product: confocal fluorescence sensor; ultra-compact, high resolution, Robust, user-friendly.

ESE develops, analyzes and optimizes optics, light sources and sensors for the UV, VIS, IR spectral ranges, lens and mirror optic hybrid and MEMS as well as optical sensors for fluorescence measurements. In our analytical laboratory, we carry out spectral examinations and process optimization for our customers. For optics calculation, we use the most common software tools. Cooperation's with institutes and research centers (e.g. IMTEK/Freiburg) ensure our technological lead. Contact: Klaus Haberstroh, Chief Executive Officer, klaus.haberstroh@ese-gmbh.de.

ET Precision Optics Inc.

#6190

33 Curlew St, Rochester, NY, 14606
585/254-2560; fax 585/254-2966
info@etprecision.com; www.etprecision.com

Evans Analytical Group

#6228

810 Kifer Rd, Sunnyvale, CA, 94086
408/530-3500; fax 408/530-3501
marketing@eaglabs.com; www.eaglabs.com

Evans Analytical Group is the worldwide leader in surface analysis, serving industries, including the semiconductor, medical device, communications and disk drive. We are the largest independent surface microanalytical services organization with labs and sales offices in CA, MN, TX, MA, NJ, Taiwan, Japan and Singapore. We have been supplying solutions for over 25 yrs by providing analyses used for materials characterization, failure analysis, contamination ID and quality control. Contact: Ray Caron, Sales & Marketing, rcaron@eaglabs.com; Jim Norberg, Operations Coordinator, jnorberg@eaglabs.com.

competitiveness in supplying and designing optical components and assemblies for defence and commercial applications. Contact:

Postdoctoral Research Awards Senior Research Awards *offered by the* NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES

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- detectors, sensors, cameras and related disciplines
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National Institute of Standards and
Technology (NIST)
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US Army Research Laboratory
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US Army Night Vision Laboratory
US Army Research Office
Air Force Research Laboratory
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Detailed program information, including instructions on how to apply, is available on our Web site at:

www.national-academies.org/rap

Applications must be submitted online. CVs will not be accepted. Questions should be directed to the NRC at 202-334-2760 (tel) or rap@nas.edu

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in the exhibit hall.**

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Evaporated Coatings, Inc.

#737

2365 Maryland Rd, Willow Grove, PA, 19090-1708
215/659-3080; fax 215/659-1275
evapsales@evapcoat.com; www.evaporatedcoatings.com
New Product: Bandpass Filters, High Performance AR for garnet, polarcore, silicon and other semiconductor materials.

ECL is a custom manufacturer of vacuum-deposited thin films including mirrors, anti-reflection, beamsplitters, low reflection attenuation, solderable films, transparent conductive, LWP/SWP and bandpass filters. We are specialists at coating temperature sensitive substrates including plastics, fiberoptic components including fiberends, ferrule assemblies, laser bars, ball lenses and semiconductor materials. We offer IAD, IBS and APS deposition methods. Contact: Stephen Schaffer, Vice President.

EXALOS AG

#1133

SPIE Corporate Member

Technoparkstr 1, Zurich, Switzerland, CH-8005
41 43 444 60 90; fax 41 43 444 60 99
sales@exalos.com; www.exalos.com

EXALOS is a pioneer in developing and selling advanced Superluminescent Light Emitting Diodes (SLEDs) to optical coherence tomography, fiber optic gyroscope, fiber optic test equipment and sensor applications. EXALOS SLEDs being the most reliable devices in the market achieve following performance factors: Wavelengths from 740 to 1700 nm, very high optical output power, ultra-wide optical bandwidth, low ripple, TELCORDIA and MIL qualified. Contact: Anthony Abdilla, Sales Director, abdilla@exalos.com; Philip Crowley, Sales, phil@markettechinc.net.

EXFO

#6129

400 Godin Ave, Vanier, QC, Canada, G1M 2K2
418/683-0211; fax 418/683-2170
isales@exfo.com; www.exfo.com

New Product: All-Band Component Analyzer tests passive components: IL, ORL, PDL (up to 32 channels simultaneously).

EXFO is a recognized test and measurement expert in the global telecommunications industry. The Telecom Division offers fully integrated and complete test solutions to network service providers, system vendors and component manufacturers. The Photonics and Life Sciences Division mainly leverages core telecom technologies to offer value-added solutions in the life sciences, high-precision assembly and research sectors. Contact: Inside Sales.

Exitech Inc.

#445

10216 NW 47th St, Sunrise, FL, 33351
954/746-3717; fax 954/746 6336
mheglin@exitechinc.com; www.exitechinc.com

New Product: New systems: NanoProbe 1000 nanomachining, M1000C low cost system, M2000A semiconductor annealing.

Exitech provides complete turn key laser production systems to the flat panel, solar, electronics, medical, automotive, aerospace and R&D industries. A number of standard micromachining platforms are available. Exitech will select the best laser for the application. Exitech also provides advanced EUV lithographic and mask inspection systems from 193nm to 13.5nm. In addition, Exitech maintains a complete laser R&D application development and contract manufacturing centers in both the US and UK. Contact: Mike Heglin, Sales Manager, mheglin@exitechinc.com; Mike Scaggs, Director of US Operations Manager, mscaggs@exitechinc.com.

F&K Delvotec, Inc.

#1742

27182 Burbank, Foothill Ranch, CA, 92610
949/595-2200; fax 949/595-2207
rick.bailey@fkdelvotecusa.com; www.fkdelvotecusa.com

Manufacturing Die Bonders, Wire Bonders and Pull/Shear Test Equipment. F&K Delvotec offers a diverse line of bonding equipment. We manufacture manual and automatic multi-chip die bonders for epoxy, eutectic and flip chip applications. We also manufacture ribbon bonders, ball bonders, ball bump machines, fine wire wedge bonders and heavy wire bonders for a wide variety of applications. We make all these wire bonders in manual, semi-auto and fully automatic applications. F&K Delvotec also offers test equipment. We manufacture wire pull, ball shear and die shear test equipment. Come see our new Generation 5 wire bonder.

Fairchild Imaging

#6154

1801 McCarthy Blvd, Milpitas, CA, 95035
408/433-2500; fax 408/435-7352
sales@fcimg.com; www.fairchildimaging.com

New Product: Peregrine 3041 – multiport cooled CCD camera with four megapixel resolution.

Fairchild Imaging, a manufacturer of scientific CCD & 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 fiber optic taper cameras up to 200-mm in aperture. Visit <http://www.fairchildimaging.com> for more information on these cooled, multiport cameras. Contact: Sally McAuliffe, Marketing Administrator; Colin Earle, Director, Sales & Marketing.

FDS Group B.V.

#1801

Bedrijven Park Twente 323, Almelo, Netherlands, 7602 KL
31 546 815 142; fax 31 546 811 480
info@fdsgroup.nl; www.fdsgroup.nl

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

FEMLIGHT

#1944

Unitec 2 Domaine du haut Carre, 43 rue P. Noailles,
Talence, France, 33400
33 5 10 00 34 27; fax 33 5 40 00 34 44
sebastien.ermeneux@femlight.com; www.femlight.com

New Product: EOLES30 is a new fiber laser with 10 ns pulses at 30 kHz and 30W average power and TEM00 beam profile.

FEMLIGHT is a leading edge supplier of new photonics solutions for R&D and industry needs. Recent developments led to a new generation of very high power Q-switch nsec lasers based on a new fiber laser technology. "EOLES 30" delivers 10nsec pulses at 10-200 kHz repetition rates around 1µm with 30W average power in a diffraction-limited beam. FEMLIGHT also proposes a new high speed optical detector with better than 5ps temporal resolution and a very high sensitivity and dynamic range (>10⁵). Contact: Sebastien Ermeneux, sebastien.ermeneux@femlight.com; Philippe Metivier, philippe.metivier@femlight.com.

FEMTO Messtechnik GmbH

#715

Paul-Lincke-Ufer 34, Berlin, Germany, 10999
49 30 446 9386; fax 49 30 446 9388
info@femto.de; www.femto.de

New Product: FEMTO DHPCA-100 - Variable Gain Transimpedance Amplifier with 200 MHz Bandwidth.

FEMTO manufactures amplifier modules and photoreceivers for sensitive measurements of small signals. The product range includes transimpedance, voltage, logarithmic, lock-in and GHz amplifiers, as well as amplified photodiodes, balanced photoreceivers and fiber optic power meters. All products offer excellent noise performance and high bandwidths. Typical applications are spectroscopy, surface analysis, beam monitoring, process control, biochemistry, as well as particle and laser physics.

Femtochrome Research, Inc.

#6170

2123 4th St, Berkeley, CA, 94710
510/644-1869; fax 510/644-0118
sales@femtochrome.com; www.femtochrome.com

Femtochrome manufactures state-of-the-art instruments for the characterization of ultrafast optical signals. Our current FR-103 Auto/CrossCorrelators are unmatched in sensitivity and overall versatility. While providing the utmost in technical performance, the FR-103 series is reasonably priced, offering excellent performance/price ratio. Contact: Z.A.Yasa, Research Director, zyasa@femtochrome.com.

FemtoLasers, Inc.

#1838

239 Stow Rd, Harvard, MA, 01451
971/456-9920; fax 971/456-9922
mary.essary@femtolasers.com; www.femtolasers.com

Femtolasers offers a complete line of Ti:S ultrafast lasers. The patented dispersive mirror (DM) platform allows for prism-free oscillators and grating-free amplifiers, giving the most stable and highest performance available. State-of-the-art products include the compact, turn-key Integral™, the Rainbow with pulse-widths <7fs; the -XL with >80nJ at 11MHz and the new FemtoPower-CEP with integrated DFG stabilization. The company also provides a complete line of optics for ultrafast research. Contact: Andreas Isemann, General Manager, FemtoLasers, Inc., andreas.isemann@femtolasers.com; Andreas Stingl, General Manager, Femtolasers Produktions, GmbH, andreas.stingl@femtolasers.com.

Fenix Technology

#418

642 E 39th Pl #1, Yuma, AZ, 85365
928/344-3310; fax 928/344-0119
info@fenixtechnology.com; www.fenixtechnology.com

Fenix Technology designs and manufactures totally Thorium-free high-performance Krypton Arc Lamps and Xenon and Krypton Flash Lamps. Combining a unique error-eliminating custom-design capability with decades of manufacturing experience. They will have their lamps and design capabilities on display. Contact: Egils M. Grasis, President, egrasis@fenixtechnology.com; Maris Grasis, Sales Manager, mgrasis@fenixtechnology.com.

Ferrotec Corp.

#1044

40 Simon St, Nashua, NH, 03060-3075
603/883-9800; fax 603/883-1213
info@ferrotec.com; www.ferrotec.com

New Product: Ferrotec's new FTC100 Temperature Controller puts power, accuracy and programmability in your hands.

For precision temperature control in laser and opto-electronic applications, Ferrotec manufactures thermoelectric (Peltier) modules and assemblies for cooling, heating or thermal cycling in custom or industry-standard configurations. With short lead times, competitive pricing, exceptional quality and industry-standard sizes, Ferrotec can help you develop your solution or replace your existing thermoelectric components. Contact: Rand Poplar, Western Region Sales Manager, rpoplar@ferrotec.com; Kevin Schmidlein, Eastern Region Sales Manager, kschmidlein@ferrotec.com.

Fianium

#6239

20 Compass Point, Ensign Way, Southampton Hampshire, United Kingdom, SO31 4RA
44 2380 458776; fax 44 2380 458734
info@fianium.com; www.fianium.com

New Product: High-brightness supercontinuum fiber laser (SC450) providing up to 5mW/nm from 450nm to 1700nm.

Fianium is a leading manufacturer of ultrafast fiber lasers, providing a product portfolio of unrivalled diversity. Fianium's fiber lasers offer a compact, reliable alternative to solid-state lasers in a wide range of ultrafast scientific and industrial applications. Built on a modular platform of picosecond oscillators, high-power amplifiers and frequency conversion technology, Fianium provide lasers operating over the spectrum from 266nm to 2µm - including ultra-broad supercontinuum sources. Contact: John Clowes, R&D Manager, john.clowes@fianium.com; Vladimir Kozlov, Sales Manager, sales@fianium.com.

Fiber Optic Center, Inc.

#6316

28 Centre St, New Bedford, MA, 02740
508/992-6464; fax 508/991-8876
sales@focenter.com; www.focenter.com

Fibercore Ltd.

#6338

Fibercore House, Univ Pkw Chilworth 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 specialty singlemode fibers. With over 23 years experience manufacturing rare-earth doped, bend-insensitive, polarization-maintaining and fiber laser products, including the worlds only 'All Silica Cladding Pump Fiber' - you can be confident that Fibercore has the expertise and experience necessary to not only meet, but exceed all your expectations and requirements. Whatever your specialty fiber requirement - call us, email us or fax us - we can help! Contact: Simon Vargeson, Sales Engineer, simon.vargeson@sciatl.com; Wendy Stewart, Sales Administrator, wendy.stewart@sciatl.com.



Laser Communications Technical Group Sponsor

Fiberguide Industries, Inc.

#1811

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

New Product: V-Grooves and 2D Optical Fiber Arrays.

The Fiber Optic Solutions company to OEM market with line of standard and custom multimode (including Hard Clad), singlemode and graded-index optical fibers from UV to NIR. Design, prototype, manufacture custom assemblies from single fiber assemblies through multi-furcated input/outputs, and V-Groove and 2D fiber arrays. FDA registered as Contract Manufacturer. Contact: Ron Atanesian, Eastern Regional Sales Representative, ratanesian@fiberguide.com; Jim York, Western Regional Sales Manager, jyork@fiberguide.com.

FiberLogix Ltd.

#1941

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: Polarization controller and Polyimide fiber stripper.

FiberLogix designs, manufactures and markets Specialty Fiber and All-fiber passive devices based on its patented Evanescent Wave Technology (IFOS™). FiberLogix's expanded portfolio of products offer greatest depth specialty Fiber and breadth Passive Devices). Our cutting edge innovations provide enhanced functionality, flexibility and quality. Contact: Saeed Rehman, Director, saeed@fiberlogix.com; Shafiq Parwaz, Director, shafiq@fiberlogix.com.

Fiberoptic Systems, Inc.

#6247

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, spectroscopy, microscopy and machine vision markets. In 23 years of business we have worked with borosilicate, fused silica, fluoride, silver halide, chalcogenide and plastic optical fibers. From prototype to production, UV to IR, cryogenic to high temperature, short to long, we will help design a solution to fit your budgetary, timing and quality requirements. Contact: Todd Johnson, Senior Engineer, todd@fiberopticssystem.com; Kathy Hanau, Sales/Customer Service, Kathy@fiberopticssystem.com.

Fibertech Optica

#6342

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

New Product: Advanced mid-infrared material fiber.

Designer and manufacturer of multimode specialty fused silica, HCS, PCS and ZBLAN fluoride fibers. Ultra low OH content VIS/NIR fiber guaranteed. Non-solarizing deep-UV available. Many choices of numerical apertures, core to clad ratios and diameters and various types of buffers and coatings are available. Spectral bands covered from deep UV to MIR. We also design and manufacture custom bundles, probes and assemblies combining our high performance fibers with superior quality assembly. Contact: Jeff Dupuis, Sales & Marketing Manager, jeffdup@fto.ca.

ficonTEC GmbH

#2039

Fahrenheitstr 1, Bremen, Germany, 28359
49 421 690118 0; fax 49 421 690118 90
info@ficontec.com; www.ficontec.com

ficonTEC manufactures automated assembly, test and inspection equipment for microsystems and optoelectronic components. ficonTECs DioLine is the worlds first complete line of production and test equipment for manufacturers of Laser Diodes. Contact: Matthias Trinker, trinker@ficontec.com.

Fietje Sensor & Optoelektronik GmbH

#1801

Dorfstr 1E, Glashagen, Germany, 18209
49 38203 65 633; fax 49 38203 17 890
sales@fietje-web.de; www.fietje-web.de

New Product: LED's 380nm-950nm (customer specified available - >+/-3nm) Ceramic based SMD-high-power-LED.

Fietje Sensor & Optoelektronik GmbH, founded 1994, is a special design-house and distributor for LED's and photosensors. The main applications are customer specified. The production is ODM/OEM. The LED are available from 380nm-950nm up to high-power or high-speed applications depend on wavelength. Contact: Ing. Egbert Freiberg, General Manager, support@fietje-web.de; Elvira Gasper, Sales Manager.

Filmetrics, Inc.

#5048

9355 Chesapeake Dr, San Diego, CA, 92123
858/573-9300; fax 858/573-9400
info@filmetrics.com; www.filmetrics.com

New Product: InGaAs-based spectrometers measure wavelengths up to 1700 nm and films up to 450 microns thick.

Filmetrics offers a full line of metrology equipment using non-contact reflectometry. Featuring a full line of UV-NIR spectrometer systems (wavelength range 220-1700 nm) for measuring thickness, refractive index, absorption and deposition rates of thin films, these affordable systems are faster, easier-to-use and less expensive than conventional instruments. Applications include in-situ and tabletop measurement of oxides, photoresist, silicones and other transparent or translucent films.

Finetech

#417

10201 S 51st St #127, Phoenix, AZ, 85044
480/893-1630; fax 480/893-1632
sales@finetechusa.com; www.finetechusa.com

Precise Bonding & Rework systems with modular approach for various bonding technologies, heat (400C), force (10gm - 50Kgm), ultrasonic and UV. Opto-Bonder for Diodes, MEMS, MOEMS, Flipchip with ± 1/2 micron placement accuracy. Auto-Bonder, 5 micron 3 sigma accuracy, die pick/place and pattern recognition system, patented fixed beam splitter technology. Semi-automatic Bonding/Rework system. Automated 4-axis control, die pick/place, solder removal and pattern recognition system. Contact: Chris Underhill; Adrienne Gerard, adrienne@finetechusa.com.

Fisba Optik LLC

#327

Bldg E, 3495 Winton Pl Ste 120, Rochester, NY, 14623
585/427-9155; fax 585/427-9026
info@fisbaoptik.com; www.fisbaoptik.com

Manufacturer of miniaturized, modular, measurement solutions for surface and wavefront metrology. Surface testing includes flats, spheres, cylinders and aspheres. Transmission testing includes material homogeneity and OPD of optical components and assemblies at 633 nm or user specified wavelength between 350 nm and 1100 nm. Manual, Semi-automatic and automatic solutions available. Contact: John Nemechek, Sales and Marketing Manager, jjn@fisbaoptik.com.

FJW Optical Systems, Inc.

#120

322 N Woodwork Ln, Palatine, IL, 60067-6949
847/358-2500; fax 847/358-2533
fjwsales@starnetwx.net; www.findrscope.com

New Product: Find-r-scope thermal viewer/camera; Low cost, handheld, high res., full featured infrared imaging.

The find-r-scope line of infrared viewers and viewer/cameras covers the nir range up to 2200 nanometers. The uv scope covers the uv range from 180 to 1550 nanometers. The thermal viewer/camera utilizes the 7-14 um range. All units are handheld, lightweight, battery operated and designed for operator convenience. Contact: Mary, Sales, fjwsales@sbcglobal.net.

FLIR Systems

#1213

16 Esquire Rd, N. Billerica, MA, 01862
978/901-8000; fax 978/901-8532
info@flir.com; www.flirthermography.com

New Product: SC6000 Scientific Infrared Camera features high-speed/resolution performance in multiple wavebands.

FLIR Systems, Inc. designs, manufactures and markets infrared imaging systems worldwide. With over 30 years experience and more than 30,000 of its IR systems in use, FLIR is the global leader in infrared cameras, software, service, training and support. FLIR's ThermoCAM thermal imaging cameras have set the standard for thermographic testing and analysis and are the most widely used IR non-contact temperature measurement systems worldwide. Contact: Dave Bursell, Director, Scientific Segment Engineers, dave.bursell@flir.com; Brad Risser, Western Regional Sales Manager, brad.risser@flir.com.

Flowstar, Inc.

#6069

6800 Silacci Way, Gilroy, CA, 95020
408/842-2400; fax 408/842-2407
info@flowstar.com; www.flowstar.com

Foctek Photonics, Inc.

#1133

32 Bldg Juyuanzhou Ind Park, Fuzhou Fujian, China, 350002
86 591 3767 816; fax 86 591 3767 817
sales@foctek.com; www.foctek.com

FOCtek Photonics, Inc. was established Nov. 18, 2001. Our products include Laser crystals, NLO crystals, Birefringent crystals, Windows, Lenses, Prisms, polarizing optics, Beamsplitters, etc. Foctek owns over 2000M² of workshop. With the advantage of complete kits of production line as crystal growth, crystal fabrication, coating, and optical fabrication, coating, the yearly output of crystals reach 100,000.00 pcs, and optics reach 500,000.00 pcs. Contact: Steve Huang, Vice President, steve.huang@foctek.net; Daisy Wu, Vice President, daisy.wu@foctek.net.

Foreal Spectrum, Inc.

#6248

2380 Qume Dr Ste F, San Jose, CA, 95131
408/433-5558; fax 408/433-5595
sales@forealspectrum.com; www.forealspectrum.com

New Product: Biotechnology Filters: Fluorescence Filter Sets, Biomedical Bandpass Filters, Laser Line Filters.

Foreal Spectrum is the technology leader for ultimate performance optical coatings and components produced using Foreal's proprietary process and control system. Foreal specializes in defect-free, polarization management and high damage threshold coatings for lasers, analytical instrumentation, fiber optics and displays. Contact: Claire Nippres, Director of Sales and Marketing, sales@forealspectrum.com.

Fotofab Corp.

#6256

3758 W Belmont Ave, Chicago, IL, 60618
773/463-6211; fax 773/463-3387
sales@fotofab.com; www.fotofab.com

New Product: Fotofab offers Rapid Delivery of your custom metal parts. Ask about same-day shipping.

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: James Tankersley, Inside Technical Sales; Alison Anzalone, Marketing Manager, alison@fotofab.com.

Frank Optic Products GmbH

#1801

Heidelberger Str 63-64, Berlin, Germany, 12435
49 30 530249 0; fax 49 30 530249 21
info@gms-fop.de; www.frank-optic-products.de

New Product: Laser cable with active cooled connectors, High-power laser cable up to 7kW, medical fibre probes.

FRANK OPTIC PRODUCTS® makes the concentrated worldwide know-how in photonics for customized solutions to problems available to you. Our many years of experience, our highly qualified interdisciplinary team as well as our extensive and modern production and measuring technology, guarantee that we can implement all types of customers requirements, ranging from prototyping to large series. FRANK OPTIC PRODUCTS® is one of the leading specialists in Laser technology and special medical optics. Contact: Dieter W. Fank, General Manager, d.frank@fop-berlin.de.



Exhibition Map/Restaurant Guide/Meterboard Sponsor

Frankfurt Laser Co.

#115

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: World Smallest Green DPSS Laser. FLC showcases MicroGreen and MiniGreen lasers - the market smallest OEM industry grade DPSS green laser head offering optical output in 1-5mW and 50-100mW power range.

FLC supplies CW single mode and broad area laser diodes (visible 395nm-690nm 3mW-1.2W and IR 730nm-2400nm 1mW-7W), pulse IR laser diodes, super luminescent diodes in 680nm - 1670nm wavelength range free space and fiber-coupled packages, high-power laser diode arrays with fiber output (2W-100W) 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 fiber and cables, mid-IR 1.2µm-4.3µm LED lamps. Contact: Vsevolod Mazo, Sales Director, sales@frlaserco.com.

Your Search for An

Infrared Signature



An IR signature is the quantitative measurement of a target's apparent infrared brightness as a function of wavelength. Signature measurements are used to determine the appearance of a target to sensors under varying conditions of standoff distance and atmosphere, and to constrain the design of vehicle, sensor and camouflage systems.

High Speed/Stop Motion



Advanced infrared sensors and data acquisition systems bring high-speed infrared imaging to a new level of performance, enabling microsecond exposure times to stop the apparent motion of dynamic scenes as well as capture frame rates exceeding 10,000 frames per second. Applications include thermal and dynamic analysis of jet engine turbine blades, supersonic projectiles and explosions.

Near Infrared (NIR)



NIR light interacts with materials very differently from visible light or thermal IR. NIR imaging spectroscopy provides non-destructive quantitative analysis of crops, pharmaceuticals, agricultural products and lasers. Because NIR can penetrate many opaque materials, it can be used for imaging through haze, examination of art forgeries and questioned documents, semiconductor wafer inspection and many other applications.

FLIR is the largest manufacturer of infrared cameras in the world, offering the widest selection, best post-sale technical support and a wide variety of rental, purchase and leasing options to fit any budget. Please contact your local rep to learn more:
www.flirthermography.com/localrep

So, if you're looking for the best infrared solutions —
Your Search Ends Here with FLIR.

Visit us at Photonics West Booth #1213



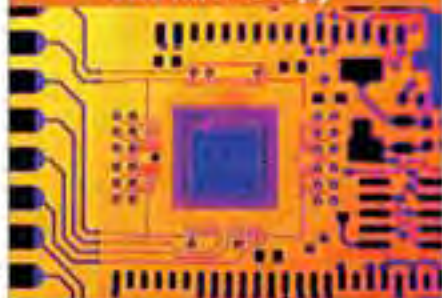
The Global Leader in Infrared Cameras



ThermoVision™ A10

Answers Begins Here

Infrared Close-up and Microscopy



An infrared camera combined with a microscope becomes a thermal imaging microscope, capable of accurate temperature measurement of features as small as 5 microns. Electronics manufacturers can characterize the thermal performance of active and passive components as well as printed circuit traces in operation without physical contact.

Preset Sequencing



Preset Sequencing is the ability to capture image frames at 4 different integration times in rapid succession. The best pixel response from each image can then be selected and reconstituted into one dynamic image through a process called Dynamic Range Extension, producing an 18-20 bit image with superior thermal detail.

Research & Development



Infrared cameras enable characterization of the properties of materials in ways that complement many standard analysis techniques, as well as rapid non-contact temperature measurement in the most demanding conditions. The wide range of infrared sensor types and optics that are commercially available make infrared imaging capability an indispensable tool in many research environments.



ThermaVision™ A-Series



ThermaCAM™ Alpha



ThermaCAM™ HS Series



ThermaCAM™ Merlin



ThermaVision™ SC6000

NEW PRODUCT

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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

New Product: Micro-optics for LED illumination; collimation optics, tandem micro-lens arrays; ultra thin vision system (< 300 μ m) based on artificial compound eyes; modulated RGB laser sources; laser beam soldered optical components and subsystems; micro-mounted optoelectronic sub-systems; coated plastics for optics.

Fraunhofer IOF carries out customer specific developments in the field of optical systems technology with the aim of controlling light better and better. Focus of the application-oriented research is put on the following fields: multi-functional optical layer systems, micro-structured surfaces, characterizing of surfaces and coatings, micro- and integrated-optical systems, fiber lasers and their application, optical measurement systems and sensors, systems for optics-characterization, fine mechanical precision systems, procedures of optics assembly. Contact: Andreas Tünnermann, Institute Director, andreas.tuennermann@iof.fraunhofer.de; Brigitte Weber, Public Relation.

Fraunhofer Institute for Silicate Research ISC #1801

Neunerplatz 2, Würzburg, Germany, 97082
49 931 4100 0; fax 49 931 4100 199
info@isc.fraunhofer.de; www.isc.fraunhofer.de

New Product: research for microoptic materials with outstanding properties.

Fraunhofer ISC develops (photo-) patternable inorganic-organic hybrid materials (ORMOCER[®]s) for microsystems. Beside activities in the fields of microelectronics, energy storage and supply, a focus of R&D activities is on materials for optical applications, where the materials can be tailored to the specific requirements (e.g., refractive index, surface-modifying) with advantageous properties (chemical stability, ability to process at low temperatures, high thermal stability, etc.). Contact: Ruth Houbertz, houbertz@isc.fraunhofer.de.

Fraunhofer IPMS #6181

Grenzstr 8, Dresden, Germany, 01109
49 351 8823 0; fax 49 351 8823 266
info@ipms.fraunhofer.de; www.ipms.fraunhofer.de

New Product: Transparent OLED light sources and displays; OLED on silicon integration.

Fraunhofer IPMS carries out customer specific developments in the field of microelectronic and microsystem technology. The institute is prepared for serial production of modern CMOS compatible MEMS technology products in its own clean room facilities. About 180 scientists work to provide customer specific solutions in the field of circuit design, sensors and sensor systems, micromechanical actuators and actuator systems, lightmodulating microsystems and organic electronics. Contact: Ines Schedwill, Ines.Schedwill@ipms.fraunhofer.de.

Fraunhofer-Institut für Angewandte Festkörperphysik #1801

Tullastr 72, Freiburg, Germany, 79108
49 761 5159 0; fax 49 761 5159 400
info@iaf.fraunhofer.de; www.iaf.fraunhofer.de

At the Fraunhofer Institute for Applied Solid State Physics (IAF) novel semiconductor lasers and light emitting diodes emitting in a large spectral range from the UV (350 nm) to the mid-IR (12 μ m) are developed. The complete production chain from design to epitaxy, processing and packaging is covered within our institute. For our customers we develop and supply prototype devices and modules up to a small scale production level. Contact: Christian Mann.

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

New Product: PlasmAR-AR Structuring of Optical Surfaces in nm size for higher transmission and performance.

Fresnel Optics GmbH is a German subsidiary of the US Reflexite Corporation. Based on a complete chain from optical design to custom finishing and certified according to DIN EN ISO, we offer state-of-the-art fabrication of plastic microstructured optics. Product enhancement includes PlasmAR structuring, coating, printing and customized trimming. Our optical components are used in automotive and display applications and serve in machine-vision, sensor, avionics, solar, lighting and other systems.

Fresnel Technologies Inc. #5059

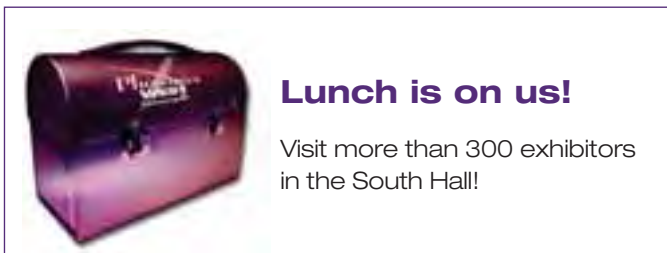
101 W Morningside Dr, Fort Worth, TX, 76110
817/926-7474; fax 817/926-7146
info@fresneltech.com; www.fresneltech.com

Fresnel Technologies manufactures molded plastics Fresnel lenses and related optical components, 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; Donald Combs, Diamond Machining Specialist, dcombs@fresneltech.com.

Frontier Optics Inc. #6242

5 Pacifica, Aliso Viejo, CA, 92656
949/448-5954; fax 949/215-7832
frontier-optics@att.net

Manufacturer of stock and custom precision optical components. Products include singlet lenses, doublets, cylindrical lenses, prisms, windows, mirrors, beamsplitters and filters. Capabilities include prototype and high volume production. Contact: Lee Shaw, President, Lshawfrontier@att.net.



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Frontier Semiconductor #6031

1631 N First St, San Jose, CA, 95112
408/452-8898; fax 408/452-8688
fsm100@frontiersemi.com; www.frontiersemi.com

New Product: FSM 360 Inline UV/VIS Raman System, FSM 413 Microscope FO Interferometer, Rs, Leakage and EOT Testers.

FSM company was founded in 1988, with film stress tools serving semiconductor and optoelectronic customers as its core technology. Currently FSM product portfolio includes suite of advanced metrology products for FEOL, BEOL and packaging applications. FSM provides metrology solutions for stress (based on optical cantilever and Raman spectroscopy), wafer thickness, desorption during heat process, ion implantation, metal contamination, resistivity, leakage and gate oxide metrologies. Contact: Wojtek Walecki, Optical Division Manager, wojtekwalecki@frontiersemi.com; S. Lau, Vice President, shlau@frontiersemi.com.

Fuji Hunt Photographic Chemicals, Inc. #6020

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Fujian CASTECH Crystals, Inc. #1831, #6300

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86 591 8371 0533; fax 86 591 8371 11593
sales-us@castech.com; www.castech.com

Develops and manufactures Nonlinear Optical Crystals, Laser Crystals, Birefringent Crystals and Optical Components. A worldwide leading supplier for LBO (patented product), BBO, KTP, Nd:YVO4, Nd:YLF and other optical components. Contact: Robert Chen, Director of Sales and Marketing, Sales Manager, Manager of USA Sales Office.

Fujinon, Inc. #6341

10 High Point Dr, Wayne, NJ, 07470
973/633-5600
www.fujinon.co.jp

Fuzhou Kire Optronics Co., Ltd. #6082

Bldg B Guishan Industry Factory, Guishan Rd, Fuzhou, China, 350013
86 591 87588833; fax 86 591 87575777
sales@kireinc.com; www.kireinc.com

Fuzhou Kire Optronics Co., Ltd. is one of the leading optical companies in China. Dedicated to the design, manufacturing and distribution of high precision optical elements and system; also we supply coating service applied in the special range from UV to IR.

G.M. Associates, Inc. #6126


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Gam Laser Inc. #5034

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407/851-8999; fax 407/850-0700
sales@gamlaser.com; www.gamlaser.com

New Product: EX5/1000: 1KHz EX5 laser: high pulse-pulse stability, pointing stability, improved gas & optics lifetime.

GAM manufactures the longest gas lifetime excimer lasers. Applications Includes Interferometry, micromachining, Lithography, Metrology, LIDAR, FBG, etc. Key benefits: High Reliability, Soft Corona preionization, high pointing stability, low trigger jitter, longest gaslife, higher energy density, all metallic/ceramic design, Int. vacuum pump & halogen filter, Int. energy monitor, computer controlled. Wavelengths(nm): 157, 193, 222, 248, 308, 337, 351. Energy Output: 2-200mJ Rep. Rate: 60-1000Hz. Contact: Joe Batcho, Sales Manager, joe_batcho@gamlaser.com; Aruna Bala, Applications/ Sales Engineer, aruna@gamlaser.com.

Gamma Scientific, Inc. #1045

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info@gamma-sci.com; www.gamma-sci.com

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GEL-PAK #1536

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General Atomics #6343

10240 Flanders Ct, San Diego, CA, 92124
858/457-8813; fax 858/457-8746
chirag.sheth@ga.com; www.galasers.com

New Product: Diode-pumped, solid state UV laser. High Efficiency Diffraction Gratings - Gold and Multilayer.

General Atomics (GA) is a privately held technology and product company headquartered in San Diego, CA, USA. The Commercial Laser Group (CLG) of GA is leading the development in diode-pumped, solid-state nanosecond lasers and high efficiency diffraction gratings. The CLG has developed the Everest[®] SuperPulse[™], a patented dual-pulse laser, which has allowed users to process a variety of materials at ablation rates many orders of magnitude greater than femtosecond lasers and at a comparable quality. Contact: Chirag Sheth, Marketing Engineer, chirag.sheth@ga.com.

General Optics, Inc. #6071

5390 Razuko Ct, Moorpark, CA, 93021
805/529-3324; fax 805/529-4298
www.generaloptics.com

General Optics is the premiere manufacturer of ultra-precision optics for OEM applications. The company manufactures a wide variety of custom optics from a broad selection of materials and is distinguished from other manufactures by its unsurpassed manufacturing capabilities. These include super polishing, IBS coating of optics, machining of optics and the ability to process substrates up to twenty inches in diameter.

General Scanning Optical Scanning Products #6071

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Manufacturer of laser beam measurement and analysis instruments. Product line includes a complete range of thermopile power meters, pyroelectric energy meters and calorimeters. Also features the HBS (Holographic Beam Sampler) series for beam sampling and beam profiling equipment. Contact: Christian Lafrance, Sales Engineer East & Central, clafrance@gentec-eo.com; Nathalie Becotte, Sales Manager West Coast, nbecotte@gentec-eo.com.

Gentex Corp. Filtron #2003

PO Box 315, 324 Belmont St, Carbondale, PA, 18407
570/282-8502; fax 570/282-8555
filtron@gentexcorp.com; www.gentexcorp.com

Filtron by Gentex is a proprietary line of organic dyes allowing selective and broadband absorption of light from the UV through IR regions. These dyes can be homogeneously dispersed into an array of polymeric substrates to create filters with unique spectral absorption and transmission characteristics. We incorporate this capability into a variety of products including cast acrylic sheet, injection molded plates, custom resins, laser eyewear, lenses, indicator panels and custom molding parts. Contact: Scott Hartley, Business Development Manager, shartley@gentexcorp.com; Timothy Kopp, Filtron Marketing Specialist, tkopp@gentexcorp.com.

GEOMATEC Co. Ltd. #6230

c/o Blue Hill Optical Technologies, 480 Washington St,
Norwood, MA, 02052
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GEOMATEC designs and produces high quality scan lenses and 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, President, pbarrows@bluehilloptical.com; Martina Spitzer, Sales Engineer, mspitzer@bluehilloptical.com.

Gestione SiLO srl #6065

Via di Casteloulci 14/D, Scandicci Florence, Italy, 50010
39 055 7221367; fax 39 055 7221394
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AOIA Facts

Arizona's burgeoning optics industry started in 1942, based around the area's large number of telescopes. Within 100 kilometers of Tucson, Arizona, there are more square centimeters of astronomical glass pointed out toward the universe than at any other location on earth.

Today, Arizona Optics Industry Association members number more than 300 companies and organizations covering a broad range of products and services.

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Gigahertz-Optik, Inc.

#1133

5 Perry Way, Newburyport, MA, 01950-4009
978/462-1818; fax 978/462-3677
www.gigahertz-optik.com

New Product: Gigahertz-Optik X4 Light Analyzer precise photometer-radiometer-colorimeter.

Gigahertz-Optik is a manufacturer of instrumentation for the Measurement of Light and Measurement with Light including UV-Vis-NIR radiometers, photometers, colorimeters, integrating spheres, power/noise/pulse analyzers, reflectance/transmittance meters, optically diffuse materials and calibration standards. Standard lab-based systems, mobile models plus OEM & custom design services are available for industrial, medical and research applications. Contact: Bob Angelo, Vice President of Sales and Marketing, b.angelo@gigahertz-optik.com; Philip Crowley, Sales, phil@markettechinc.net.

Gilway Technical Lamp Co.

#6016

55 Commerce Way, Woburn, MA, 01801
781/935-4442; fax 781/938-5867
sales@gilway.com; www.gilway.com

Gilway Technical Lamp unites specialized manufacturing techniques with assembly and testing, together with our broad product line, including high power LEDs, precision lens end lamps, halogen lamps, holders, reflectors, neon, miniature, UV, visible and IR lamps and provides unmatched customer service and support in an ISO 9001:2K environment. We also help with product concept development and specifications to prototypes and complete assemblies. Contact: Thomas Connolly, President.

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#5055

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info@glassfab.com; www.glassfab.com

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#5112

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sales@globallasertech.com; www.globallaser.co.uk

GMN Paul Müller Industrie GmbH & Co. KG

#521

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49 911 5691 527; fax 49 911 5691 699
info@gmn.de; www.gmn.de

Gooch & Housego, PLC

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Gorman Rupp Industries

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419/886-3001; fax 419/886-2338
kgranger@gripumps.com; www.gripumps.com

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GPD Optoelectronics Corp.

#6240

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, biomedical and telecommunications applications. Devices are available in die form, on submounts and in a large variety of TO-and custom packages. Custom designs (including custom optical coatings) are a GPD specialty. Contact: Dan LaPointe, Sales Manager, dlapointe@gpd-ir.com; Rufus Ward, Vice President, Engineering, rward@gpd-ir.com.

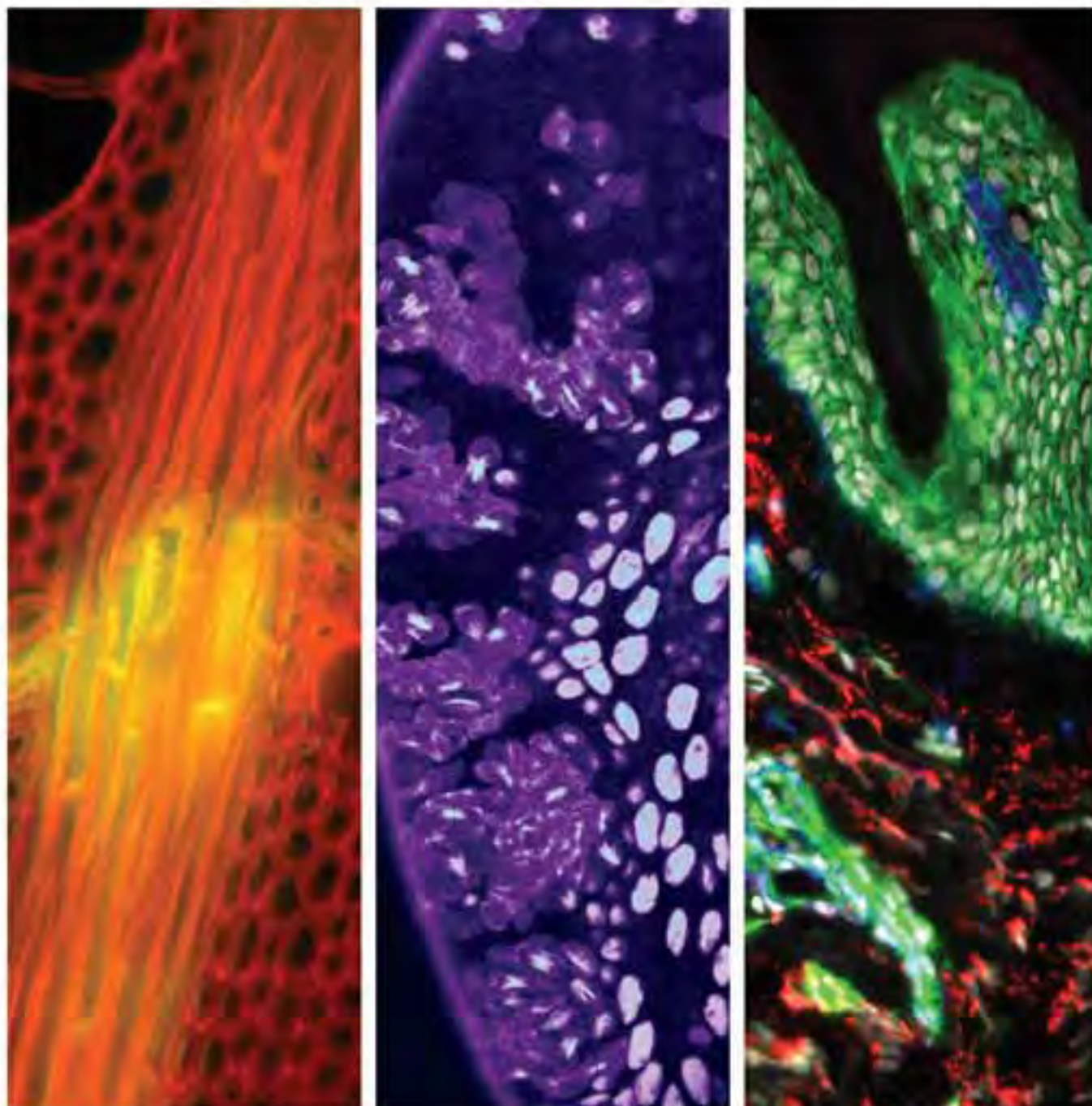
Grintech GmbH

#141

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

New Product: 0.85mm diameter objective lenses for imaging fiber bundles.

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GSI Group #6071

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GTI #6109

Gwangju Institute of Science and Technology, Buk-gu,
Gwangju, CT, Korea, 500-712
82 62 970 3126; fax 82 62 970 3115
dykim@gist.ac.kr; www.gist.ac.kr

New Product: ultra-wideband supercontinuum sources (superchrome), high-power pulse lasers.

We produce ultra-wideband (800-1800 nm) supercontinuum sources based on reliable fiber-optic technology. Superchrome targets fiber-optic measurement and OCT applications. Contact: Sucbei Moon, Sales Engineer, moonsb@optune.co.kr.

GTI Technologies, Inc. #6311

6 Armstrong Rd, Shelton, CT, 06484
203/929-2200; fax 203/926-0074
sales@gti-usa.com; www.gti-usa.com

GTI Technologies sells and services multi-wire saw and wafer lamination, delamination, and mounting tools from Takatori, wafer measurement tools from MTI, EDXRD Crystal orientation devices from Roentec, backgrinding systems from Supfina and GTI, carbon fiber and effectors from Astel, wafer scribing equipment from JFP, gas detection systems from RKI Instruments, GTI Dicing systems and process gas abatement systems from IEM. Contact: Bob Thron, Vice President Sales, bob@gti-usa.com.

Guided Color Technologies GmbH #1415

Goeschwitzer Str 25, Jena, Germany, 07745
49 3641 65 4530; fax 49 3641 65 4533
contact@gc-tec.de; www.gc-tec.de

New Products: Fiber coupled modulators VIS; Fiber pulsed laser sources; Fast electronics for modulators & lasers.

Guided Color Technologies GmbH (GC-Tec) is a manufacturer of integrated-optical modulators and fiber lasers. The product line of integrated optical (IO) modulators includes models for the VIS and NIR range (532 nm - 1550 nm). There are phase modulators available as well as intensity modulators with bandwidths up to 10 GHz. The product line of fiber lasers covers the visible range at 491, 520, 546 and 635 nm. Other wavelengths are in development. They have around 10 mW output power. Contact: Peter Riedel, Sales & Marketing.

Guild Optical Associates, Inc. #3033

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. We work with all of the common optical materials and have a world-wide reputation for our work in sapphire. We provide Prototypes through full production runs with tight tolerances and superior surface finishes.

Gurley Precision Instruments, Inc. #331

514 Fulton St, Troy, NY, 12180
518/272-6300; fax 518/274-0336
info@gurley.com; www.gurley.com

Gurley Precision Instruments (GPI) has a long history of manufacturing high-end optical components. We utilize standard substrate materials in our fabrication process to manufacture lenses, prisms, windows, reticles and other components. In addition, we also offer high-end optical coatings including Anti-Reflection (NB, BB and Dual Band) and chrome on glass patterns such as targets. GPI is a one stop supplier of optical components offering competitive prices and quick delivery. Contact: Martin Gordinier, Vice-President of Sales, m.gordinier@gurley.com; Brian Molis, Director of Optic Sales, b.molis@gurley.com.

GWU Lasertechnik GmbH #935, #942

Talstr 3, Erfstadt, Germany, 50374
49 2235 955 220; fax 49 2235 756 32
info@gwu-group.de; www.gwu-group.de

New Product: Ns-OPOs, harmonic generators, wavemeters, crystals, optics, Echelle spectrographs.

GWU offers a product line of pulsed 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/OPOs/harmonic generator systems in a common housing (even for outdoor use). Further products: Spectrelle - high resolution Echelle spectrographs, crystals and optics, including laser and non-linear crystals, periodically poled crystals, waveplates and prisms. Contact: Günter Warmbier, President; Mark Mann, Sales Manager, sales@sacher.us.

Halbo Optics

#6003

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: Magnesium fluoride Rochon polarizers.

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: Harry Koetser, Technical Manager.

Halcyonics GmbH

#6035

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49 551 9990620; fax 49 551 999062 10
info@halcyonics.de; www.halcyonics.de

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908/231-0960; fax 908/231-11539
usa@hamamatsu.com; www.hamamatsu.com

Hamamatsu is the proven leader in the photonics industry. For more than 50 years, Hamamatsu has been unsurpassed in its number of innovations and its dedication to research and development. Hamamatsu offers a vast range of devices for the generation and detection of light. Hamamatsu is known for quality, reliability and the ability to customize to meet the exact specifications for companies that rely on photonic components and systems to meet their goals.

Hamamatsu Photonic Systems

#826, #827

360 Foothill Rd, Bridgewater, NJ, 08807
908/231-1116; fax 908/231-0852
sales@hamamatsu.com; www.hps-systems.com

New Product: C9260 series Board camera for OEM solutions, C9300-124 10.6 pixel camera for PIV and flow imaging.

Hamamatsu, the world leader in imaging technology, produces imaging and analysis systems and systems featuring X-Ray, UV, VIS, IR, low light capability, fast frame rate and real time image processing as well as ultrafast, ultra-sensitive streak cameras, picosecond light pulsers and the C9136 FLIM system offering <20ps time resolution and fast scanning for lifetime imaging of live cells. Contact: Mary Boyle, Business Manager, mboyle@hamamatsu.com; Bill Cieslik, Product Manager, bcieslik@hamamatsu.com.

Meter Board Sponsor

hannoverimpuls GmbH

#1801

Breite Str 7, Hannover, Germany, 30159
49 511 300 333 0; fax 49 511 300 333 99
www.hannoverimpuls.de

Situated in the heart of Europe, Hannover (Germany) is a leading region for business and research in optical technologies, providing ideal prerequisites for successful company location and start-up activities. We at hannoverimpuls, the local business promotion company, are providing extensive and customer-oriented technological, financial, administrative and operational assistance to establish your business successfully in Hannover. Visit us at our booth for more information. Contact: Oliver Dehning, Project Manager, Oliver.Dehning@hannoverimpuls.de; Steven Lanier, Director, slanier@awscorp.com.

Harold Johnson Optical Labs.

#3006

1826 W 169th St, Gardena, CA, 90247
310/327-3051; fax 310/327-6179
www.hjol.com

Custom manufacturer of cylindrical and spherical lenses, achromats, prisms, mirrors, filters, wedges, domes, hyperhemispheres and multielement assemblies in prototype and volume quantities for aerospace and commercial industries. Contact: Hal Johnson, President, hj@hjol.com; Julia Stockwell, Sales Manager, julia@hjol.com.

Hawkeye Technologies LLC, TomaTech Products

#632

241 Research Dr Ste 4, Milford, CT, 06460
203/878-6892; fax 203/878-7462
info@hawkeyetechnologies.com;
www.hawkeyetechnologies.com

Broadband filament wound and pulsed IR sources for continuous and modulated applications. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

HC Photonics Corp.

#1739

Science Based Industrial 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: PPMgO:LN/PPMgO:SLT Bulk and Waveguide for RGB display, Bio, THz, Mid-IR and other applications.

HC Photonics, one of 100 most promising companies in the "Greater Asia" region by Red Herring Asia, was established in Year 2000 and co-founded by Stanford graduates. The company is financially supported by JAFCO Group. HCP provides Periodically Poled Nonlinear Materials, PPLN, PP-MgO:CLN, PP-MgO:SLN, PP-MgO:SLT Bulk and Waveguide devices, with the highest performance for different applications specially for RGB display, Bio-photonics, Mid-IR and THz applications. HCP inside is the Best! Contact: Karin Wu, Sales Manager, karin@hcphotonics.com.

Headwall Photonics

#3014

601 River St, Fitchburg, MA, 01420
978/353-4100; fax 978/348-1864
information@headwallphotonics.com;
www.headwallphotonics.com

New Product: Hyperspec - Hyperspectral Imaging Systems for Commercial Applications.

Design & manufacture of optical instruments to manage wavelengths for OEM customers in analytical & telecommunications industries. Products - integrated sensors, spectral modules and original holographic diffraction gratings. Specialization-integration of detectors and spectral engines for application-specific performance. Multi-channel Raman, hyperspectral imaging systems, micro-spectrometers, Low PDL gratings. Highest optical performance, low stray light, small form factor & rapid prototyping. Contact: Kirk Grim, Sales, Jay Zakrzewski, Business Development.

Heidelberg Instruments Inc.

#1916

2807 Oregon Ct Unit E-2, Torrance, CA, 90503
310/212-5071; fax 310/212-5254
sales@heidelberg-instruments.com; www.heidelberg-instruments.com

New Product: μ PG 101 table top maskless lithography laser writer; 5 μ features, 4" sq substrates. ON DISPLAY!

Maskless lithography laser writers for photomask production, direct writing applications and gray scale exposures. Ideal for rapid prototyping of 2D and 3D microstructures. μ PG 101 is the latest addition to the series of lithographic systems by Heidelberg Instruments—a company with 20 years of experience and over 230 direct write lithography systems worldwide, including prestigious universities and research institutes in the USA. μ PG 101 table top system-stop by for a demonstration! Contact: John Donnelly, Technical Sales, USA.

Heliotis Inc.

#6293

Badenerstr 569, Zurich, Switzerland, 8048
41 44 497 1498; fax 41 44 497 1400
info@heliotis.ch; www.heliotis.ch

Helix Technology Corp.

#5111

9 Hampshire St, Mansfield, MA, 02048
508/337-5000; fax 508/337-5180
marketingcommunications@helixtechnology.com;
www.helixtechnology.com

Hellma International, Inc.

#320

80 Skyline Dr, Plainview, NY, 11803
516/939-0888; fax 516/939-0555
info@hellmausa.com; www.hellmausa.com

New Product: Zeiss PGS nir Spectrometer modules 960-2150nm in combination, MMS CCD modules for low light apps.

Manufacturer of Hellma Optics, Photometer Cells and Accessories, Fiber Optic Immersion Probes, Calibration Standards, Cylindrical and Flat Optics, Beam Splitters and Mirrors for Laser and other applications. Unmatched selection of stock and custom Cells. Supplier of Cathodeon Light Sources including Deuterium, Hollow Cathode, Photoionization, Spectral Line; Zeiss MMS/MCS Monolithic Miniature Spectrometer modules covering 190-2200nm in combination with 16 bit S/N Tec5 Interface electronics. Contact: Dan Fields, Sales Manager, dfields@hellmausa.com; Ed Roth, Sales Engineer, eroth@hellmausa.com.

Heptagon Oy

#6293

Moosstr 2, Rueschlikon, Switzerland, 8803
41 44 497 3000; fax 41 44 497 3001
sales@heptagon.fi; www.heptagon.fi

New Product: Compact LED flash module based on thin flat robust LED microlens with unique beam-shaping capability.

Heptagon is a pioneer and leader in replicated diffractive and refractive micro-optics. Our expertise in design and mastering, and our 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 IR reflow compatible and Telcordia qualified. Heptagon is ISO9001 certified and manufactures components in high volumes for customers worldwide. Contact: Jyrki Saarinen, Senior Vice President, jyrki.saarinen@heptagon.fi; Martin Salt, Project Manager, martin.salt@heptagon.fi.

Heraeus Quartz America

#532

100 Heraeus Blvd, Buford, GA, 30518
678/714-4350; fax 678/714-4358
sales@heraeus-optics.com; www.heraeusoptics.com

Heraeus Quartz America, a subsidiary of Heraeus Quarzglas, GmbH, a leader of market and technology manufacture of high-quality quartz glass and synthetic fused silica materials and products. Through differential product performance, customer service and technical support within North America, Heraeus is committed to delivering quality products that meet our customer's specifications on-time. Flexibility and responsiveness to our customers are the foundations of our business. Contact: Bambi Everett, Marketing, Advertising and Promotions, bambi.everett@heraeus.com.

High Energy Laser Joint Technology Office

#6231

901 University Blvd SE Ste 100, Albuquerque, NM, 87106
505/248-8200; fax 505/245-2195

The HEL JTO was established in 2000 to develop and execute a DoD investment strategy for HEL S&T that would underpin weapons development. The JTO currently sponsors 80+ projects across industry, academia and government with a budget of \$70 million. The competitively awarded programs are chosen to advance the current state of the art in HEL technology and fill technology gaps, thus providing a broad capability that can be harvested in acquisition programs by the military services. Contact: Chris Washer, System Engineer, Chris.Washer@jto.hpc.mil.

High Finesse GmbH

#1233

Auf de Morgenstelle 14, Tübingen, Germany, 72076
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.highfinesse.de

High Finesse offers fizeau interferometer-based wavelength and line width meters to operate in the cw or pulsed regime from 193 - 2000nm, with different resolution options ranging from less than 10MHz to 5000MHz. TPI is our distributor in the US. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com.

High Plains Optics

#1507

105 S Sunset Ste M, Longmont, CO, 80501
303/678-1406; fax 303/678-0299
www.highplainsoptics.com

New Product: High Plains Optics now offers spherical and cylindrical lens fabrication and test capabilities.

High Plains Optics manufactures a broad range of high quality, precision optical components and related services. We provide custom fabrication services using advanced techniques and state-of-the-art equipment. Applications include medical instrumentation, inspection equipment and precision substrates for coating. Complex optical prisms are an important company strength. New spherical and cylindrical lens capabilities have been recently added. Contact: Natalie McMillan, Customer Service, nmcmillan@highplainsoptics.com; R. Jay Perkins, President, jperkins@highplainsoptics.com.



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• *Strong optics and photonics knowledge base*

• *Booming high-tech sectors*



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-Fortune Magazine

“Ranked as one of the top places to live”
-CNN Money



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High Power Devices, Inc.

#1910

1200-A Airport Rd, North Brunswick, NJ, 08902
732/249-2228; fax 732/249-8139
sales@hpdinc.com; www.hpdinc.com

New Product: HPD7401 Visible Laser System in an RS232 interfaced OEM version has half the footprint of the 7401.

Manufacturer of laser diodes and turn key laser delivery systems. Standard CW wavelengths include 630/635, 650, 670, 690, 730, 785, 808, 830, 870, 905 and 980nm with powers ranging from 0.25W to 5W. All products, including newly introduced 1.5um can be used in short pulse configurations. Custom prototyping is available for wavelength, fiber pig-tailing and special packaging. Contact: Leonard Hillis, Director of Marketing; John Cary, Application and Sales Specialist.

Hinds Instruments, Inc.

#834

3175 NW Aloclek Dr Ste 170, Hillsboro, OR, 97124-7135
503/690-2000; fax 503/690-3000
info@hindsinstruments.com; www.hindsinstruments.com

Manufacturer of high sensitivity polarization metrology tools. These include the photoelastic modulator (PEM) polarization modulation components, Dual PEM Stokes Polarimeters, high speed optical choppers, and Exicor® birefringence measurement instrumentation. The PEM is used in MOKE, ellipsometry, and other spectroscopy applications. The Polarimeters can be used for fiber or free space applications. The Exicor systems display measurement data from LCDs, film or optics in high content data maps. Contact: Amanda Bryan, Sales Engineer, abryan@hindsinstruments.com.

Hitachi High Technologies America, Inc.

#6188

3100 N First St, San Jose, CA, 95134
800/548-9001; fax 408/432-0704
sales-ls@hitachi-hita.com; www.hitachi-hita.com

New Product: U-0080D Photodiode Array Spectrophotometer.

Hitachi High Technologies America, Inc. (HTA) assists researchers in finding solutions to their scientific instrument requirements with a wide range of reliability-proven analytical instrumentation, including high performance liquid chromatography (HPLC), Amino Acid Analyzers and UV-Visible/NIR and Fluorescence Spectroscopy Systems. Contact: Chad Ostrander, Product Marketing Manager; Kyoko Ramirez, Senior Marketing Specialist.

HOLOEYE Photonics AG

#5093

Albert-Einstein-Str 14, Berlin, Germany, 12489
49 30 6392 3660; fax 49 30 6392 3662
contact@holoeeye.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 OEM 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 microdisplay types and products as OEM solution in higher quantities. Contact: Klaus von Guenner, Sales, klaus.von.guenner@holoeeye.com; Rudy Garza, Sales Manager, rudy.garza@holoeeyecorp.com.

Honeywell Electronic Materials

#5083

1349 Moffett Park Dr, Sunyvale, CA, 94089
408/962-2098; fax 408/980-1430
www.honeywell.com

Honeywell manufactures sapphire substrates and custom sapphire fabrications. We are a primary producer of Czochralski grown sapphire crystals, from which we generate a variety of products ranging from sapphire rodstock and blanks to finished components such as windows, domes and substrates. Our sapphire substrates are available in 2, 3 and 4 inch wafer sizes and are integral to the production of advanced LEDs. With over 20 years of experience, HEM is recognized as a world leader in this area.

Meterboard Sponsor

High Q Laser (US), Inc.

#1817

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

High Q Laser is a leading manufacturer of ultrafast all-diode-pumped, solid state pico- and femtosecond oscillators, cavity-dumped oscillators, and regenerative amplifiers. All lasers are based on direct diode-pumping and semiconductor saturable absorber (SESAM) modelocking. Covering 266nm to 1340 nm, 1 kHz to 1.5 Ghz and more than 10W, the set-up of High Q Laser systems is compact and modular - operation and installation is easy. Sealed-off technology leads to long life times and reliability. Contact: Wolfgang Seitz, Sales & Technical Support Manager, wolfgangseitz@highq-us.com; Daniel Kopf, President & Chief Executive Officer, danielkopf@highqlaser.at.

High Tech Photonics

#1636

61 Alafaya Woods Blvd, Oviedo, FL, 32765
800/335-5582
www.jtingram.com

New Product: IR Fiber Probes (2-18um), Gold fiber, Fiber coupled High Power LED's, Fiber coupled MCT detectors.

Broad Spectrum Fiber Optic solutions from the UV to 18um, Metalized Fiber Optics including Gold, copper and Al, High Temperature Fiber Optics, Fiber coupling, High Power Fiber Optic Delivery, Medical Probes, Fiber Coupled Detectors (UV-18um), High Power Fiber Coupled LED sources, FTIR accessories, Fiber Optic CO₂ Laser delivery, Fiber Optic Vacuum Feedthroughs Contact: Jim Ingram, Marketing Manager, Jim@JTIngram.com.

Hilger Crystals Ltd.

#1315

Unit RI Westood 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

Manufacturer of synthetic crystals for infrared and x-ray detection applications. Materials supplied can be used for FTIR optics or x and gamma ray detectors for security or medical applications. Contact: Jim Telfer, General Manager, jim.telfer@hilger-crystals.co.uk.

Hong Kong Photographic and Optics Manufacturers Association #6108

HKPC Bldg, 78 Tat Chee Ave,
Kowloon Tong Hong Kong, China,
852 2788 5544; fax 852 2788 5543
hkpoma@hkpc.org; www.hkpoma.org

The Hong Kong Photographic and Optics Manufacturers Association, inaugurated in 2000, has around 60 members heavily engaged in high value-added manufacturing activities including optics design, manufacturing & business investment. The HKPOMA successfully assists many Hong Kong industrialists interested in optics & opto-mechatronic industry to explore & diversify into the business and to develop a close network & collaboration relationship with China, overseas industries & related organizations. Contact: Tammy Tse, Secretary, tammytse@hkpc.org.

HORIBA Jobin Yvon - Raman & Fluorescence Divs #427

3880 Park Ave, Edison, NJ, 08820-3012
732/494-8660
www.jobinyvon.com

Raman Division-We are the leading supplier of Raman spectroscopy, our Raman products include the award winning LabRAM family of Raman microscopes including the LabRAM HR our high spectral resolution system, the LabRAM IR our combined Raman and FT-IR microscope and the LabRAM INV inverted microscope based system for biological applications.

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3880 Park Ave, Edison, NJ, 08820-2417
732/494-8660; fax 732/549-5125
info@jobinyvon.com; www.jobinyvon.com

New Products: Multilayer diffraction gratings, dual channel mini spectrograph, complex spectrograph series from UV to NIR.

OEM products: Diffraction gratings, spectroscopic and imaging subsystems, monochromators, spectrographs, optical subsystems, contract manufacturing, imaging CCD cameras. Custom products: Diffraction gratings and mirrors for flight, laser, pulse compression, and synchrotron applications. Contact: Dave Goodwin, Applications Engineer-Sales Manager, dave.goodwin@jobinyvon.com; Steve Kane, Applications Engineer-Custom Gratings, steve.kane@jobinyvon.com.

HORIBA Jobin Yvon Inc. - Optical Spectroscopy Div. #427

3880 Park Ave, Edison, NJ, 08820
732/494-8660; fax 732/549-5125
www.jobinyvon.com

Displaying Optical Spectroscopy Products for Photoluminescence, Fluorescence, and Raman. All products include: Spectrometers, Imaging Spectrographs, Diffraction Gratings, CCDs, InGaAs Arrays, PMTs, IR Detectors, Sample Compartments, and Customized Spectroscopy Solutions.

HORIBA Jobin Yvon Inc. - Thin Film Div. #427

3880 Park Ave, Edison, NJ, 08820
732/494-8660; fax 732/549-5125
eric.teboul@jobinyvon.com; www.jobinyvon.com

HORIBA Jobin Yvon Thin Film Division manufactures Spectroscopic and Laser Ellipsometers for thin film and bulk materials characterization. Ellipsometry measures film thickness and optical constants for all types of materials. We also provide Optical Emission Spectrometers and Imaging Laser Interferometers for In Situ Real Time plasma analysis, Trench Depth Monitoring and End Point Detection.

Hoya Corp. USA #2015

101 Metro Dr Ste 500, San Jose, CA, 95110
408/441-3300; fax 408/451-9562
opticsales@hoyausa.com; www.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 also offer a variety of Coatings and Fabrication capabilities.

HTA Photomask #5129

1620 Berryessa Rd Ste C, San Jose, CA, 95133-1026
408/259-9595; fax 408/259-4955
sales@htaphotomask.com; www.htaphotomask.com

Hypertronics Pte Ltd. #6223

1022 Tai Seng Ave #06-3514, Tai Seng Industrial Estate,
Singapore, Singapore, 534415
65 62800055; fax 65 62849910
mail@hylax.com; www.hylax.com

HYTEC, Inc. #1033

110 Eastgate Dr, Los Alamos, NM, 87544
505/661-3000; fax 505/662-5179
sales@hytecinc.com; www.hytecinc.com

New Product: PRISM D/V provides real-time high resolution maps of what happens to an element/panel under load.

HYTEC, Inc. is an employee owned, ISO Certified, small business headquartered in Los Alamos, New Mexico with three wholly owned subsidiaries. HYTEC Engineering Inc. (HEI) specializes in advanced engineering projects. HYTEC Sensors & Imaging Group (HYSIG) is a custom manufacturer of optical and radiographic imaging equipment including FlashCT and PRISM. HYTEC Scanning Services Inc. (HSSI) offers high volume, high-speed, x-ray scanning services to orthodontists/dentists. Contact: Robert Kline, Executive Vice President and Chief Operating Officer, rkline@hytecinc.com.

Photonics West Exhibitor Directory

Ibsen Photonics

#6180

Ryttermarken 15-21, Farum, Denmark, DK-3520
45 4434 7000; fax 45 4434 7001
inquiry@ibsen.dk; www.ibsenphotonics.com

New Product: PING! - Polarization independent telecom gratings: Fused Silica Transmission Gratings.

Ibsen supplies Phase masks, Fused Silica Transmission Gratings and Optical Modules. An established, leading manufacturer of holographic phase masks, transmission gratings are today supplied to a broad range of applications including telecom, laser pulse compression and spectrometers. More than 10 years in diffractive optics is leveraged in optical modules such as the I-MON FBG Sensor System Interrogation Monitors and D-MON Optical Channel Monitors in addition to OEM Spectrometer modules. Contact: Kristian Buchwald, Product Manager, Phase Masks & Gratings, kjb@ibsen.dk; Bjarke Rose, Product Manager, Optical Modules, br@ibsen.dk.

ICA Corp.

#1244

12130 Brockton Ln, Minneapolis, MN, 55369
800/345-2801; fax 763/428-4230
www.icacorp.com

Contract manufacturer providing build-to-print metal fabrication of component parts and assemblies to the imaging, medical, instrumentation and electronics industry. Wide range of capabilities - close tolerance CNC machining, opto-mechanical component machining, custom electronic enclosures, electro-mechanical assembly and sheet metal fabrication. Let us help you meet your challenges by being an extension of your company - giving you the flexibility to focus on the things you do best. Contact: Susan Goran, National Sales Manager, sgoran@icacorp.com.

id Quantique SA

#632

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

c/o German Pavilion, Torstr 124, Berlin, Germany, 10119
49 30 283 9390; fax 49 30 283 93928
broede@iecberlin.de; www.iecberlin.de

ILX Lightwave Corp.

#5036

31950 E Frontage Rd, Bozeman, MT, 59715
406/556-2481; fax 406/586-9405
sales@ilxlightwave.com; www.ilxlightwave.com

ILX Lightwave manufactures laser diode test and measurement instruments and systems, including laser diode current sources, temperature controllers, mounting fixtures, optical power meters, precision fiber optic sources, and laser diode test systems. Contact: Steve Gwinner, Director Sales and Marketing, sgwinner@ilxlightwave.com; Patrick Gale, Sales Engineer, pgale@ilxlightwave.com.

Imagine Optic

#1421

18 rue Charles de Gaulle, Orsay, France, F-91400
33 1 648 61560; fax 33 1 648 61561
contact@imagine-optic.com; www.imagine-optic.com

New Product: New software version_Mirao: high dynamic deformable mirror_New HASO 64!!!

Imagine Optic is Europe's leading provider of Shack-Hartmann wavefront sensing technologies for adaptive optics, quality control and optical measurement. Since 1996, we've been supplying industry leaders around the world with the high-quality products and services that they need to perform. From X-EUV, to the visible light spectrum and on to NIR (near infra-red), we develop, manufacture and support the largest range of wavefront measurement and correction technologies available. Contact: Jerome Ballesta, Sales Engineer, jballesta@imagine-optic.com.

IMM Messtechnologie GmbH

#715

Carl-Von-Linde-Str 40, Unterschleissheim, Germany, 85716
49 89 321412 0; fax 49 89 321412 11
info@imm-laser.de; www.imm-laser.de

New Product: IMM products include laser diode modules/ collimators, fiberoptic components, laser accessories.

Established in 1992 IMM Messtechnologie GmbH has been continuously developed to supplier, distributor and service company. With more than 30 employees we are one of the leading suppliers in laser technology, optoelectronics and fiber optics with own development and production department. With regard to customer specific solutions, we have got nearly 100 years of experience in engineering; our technical know-how is reflected in the high quality of our products. Contact: Friedrich Raith, Managing Director.

Impex HighTech

#6334

Hovesaatstr 6, Rheine, Germany, 48432
49 5971 981650; fax 49 5971 981659
www.impex-hightech.de

New Product: Single frequency, q-switched 1064nm laser (10µJ pulse energy, 10 kHz repetition rate, ns pulsewidth).

IMPEX HighTech was founded 1995 and started with crystal growth of sapphire and doped YAG. The possibilities were enlarged tremendously so now producing a broad range of optical elements for UV to IR application (eg. Al₂O₃, ZnSe). The newest product IMPEX manufactures is a single frequency, q-switched laser with >10µJ pulse energy, 10kHz repetition rate and <2ns pulselength. With due date 1st of May 2005, IMPEX purchased the U.S. based "Princeton Scientific Corporation" in Princeton, New Jersey. Contact: Norbert Munser, Dipl. Ing., munser@impex-hightech.de; Hank Gerwers, info@princetonscientific.com.

IMRA America, Inc.

#2010

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

IMRA America is a world-leading developer and manufacturer of ultrafast fiber lasers for commercial, OEM, and scientific applications. 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: Robert A. Kunkle, Sales Manager; Bob Yazell, Western Regional Sales Manager, byazell@imra.com.

Get to know CMOT!

What is the Carolinas MicroOptics Triangle?

The Carolinas MicroOptics Triangle is a partnership between Clemson University, The University of North Carolina at Charlotte and Western Carolina University with a collective vision to be a full service research, educational and business development resource to the optics industry.

What are the primary Technology Platforms?

CMOT takes advantage of the three technology platforms:



As a combined alliance, CMOT has a vertically integrated capability to provide fertile ground for product innovation and technology development. The collective resources include 225,000 square feet (\$57M) of new building space, \$29M in equipment, 37 Professors, and 30 Staff.

What is the mission of CMOT?

The Carolinas MicroOptics Triangle will provide leading edge optical technologies in support of the growth of key industries of the region. CMOT will operate in a business friendly structure such that innovation and technology developed are effectively transferred for economic benefit.



Do you want to know more?

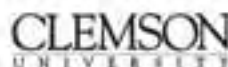
Visit us at booths 6232 and 6233 at the Photonics West show.

Now you know CMOT!

A world class collaborative alliance providing significant economic benefit for the Carolinas through innovation and education in optical technologies.

www.CarolinanMicroOpticsTriangle.com

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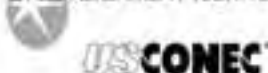
AFL Telecommunications



Digital Optics Corporation



OPTO-ALIGNMENT TECHNOLOGY



IMT Masken und Teilungen AG #5042

Im Langacher, Greifensee, Switzerland, CH-8606
41 1 943 1900; fax 41 1 943 1901
info@imtag.ch; www.imtag.ch

New Product: Microstructures on Glass - Solutions in the field of microlithography.

Leading supplier of microstructures on glass since 1954. All processes are in house. Products; custom made microstructures, reticles, electro-optic modulators, etched-and-filled structures, test targets, optical calibration plates. IMT employs a staff of 61 and operates a 1000 m² clean-room facility near Zürich, Switzerland. A subsidiary of HEIDENHAIN. Contact: Robert Trottni, Sales Manager, rtrottni@imtmask.com.

Incom, Inc. #1813

294 Southbridge Rd, Charlton, MA, 01550
508/765-9151; fax 508/765-0041
sales@incomusa.com; www.incomusa.com

Manufacturer of fiber optic faceplates for CCD arrays and image intensifiers. Capabilities include large format tapers, faceplates, image conduit, lightguides, microwell plates, capillary arrays and custom assemblies for medical and industrial applications. Contact: Michael Detarando, Vice President, New Product Development, mad@incomusa.com; Allan Narris, Sales Engineer, aln@incomusa.com.

Infinite Graphics Inc. #6264

4611 East Lake St, Minneapolis, MN, 55406
612/721-6283; fax 612/721-3802
sales@igi.com; www.igi.com

New Product: Increase capacity by 50% and quality by installation of new AOI for 300mm masks.

Direct write Photo Masks from 4 inches up to 24 X 32 inches. Down to 50nm resolution with 2um feature capability. Metrology down to 10nm resolution with .5um accuracy. Large area custom Calibration plates, certified by IGI and NIST traceable if necessary. GDSII to DXF bi-directional software with powerful editing. Contact: Gary Stoll, Sales Engineer, gstoll@igi.com; Gene Brunn, Customer Service, gbrunn@igi.com.

Infotonics Technology Center #343

5450 Campus Dr, Canandaigua, NY, 14424
585/919-3000; fax 585/919-3011
info@infotonics.org; www.infotonics.org

New Product: Low cost miniature hyperspectral imager to enable enhanced real-time visualization and analysis.

As a collaborative, world-class Center of Excellence in photonics and microsystems, Infotonics develops and prototypes microsystems concepts at our comprehensive in-house design, microfabrication and device packaging facility. Accelerating microsystems commercialization, we provide complete solutions for product development, reducing financial risk & expense often associated with the development process and increasing the probability of commercial success. Contact: Pam Sims, Business Development, pam.sims@infotonics.org.

Infrared Fiber Systems, Inc. #432

2301-A Broadbirch 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.

InfraTec GmbH #715

Technologie Zentrum Dresden, Gostritzer Str 61-63,
Dresden, Germany, 01217
49 351 473 48620; fax 49 351 473 48727
sensor@infrotec.de; www.infrotec.de

More than 14 years experience with production and development of standard or customized pyroelectric detectors for gasanalysis, flame and fire detection, radiometry and spectroscopy.

Ingeneric GmbH #6244

Dennewartstr 25-27, Aachen, Germany, 52068
49 241 9631340; fax 49 241 9631349
info@ingeneric.com; www.ingeneric.com

New Product: High efficiency fiber coupling devices for high-power diode lasers.

INGENERIC designs and produces aspherical macro- and micro-optics for semi-conductor lasers and optical data transfer. The range of products comprises fast-axis collimation optics (FAC) with high numerical aperture (0.8), slow-axis collimators (SAC) and new generations of beam transformation systems to efficiently couple semiconductor lasers into fibers. Standard as well as customized designs are offered. Discuss your requirements with the INGENERIC team at #6244. Contact: Stefan Hambuecker, Managing Partner; Volker Sinhoff, Managing Partner.

Innolas GmbH #935, #942

Justus von Liebig Ring 8, Krailling, Germany, 82152
49 89 866 360 0; fax 49 89 899 360 16
info@innolas.com; www.innolas.com

New Product: ND:YAG Laser.

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, Sales Manager; Mark Mann, Sales Manager, sales@sacher.us.

InnovaQuartz, Inc. #6074

23030 N 15th Ave, Phoenix, AZ, 85027
623/434-1895; fax 623/434-1894
info@innovaquartz.com; www.innovaquartz.com

Innovations In Optics, Inc.

#5121

10 Tower Office Park Ste 100, 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; Dave Doyle, Senior Optical Engineer, daved@innovationsinoptics.com.

Innovative Photonic Solutions

#5130

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

New Product: Ultra-narrow linewidth, spectrum stabilized, single frequency semiconductor lasers.

Manufacturer of high performance semiconductor light source systems. Specializing in spectrum stabilized lasers for Raman spectroscopy, gas sensing, direct diode frequency doubling and laser seeding & pumping applications. Products include multi-mode and single frequency lasers in fiber coupled and open-beam configurations and 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, rudder@innovativephotonics.com.

Innovavent GmbH

#1415

Bertha-von-Suttner-Str 5, Goettingen, Germany, 37085
49 55 1 900 47 0; fax 49 55 1 900 47 19
info@innovavent.com; www.innovavent.com

New Products: VOLCANO 808 diode laser system for ms annealing and LAVA 532 system for ns semiconductor annealing.

Innovavent, a subsidiary of JENOPTIK Laser, Optik, Systeme GmbH, develops and manufactures laser systems for ns and ms thermal processes of semiconductors in the electronics industry. The systems use diode pumped frequency converted solid state lasers or diode lasers. Innovative optical beam shaping and homogenizing designs are the unique features of the Innovavent LAVA and VOLCANO systems. These modules are custom designed with the flexibility for easy integration into complete production tools. Contact: LMH Technologies, Mike Heglin, heglin@innovavent.com.

INO

#943

2740 rue Einstein, Sainte Foy, 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.

INP Greifswald

#6229

Jahn Str 19, Greifswald, Germany, 17469
49 3834 554 300; fax 49 3834 554 301
welcome@inp-greifswald.de

New Product: Q-MACS a Quantum Cascade Laser Measurement and Control System.

The INP researches low temperature plasmas for technical applications. We have experts for the current and trend-setting plasma technologies: nano-materials, surface modifications, biotechnology, environmental technology and light sources. With our modern and comprehensive equipment for the generation, diagnostics and modelling of any technical plasma, we have the ability to support our customers' ideas from the basics up to the prototype. Q-MACS is one of them. Contact: Hendrik Pridoehl, pridoehl@inp-greifswald.de; Juergen Roepcke, roepcke@inp-greifswald.de.

InPhenix Inc.

#3030

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

INRAD, a PPGI Company

#727

181 Legrand Ave, Northvale, NJ, 07647-2498
201/767-1019; 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: Devaunshi Sampat, Vice-President, Sales & Marketing, dsampat@inrad.com; Thomas Pelnar, Senior Account Manager, tpelnar@inrad.com.

Insaco, Inc.

#5069

1365 Canary Rd, Quakertown, PA, 18951
215/536-3500; fax 215/536-7750
sales@insaco.com; www.insaco.com

Insaco precision machines technical ceramics, sapphire and quartz to customer specification. We do NOT machine metals or plastics. Our engineers welcome discussion on material selection and offer comment on machining costs. Solving customer problems since 1948. Contact: Scott Mittl, Sales Engineer, sdm@insaco.com; Klaus Burckhardt, Sales Engineer, kab@insaco.com.

Institute on Laser & Information Technologies (ILIT RAS)

#6030B

Svyatoozerskaya Str 1, Shatura, Moscow Region, Russia, 140700
7 495 135 0254; fax 7 09645 22532
panch@laser.ru

ILIT RAS designs and manufactures custom lasers, electro-optics equipment for industry, communication technologies, healthcare and metrology. Standard products include CO₂ lasers, wavefront measurement systems, including portable Shack-Hartmann sensors, adaptive optics elements and systems, specific software for wavefront analysis and interferogram processing.

Inta Technologies

#6364

2281 Calle de Luna, Santa Clara, CA, 95054
408/748-9955; fax 408/727-3027
tgerillo@prodigy.net; www.intatech.com

New Product: Metallized Insulators, Copper-Tungsten Carriers and Flanges.

INTA supplies metallized plated and assembled ceramic and metal components to the Aerospace, Medical, Electronics, Semiconductor, Defense, Analytical Instruments, Telecommunications, Machined Components, RF, X-Ray and Microwave Industries. INTA's strict adherence to quality assurance, engineering knowledge and dedication to customer service has made us a valuable vendor/partner to our customers. Prototype to production: Count on INTA as part of your team for project success.

Intellectual Property Insurance Services

#6204

9720 Bunsen Pkwy, Louisville, KY, 40299
502/491-1144; fax 502/491-4888
svanmeter@ipisc.com; www.infringeins.com

New Product: Intellectual Property Infringement Insurance - Defense and Enforcement.

Intellectual Property Ins Services (IPISC) is Program Mgr for patent, trademark & copyright insurance products. The IP products relate to not only legal enforcement and defense of infringement lawsuits, but also subsequent losses of IP value or business interruption losses due to patent invalidity, permanent injunctions, etc. IPISC serves clients ranging from Fortune 500 cos. to individual inventors across the U.S and overseas, including financial institutions and private investors. Contact: James E. Shepherd, Account Representative, JShepherd@ipisc.com; Sheila A. VanMeter, Sr. Vice President, svanmeter@ipisc.com.

Intellevation Ltd.

#6201

5 Dalziel Rd, Hillington Park, Glasgow, United Kingdom, G52 4NN
44 141 882 0058; fax 44 141 882 9223
enquiries@intellevation.co.uk; www.intellevation.co.uk

New Product: Optical monitor for in-situ control and monitoring of precision optical coatings.

Intellevation designs and manufactures the world's most advanced optical monitoring solutions for precision optical coating and dry etching applications. Products combine advanced hardware and software to give unparalleled precision and accuracy. Applications include precision optical coatings, ophthalmics, MEMS, packaging, III-V optoelectronics and many more. Contact: Simon Hicks, simon.hicks@intellevation.co.uk.

Intense Ltd.

#6327

Hamilton International Technology Pk, 4 Stanley Blvd, Blantyre Glasgow, United Kingdom, G72 OBN
44 1698 827 000; fax 44 1698 722 047
info@intenseco.com; www.intenseco.com

New Product: Intense Ltd is a volume manufacturer of III-V lasers and laser modules.

Intense designs, develops and manufactures custom module solutions for the digital print industry. Intense works closely with customers to ensure they create next-generation, custom-built products that help them dominate their markets. The company owns core intellectual property in revolutionary new technologies in photonic integration, including Quantum Well Intermixing (QWI), making it easier for firms to use laser modules in an industrial setting. Contact: Jim Ashe, Vice President Sales & Marketing, jim_ashe@intenseco.com; Gordon McKinnon, Vice President Business Development, gordon_mckinnon@intenseco.com.

International Light, Inc.

#6018

17 Graf Rd, Newburyport, MA, 01950-4092
978/465-5923; fax 978/462-0759
ilsales@intl-light.com; www.intl-light.com

New Product: The RPS900 Spectroradiometer measures 220 to 1050 nm @ 1 nm resolution w/USB interface & software.

Over the last forty years, International Light, Inc. has been the leading manufacturer of research oriented light measurement equipment. Our commitment to engineering the most accurate light meters available has led to several generations of industry standards. Our technical expertise and unparalleled support provides our customers with the solutions they need to overcome the most difficult light measurement challenges. Contact: Jill Fowler, Sales/Ops Manager, Lawrence Schmutz, President.

International Photonics

Commercialization Alliance - IPCA #6012

5450 Campus Dr, Canadaville, NY, 14424
585/919-3081; fax 585/919-3041
info@ipcalliance.org; www.ipcalliance.org

New Product: International alliance of photonic device prototyping and fabrication organizations.

The IPCA is a not-for-profit organization, the alliance goal is to act as a hub among businesses, regional photonic clusters, government organizations and technology commercialization centers, internationally, to facilitate the commercialization of photonic enabled opportunities and help strengthen member's capacity to innovate and compete in today's global economy. A photonics commercialization portal! Contact: Jim Frappier.

International Radiation Detectors, Inc.

#137

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: Electronics for the quadrant photodiodes.

Silicon photodiodes and associated electronics for detection of UV, EUV and soft x-ray photons, electrons and low energy ions. Contact: Raj Korde, President, rajkorde@ird-inc.com; Dejan Jovanovic, Device Engineer, dejan@ird-inc.com.

Intevac, Inc.

#6146

3560 Bassett St, Santa Clara, CA, 95054
408/588-2150; fax 408/727-5739
sales@mosir950.com; www.mosir950.com

New Product: MOSIR 950-The World's first NIR Image Intensified Camera for Low Light Spectroscopy and Imaging.

Intevac designs, manufactures and markets sensors and cameras for low light imaging and spectroscopy. The core sensor technology is based on Intevac's patented and exclusive electron-bombarded (EB) CCD and CMOS imagers that provide high sensitivity from 400-1700 nm. Back-thinned CMOS and CCD imagers are available that support low light imaging and spectroscopy from 150 to 1100 nm. Contact: Leslie M. Tack, Director of Business Development.



Federal Ministry of
Economics and Labour



AUMA



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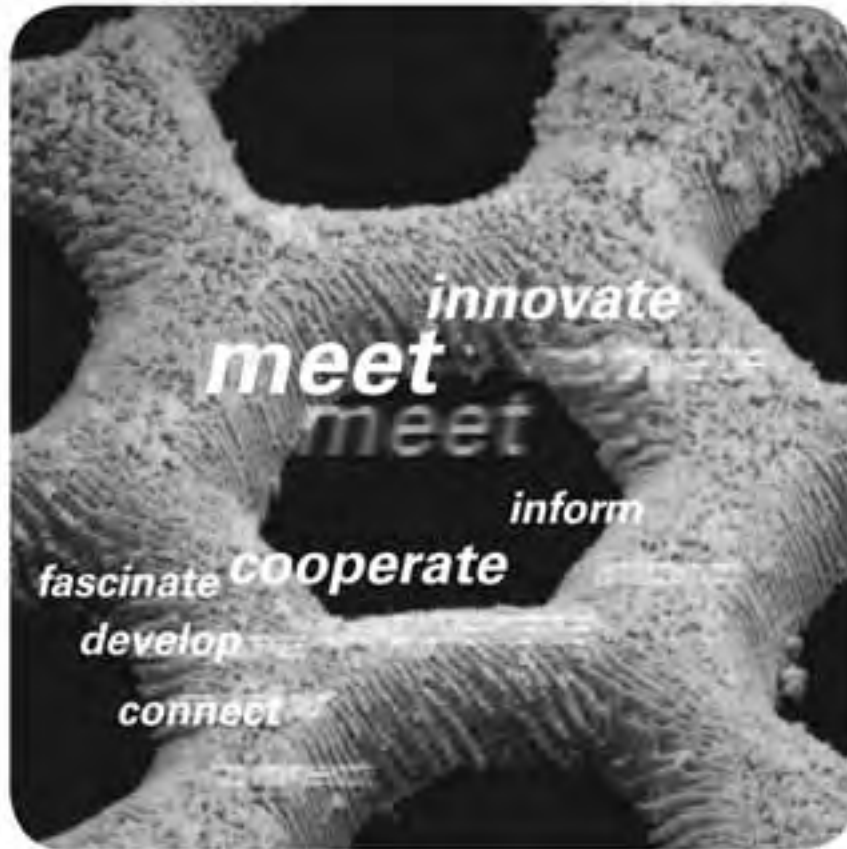
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for Glass, Crystal and
Mechanical Technology



Competence Networks for
Optical Technologies



Federal Ministry
of Education
and Research



Optical Technologies


**made
in
Germany**

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 Convention Center, Booth 1801

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Photonics West Exhibitor Directory

Intex, Inc.

#715

7080 N Cathedral Rock Pl, Tucson, AZ, 85718
520/299-9533; fax 520/844-8255
info@eoc-inc.com; www.eoc-inc.com

New Product: High intensity pulsed infrared light source.

Intex is a leader in the development of a new generation of Microsystems (MEMS) components incorporating advanced materials in combination with standard silicon processing. This includes unique electroactive nanostructured amorphous carbon and amorphous diamond coatings and conducting oxides. The first product is a broadband pulsed infrared light source with high intensity and ability to pulse at high frequencies, over 100 Hz. A thermopile detector with fast response will be released in 2006. Contact: Terje Skotheim, Chief Executive Officer, terje.skotheim@intexworld.com.

IntraAction Corp.

#5099

3719 Warren Ave, Bellwood, IL, 60104-2055
708/547-6644; fax 708/547-0687
sales@intraaction.com; www.intraaction.com

Invenios

#6034

35 S La Patera Ste C, Santa Barbara, CA, 93117-3293
914/242-2040; fax 805/681-9534
craigw@invenios.com; www.invenios.com

Invenios

#6034

35-C La Patera Ln, Santa Barbara, CA, 93117-3293
914/242-2040; fax 805/681-9534
craigw@invenios.com; www.invenios.com

New Product: -6DOF Nanopositioning platform -Industrial Grade, high aspect ratio glass microfluidic components.

Invenios is a supplier of precision stages and direct-write (maskless) 3D Microfabrication foundry services within glass. Invenios delivers a nanopositioned integration of optical, mechanical and packaging functionality resulting in a reduced component count for prototyping or production requirements. These product lines serve a broad range of traditional and emerging micromanufacturing applications such as microfluidics, where reduced "cost-of-packaging" is paramount. Contact: Craig Wurzel, Business Manager, CraigW@Invenios.com

Ion Beam Milling Inc.

#5103

1000 E Industrial Park Dr, Manchester, NH, 03109
603/644-2326; fax 603/647-6889
ionbeamnh@aol.com; www.ionbeammilling.com

Ion Optics Inc.

#632

411 Waverly Oaks Rd Ste 144, Waltham, MA, 02452
781/788-8777; fax 781/788-8111
www.ion-optics.com

Electrically pulsed infrared radiators for gas analysis. Broadband IR sources from 2-20 microns. Modulated light sources. Contact: Jim Melnyk, Applications Engineer, melnyk@boselec.com.

IOP Publishing

#1736

Dirac House Temple Back, Bristol, United Kingdom, BSI 6BE
44 117 929 7481; fax 44 117 930 1178
sales@iop.org; www.iop.org

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IPG Photonics Corp.

#1119

50 Old Webster Rd, Oxford, MA, 01540
508/373-1100; fax 508/373-1103
sales.us@ipgphotonics.com; www.ipgphotonics.com

IR Microsystems

#715

PSE-C, Lausanne, Switzerland, CH-1015
41 21 693 8531; fax 41 21 693 8529
info@ir-microsystems.com; www.ir-microsystems.com

New Product: Microray® 1x64 pyroelectric detector array with Linear Variable Filters (LVF).

IR MICROSYSTEMS® manufactures low-cost infrared detector array components and spectrometry subsystems with outstanding performance/price ratio. Their breakthrough pyroelectric array technology is the backbone for innovative infrared products that provide application-specific spectrometry solutions in many industrial sectors. The arrays enable accurate analysis of gases, liquids and solids and are smaller, less complex and more flexible than competing technologies.

Iridian Spectral Technologies

#6206

1200 Montreal Rd Bldg M-50, Ottawa, ON, Canada, K1A 0R6
613/741-4513; fax 613/741-9986
inquiries@iridian.ca; www.iridian.ca

New Product: Multipeak filters for spectroscopy applications.

Since 1998 Iridian has manufactured standard and custom dielectric thin film optical filters for UV, visible and near-IR applications, ranging from optical communications to spectroscopy. Products include AR and HR coatings, notch, edge dichroic, laser line, bandpass and gain equalization filters. Iridian also coats optical components and semiconductor facets. Contact: Nikki Bulgarea, Sales Manager.

IRphotonics

#6006

624 Rue McCaffrey, Ville St-Laurent, QC, Canada, H4T 1N3
514/345-6982; fax 514/227-5210
sales@irphotonics.com; www.irphotonics.com

IRphotonics is a leading manufacturer of mid infrared (MIR) optical fibers and materials that can be customized for specific wavelengths and applications such as homeland security, aerospace, process analytics, medical and telecommunications. Using enhanced patented ZBLAN (fluoride fiber) manufacturing technology and unique chemical compositions, IRphotonics provides quality glass and fiber at the lower cost. Contact: Eric Geoffrion, Vice President of Sales and Marketing, egeoffrion@irphotonics.com.

Isomet Corp.

#1735

5263 Port Royal Rd, Springfield, VA, 22151-2103
703/321-8301; fax 703/321-8546
isomet@isomet.com; www.isomet.com

New Product: AOM600-1108 high power AO modulator/deflector for CO₂ - has excellent beam quality at >500 watts.

Isomet manufactures standard and custom acousto-optic Bragg cells for UV, VIS, NIR and IR wavelengths. TeO₂, PbMoO₄ and LiNbO₃ crystal materials grown in-house. Provider of optical fabrication services and AR coatings on most optical surfaces. Products include modulators, deflectors, fiber-coupled frequency shifters, Q-switches, AO tunable filters and a full range of RF drive electronics. Custom design and manufacture of laser-based systems and sub-systems. Contact: Everett Taylor, Vice-President, Sales & Marketing, etaylor@isomet.com; Roman Yasinsky, Director, Sales & Marketing, ryasinsky@isomet.com.

ISP Optics

#1046

1 Bridge St, Irvington, NY, 10533
914/591-3070; fax 914/591-3715
sales@isoptics.com; www.isoptics.com

New Product: CaF₂ beamsplitters for femtosecond laser applications for 3.0 microns, 4.5 microns and 6.0 microns.

Manufacturer of high precision infrared optical components including windows, lenses, domes, prisms, wedges, beamsplitters, polarizers, filters, diffusers, mirrors, fibers and micro-optics made from CaF₂, ZnSe, Ge, BaF₂, Si, MgF₂, LiF, KRS-5, KBr, KCl, NaCl, CdTe, GaAs, ZnS, Sapphire, Crystal Quartz, Fused Silica and more. Infrared coatings and diamond turning service is available. Catalog, custom and OEM items. Contact: Fred White, Sales Manager, fredw@isoptics.com; Joe Mignano, Sales Engineer, joem@isoptics.com.

ISS, Inc.

#6187

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

ISS, a leader in frequency-domain spectroscopy, is displaying the Alba, a dual-channel instrument that combines a scanning confocal lifetime imaging microscope with fluorescence correlation spectroscopy (FCS) and the Chronos, a LED/Laser Diode based lifetime fluorometer. Other instruments include the PC1 photon counting fluorometers, the K2 lifetime fluorometer. Contact: Samantha Pearce, Sales & Marketing Coordinator.

Isuzu Glass Co., Ltd.

#130

3-6 Minamitsumori 6-chome, Nishinari-ku, Osaka, Japan, 557-0063
81 6 6659 1575; fax 81 6 66517966
sd@isuzuglass.co.jp; www.isuzuglass.co.jp

ITF Optical Technologies Inc.

#6079

400 Montpellier Blvd, Saint-Laurent, QC, Canada, H4N 2G7
514/748-4848; fax 514/744-2080
info@itfoptical.com; www.itfoptical.com

New Product: Large mode area PM pump signal combiner.

ITF is a leading manufacturer and designer of advanced, high-power photonic solutions based on a proprietary All-Fiber® Technology. ITF's products range from High Power pump/signal combiners for state of the art fiber lasers and amplifiers; to miniaturized DPSK demodulator modules for next generation communication systems, along with submarine qualified Bragg filters and fused fiber couplers. ITF also manufactures complete custom amplifier assemblies, for high power industrial and military use. Contact: Nigel Holehouse, Senior Director of Sales and Marketing, nholehouse@itfoptical.com.

Janos Technology, Inc.

#2019

1068 Grafton Rd, Townshend, VT, 05353
802/365-7714; fax 802/365-4596
info@janostech.com; www.janostech.com

New Product: New online store with hundreds of items in stock and ready to ship.

Janos Technology Inc. a world leader in advanced optical components and assemblies for both reflective and refractive systems. Combining opto-mechanical design, state-of-the-art fabrication, optical coating and extensive metrology capabilities. Janos provides high performance optical solutions for multi-spectral applications. Certified to MIL-STD specifications, Janos provides thermal imaging lens assemblies, complex collimators, missile seeker heads, optical components and assemblies. Contact: Karl Martinson, Director of Business Development, kmartinson@janostech.com; Anita Foss, Product Manager, anita@janostech.com.

JDS Uniphase

#1621

1763 Automation Pky, San Jose, CA, 95131
800/498-5378; fax 800/898-8537
customer.service@jdsu.com; www.oci.com

New Product: Ucp-1 New thin film coating platform producing anti-reflective coatings with high throughput.

JDSU is enabling broadband & optical innovation in the communications, commercial and consumer markets. Leading provider of communications test and measurement solutions and optical products for telecommunications. Also a leading provider of innovative optical solutions for medical/environmental instrumentation, semiconductor processing, display, brand/document security and aerospace. Contact: Ken Ibbs, Director of Lasers Marketing, ken.ibbs@jdsu.com; Bill Holtkamp, North American Sales Manager, bill.holtkamp@jdsu.com.

JENOPTIK Laser, Optik, Systeme GmbH - Laser Systems

#1415

Goeschwitzerstr 25, Jena, Germany, 07745
49 3641 65 4015; fax 49 3641 65 4011
laser.sales@jenoptik.com; www.jenoptik-los.com

New Product: MOPA Laser for Micro Material Processing; Disc Laser, q-switched esp. for Marking; Thin Disc Laser for Medicine.

Business Unit Laser Systems of the JENOPTIK Laser, Optik, Systeme GmbH manufactures diode lasers and diode-pumped-solid-state lasers for OEM and R&D customers. Target applications in micro material processing are marking, engraving, ablating, structuring, cutting and drilling for the electronics, semiconductor, automotive and packaging markets. Life science laser applications are in dermatology and ophthalmology. Contact: Wolfgang Hemmer-Girod, Sales Manager Material Processing, wolfgang.hemmer-girod@jenoptik.com; Angelika Rose, Medical Applications, angelika.rose@jenoptik.com.



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JENOPTIK Laser, Optik, Systeme GmbH - Optics

#1415

Goeschwitzer Strasse 25, Jena, Germany, 07745
49 3641 65 3311; fax 49 3641 65 3677
optics@jenoptik.com; www.jenoptik-los.com

New Products: High precision torics, cylinders; f-theta lenses; DLC for infrared components; Multilevel binary elements.

The Business Unit Optics of the JENOPTIK Laser, Optik, Systeme GmbH is an OEM- supplier of optical components (flats, spheres, aspheres, cylinders, segment lenses, laser components, crystal optics, DOE's) from DUV through IR. It develops and produces customized lenses, subsystems and opto-mechanical modules for semiconductor equipment industry, laser material processing, infrared application, scanning systems, interferometry and machine vision. Contacts: Wolfgang Seiferth, Manager Sales and Marketing Optics, wolfgang.seiferth@jenoptik.com; Ray Malcom, Sales Manager of Coastal Optical Systems, Inc., sales@coastalopt.com.

JENOPTIK Laser, Optik, Systeme GmbH-Sensor Systems

#1415

Goeschwitzer Str 25, Jena, Germany, 07745
49 3641 65 3156; fax 49 3641 65 3573
sensor.sales@jenoptik.com; www.jenoptik-los.com

New Product: Eye-safe laser-rangefinders for distances from 0.1 to 10,000 meters, for industrial and military use.

The Sensor Systems business unit of JENOPTIK Laser, Optik, Systeme GmbH focuses on three special fields: laser sensors for distance measurement, infrared sensors for thermography and professional digital cameras. We provide smart and cost-effective sensor solutions for high-end applications, including the development, manufacture and sale of components, assemblies and systems. In addition to our own products, we also design and manufacture OEM units and devices to customers' specifications. Contact: Werner Reiland, Sales Manager Laser Sensors.

JENOPTIK Laserdiode GmbH

#1415

Goeschwitzer Strasse 29, Jena, Germany, 07745
49 3641 65 4300; fax 49 3641 65 4392
jold@jenoptik.com; www.jold.com

New Products: Passively cooled fiber-coupled diode laser module with 30 W optical output power from a 100 μ m fiber (NA 0.22).

JENOPTIK Laserdiode GmbH (JOLD) is the quality leader in development, manufacturing and global distribution of high-power diode lasers as OEM components. The company offers high-efficiency diode lasers with a long lifetime and high reliability - from single diode lasers to vertical and horizontal diode laser stacks and fiber-coupled diode lasers based on the user-friendly Long Life Technology. Its diode lasers have proven themselves in a multitude of applications in industry, medicine and research. Contact: Detlev Wolff, Head Sales & Marketing, detlev.wolff@jenoptik.com; Ingolf Michler, Sales & Marketing, ingolf.michler@jenoptik.com.

JMAR Technologies, Inc.

#6310

10905 Technology Pl, San Diego, CA, 92127
858/946-6800
jmarcorporate@jmar.com; www.jmar.com

New Product: BriteLight™: Modular, diode pumped solid-state laser system from JMAR Technologies.

The BriteLight series of Nd:YAG lasers from JMAR delivers a unique combination of high average power and high pulse energies while, at the same time, maintaining excellent beam parameters.

A standard BriteLight configuration can deliver up to 125 W of average power at the Nd:YAG fundamental in a beam that is better than 3.5x diffraction limit. The BriteLight's modular architecture provides a wide range of output energies, power levels and pulse lengths. Contact: Ulf Westblom, VP Marketing, Photonics Products, uwestblom@jmar.com.

JML Optical Industries Inc.

#329

820 Linden Ave, Rochester, NY, 14625
585/248-8900; fax 585/248-8624
jml@jmloptical.com; www.jmloptical.com

New Product: New JML direct optics catalog to be available in 2006.

JML is a leading designer, manufacturer and coater of precision optical systems and components. Rapid prototypes and high volume production are a few of the benefits offered by JML, as well as a world class coating facility. A new JML Direct optics catalog will be available in 2006. Please visit us at our new, high-tech facility in Rochester, NY! Contact: Marty Roberts, Manager Catalog Division, Martyr@jmloptical.com; Gary Clark, Vice-President Sales and Marketing, garyc@jmloptical.com.

JP Sercel Associates, Inc.

#5095

17 D Clinton Dr, Hollis, NH, 03049-6574
603/595-7048; fax 603/598-3835
www.jpسالaser.com

New Product: IX-3000 Excimer Workstation with Coordinated Opposing Motion.

JPSA provides state-of-the-art excimer laser and UV-DPSS laser systems for micro machining solutions at 157nm to 355nm wavelengths. Our corporate mission is to deliver world-class, industrial UV laser technology to the international market with 100% customer satisfaction. Contact: Doug Pulfer, Sales & Marketing, dpulfer@jpsالaser.com; Bill Kallgren, Sales Manager, bkallgren@jpsالaser.com.

JT Ingram Sales & Marketing

#1636

316 Harlequin Ct, Oviedo, FL, 32765
800/335-5582; fax 888/335-5587
www.jtingram.com

New Product: IR Fiber Probes (2-18um), Gold fiber, Fiber coupled High Power LED's, Fiber coupled MCT detectors.

Broad Spectrum Fiber Optic solutions from the UV to 18um, Metalized Fiber Optics including Gold, copper and Al, High Temperature Fiber Optics, Fiber coupling, High Power Fiber Optic Delivery, Medical Probes, Fiber Coupled Detectors (UV-18um), High Power Fiber Coupled LED sources, FTIR accessories, Fiber Optic CO₂ Laser delivery, Fiber Optic Vacuum Feedthroughs. Contact: Jim Ingram, Marketing Manager, Jim@Jtingram.com.

Judson Technologies, LLC #743

221 Commerce Dr, Montgomeryville, PA, 18936-9641
215/368-6900; fax 215/362-6107
www.judtech.com

New Product: Cryogenically cooled detectors with integrated cold preamps for fluorescence applications.

Judson Technologies is a leading designer/manufacturer of subsystems in IR Sensor Area with design/fabrication expertise in IR Detectors (Ge, InGaAs, InAs, InSb, PbS, PbSe, HgCdTe), detector packaging/cooling, detector signal amplification and detector 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: Joe Kimchi, Vice President Engineering, jkimchi@judtech.com; Mark Sediva, Sales Engineer, msediva@judtech.com.

Kaiser Electro-Optics, Inc. #1806

A Rockwell Collins Company, 2752 Loker Ave W, Carlsbad, CA, 92008-6603
760/438-9255; fax 760/438-6875
mktginfo@keo.com; www.keo.com

Kaiser Optical Systems, Inc. #6116

371 Parkland Plaza, Ann Arbor, MI, 48103
734/665-8083; fax 734/665-8199
www.kosi.com

New Product: UltraSpec™-HT volume phase holographic (VPH) gratings for telecom with high efficiency & low PDL.

Kaiser Optical Systems Inc., a Rockwell Collins Company, is a world-recognized leader in the production of holographic optical elements and Raman instruments. With over 25 years experience designing and building head-up display combiners for tactical aircraft, KOSI has leveraged its volume phase holographic technology to produce state-of-the-art holographic optics, including notch filters and diffraction gratings for application in telecommunications, ultrafast lasers, astronomy and sensors. Contact: Michael Browne, Business Development - Telecom Gratings, telecom@kosi.com; James Arns, Custom VPH Gratings, gratings@kosi.com.

Kaiser Systems, Inc. #736

126 Sohier Rd, Beverly, MA, 01915
978/922-9300; fax 978/922-8374
apps@kaisersystems.com; www.kaisersystems.com

New Product: XLS202 high voltage power supply platform for high reliability in capacitor charging applications.

Kaiser Systems, Inc. designs and manufactures high voltage power supply systems for laser, x-ray and electron beam applications. Capacitor chargers are available for laser applications from 500V to 40kV in a variety of packages and power levels. X-ray generators and electron beam power supplies offered with output voltages to 750kV.

Kaleido Technology #6356

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 passive optical components and sub-modules by machining and precision glass molding. Kaleido Technology offers precision-molded glass aspheres and free-form lenses in a large selection of optical glasses and with even highly complex geometries. Thanks to proprietary ultra-precision machining capabilities, Kaleido offers aspheric and free-form mirrors with world-leading precision. Contact: Palle Geltzer Dinesen, Technical Director, pgd@kaleido-technology.com.

Expertise in Thin-Film Optics



Light is a topic tool.
Use it to your profit!

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- ◆ splitting
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mso jena is a German optical coating manufacturer able to design and produce thin-film coatings which meet a wide range of specifications in a challenging market.

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Fax: +49(0) 36 41/35 29 35
E-mail: info@mso-jena.de
Internet: www.mso-jena.de

KAPID (Korea Association for Photonics Industry Development) #6307

971-35 Wolchul-dong, Buk-gu, Gwangju, South Korea, 500-460
82 62 605 9640; fax 82 62 605 9650
www.kapid.org

KAPID is an industrial association of photonics in Korea. The aims of KAPID are to build, strengthen ties within the industry and to make mutual benefits from public and private sectors. The major activities of KAPID are to support R&D of photonics technology, to distribute its results, to build up international cooperative projects & programs and to foster overall developments of photonics industry in Korea. Contact: Horim Lee, Planning Team, horimlee@kapid.org.

Kapteyn-Murnane Labs. Inc. #1600

1855 S 57th Ct, Boulder, CO, 80301
303/544-9068; fax 303/821-2284
kmlabs@kmlabs.com; www.kmlabs.com

Keopsys Inc. #6151

16 White Bridge Rd, Pittstown, NJ, 08867
908/238-0898; fax 908/238-9178
webslaes@keopsys.com; www.keopsys.com

New Product: MIRVISION Series: 25kW peak power pulsed fiber lasers for LIDAR.

Keopsys' fiber amplifiers and lasers deliver high output powers - up to 30W CW or 25kW peak when pulsed - in the 1 or 1.5 micron bands. Standard or polarization maintaining, these efficient devices based on VSP technology find their applications in CATV, telecom, industrial, medical and military environments. Contact: Yves Deiss, Regional Sales Director - West Coast, ydeiss@keopsys.com; Alexandre Amavigan, Regional Director of Sales - East Coast, aamavigan@keopsys.com.

KEOS Optoelectronics, Inc. #1835

40087 Mission Blvd #165, Fremont, CA, 94539
510/792-5922; fax 510/217-3457
info@keoselectronics.com; www.keoselectronics.com

New Product: KEOS is now representing Mitsubishi fiber optics for laser delivery.

KEOS Optoelectronics, Inc. is a manufacturers' representative firm specializing in Optoelectronics applications. Based in the heart of Silicon Valley, KEOS offers geographical or market based coverage to its principals. Contact: Keith Breeding, Principal, kbreeding@keoselectronics.com.

Kigre, Inc. #546, #6232, #6233

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 eye-safe laser (cigarette pack size) emits half a Megawatt of 1.54um power (4mj, 7ns, 10Hz).

Kigre manufactures lasers and custom laser components. Miniature high peak power "eye-safe" erbium glass and neodymium YAG and glass lasers. Kigre manufactures laser glass and laser filter materials for use in rod, microchip, microplate, fiber, waveguide and disk laser/amplifier applications. Featured products include: MK-88 EMK-50 eye-safe 1.54um lasers; MK-367 One-micron 6-Megawatt lasers; Breech Mount Laser Ignition System; Laser Induced Breakdown Spectroscopy. Contact: Michael J. Myers, President, kigreinc@cs.com; Jeffrey A. Myers, Vice President, jeffmyers@hargray.com.

Kinetic Ceramics, Inc. #6076

26240 Industrial Blvd, Hayward, CA, 94545
510/264-2140; fax 510/264-2159
piezo1@kineticceramics.com; www.kineticceramics.com

Kinetic Systems, Inc. #1040

20 Arboretum Rd, Boston, MA, 02131-1102
617/522-8700; fax 617/522-6323
sales@kineticsystems.com; www.kineticsystems.com

New Product: Electronic Vibration Isolation Equipment uses active feedback to sense vibrations and eliminate it.

Kinetic Systems is a leader in the design, manufacture and marketing of vibration isolation equipment, optical tables, and related components used in a variety of industries worldwide. Contact: Thomas Hoarty, Director of Sales and Marketing, thoarty@kineticsystems.com.

Koheras A/S #5120

Blokken 84, Birkerød, DK, Denmark, DK-3460
45 4348 3900; fax 45 4348 3901
info@koheras.dk; www.koheras.com

New Product: HP (3W) Supercontinuum sources, HP (10W) Single Frequency lasers, HP(100W)Yb-fiber Laser, Thulium Laser.

Koheras produces Ultra Low-Noise fiberlasers, HP (5-100W) industrial Yb-fiberlasers, Ultra-wideband light sources and HP(10W) Single Frequency FiberLaser. Applications for the low-noise lasers are sensing e.g. oil-exploration, security, LIDAR & spectroscopy. The HP lasers target industrial segments e.g. printing, marking etc. The ultra-broadband sources target CWDM, OCT & medical. Contact: Choung Tran, Sales & Business Development, cht@koheras.com or Soeren Lauridsen, Sales Manager, sl@koheras.com.

Komatsu Electronics Inc. #6306

3-25-1 Shinomiya, Hiratsuka, Kanagawa, 254-8543
81 463 23 3697; fax 81 463 24 6749
www.komatsu-electronics.co.jp

Komatsu Electronics Inc. #6306

3-25-1 Shinomiya, Hiratsuka, Kanagawa, 254-8543
81 463 23 3697; fax 81 463 24 6749
www.komatsu-electronics.co.jp

New Product: K5MB002X, 5-stage-TEC with the world highest performance. Delta Tmax 143deg C/Th=27°C.

Komatsu Electronics provides the Thermo-modules with high-reliability and excellent & consistent performance. Since 1960, we have been producing the Thermo-modules and developing numerous application system for precise temperature control. Since 1997, we have been mass-producing the hot-forged element-material, world-best performance in production, made by an innovative hot-forging process. We vow to answer our client's continuously intensifying needs by offering higher performance, more reliable and cost efficient thermo-modules created in our leading-edge research and development.

Konoshima/Baikowski Group #6202

6601 Northpark Blvd Ste H, Charlotte, NC, 28216
704/587-7100; fax 704/587-7106
baikjotto@aol.com; www.baikowski.com

Kopp Glass, Inc.

#5137

2108 Palmer St, Pittsburgh, PA, 15218
412/271-0190; fax 412/271-4103
www.koppglass.com

Leading manufacturer for 80 years in filter, technical, molded and precision glass. Wide range (>300 compositions) of clear and colored glass from UV through IR. Complete line of Kopp (Corning) filter glass and night vision filters. Custom capability, including specialized glass formulations and photometric design. World recognized leader in glass molding capabilities. Glass filters: UV, color filters, color correcting, NVIS, IR Holmium/Didymium, Neodymium and more. Contact: Matt Cottrill, Director of Sales & Marketing, mcottrill@koppglass.com; Gregg Bako, Sales Engineer, gbako@koppglass.com.

La Precision

#1841

16 Rue Des Horlogers, Scionzier, France, 74950
33 450 98 40 77; fax 33 450 98 21 19
info@laprecision.com; www.laprecision.com

La Precision manufactures Optoelectronics components according to customers' drawings and develops research for their customers. Fields of activity: components for MM/SM/PM fiber connectors; pigtailed, patchcords; packaging, attenuators, collimators. Capability: high precision: 1 micron. Materials: Arcap, Stainless Steel, Kovar, Invar, Titanium. Quantities: 100 to 1,000,000. Capacity: 300 people; 300 CNC/high speed/conventional machines. Contact: Florence Moenne-Loccoz, Sales Department, florencem@laprecision.com.

Labest Medical Device

#5040

16385 SE 66th St, Bellevue, WA, 98006
425/644-2380; fax 425/747-9535
gqxy@labestmd.com

Labsphere, Inc.

#232

231 Shaker St, PO Box 70, North Sutton, NH, 03260-0070
603/927-4266; fax 603/927-9200
info@labsphere.com; www.labsphere.com

New Product: Labsphere's SLMS LED Series offers a practical high-performance solution for testing packaged LEDs.

Labsphere has provided innovative light test and measurement equipment for over 25 years. Products include light measurement systems for testing LEDs, lasers and lamps; uniform light sources for the calibration of imaging and non-imaging devices; and reflectance standards for instrument calibration. Labsphere also has a full line of diffuse reflectance materials and coatings for applications such as laser cavities, back panel displays and medical imaging equipment. Contact: Ed Cammarota, West Coast Sales Manager, ecammarota@labsphere.com; Brian Lai, East Coast Sales Manager, blai@labsphere.com.

LaCroix Optical Co.

#6257

PO Box 2556, Batesville, AR, 72503
870/698-1881; fax 870/698-1880
sales@lacroixoptical.com; www.lacroixoptical.com

LaCroix Optical Co. is a manufacturer of 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.

Lambda Research Corp.

#219

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

New Product: Stop by to demo latest releases of TracePro, OSLO and the NEW Add-In, TracePro Bridge for SolidWorks.

Lambda Research, leading developer of optical software, provides optical engineering solutions through software products and consulting. Software includes TracePro, solid modeling optical analysis software for virtual prototyping and OSLO for optical design of image-forming lens systems. TracePro Bridge allows users to incorporate optical elements into mechanical models within SolidWorks and ensures efficient transition of models between mechanical design and optical analysis software.

Lambda Research Optics Inc.

#633

1695 W MacArthur Blvd, Costa Mesa, CA, 92626
714/327-0600; fax 714/327-0610
lambda@lambda.cc; www.lambda.cc

New Product: Lens Assembly, Optically contacted Polarizers, CO₂ Optics, IR coating and 3uhm-5um coating service.

At Lambda Research Optics, we offer a wide variety of optics, components and coatings that span the optical spectrum from the Deep Ultra-Violet to the Far Infra-Red. Whether your requirements are for High Power Excimer products, Replacements or Cavity Optics for CO₂ and YAG Lasers, make Lambda Research Optics your preferred choice. Contact: James Choi, Sales Engineer, jchoi@lambda.cc; Jae Oh, Sales Engineer, joh@lambda.cc.

Lanics Co., Ltd.

#6259

Rm 703 Woolin e-Biz Ctr, 170-5 Guro-dong Guro-gu, Seoul, South Korea, 152-050
82 2 2108 2255; fax 82 2 2108 2260
support@lanics.com; www.lanics.com

New Product: Laser illuminator.

Lanics Co., Ltd is specialized in Laser diode module and system from 1998. Lanics has more than 200 different models. It makes easy to comply with customer's asking. Dot, Line, Cross type laser, IR Laser illuminator and Target aimor. ODM/OEM design available. Contact: D.H Baek, Sales Manager.

Larsen Equipment Design, Inc.

#3004

1117 NW 52nd St, Seattle, WA, 98107-5130
800/789-5121; fax 206/789-7756
www.larsenequipment.com

Larsen Equipment Design specializes in superior quality bench-top polishing equipment for micro and miniature optics. Since 1981 we have been recognized as the source for your micro and miniature optics manufacturing needs. Our polishers are made with sturdy stainless steel cases and sealed spindles for worry free operation. Our engineering department can also help with your tooling requirements. For your complete precision optics resource, turn to us. Contact: Erik A. Larsen, President, erik@larsenequipment.com.

LAS-CAD GmbH

#128

Brunhildenstr 9, Munich, Germany, 80639
49 89 173607; fax 49 89 172594
info@las-cad.com; www.las-cad.com

New Product: LASCAD computes output power for both 3-level and 4-level systems.

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: Konrad Altmann, President, dr.altmann@las-cad.com; Harry Skolnik, US sales, hskolnik@comcast.net.

Laser 2000 GmbH

#129

Argelsrieder Feld 14, Wessling, Germany, 82234
49 8153 405 0; fax 49 8153 405 33
contact@laser2000.de; www.laser2000.com

Laser Applications International

#6134

166 S industrial, Saline, MI, 48176
734/944-5850; fax 734/944-5840
advertise@laimagazine.com; www.laimagazine.com

New Product: Buyers' Guide, Product Design Guidelines for Lasers, Laser Technology Review.

Laser Applications International is a unique journal that serves a potentially vast community by having a clear purpose to be the practical information tool for product, manufacturing engineers and managers, whether in machine tools, in Fabrication, in transportation or utilities, in medical, micro-electronics or telecommunications; A specific focus on how lasers can be put to practical use; A comprehensive scope with a view that includes both local and global perspectives. Contact: M. Nasim Uddin, Associate Publisher & Editor-in-Chief, nasimu@LAIMagazine.com; Maria Burkel, Advertising Manager.

Laser Beam Products

#715

Units B&C Stratton Park, Dunton Ln, Biggleswade, United Kingdom, SG18 8QS
44 1767 600877; fax 44 1767 600833
sales@lbp.co.uk; www.lbp.co.uk

New Product: CO₂ Laser mirrors for powers up to 40 Kilowatts.

Established 15 years as European manufacturers of infra red mirrors. We are best known for our range of Copper, Silicon and Molybdenum mirrors for infra lasers. A wide range of coatings, such as Gold, Super High Reflectivity and Phase Retarder are available. Water cooled mirrors and assembled mirrors such as beam expanders, focus units etc are manufactured. Many standard parts are held in stock. Contact: Mark Wilkinson, Managing Director, info@lbp.co.uk.

Laser Compliance, Inc.

#6230

4666 Oxford Way, Bountiful, UT, 84010
801/292-2309; fax 801/292-2415
mail@lasercompliance.com; www.lasercompliance.com

Laser Compliance helps US and International laser product manufacturers make their products legal for sale and import into the United States. We can handle all of the regulatory issues and paperwork to make your product legal for sale and/or importation into the US. You can focus on your work and we make your product legal for you! Contact: Casey Stack, President, casey@lasercompliance.com; Phil Barrows, Sales, phil@lasercompliance.com.

LASER COMPONENTS CANADA, Inc.

#1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
www.lasercomponents.com

New Product: Pulsed Laser Diodes at 905 nm - record high optical peak power levels up to 250 W.

LASER COMPONENTS CANADA, Inc., located in Quebec, designs and manufactures custom and standard high power pulsed laser diodes with output to 220 watts peak at 0.1% duty and at wavelengths between 905 and 1550nm. Typical applications are rangefinding, surveying, weapons simulation, speed guns and security barriers. Contact: Gary Hayes, Chief Executive Officer/General Manager, hayes@laser-components.com; Valerie King, Sales/Marketing, king@laser-components.com.

LASER COMPONENTS DG, Inc.

#1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
www.lasercomponents.com

New Product: Complete Range of Silicon Avalanche Photodiodes - Many Enhanced Versions Including "Reach Through".

LASER COMPONENTS DG, Inc. located in Tempe, Arizona is the producer of high performance optoelectronic components and subsystems for medical and scientific instrumentation, industrial monitoring, military, homeland security, automobile and telecommunication markets. The company focuses on silicon APD (Avalanche Photo Diodes) used in laser range finding and photon counting applications. Linear and focal plan APD arrays with all supporting electronics are being developed as well. Contact: Gary Hayes, Chief Executive Officer/General Manager, hayes@laser-components.com; Valerie King, Sales/Marketing, king@laser-components.com.

LASER COMPONENTS GmbH, Inc.

#1333

Werner von Siemens Str 15, Olching, Germany, 82140
49 8142 28640; fax 49 8142 286411
info@lasercomponents.com; www.lasercomponents.com

New Product: LC GmbH has added sputtering for a higher coating density for an even higher damage threshold.

Laser Components is recognized as one of Europe's leading high power laser coating manufacturers and supplies the spectroscopic community in industry and research labs for their infrared spectroscopic needs. Products include high power laser optics, the SPECILAS[®] line of spectroscopic grade NIR lasers including DFB's, QCL's, FLEXPPOINT[®] laser diode module series and 905, 850, 1550 Pulsed Laser Diodes. Contact: Ken Norbrothen, Sales Engineer, knorbrothen@laser-components.com; Gary Hayes, Chief Executive Officer, hayes@laser-components.com.



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LASER COMPONENTS IG, Inc. #1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
info@laser-components.com; www.lasercomponents.com

New Product: NEW OEM Laser Head with Integrated Quantum Cascade Laser and NEW QCL Wavelengths.

Provides high power laser optics from 193nm to 10.6um. IR lead salt diode lasers (3-25 um) and SPCDILAS selected diode lasers in the range of 750 to 2050nm, including VCSELs and DFBs. Quantum Cascade Lasers and Flexpoint miniature laser modules available. Glass polarizing filters, laser safety eyewear, fiberoptic assemblies and color sensors. Spectroscopic instrumentation including NIR spectrometers and Echelle spectrum analyzers. Avanch photodiodes and Pulsed Laser Diodes in stock. Contact: Gary Hayes, Chief Executive Officer/General Manager, hayes@laser-components.com; Valerie King, Sales/Marketing, king@laser-components.com.

Laser Diode, Inc. #836

2 Olsen Ave, Edison, NJ, 08820-2419
732/549-9001; fax 732/906-1559
sales@laserdiode.com; www.laserdiode.com

Laser Diode Inc. offers a full line of MOCVD based high power CW and short pulse lasers. CW lasers from 1-5W and pulsed lasers from 1-100W are available at wavelengths of 800 to 1550nm. Also high power 630nm lasers. LDI also produces a complete range of lasers and ELEDs for fiber-optic data transmission and instrumentation applications. Including high power OTDR lasers. Our products include commercial and ruggedized transmitter-receiver modules compliant with SONET and FDDI hierarchies. Contact: Stephen Lerner, Product Manager, stephen.lerner@tycoelectronics.com; Scott Grayman, Product Manager, sgrayman@tycoelectronics.com.

Laser Drive, Inc. #319

5318 Ranalli Dr, Gibsonsia, PA, 15044-9625
724/443-7688; fax 724/444-6430
sales@laserdrive.com; www.laserdrive.com

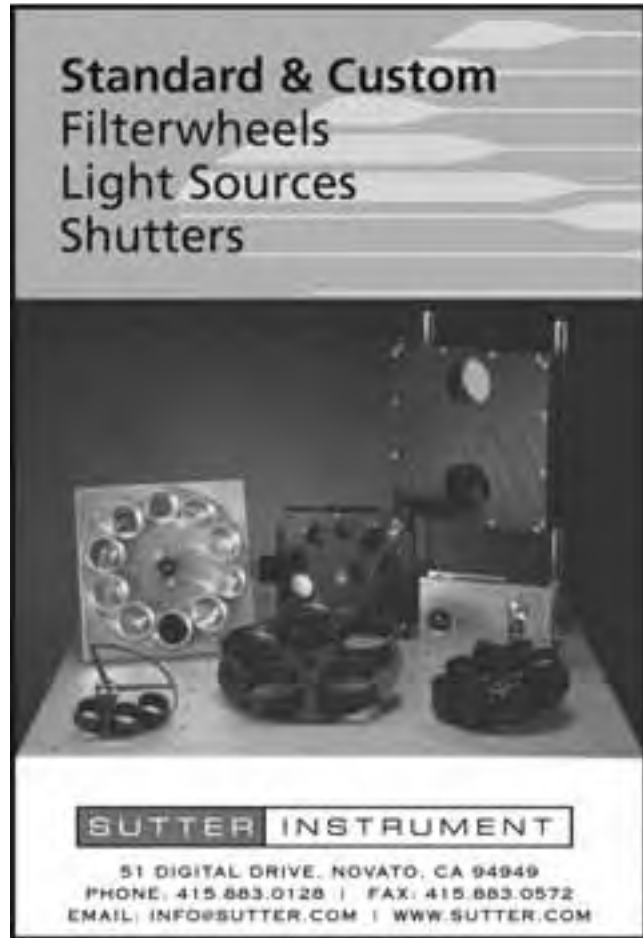
Laser Drive is an innovative international company dedicated to the quality design, manufacture and support of power supplies for various Laser and Light sources. Some of our laser products include Power Supplies for Argon, HeNe and Diode Lasers. Our light products include Capacitor Charging Power Supplies for Dye and Excimer Lasers, Deuterium Lamp Power Supplies, CW Arc Lamp Power Supplies, Tungsten Lamp Power Supplies and a variety of Flash Lamp Power Supplies. Contact: Sales Department, pw@laserdrive.com.

Exhibitor Reception Sponsor

Laser Focus World #514

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603/891-0123; fax 603/891-0574
www.laserfocusworld.com

LASER FOCUS WORLD is a monthly magazine for engineers, researchers, scientists and technical managers, providing comprehensive global coverage of optoelectronic technologies, applications and markets. Each month, the magazine reports on and analyzes the latest developments and significant trends in both technology and business in the worldwide optoelectronics and photonics industry. Contact: Stephen G. Anderson, Associate Publisher/Editor-in-Chief, stevega@pennwell.com.



Laser Focus World Japan #6023

Hirakawacho TEC Bldg, 2-11-11 Hirakawacho, Chiyoda-ku
Tokyo, Japan, 102-0093
81 3 3556 1575; fax 81 3 3556 1576
ex-press@ex-press.jp; www.lfw-japan.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: Limits for industrial laser safety - interactive training CD on laser safety designed for the LSO.

Laser Institute of America is the professional society dedicated to fostering lasers, laser applications and laser safety worldwide. The LIA provides continuing education credits, ABIH CM points and BLS CM points for all our laser safety training courses which include in-house training. 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: Jim Naugle, Marketing Director, jnaugle@laserinstitute.org; Gus Anibarro, Education Coordinator, gus@laserinstitute.org.

Laser Materials Corp.

#3024

12706 NE 95 St Apt 102, Vancouver, WA, 98682-2410
360/254-4180; fax 360/254-4182
sales@lasermaterials.com; www.lasermaterials.com

Manufacturer of Nd: YAG rods and slabs. At Laser Materials Corporation we grow large diameter crystals (82 and 100mm) with high yields to provide excellent quality material at low prices. Contact: Paul R. Collins, President, paul@lasermaterials.com; David Collins, Vice President, dcollins@lasermaterials.com.

Laser Mechanisms, Inc.

#6030

24730 Crestview Ct, Farmington Hills, MI, 48335
248/474-9480; fax 248/474-9277
info@lasermech.com; www.lasermech.com

Laser Mechanisms specializes in innovative laser beam delivery components and articulated arm systems for high power CO₂, YAG and other wavelengths that suit all facets of industrial applications. Staff of laser system engineers can custom design a performance guaranteed beam delivery system for your laser application. Laser Mechanisms is also the exclusive North American distributor of the PRiMES line of laser beam analysis equipment for diagnosing and monitoring high-power laser beams. Contact: Mike Klos, Sales Engineer, mklos@lasermech.com.

Laser Optics, a PPGI Company

#727

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: Jeff Brunner, Sales Manager - Optics, jbrunner@laseropticsinc.com; Devaunshi Sampat, Vice President Sales & Marketing, dsampat@laseropticsinc.com.

Laser Quantum Ltd.

#437

Emery Court Vale Rd, Stockport Cheshire, United Kingdom, SK4 3GL
44 161 975 5300; fax 44 161 975 5309
sales@laserquantum.com; www.laserquantum.com

Laser Research Optics

#1043

120 Corliss St, Providence, RI, 02904
401/331-3838; fax 401/331-4004
sales@laserresearch.net; www.laserresearch.net

New Product: Laser Research Optics is proud to introduce our new innovative line of small CO₂ optics.

Laser Research Optics supplies high quality optics for CO₂ lasers. Premium raw materials, precision multi-axis lens generation, polishing techniques that eliminate sub-surface damage and computer aided thin film coating. Series include: ZnSe plano/convex and meniscus lenses, Molybdenum Mirrors, Enhanced Copper & Dual Band Turning Mirrors, Silicon Total Reflectors, Silicon & Copper Phase Retardation Reflectors, Zero Phase Reflectors, Output Couplers, Beam Combiners and Beamsplitters. Contact: Scott Rouillard, Sales Representative, scott@melleroptics.com.

Laser Zentrum Hannover e.V. (LZH) #1801

Hollerithallee 8, Hannover, Germany, 30419
49 511 2788 0; fax 49 511 2788 100
info@lzh.de; www.laser-zentrum-hannover.de

Laser-compact Co., Ltd.

#6165

3 Vvedensky St, Moscow, Russia, 117342
7 495 720 54 50; fax 7 495 720 54 51
ik@lcompact.msk.ru; www.laser-compact.ru

New Product: Green SLM DPSS laser module. Advanced optimization provides reliable life-time low-noise operation.

Laser-compact Co. Ltd. is the leading research and production company specializing in development, design, manufacturing and marketing of DPSS lasers. Since foundation in 1992 Laser-compact have introduced into laser market more than 110 models of CW and Q-switched DPSS lasers radiating in ultraviolet, infrared and visible range of spectrum. More than 22,000 lasers have been produced and sold to customers in 30 countries all over the world. DPSS laser, UV pulsed laser, green SLM, green low noise, laser for OEM. Contact: Natalia Gavrilenko, Sales & Marketing Manager.

LASERLINE GmbH

#5087

Fraunhoferstr, Muelheim-Kaerlich, Germany, 56218
49 2630 964 0; fax 49 2630 964 1018
info@laserline.de; www.laserline.de

LaserPoint

#6314

Via Burona 51, Vimodrone, Italy, I-20090
39 02 27400236; fax 39 02 25029161
sales@laserpoint.it; www.laserpoint.it

New Product: New thermopile head that measures simultaneously laser beam power, position and diameter up to 6kW.

LaserPoint manufactures end user and OEM thermopile heads, sensors, probes and power and energy measurement instruments for the laser industry from few milliwatt up to 10 kilowatt providing cost effective solutions. Contact: Fabio Vidimari, Managing Director, vidimari@laserpoint.it; Flavio Ferretti, Industrial Products Manager, ferretti@laserpoint.it.

Lasertel

#1744

7775 N Casa Grande Hwy, Tucson, AZ, 85743
520/744-5700; fax 520/744-5766
info@lasertel.com; www.lasertel.com

New Product: The LT-5000 delivers industry-leading power in a stacked array platform.

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 and fiber-coupled devices are available with peak wavelengths from 790nm to 1000nm and peak powers from 200mW to 200W. Contact: Robert Walker, Sales & Marketing Manager, rwalker@lasertel.com; Robin Stroud, Sales & Marketing Representative, rstroud@lasertel.com.

LASERVISION GmbH

#1801

Siemensstr 6, Fuerth, Germany, 90766
49 (0)911 97368100; fax 49 (0)911 97368199
www.lvg.com

Since LASERVISION was founded in 1987, the company has become the world market leader in laser safety products. We offer a broad range of independently certified products and combine the highest quality with innovative technologies like di-electrical coatings. This guarantees the safety of your eyes while offering the maximum in comfort and fit. A broad portfolio of protection windows is available to be built into laser housings. Contact: Peter Bura, Managing Director, peter.bura@lvg.com.

LASOS Lasertechnik GmbH

#1133

Carl Zeiss Promenade 10, Jena, Germany, 07745
49 3641 2944 0; fax 49 3641 2944 79
lasosinfo@lasos.com; www.lasos.com

New Product: Compact OEM laser modules- GKL- / BKL- / YKL-series with excellent cost-performance-ratio.

The German medium-sized enterprise LASOS Lasertechnik is manufacturer of Air-Cooled Gas Lasers, Diode-Pumped Solid-State Lasers, Laser Diode Modules and integratable OEM-modules in the visible wavelength range. LASOS stands for high quality and a flexible production for customized OEM solutions. Contact: Sandra Schubert, Marketing/Sales Assistant, Sandra.Schubert@lasos.com; Phillip Crowley, US-Representative for LASOS, phil@markettechinc.net.

Lattice Electro Optics, Inc.

#230

571 S State College Blvd, Fullerton, CA, 92831
714/449-0532; fax 714/449-0531
lattice@lattice-eo.com; www.lattice-eo.com

Manufacturer of High Damage Threshold Optics & Coatings. Mirrors, windows, beamsplitters, polarizing optics, waveplates, spherical/cylindrical/aspheric lenses, ETALONS, filters, prisms. Specialized in EXCIMER(193 & 248nm), YAG, CO₂ & FEMTOSECOND optics. Also for OPO optics & Laser Rod coatings. Sandia Nat. Labs Level 1 Supplier. 24 hours turn around on coating. Contact: Scott Kim, Application Engineer.

Lee Laser, Inc.

#1645

7605 Presidents Dr, Orlando, FL, 32809
407/812-4611; fax 407/850-2422
salesdept@leelaser.com; www.leelaser.com

New Product: Lamp-pumped and diode-pumped Nd: YAG lasers up to 24 mJ pulse energy at 532 nm to pump Ti: Sapphire.

Manufactures industrial-grade OEM solid-state lasers: lamp-pumped CW and Q-switched YAG lasers to 25 Watts TEM₀₀ and 1000 Watts multimode at 1064 nm to mark/engrave, trim, process diamonds, cut and weld; DPSS lasers from 6 Watts to 400 Watts at 1064 nm; lamp- and diode-pumped lasers up to 100 Watts at 532 nm to pump Ti: Sapphire and PIV; pulse-pumped YAG lasers to 15 Watts TEM₀₀ and 100 Watts multimode to cut stents and stencils. Specializes in OEM engineering to enhance form and function. Contact: Bob Schrickler, Vice President - Sales, schrickler@leelaser.com; Steve Lendway, Sales Engineer, slendway@leelaser.com.

LEG Thüringen GmbH

#1801

Mainzerhofstr 12, Erfurt, Germany, 99084
49 361 5603 445; fax 49 361 5603 328
invest@leg-thueringen.de; www.invest-in-thueringen.org

LEISTER Technologies, LLC

#1438

1253 Hamilton Pkwy, Itasca, IL, 60143
630/760-1000; fax 630/760-1001
sales@leisterusa.com; www.leisterusa.com

New Product: Micro-Optics for Fiber Array Collimation (DWDM, MUX, OADM), Laser Diodes, and Optical Switching.

Axetris Microsystems (prev. LEISTER Technologies) develops and manufactures microlens arrays, diffractive optics, and infrared sources for information technology, industry automation, and biomedical applications. Our standard and OEM solutions include optics for Fiber Array Collimation (DWDM, MUX, OADM), Laser Diode Collimation, Shack-Hartmann Sensors, & Optical Switching. ISO 9001:2000 certified, combined with 50 years of manufacturing experience, makes Swiss-based Axetris a reliable supplier. Contact: John Vrakas, Optical Engineer, Technical Sales, info@leisterusa.com.

Leoni Fiber Optics GmbH

#6192

Muehldamm 6, Neuhaus-Schierschmitz, Germany, 96524
49 36764 81100; fax 49 36764 81110
fiber-optics@leoni.com; www.leoni-fiber-optics.com

New Product: UL-approved cables made of POF and glass optical fibers; Worlds first POF connector with IP65.

Leoni Fiber Optics is your specialist for all fiber optic applications e.g. in local area networks, the telecommunications sector, industrial environments, sensor technology, medical or traffic engineering. Our product range includes standard multi-mode and single-mode fibers, POF, PCF and special silica fiber cables, fiber bundles, cable assemblies, connectors, assembly and measurement tools. We also offer customised FO cable solutions. Contact: Andreas Wilhelm, Sales Manager, andreas.wilhelm@leoni.com; Imke Kuester, Sales Manager, imke.kuester@leoni.com.

LEW Techniques

#2042

Cook Way, Taunton Somerset, United Kingdom, TA2 6BG
44 1823 286698; fax 44 1823 333697
info@lewtec.co.uk; www.lewtec.co.uk

L.E.W. Techniques manufactures to customer design very precise and reliable microminiature components and assemblies including essential next-to-the-chip packaging, alumina/aluminium nitride laser die/photodiode/back facet monitor submounts with wraparound connections, heatsinks, subcarriers, hermetic window lids, whole packages, C, B and other mounts and more. Wide range of materials. Independent company, development to mass production. Come and discuss your requirements with us. Contact: Andrew Walker, Technical Director.

Lexel Laser Product Division

#6013

853 Brown Rd, Fremont, CA, 94539
510/651-0110; fax 510/651-1690
info@lexellaser.com; www.lexellaser.com

New Product: SHG Intra-Cavity Quick Switch and BeamROC™.

The Lexel Laser Product Division of Cambridge Lasers Laboratories manufactures Lexel ion Laser systems and replacement plasma tubes. Products include frequency doubled deep UV Laser systems, ideally suitable for Resonant Raman Spectroscopy, Fluorescence and Fiber Bragg Grating. Contact: Brian Bohan, brian@camlaser.com.

Photonics West Exhibitor Directory

Leibold Optics GmbH

#144

Siemensstr 88, Alzenau, Germany, 63755
49 6023 500 190; fax 49 6023 500 9190
marketingservices@leiboldoptics.com;
www.leiboldoptics.com

New Product: OMS 5000 direct monitoring right on the calotte.

LEYBOLD OPTICS is a leading manufacturer of vacuum coating systems and developer of processes for thin film technology. Our main focus is on evaporation, sputtering and plasma-assisted coating processes for optical applications, web coating and display technology. Our division for precision optics specializes in filters, mirrors and lenses. Apart from the popular SYRUSpro series, new developments in the field of applications are on show at Photonics West. Contact: Karl Matl, Director, karl.matl@leiboldoptics.com; Tobias Haecker, Regional Sales Manager, tobias.haecker@leiboldoptics.com.

LEYSOP Ltd.

#715

18 Repton Ct, Repton Close, Burntmills Basildon Essex, United Kingdom, SS13 1LN
44 1268 522 111; fax 44 1268 522 111
sales@leysop.com; www.leysop.com

New Product: Our EM510C KD*P Pockels cell offers an 8mm aperture in a 25mm diameter package.

Established for over 15 years, Leysop are the only UK manufacturer of electro-optic components, including Pockels cells for Q-switching, modulation and pulse slicing, Faraday isolators and calcite polarizers. Our special Pockels cells include ultra fast models for sub-ns pulse slicing, three electrode cells ideal for use in regenerative amplifier systems and our 100kHz RTP Q-switch and driver system. We also make special components to customer specifications in both active and passive devices. Contact: Steve Payne, Principal Engineer, steve.payne@leysop.com;

LG-Laser Technologies GmbH

#935

Kardinal-Faulhaber-Str 14, Kleinostheim, Germany, 63801
49 6027 46620; fax 49 6027 4662 33
info@lg-lasertechnologies.com; www.lg-lasertechnologies.com

New Product: LGT series: Temperature stabilized, eg. 375, 408, 445, 658, 670, 690, 780, 808, 920nm, CW/modulated.

LG-LASER TECHNOLOGIES offers the following products: Air-cooled Argon-Ion Lasers incl. refreshment and repair service, Helium-Neon Lasers, OEM Laser Diode modules, DPSS lasers and laser safety products. Reference applications are Printing/Reprography (large-format digital printing, CtP, CtS, holography), Industrial Testing and Measurement (alignment, pointing, projection, process control), Medicine/Life Science (flow cytometry, DNA-analysis, confocal microscopy) and Scientific Research. Contact: Barbara Eschbach, Sales Manager, beschbach@lg-lasertechnologies.com; Mark Mann, Sales Manager, sales@sacher.us.

Licel GmbH

#632

Chaudsseestr 34/35, Berlin, Germany, 10115
49 30 2839 1737; fax 49 30 2839 1738
stein@licel.com; www.licel.com

Electronics and detectors for Laser Radar (LIDAR). Optical Transient Recorders. Photon counting PMTs for 160 to 850 nm. Silicon Avalanche photodiodes for 650 to 1064 nm. Contact: John Devaney, Instrument Sales, devaney@boselec.com.

Liebmann Optical Co.

#145

1 Industrial Pky, Easthampton, MA, 01027
413/527-0079; fax 413 527 5132
sales@liebmann.com; www.liebmann.com

Light Age, Inc.

#618

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

Light Age, Inc. develops, manufactures and sells uniquely versatile high power, pulsed and cw tunable solid-state lasers for medical, industrial and scientific applications. Light Age's laser products are currently used in applications as diverse as microelectronics manufacturing, development of new laser sources, hair removal, remote sensing, spectroscopy to materials processing and micromachining. Contact: Brian Pryor, Vice President, Business Development, bpryor@lightage.com; Rick Frost, Vice President, Sales and Marketing, rfrost@lightage.com.

Light Guide Optics Germany GmbH

#6168

Heerstrassen Benden 10, Rheinbach, Germany, 53359
49 2226 158516; fax 49 2226 158520
info@lgoptics.de; www.lgoptics.de

We are manufacturers of optical fibres, cables, bundles, fused bundles for UV and NIR in Industrial and Medical applications like lasers, spectroscopy, analytical fibres with different coatings like acrylate, nylon, teflon or polyimide, cables with all know connectors or custom designed solutions, bundles round to round or round to line, fused end bundles highpower cables for marking or welding. We have our own fibre production see our website. Contact: Peter Taenzer, Sales & Marketing Manager, taenzer@lgoptics.de; Wolfgang Mielke, Sales & Marketing Manager, mielke@lgoptics.de.

Lightel Technologies, Inc.

#6057

1034 Central Ave S, Kent, WA, 98032
253/831-2862; fax 253/831-2861
www.lighteltech.com

LightPath Technologies, Inc.

#1644

2603 Challenger Tech Ct, Orlando, FL, 32826
407/382-4003; fax 407/382-4007
eluna@lightpath.com; www.lightpath.com

New Product: High-power Fusion™ collimators for laser delivery, Black Diamond™ molded LWIR aspherical optics.

LightPath Technologies Inc. is a recognized leader in optical solutions for medical, industrial, defense and communication applications. LightPath offers a full line of UV to long wavelength infrared optics, including aspherical, gradium and traditional optics, fiber collimators, optical isolators and optical assemblies. Complete custom engineering and design support is available. Contact: Edward Patton, Vice President Marketing, epatton@lightpath.com; Jim Magos, Vice President Sales, jmagos@lightpath.com.

LightSmyth Technologies, Inc.

#6305

860 W Park St Ste 250, Eugene, OR, 97401
541/431-0026; fax 541/284-5607
info@lightsmyth.com; www.lightsmyth.com

New Product: World's first fully integrated CWDM mux/demux for single-mode systems (4x20mm die)

LightSmyth's advanced waveguide grating devices harness the power of DUV photolithographic and nanoimprint fabrication methods to produce integrated and free-space gratings of unprecedented functionality. Integrated gratings provide thin-film-filter-level passband control, powering versatile, ultra-compact filters, multiplexers and sensors. Free-space gratings with arbitrary curvilinear lines and variable spacing provide dual function focusing and dispersion. Contact: Tom Mossberg, Chief Technical Officer, twmoss@lightsmyth.com.

Lightspeed Technologies

#6395

90 Hardy Ave, Campbell, CA, 95008
408/761-0062; fax 408/378-3629
info@light-speed-tech.com; www.light-speed-tech.com

New Product: Low cost, high resolution spectrometers from Photon Control have readout ranges from 200 to 950nm.

Lightspeed Technologies distributes Elliot Scientific precision alignment products including flexured stages, mounts, mini stages, automated alignment systems and also optical tweezer systems. Lightspeed Technologies distributes low cost, high resolution spectrometers from Photon Control. Laser products available include Southampton Photonics Inc. fiber lasers for R&D, biomedical and other applications. Engineering services are available for product development or laboratory requirements. Contact: Randall Wilcox, Sales Manager, randall.wilcox@light-speed-tech.com.

LightTrans GmbH

#1801

Wildenbruchstr 15, Jena, Germany, 07745
49 3641 66 4353; fax 49 3641 66 4354
service@lighttrans.com; www.lighttrans.com

Lightwaves2020 Inc.

#6019

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

LIMO Lissotschenko Mikrooptik GmbH

#6373

Bookenburgweg 4, Dortmund, Germany, 44319
49 231 22241 300; fax 49 231 22241 301
sales@limo.de; www.limo.de

Laser sources in medicine, for pump applications and for material processing. Beam shaping for high-power diode lasers, for laser material processing and for semiconductor processing. Beam shaping modules; homogeniser for laser radiation; material processing system; and customised solutions. Contact: Richard van Densen, Sales Director North America.

Lincoln Laser Co.

#521

234 E Mohave, Phoenix, AZ, 85004-2845
602/257-0407; fax 602/257-0728
www.lincolnlaser.com

Lincoln Laser is a manufacturer of high-precision laser scanning components and laser systems. Lincoln Laser has supported hundreds of innovators in taking their ideas from prototype to production, thanks to its experienced engineering team, a fully equipped machine shop and a precision assembly facility. So whether you need a single highly customized part or several thousand parts or a complete laser system, Lincoln Laser can meet all your engineering design and manufacturing needs. Contact: Beverly Walters, Corporate Account Manager, bwalters@lincolnlaser.com; Michael Adkins, Regional Sales Manager, madkins@lincolnlaser.com.

SmartShutter™
Stepper-Motor
Driven Shutter

- As fast as 8msec from trigger to open or close
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- Free running or timed interval operation
- Variable aperture settings for neutral density
- Life tested to over 100 million cycles
- 25mm, 35mm or 50mm shutters available
- Modular repairable design
- USB or TTL control

SUTTER INSTRUMENT

51 DIGITAL DRIVE, NOVATO, CA 94949
PHONE: 415.883.0128 | FAX: 415.883.0572
EMAIL: INFO@SUTTER.COM | WWW.SUTTER.COM

LINOS Photonics, Inc.

#1027

459 Fortune Blvd, Milford, MA, 01757-1723
800/334-5678; fax 508/478-5980
info@linos-photonics.com; www.linos-photonics.com

New Product: LINOS announces the NanoBench line of optical components. Reduced size, same great performance.

LINOS offers an industry-leading selection of optical components, opto-mechanical and opto-electronic devices including lenses, mirrors, beamsplitters, filters, prisms, polarizers, laser optics, beam expanders, CCD and machine vision lenses, positioning systems, fiber optic components, laser modulators, Pockels cells, Faraday isolators, x-ray imaging lenses and cw Optical Parametric Oscillator.

Logitech Product Group

#1705

24766 Detroit Rd, Westlake, OH, 44145-2525
800/321-5834; fax 440/871-8188
info@logitech.com; www.logitech-us.com

New Product: The LP600 was designed specifically for the photonics and semiconductor processing industries.

Logitech manufacturers high precision sawing, lapping and polishing equipment for both research and small scale production systems. These systems are available for substrate backthinning, polishing of GaAs, InP, Sapphire, Silicon, semiconductor wafers, electro-optic crystals, ceramics, waveguides, laser rods and optical components. Logitech can also supply a full range of polishing consumables. Stop by the Logitech booth to discuss the latest advances in the wafer processing industry. Contact: Craig Slimmer, Director of US Sales; Lynn Cielec, Director of US Sales.

Photonics West Exhibitor Directory

Lumenera Corp.

#6304

7 Capella Ct, Ottawa, ON, Canada, K2E 8A7
613/736-4077; fax 613/736-4071
scientificsales@lumenera.com; www.lumenera.com

New Product: Lumenera's 11 MP Camera- 3.5 fps, 4008x2672, CCD, USB2, DirectShow, color/mono, board-level/encl.

Lumenera is a leading developer and manufacturer of high performance digital cameras and custom imaging solutions. Our cameras satisfy a wide range of machine vision, scientific and security applications, providing unique combinations of speed, resolution and sensitivity. Our cost effective digital cameras range from 0.5 through 21 megapixel resolution, include CMOS, CCD, Cooled CCD, Pixel Shifting technology, and USB 2.0 and Ethernet interfaces. Color/mono, board-level/enclosed. Contact: Kevin Barwin, Vice President of Sales, Drew Buttress, Business Development-Industrial Markets USA, drew.buttress@lumenera.com.

Lumera Corp.

#6157

PO Box 3040, 19910 Northcreek Pkwy,
Bothell, WA, 98041-3040
425/415-6900; fax 425/398-6599
www.lumera.com

Lumera Laser GmbH

#5071

Opelstr 10, Kaiserslautern, Germany, 67661
49 6301 703 180; fax 49 6301 703 189
www.lumera-laser.com

New Product: Our RAPID offers 500 kHz, 10 picoseconds, 2W or 10W Harmonics.

Picosecond lasers, such as the 1MHz RAPID, 100 kHz STACCATO and the 160MHz UPL lasers, for ablative micromachining, spectroscopy, material processing, lidar, scientific and other uses. The ultrafast picosecond lasers ablate substrates without heat affected zone or burrs and with minimal recast. These lasers are available at 1064nm or 532, 355, 266nm standard units and custom 213nm and 1.5 um. Contact: Achim Nebel, President, Bernard H. Klimt, Director-Marketing-Sales, klimt@lumera-laser.com.

Lumics

#6113

Carl-Scheele-Str 16, Berlin, Germany, 12489
49 30 67806760; fax 49 30 678067626
sales3@lumics.com; www.lumics.com

Lumics, based in Berlin, Germany is specialized in laser module components. The product range includes laser diodes and fiber coupled devices in TO220, 14-pin butterfly and Mini-DIL design for the use in optical communication networks, analytical instruments and commercial laser applications. The company is specialized in development and production of laser devices in the range from 800nm to 1080nm wavelength. Contact: Madlen Arend, Sales Assistant, Madlen.Arend@lumics.com.

Lumina Power, Inc.

#236

240 Jubilee Dr, Peabody, MA, 01960
978/532-4666; fax 978/532-3066
sales@luminapower.com; www.luminapower.com

New Product: High Power laser diode drivers with current to 200A at power levels up to 5000W.

Lumina Power designs and manufactures high power laser diode drivers and capacitor charging power supplies. The LDD family of CW laser diode drivers has current capability up to 200A at power levels from 50W to 5000W. The LDQCW family of QCW drivers can pulse up to 200A. Lumina Power has seven models of capacitor charging power supplies with power capability from 500J/s to 6400J/s at output voltages up to 15kV. Visit www.luminapower.com. Contact: Bill O'Brien, President, billob@luminapower.com.

Luna Technologies

#6232, #6233

2020 Kraft Dr, Blacksburg, VA, 24060
540/961-5190; fax 540/961-5191
hovorkar@lunatechnologies.com;
www.lunatechnologies.com

New Product: 1310nm version of the industry's most sensitive OFDR: Optical Backscatter Reflectometer.

Luna Technologies 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: Ed Valigursky, Vice President Sales, valigurskye@lunatechnologies.com; Michelle Sallee, Sales, West Coast, salleem@lunatechnologies.com.

LxSix Photonics

#6006

520 McCaffrey, St-Laurent, QC, Canada, H4T 1N1
514/599-5714; fax 514/599-5729
www.lxsix.com

LxSix designs and manufactures complex products based on Fiber Bragg Grating technologies. Using its automated platform, LxSix manufactures laser and pump stabilizer products for Telecommunications as well as distributed optical sensors for complex and harsh environments. Contact: Francois DuSablou, Vice President Sales, fdusablou@lxsix.com; Robert Caporuscio, Vice President Marketing, rcaporuscio@lxsix.com.

Lydall Thermal Solutions LLC

#2020

775 Rte 16, Ossipee, NH, 03864
603/539-3600; fax 603/539-8484
affinity_sales@lydall.com; www.affinitychillers.com

Manufacturers of Affinity Brand refrigerated chillers and non-refrigerated heat exchangers, Lydall is a worldwide leader for process cooling solutions and customer service for semiconductor and photonics industries. Contact: Peter Brown, Senior Account Manager, pbrown@lydall.com; Rich Young, Senior Account Manager, ryoung@lydall.com.

Lytron, Inc.

#735

55 Dragon Ct, Woburn, MA, 01801-1039
781/933-7300; fax 781/935-4529
info@lytron.com; www.lytron.com

New Product: Lytron's new CP40 copper etched cold plate combines ultra-high performance and water compatibility.

Lytron, the Total Thermal Solutions™ company, designs and manufactures standard and custom cooling systems and components including compressor-based and thermoelectric recirculating chillers, cold plates, non-refrigerated cooling systems, stainless steel and copper heat exchangers and aluminum oil coolers. Specialties include compact products and innovative designs. ISO 9001 registered since 1996.

M³ Measurement Solutions Inc.

#5141

PO Box 503854, San Diego, CA, 92150-3854
760/749-7159; fax 760/749-7152
m3msi@m3msi.com; www.m3msi.com

M Cubed provides refractive index measurements at wavelengths from 350nm to 16um and temperature ranges from -268 C to +200 C. Refractive index is measured via a modified minimum deviation technique. We can supply various types of curve fitting and dispersion algorithms (e.g. Herzberger, Schott, Sellmeier, etc). Accuracies range from $n \times 10^{-4}$ to $n \times 10^{-6}$ depending on specific test parameters. Contact: Erik Stover, Business Development Manager, estover@m3msi.com; Jim Grimes, Senior Engineer, jgrimes@m3msi.com.



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Photronics.com gives you what no other Web site can: The total picture. It's the only site that has the photonics companies, products, news and information you need to stay informed about the industry and the competition. If it's important to the photonics industry, our editors report on it daily.

With our powerful search engine, you'll quickly find company catalogs and links to suppliers in the online Photronics Buyers' Guide. And you can browse the electronic editions of the award-winning *Photronics Spectra* magazine, as well as *Biophotonics* and *EuroPhotonics* magazines.

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- Faster, more powerful search engine
- The Photronics.com Community Forum

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most complete and most consulted
Web site. You owe it to yourself
and your business to give it a
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**Over 200,000 visitors
each month and growing!**

m•u•t Group

Am Marienhof 2, Wedel, Germany, 22880
49 4103 9308 0; fax 49 4103 9308 99
info@mut-gmbh.de; www.mut-gmbh.de

New Product: TRISTAN 5 Spectrometer series & Accessories.

m•u•t's business unit "Spectroscopy" provides solutions in the field of bio-analytics, homeland security, quality assurance, process control and many other applications. Our outstanding experience from many OEM projects in many different spectroscopy applications results in the realization of intelligent solutions from the basic sensor up to complex system solutions. m•u•t offers a full range of spectrometers and accessories such as light sources, measurement equipment and software tools. Contact: Sven Johannsen, Marketing Manager, sjohannsen@mut-gmbh.de; Michael Lindner, Sales Manager, mlindner@mut-gmbh.de.

#1801

Exhibition Map/Restaurant Guide Sponsor

The MathWorks Inc.

3 Apple Hill Dr, Natick, MA, 01760-2098
508/647-7000; fax 508/647-7001
info@mathworks.com; www.mathworks.com

The MathWorks, developer of the MATLAB and Simulink product families, will highlight their software platform for image acquisition, processing, analysis, algorithm development and application deployment. With more than 1,000,000 users in industry, government and academia, MATLAB combines comprehensive math and visualization functionality with specialized toolboxes for signal processing, image processing, wavelets, statistics and more. Contact: The MathWorks Sales & Service Team.

#527

m2k-laser

Tullastr 72, Freiburg, Germany, 79108
49 170 4123487; fax 49 761 5573332
info@m2k-laser.de; www.m2k-laser.de

#1801

Mad City Labs, Inc.

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

New Product: Nano-MTA2: High speed/high precision piezo based mirror actuators with nanoradian resolution.

Mad City Labs, Inc. manufactures high speed, high precision nanopositioning systems with sub-nm resolution. Our products feature integrated position sensors, closed loop feedback, low noise high linearity and true flexure guided motion. Products: High speed Z axis, focusing elements, tip/tilt and rotational actuators, ac lowest profile nanopositioners, integrated positioning solutions, vacuum compatible models. Contact: Jenice Con Foo, Technical Sales, jenice@madcitylabs.com; Dale Baldwin, Technical Sales, dbaldwin@madcitylabs.com.

#6219

Market Tech, Inc.

PO Box 67037, Scotts Valley, CA, 95067-7037
800/326-5714; fax 831/461-1136
info@markettechinc.net; www.markettechinc.net

Market Tech, Inc. is US based distribution company that provides a wide variety of lasers, detectors, optics and fiber optics for life science, medical, aerospace and research applications. Laser products offered include Gas, Diode, Fiber lasers and Diode Pumped Solid State lasers with wavelengths from 266nm to 1550nm. Other products include SLED's, non-linear crystals, fused fiber components, scan heads, APD's and single photon counting modules. Contact: Philip Crowley, Vice-President of Marketing, Phil@markettechinc.net;

#1133

Marlow Industries, Inc.

10451 Vista Park Rd, Dallas, TX, 75238-1698
214/340-4900; fax 214/340-7728
www.marlow.com

#447

Max Levy Autograph, Inc.

220 W Roberts Ave, Philadelphia, PA, 19144-4298
215/842-3675; fax 215/842-3637
sales@maxlevy.com; www.maxlevy.com

New Product: Max Levy Autograph introduces a multi-function target to test and characterize large format lenses.

Max Levy Autograph specializes in ultra-precision patterned optical components, NIST traceable metrology standards, metrology scales and calibration grids. Major capabilities provide component or artifacts within these products lines: small optics and components, electroforming, calibration grid plates and services, photochemical etching, film products and micro-contouring/machining. Contact: Tom Cinque, Sales Manager, tom@maxlevy.com; Rich Rosenfeld, Operations Manager, richr@maxlevy.com.

#637

McPherson Inc.

7A Stuart Rd, Chelmsford, MA, 01824
978/256-4512; fax 978/250-8625
mcp@mcphersoninc.com; www.mcphersoninc.com

New Product: 1-meter vacuum monochromator resolves .01-nm for physics of high temperature plasma and charged ions.

McPherson designs & manufactures Monochromators, Spectrometers and CCD equipped Imaging Spectrographs. Specialties incl. High Resolution and Vacuum Ultraviolet. Instruments for the Visible to the Infrared & Extreme Ultraviolet and Soft X-ray regions. System Solutions for PDP, PL, Plasma Diagnostics, Raman, Microscopy, Multispectral Calibration, Optical Deposition Monitoring, Spectrophotometry, Multi Fiber Imaging, and Remote Spectral Sensing. Contact: Erik Schoeffel, Sales Coordinator, eds@McPhersonInc.com; Lori Krupa, Scientific Advisor, ldk@McPhersonInc.com.

#3005

Meadowlark Optics

5964 Iris Pky, Frederick, CO, 80530
303/833-4333; fax 303/833-4335
sales@meadowlark.com; www.meadowlark.com

#1511

mechOnics ag

Unnuetzstr 2/B, Munich, Germany, 81825
49 89 4202 4207; fax 49 89 4202 4206
info@mechonics.de; www.mechonics.de

New Product: Ultra low temperature positioners with piezo inertial drive.

mechOnics ag is specialized in development, production and sales of micro- and nanopositioning systems. These systems are driven by a new developed, innovative piezo inertial drive, which combines high resolution in the nm-range with large travels up to 50 mm. Together with piezo controllers with very low power consumption this permits main voltage free applications in laboratories and out of doors. In different industry fields many customers profit of the high competence of mechOnics. Contact: Hubert Muenzer, Chief Executive Officer.

#6033

MediVision Optics

1440 S State College Blvd #1D, Anaheim, CA, 92806
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.

Additional capabilities include ground and polished aspheric lenses. We work with customers from prototype to production. Applications ranging from industrial to medical. Contact: Janice Hunter, Sales & Marketing Manager, huntermvo@hotmail.com; Roxanne Johnson, Customer Service Manger, rjohnson@medivisionusa.com.

Megaopto Co., Ltd.

11-58 Honcho, Weko, Saitama, Japan, 351-0114
81 48 469 3377; fax 81 48 469 3332

postmaster@megaopto.co.jp; www.megaopto.co.jp

Megaopto is a small but spirited manufacturer of solid-state laser and fiber laser. The basis of technology was originated in RIKEN, one of the largest research institutes in Japan. Our advanced knowledge and technologies on lasers make us possible to meet your demands rapidly and flexibly. Contact: Yoshiharu Urata, Director, yurata@megaopto.co.jp.

MegaWatt Lasers, Inc.

PO Box 24190, Hilton Head Island, SC, 29925-4190
843/342-7221; fax 843/342-7223

mwl@mwlasers.com; www.megawattlasers.com

New Product: The ER-100 eyesafe Er:Glass laser, modified T0-3 housing, 50 kW, 2 ns pulses.

MegaWatt Lasers manufactures a complete line of high-quality pump chambers. Our designs are well suited for both breadboard experimentation as well as OEM applications. Our cavities are designed to provide unsurpassed performance, reliability and leak integrity. Through many years' experience, they have been optimized to provide features such as diffuse-reflectors and symmetric cooling. Contact us to learn about improving your performance and reducing cost of your pump chamber needs! Contact: Scott Hamlin, Chief Scientist, scott.hamlin@megawattlasers.com; James Martin, Engineer, james.martin@megawattlasers.com.

Melcor Corp.

1040 Spruce St, Trenton, NJ, 08648
609/393-4178; fax 609/393-9461

tecooler@melcor.com; www.melcor.com

New Product: RM300 - Rack Mount chiller with 270 watt capacity, 4u height and solid state reliability.

MELCOR is a world leader in manufacturing thermoelectric (peltier) coolers and custom assemblies. Since 1959, Melcor has grown to offer the widest selection of thermoelectric coolers, air conditioners, plate to air systems and recirculating chillers. Our products offer high reliability and precise temperature control at a competitive price. Contact us to assist with your new cooling application or to replace your existing thermoelectric source. Melcor is an ISO 9001:2000 certified company. Contact: Bryan Allen, Sales Account Manager, ballen@melcor.com; Jay Liu, Applications Engineer, jliu@melcor.com.

Meller Optics, Inc.

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, Sapphire and Ruby. Meller has developed high-speed, low-cost finishing processes for a variety of Laser Glasses, Fused Silica, Zinc Selenide, Germanium, Silicon, Fluorides and Ceramic. Configurations include windows, substrates, lenses, domes and prisms. Meller Optics is an ISO 9002 certified company. Contact: Craig D. Schweriner, International Sales Manager, craig@melleroptics.com.

#428 Registration Stairway Strip Sponsor



Melles Griot

#1318

2051 Palomar Airport Rd #200, Carlsbad, CA, 92009-1462
760/438-2131; fax 760/438-5208

sales@catalog.mellesgriot.com; www.mellesgriot.com

New Product: 488nm Sol hid State Laser.

Melles Griot lasers, instruments and photonic components enable the practical application of light. As your supplier of choice we provide unequalled technical assistance, high quality affordable components for OEM production and a global support team ready to assist you with over 25,000 catalog parts. For OEM lasers contact sales@carlsbad.mellesgriot.com, for custom and OEM optics contact sales@rochester.mellesgriot.com, for catalog components contact sales@catalog.mellesgriot.com. Contact: Bruce Capron, Sales & Marketing Director, sales@rochester.mellesgriot.com; Philip Armatis, Sales Manager, sales@carlsbad.mellesgriot.com.

MEMS Optical Inc.

205 Import Cir, Huntsville, AL, 35806
256/859-1886; fax 256/858-0581

info@memsoptical.com; www.memsoptical.com

New Product: New products can use a larger range of material, creating flexibility for DUV to LWIR applications.

MEMS Optical, Inc., is a leading supplier and manufacturer of both refractive (microlens arrays) and diffractive (beam shapers, beam splitters, etc.) micro optics and of MEMS devices such as scanning tilt micro mirrors and deformable mirrors. Contact: Mery Beth Key, Sales Representative.

Meshtel - Intelite

2562 Silver State Pky #F1, Minden, NV, 89423
775/267-5959; fax 775/267-5958

info@meshtel.com; www.meshtel.com

New Product: DPSS and Direct Laser Diode System with Digital Programmable Controller with 375 - 1600nm wavelength.

CW 473nm, 532nm, 1064nm, 1340nm DPSS lasers, Q-switched acousto-optic modulator (AOM) 266nm, 355nm, 532nm, 1064nm DPSS lasers with < 5ns pulse width. Low noise single longitudinal mode 532nm DPSS. 375nm to 1600nm diode lasers with optional circular optics, modulation control and variable optical power. Optional fiber pigtailed for all lasers. Laser safety goggles, power meters, optics, drivers. Optical scanners. Fiber optics fault detector, Side emitting silica core fiber. Contact: Ray Newton, Manager, info@intelite.com; Steve Ozad, Email Manager.

Mesophotonics Ltd.

Chilworth Science Park, 2 Venture Rd, Southampton Hampshire, United Kingdom, SO16 7NP

44 23 8076 3752; fax 44 23 8076 3757

sales@mesophotonics.com; www.mesophotonics.com

New Product: Klarite surface enhanced Raman substrates & Silicon calibration standards for Raman spectroscopy.

Our products include Klarite® substrates, which enabling Surface Enhanced Raman Spectroscopy to rapidly detect trace levels of chemicals by providing reproducible signal enhancement of greater than 1,000,000. Based on photonic crystal enhanced nano-structured surfaces these devices are suitable for applications in forensics, pharmaceutical development, medical diagnostics and homeland security. These are supported by a range of calibration products to enhanced Raman system performance. Contact: John Lincoln, Director of Business Development, John.Lincoln@mesophotonics.com; David Reece, Sales Manager, David.reece@mesophotonics.com.

#6125

#6108A

#6211

#1043

#6326

#3016

#1939

Photonics West Exhibitor Directory

Metavac

#5122

4000 Point St, Holtsville, NY, 11742
631/447-7700; fax 631/447-7715
info@metavac.com; www.metavac.com

MetroLux GmbH

#6024

Bertha-von-Suttner Str 5, Goettingen, Germany, 37085
49 551 7976 70; fax 49 551 7976 724
info@metrolux.de; www.metrolux.de

New Product: Beamlux II software.

MetroLux is manufacturer of high quality metrology equipment for laser beam and optics characterisation especially in the VUV/UV wavelength range. Our main products are Laser Beam Profiler and Wavefront Sensor. Since 10 years MetroLux offers complete metrology solutions worldwide. Products include: Laser Beam Profiler; Cameras (digital, analog); M_ Meter; Laser Synchron Device; Attenuators; Wavefront Sensors; Wavelength Meters; VUV Spectrophotometer; High Quality Optical Components; Power/Energy Sensors.

MetroLux Analytics, Inc.

#6024

PO Box 13282, Reno, NV, 89507
775/250-3379
www.metrolux.de

New Product: Beamlux II software.

MetroLux is manufacturer of high quality metrology equipment for laser beam and optics characterisation especially in the VUV/UV wavelength range. Our main products are Laser Beam Profiler and Wavefront Sensor. Since 10 years MetroLux offers complete metrology solutions worldwide. Products include: Laser Beam Profiler; Cameras (digital, analog); M_ Meter; Laser Synchron Device; Attenuators; Wavefront Sensors; Wavelength Meters; VUV Spectrophotometer; High Quality Optical Components; Power/Energy Sensors.

Micralyne, Inc.

#6055

1911-94 St, Edmonton, AB, Canada, T6N 1E6
780/431-4400; fax 780/431-4422
info@micralyne.com; www.micralyne.com

New Product: Micragem™ - an SOI based MEMS fabrication process, Microlenses.

Micralyne develops and manufactures microfabricated and MEMS (Micro-Electro-Mechanical-Systems)-based products. Micralyne is one of the few companies in the world that manufactures MEMS in high volumes to be used in the communications, automotive, aerospace and life sciences industries. Micralyne's micron-scale solutions are found in emission sensors for Ford automobiles, optical switching technology in telecommunication networks and lab-on-a-chip devices for drug discovery. Contact: Bryan Smith, Business Development Manager, bsmith@micralyne.com; Bruce Alton, Vice President, Marketing and Business Development, balton@micralyne.com.

Micro Laser Systems, Inc.

#719

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

New Product: Turnkey High Performance Diode Lasers and angled Fiber Collimators.

Manufacturer of diffraction limited diode lasers either free space of fiber coupled from 375nm to 1550nm. Turnkey or OEM systems have narrow linewidths, high stability and circular beams. Matching accessories for expanding, focusing, filtering the beams and mounting. Specialized lasers for confocal microscopes, Raman Spectroscopy and ophthalmology. Custom laser/optical systems routinely manufactured. Contact: Norma Adachi, Marketing Manager, norma@microlaser.com.

MicroE Systems

#6071

8 Erie Dr, Natick, MA, 01760
508/903-5000; fax 508/903-5005
info@microesys.com; www.microesys.com

MicroE Systems manufactures the world's smallest high-performance motion feedback encoders. Smaller, smarter and faster than competitive encoders, our Mercury™ encoder family contains twenty-four models in programmable, digital output, analog output, absolute, multi-axis and vacuum styles. Resolutions range from 5 microns to 5 nanometers, linear and up to 67.1 M CPR, rotary.

MicroFab

#6030A

180 Zachary Rd, Manchester, NH, 03109
603/621-9522; fax 603/621-9524
microfab98@aol.com; www.microfabnh.com

MicroFab Inc specializes in manufacturing Laser Diode Sub-mounts for optical telecommunications and Custom Thin Film circuits, for microwave and millimeter wave applications. Chemical, Ion Beam etching and photolithography technologies are used to manufacture a wide variety of unique products for sensor, optical and biomedical applications.

Micron Optics, Inc.

#6166

1852 Century PI NE, Atlanta, GA, 30345
404/325-0005; fax 404/325-4082
moi@micronoptics.com; www.micronoptics.com

Micron Optics, a leading provider of tunable optical technologies, offers a comprehensive portfolio of components and instruments for sensing, biotech and telecom markets. Micron Optics optical sensing products include the best-in-class swept laser sources, sensor measurement systems and tunable filters for OCT imaging and spectrum analysis applications. Contact: Kevin Hsu, Vice President of Research & Development, khsu@micronoptics.com.

Midwest Optical Systems

#120

322 Woodwork Ln, Palantine, IL, 60067
847/359-3550; fax 847/359-3567
info@machinevisionfilters.com;
www.midwestopticalsystems.com



New dimensions in YAG components from the pioneering developer and manufacturer of Optical Isolators

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- OEM models available



High Power Fiber Isolators 1W, 5W & 10W



High Power Fiber Circulators for SM, PM and MM



High Power Fiber Splitters for SM, PM and MM



Mini breadboard (FiberTable) lab and test systems



Laser to fiber coupling with SM, PM and MM fiber

OFR
PRODUCTS FOR
PHOTONICS

Optics for Research Inc.
Box 82
Caldwell, New Jersey 07006
Phone: 973-228-4460
FAX: 973-228-0915
info@ofr.com

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by Optics for Research

See us at Photonics West Booth No. 433



High Power Focusing Objectives

Mildex, Inc.

#1515

1388 Crittenden Rd, Rochester, NY, 14623-2308
585/473-6540; fax 585/475-1971
mildex@eznet.net; www.mildex.com

New Product: OptiSpheric-AutoTray: Automatic Optical Test Station for Testing lenses in production Quantities.

Mildex will exhibit Trioptics OptiSpheric AutoTray, automated lens tester for Production quantities of lenses. It provides ultra-fast measurements of EFL, BFL, MTF, Centering errors of single lenses or Multi-element objectives using X-Y auto-stage for positioning of lens samples and powerful lens testing software. Also displayed is Trioptics Electronic autocollimator, TriAngle, equipped with new OptiAngle-3 Software for ultra-accurate measurements of small tilt or deflection angles. Contact: Harvey Miller, President.

Mindready Solutions

#6319

75 Belfast Rd, Carrickfergus, N Ireland,
United Kingdom, BT38 8BX
44 28 93 357300; fax 44 28 93 357305
John.martin@mindready.com; www.mindready.com

New Product: Burn-in/life test system 1-20 Amps.

Mindready will show their innovative burn-in/life test system with the new higher power option (5-20A per device). This extends to more powerful devices, the benefits of the module-based approach such as flexibility of use and expandability. Experts will be present to discuss topics including: Chip-on-Carrier and bar testing, Alignment Optical test solutions, Telecordia and optical packaging consultancy. Contact: John Martin, Photonics Specialist, john.martin@mindready.com; Burt Nathan, Chief Scientist, burt.nathan@mindready.com.

Stairway Strip Sponsor

Mindrum Precision, Inc.

#216

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

New Product: LaserAce LM150 and LaserAce LM 300. Eye Safe Distance Measuring Lasers.

Now Celebrating our 50th Anniversary in the Industry as a custom manufacturer of glass, quartz, ceramic and exotic material components. 5 axis capabilities in drilling and shaping. Special products include dampers, window assemblies, flow cells and optical filters. Flat, cylindrical and custom lenses including Super Polishing to Sub Angstrom on some materials and shapes. Glass and Quartz Blowing. Prototype to Production. Contact: Todd Van Son, Sales; Adam Pohl, Sales.

Miniflex Ltd.

#1941

The Technology Centre, Station Rd, Framlingham Suffolk,
United Kingdom, IP13 9EZ
44 1728 726500; fax 44 1728 726533
www.miniflex.co.uk

New Product: FLAT MANIFOLD: protect, breakout and manage primary fibre from any input fibre tube.

Miniflex is a total optical solution provider, supplying protection and management products to any fiber system. Our unique Fibre Bend Limiting Tube (FBLT) offers the ultimate protection to fibres eliminating problems such as crushing, kinking and micro bending, whilst supplying an entire, self-managing solution to managing the routing of the fibre. FBLT is available in many sizes and a range of tough, stable, fire retardant and low smoke zero halogen materials. Contact: Oliver Shearman, o.shearman@miniflex.co.uk; Paul Ekpenyong, p.ekpenyong@miniflex.co.uk.

Minus K Technology

#6282

420 S Hindry Ave Unit E, Inglewood, CA, 90301
310/348-9656; fax 310/348-9638
sales@minusk.com; www.minusk.com

New Product: Low Profile (4.5 in.) BM-6 and BM-8 isolator.

Minus K Technology manufactures vibration isolation products ideal for SPMs, Micro-hardness testers, laser and optical systems. Products are easy-to-use, low-cost, require no air, can be vacuum compatible and include bench-top platforms, workstations and custom systems. With guaranteed 1/2 Hz natural frequencies, performance is 10 times better than air tables. Contact: Erik Runge, erik@minusk.com; David Platus, President, david@minusk.com.

Exhibition Map/Restaurant Guide

Missile Defense Agency SBIR

#6147

1515 N Courthouse Rd #310, Arlington, VA, 22201
703/841-5500; fax 703/841-5501
www.winmda.com

The Small Business Innovation Research Program (SBIR), established by Congress in 1982 to open the door for small businesses to federal research and development and to speed the conversion of their research findings into commercial products. The SBIR program of the Missile Defense Agency seeks small businesses to develop technology and products for use in the program. Contact: Andy Talbert, Outreach Events and Marketing Manager, andy.talbert@onpointcorp.com.

Mitsubishi Cable Industries, Ltd.

#6335

Shin Kokusai Bldg, 4-1 Marunouchi 3-Chome Chiyoda-ku,
Tokyo, Japan, 100-8303
81 3 3216 1551; fax 81 3 3201 3948
info@mitsubishi-cable.co.jp; 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 Manager, fibersales@mitsubishi-cable.co.jp; Masakazu Kato, International Fiber Optics Sales Manager, fibersales@mitsubishi-cable.co.jp.

Mitsubishi Cable Industries, Ltd.

#1835

Sun Light Bldg, 5-29-1 Toyotama Kita, Nerima-ku Tokyo,
176-8516
81 3 3994 1507; fax 81 3 3994 1519
info@keoselectronics.com; www.mitsubishi-cable.co.jp

Silica fiber laser light guides and fiber optic bundles. Contact: Keith Breeding, Sales, kbreeding@keoselectronics.com.

MLD Technologies, LLC

#6137

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, gdbell@mldtech.com; Len Mott, Principal, lenmott@mldtech.com.

Model Optics

#342

10 Dixon Ave, Woodstock, NY, 12498
845/679-7386; fax 845/679-7449
www.modeloptics.com

Manufacturer of custom precision optics including spherical, flat, prism & toroidal components. Full optical coating services, design & assembly of opto-mechanical units on site. Specializes in prototype services & limited production volume. High volume double-sided lapping production capacities for precision plano-plano windows. Contact: Larry Kim, President, lkim@modeloptics.com.

Moeller-Wedel Optical GmbH

#6051

Rosengarten 10, Wedel, Germany, 22880
49 4103 937 7617; fax 49 4103 937 7660
info@moeller-wedel-optical.com; www.moeller-wedel-optical.com

Contact: Bernd Grubert, Sales Manager, b.grubert@moeller-wedel-optical.com.

Molecular Imprints, Inc.

#6268

1807-C W Braker Ln, Austin, TX, 78758-3605
512/339-7760; fax 512/339-3799
inquiries@milito.com; www.molecularimprints.com

Molecular Imprints, Inc. is a global developer and manufacturer of nano-lithography systems for high resolution and for 3-dimensional pattern replication. The company has commercialized a unique Step and Flash Imprint Lithography technology called S-FILTM, which is a simple step and repeat, room temperature, low pressure, nano-imprint process that has demonstrated sub-20 nanometer resolution. Contact: Scott Balaguer, Vice President Business Development, sbalaguer@molecularimprints.com.

Moore NanoTechnology Systems LLC

#1145

426A Winchester St, Keene, NH, 03431-0605
603/352-3030; fax 603/352-3363
sales@nanotechsys.com; www.nanotechsys.com

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. Contact: Bob Cassin, Sales Manager, cassin@nanotechsys.com.

Morgan Technical Ceramics

#6320

414 24th Ave, San Mateo, CA, 94403
800/433-0638; fax 973/808-2257
ussales@morganadvancedceramics.com;
www.morgantechnicalceramics.com

Morgan Technical Ceramics (MTC) is a division of The Morgan Crucible Company plc, comprising Morgan Advanced Ceramics and Morgan Electro Ceramics. The group 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. Contact: Keith Ferguson, Business Development Manager, keith.ferguson@morganplc.com.

Moritex USA Inc.

#6149

6862 Santa Teresa Blvd, San Jose, CA, 95119
408/363-2100; fax 408/363-9980
sales@moritexusa.com; www.moritexusa.com

New Product: MG-Wave LED lighting. Our new range of LED lighting products with new additional products.

Moritex USA continues to supply quality Industrial Inspection & Machine Vision components as well as different brands of CCD cameras. These products range from Endoscopes to Video Microscopes, LED lighting, Halogen light sources and a full range of Machine Vision and CCTV lenses. Our new range of LED lighting: MG-WAVE continues to grow with developments in IR and UV products. Moritex can now serve end-users, integrators and dealers. Contact: Kevin Sebley, Business Development Manager, ksebley@moritexusa.com; Jason Baechler, Technical Sales Advisor - Machine Vision, jbaechler@moritexusa.com.

Moulded Optics GmbH

#1801

Steinstr 13-15, Schoeffengrund, Germany, 35641
49 6445 6000 0; fax 49 6445 6000 40
info@mouldedoptics.com

New Product: Moulded Half-Ball-Lenses 3mm, 4mm, 5mm, 6mm as standard.

Moulded Optics is a world-wide trading supplier of moulded optic elements like aspheres, spheres, free-shape lenses, mirrors, ball lenses and more. Contact: Martin Pfeil, Managing Director, martin.pfeil@mouldedoptics.com; Thomas Behr, Sales, thomas.behr@mouldedoptics.com.

MPA Crystal Corp.

#747

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

New Product: Sapphire optics, quartz, optical glass, non-linear crystal optics and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specifications. Also provides optics made of quartz, optical glass, fused silica and non-linear crystal (BBO, KTP, Nd: YVO₄, AgGaS₂ and AgGaSe₂). Coating is available as well. Products include windows, substrates, lenses, prisms, rods, spheres, cylinders and more. Contact: Pauline Liang, Chief Executive Officer, pmpa@mpa-crystal.com.

Exhibition Map/Restaurant Guide

MPB Communications Inc.

#6193

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

New Product: Yellow fiber lasers at 580 nm with over 1W output power.

MPB Communications will be exhibiting Visible Fiber Lasers that output more than 1W in the yellow and green regions; Compact Excimer lasers; Low power consumption and small size Yb lasers and EDFAs; High Power EYDFAs and Yb Lasers; Precision Test Equipment; Mode-Locked Fiber Lasers. Contact: Jane Bachynski, Director of Marketing and Sales, jane.bachynski@mpbc.ca; Kim Boumansour, Business Development Coordinator, kim.boumansour@mpbc.ca.

MRC a PPGI Company

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: Steve Hobert, Vice President Sales, shobert@mrcoptics.com.

mso jena GmbH

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: Dichroic beam splitters with custom-tailored reflection and transmission bands.

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: Reinhard Dohle, Technical Sales Manager, dohle@mso-jena.de; Uwe Schallenberg, Managing Director, u.schallenberg@mso-jena.de.

MTI Corp.

2700 Rydin Rd Unit D, Richmond, CA, 94804
510/525-3070; fax 510/525-4705
info@mticrystal.com; www.mticrystal.com

New Product: LiNbO₃, LiTaO₃, BaTiO₃, PMN-PT, YVO₄, TiO₂, SrTiO₃, MgO, LaAlO₃, LSAT.

MTI Corporation manufactures a wide range of single crystals and EPI-polished substrates. Our substrates cater to the requirements of GaN epitaxy, HfC epitaxy, semiconductor thin films, photonics and optics and so on. We also manufacture machines for crystals and wafers processing such as CNC dicing saw, wire saw, low speed diamond saw and polishing machines. We encourage special custom made orders. Contact: Erxiong Huang, Manager.

Multimode Fiber Optics, Inc.

9A Great Meadow Ln, East Hanover, NJ, 07936
973/781-1602; fax 973/781-1603
info@multimodefo.com; www.multimodefo.com

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Multiwave Photonics

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

New Product: Compact Laser Diode Driver/Controller.

Multiwave Photonics develops and sells fiber-based modules (laser diode drivers), optical sources (lasers and broadband sources) and sensing systems for the instrumentation, medical (OCT) and industrial markets. Contact: Jose Salcedo, Chief Executive Officer, jsalcedo@multiwavephotonics.com.

#727

General Refreshment Sponsor

Naked Optics Corp.

#6215

8 Heritage Ct, North Branch, NJ, 08876
908/685-0352; fax 908/685-0353
info@nakedoptics.com; www.nakedoptics.com

New Product: Non-rotationally symmetric aspheric optical components.

Supplier of IR optics and diamond-turned components with aspheric, diffractive & hybrid surfaces in IR materials, plastics and metals; optical design services; ZnS, CaF₂ & BaF₂ blanks; finished lenses; glass and materials in pre-finished forms: raw strip glass, molded and CNC-machined blanks of all optical materials. Contact: Buzz Nesti, buzz@nakedoptics.com.

Nalux Co., Ltd.

#143

Yamazaki 2-1-7, Shimamaoto-cho, Mishima-gun, Osaka,
Japan, 618-0001
81 75 963 3456; fax 81 75 963 3450
info@nalux.co.jp; www.nalux.co.jp

New Product: Glass free-form, Glass-Plastic hybrid microlens, Plastic optics resistant to short-wavelength laser.

Nalux mainly offers the following plastic optics: Collimator and diffractive grating for pickup optical systems, Free-form surface for laserbeam printers, Roof prism and other prisms for cameras, Microlens array for various applications and other optics for imaging and collective optical systems. Contact: Seiichiro Kitagawa, President.

Nanjing Saifei Electro-Optics Co., Ltd.

#747

219 N Zhong Shan Rd, Hong Tu Office Tower Ste 1001,
Nanjing City, China, 210009
415/681-2185; fax 415/681-0787
mpma@mpa-crystal.com; www.saifei.com

New Product: Sapphire optics, quartz, optical glass, non-linear crystal optics and coating.

Specializes in processing fine-precision crystal optics mainly made of sapphire and produced to customer's specifications. Also provides optics made of quartz, optical glass, fused silica and non-linear crystal (BBO, KTP, Nd: YVO₄, AgGaS₂ and AgGaSe₂). Coating is available as well. Products include windows, substrates, lenses, prisms, rods, spheres, cylinders and more. Contact: Pauline Liang, Chief Executive Officer, mpma@mpa-crystal.com.

Nanonics Imaging Ltd.

#1240

The Jerusalem Technology Park, POB 48330, Malcha
Jerusalem, Israel, IL-91487
972 2 678 9273; fax 972 2 649 8027
info@nanonics.co.il; www.nanonics.co.il

New Product: Fully integrated ultraresolution SPM/Raman System for investigation of even opaque silicon samples.

Ultimate resolution AFM/NSOM/SPM/Confocal systems, environmental control, fully integrated with any optical/electron microscope. Online structural, chem. nanocharacterization, AFM/Confocal Raman correlation. The only dual/multiple probe AFM systems for online imaging, nanoindentation, nanochem. gas & liq. writing, multiple probe resistivity, thermal nanometric measurements. Ultralow temp (100K). Silicon, bent glass probes, NanoFountainPen, Nanoheater, Deep Trench, SideWall, SECM Imaging probes. Contact: Solly Ezekiel, Chief Operating Officer; Judy Ernstoff, International Sales and Marketing, judy@nanonics.co.il.

Nantong Xiangyang Optical Element Co., Ltd. #6083

Shuanglou Industry Zone, No 8 Haijian Rd Qutang Town Haian County, Jiangsu, China, 226671
86 513 8792456; fax 86 513 8797019
xiang-yang@pub.nt.jsinfo.net

Product has all types of color and colorless glasses. Cut-off type glasses violet, golden (yellow), orange, infrared transmission, visible and absorbed glasses. Selected and absorbed glasses (violet transmission visible and absorbed, cyanine, green, infrared visible and absorbed, adiabatic, skylight, rising temperature, falling temperature and middle dark glasses), the rest are BK7, B270, quarts, JGS1, JGS2, JGS3 λ (c) and M28 to M82 etc.

National Aperture, Inc. #1346

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

New Product: National Aperture releases a new series of precision apertures and micro-positioning stages!

National Aperture, Inc provides a complete line of state-of-the-art in pinhole, air slit, high-power slit, 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: Paul Ziarnowski, Sales Manager - Apertures, pziar@earthlink.net; Kevin M. Yonge, Sales Manager - Motion Systems, kyonge@NAIMotion.com.

National Instruments #1113

11500B N Mopac Expwy, Austin, TX, 78759-3504
512/683-8500; 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. Leveraging PCs and commercial technologies, virtual instrumentation increases productivity and lowers costs through easy-to-integrate software, such as NI LabVIEW, and modular measurement and control hardware.

National Reconnaissance Office #6267

14675 Lee Rd, Chantilly, VA, 20151-1715
703/808-3412; fax 703/808-2646
dii@nro.mil; www.dii.westerfields.net

New Product: The National Reconnaissance Office's Director's Innovation Initiative Program.

The National Reconnaissance Office's Director's Innovation Initiative invests in advanced technologies, fosters innovation, and provides seed funding to push the boundaries of technology to dramatically improve our satellite reconnaissance capabilities. It presents an opportunity for developers not traditionally associated with the NRO to participate in building the National Reconnaissance Office of the 21st Century. Contact: Bill Harter; Kevin Donaleski.

National Research Council of the National Academies #244

GR 322A, 500 5th St NW, Washington, DC, 20001
202/334-2760; fax 202/334-2759
rap@nas.edu; www.national-academies.org/rap

The National Research Council of the National Academies offers awards in all areas of science and engineering for postdoctoral and senior research to be conducted at participating U.S. government laboratories. Awards include generous stipend, relocation, professional travel and health insurance. Detailed program information, including deadlines and instructions on how to apply, is at www.national-academies.org/rap. Contact: Jane Dell'Amore, Manager for Promotions and Outreach, jdellamo@nas.edu.

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345 Park Ave S, New York, NY, 10010
212/726-9200; fax 212/696-9006
www.nature.com

NEOARK Corp. #6230

10-6 Chayamachi Kit-Ku, Osaka, Japan, 530-0013
81 6 6371 3527; fax 81 6 6376 4560
www.neoark.co.jp

New Product: 488nm Diode Laser.

Wide range of laser light sources including HeNe Laser, DPSS Laser as well as Acetylene or Iodine Stabilized Laser aimed for reference laser in metrology field Contact: Mitsuyoshi MATSUURA, Manager for Overseas Business, matsuur@neoark.co.jp.

NEOS Technologies, Inc. #1207

A Gooch & Housego Co, 4005 Opportunity Dr, Melbourne, FL, 32934
321/242-7818; fax 321/242-1019
neos@neostech.com; www.neostech.com

New England Photoconductor Corp. #444

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: 256-element linear multiplexed array of PbSe or PbS.

Infrared Detectors of PbS, PbSe, and InGaAs. Room temperature cooled and filtered are all available in many standard sizes and packages. Also TE cooler controllers, preamplifiers, beam splitters and detector controllers. We manufacture custom size detectors. Contact: Richard Brennan, Operations Manager.

New Focus, Inc. - A Division of Bookham #1727

2584 Junction Ave, San Jose, CA, 95134-1902
408/919-1500; fax 408/919-6083
contact@newfocus.com; www.newfocus.com

New Product: Spherical singlets, high-damage-threshold EOMs, new laser wavelengths, innovative optomechanics

New Focus continues to offer Simply Better™ Photonics Solutions. Several new products are being introduced, along with a new product guide for 2006. We're committed to Simply Better Products, Delivery, and Service. International e-commerce is now available, so customers worldwide can order online. We also offer a 24-hour shipping guarantee on most catalog products. Our products provide solutions in semiconductor capital equipment, life sciences, defense, industry, and research.

New Mexico Optics Industry Association

851 University Blvd SE Ste 203, Albuquerque, NM, 87106
505/280-5280; fax 505/246-6219
www.nmoia.org

NMOIA is a trade association with a mission to promote the dynamic growth and development of the optics industry in New Mexico and the Southwest Region. We also are pleased to have a close working relationship and many members from the national laboratories, the educational community and other research institutions. Contact: Ed Spivak, ed@nmoia.org.

New Scale Technologies, Inc. #338

10 E Main St Ste 301, Victor, NY, 14564
585/924-4450; fax 585/924-4468
sales@newscaletech.com; www.newscaletech.com

New Product: Ultra-thin (17 mm) closed-loop stage with integral SQUIGGLE motor: 5 N force, negligible heating.

Miniature piezo motors and nanopositioning stages. Patented SQUIGGLE motors are smaller, more efficient, more precise than conventional motors. Use in vacuum, at very low (sub-Kelvin) temperatures and in high magnetic fields. Ultrasonic vibrations create precise linear motion with four parts, no gears. Hold position with power off. For multi-axis "hands-free" optics and laser alignment, MRI-compatible and implantable medical devices, consumer electronics including phone camera focus/zoom. Contact: Fred Haas, Sales Manager.

New Source Technology, LLC #6152

4900 Hopyard Rd Ste 100, Pleasanton, CA, 94588
925/829-8989; fax 925/829-8883
sales@newsourcetech.com; www.newsourcetech.com

New Source Technology will exhibit Laser Lamps, Laser Power Supplies, Optics and Cavities. Those four products have been accepted by most advanced OEMs of medical and scientific Laser systems and a wide range of industrial Laser applications in the world since 1996. Our success is based on the strong OEM partnership which has been built by our commitment. Please visit our booth for quality service and Laser components and power supplies. Contact: Gregory Pon, President, gpon@newsourcetech.com; Naoko Mizuide, Marketing Manager, nmizuide@newsourcetech.com.

New Wave Research, Inc. #321

48660 Kato Rd, Fremont, CA, 94538
510/249-1550; fax 510/249-1551
lasers@new-wave.com; www.new-wave.com

New Wave Research is a global leader in the development of high quality laser based systems and modules for the microelectronics and analytical instrumentation industries. We manufacture lasers for wafer scribing, flat panel display repair, semiconductor failure analysis, micro-machining, particle image velocimetry, laser ablation/solid sampling for ICP/ICP MS and general purpose lasers for OEM and scientific applications.

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#1033 **Newport Corp.** #1307

1791 Deere Ave, Irvine, CA, 92606-4814
949/863-3144; fax 949/253-1680
sales@newport.com; www.newport.com

Visit our booth #1307 at Photonics West to see our high-precision optics, opto-mechanics, spectrometers, photonics instruments, filters, light sources, vibration control and motion control technologies, diffraction gratings and the wide range of Spectra-Physics Lasers. Newport's innovative products are designed to enhance productivity for precision manufacturing, engineering and research applications. The combined company offers more innovative products, more solutions and more expertise than ever before. Contact: Jason Eichenholz, Senior Marketing Manager, jason.eichenholz@newport.com.

Newsandgy Optronics Inc. #123

1F Bldg A9, No 9 Jintang Rd Jinshan Industrial District, Fuzhou Fujian, China, 350002
86 591 3856372; fax 86 591 3856371
sales@newsandgy.com; www.newsandgy.com

A top optical components manufacturer in China, it's equipped with the most advanced production machines and inspection instruments, e.g. ZYGO GPI-XP interferometer, Pekin-Elmer Lambda 950 spectrophotometer. Our products include penta prism, Beamsplitter penta prism, glass housings, window, right angle prism, dove prism, roof prism, rhombic prism and C-lens, plano-concave lens, plano-convex lens, Achromatic lens, etc. Contact: Daniel Liu, Export Manager, daniel.liu@newsandgy.com; Myron Gao, General Manager, xiguan.gao@newsandgy.com.

nLight Corp. #2033

5408 NE 88th St, Vancouver, WA, 98665
360/566-4460; fax 360/546-1960
sales@nlight.net; www.nlight.net

New Product: High-brightness, high-power single single-emitter diode lasers devices over multiple wavelengths.

nLight is focused solely on producing the world's leading high-power semiconductor lasers. With a vertically integrated 60,000 sq. ft. volume manufacturing facility, nLight offers the broadest range of diode lasers in the industry ranging from 635 nm to 1700 nm. nLight products offer superior performance and enable industrial, defense, medical and graphics applications. Contact: Jake Bell, Director, Sales and Marketing.

NM Laser Products Inc. #842

140 San Lazaro Ave, Sunnyvale, CA, 94086
408/733-1520; fax 408/736-1152
sales@nmlaser.com; www.nmlaser.com

New Product: LSTXY-S1 High Energy, Large Aperture Shutter for Pulsed Lasers.

Manufacturer of Laser Shutters for Modulation, Exposure, Safety Interlocking and Processing. Standard and OEM products, custom development. Complete line of electronic controller systems for shutter applications. Contact: David Woodruff, Sales Engineer.

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Related event : Technical Seminar



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<http://www.optronics.co.jp/en/le>

For further information

The Optronics Co., Ltd. International Dept.

Sanken Bldg., 5-5, Shin-Ogawamachi, Shinjuku-ku, Tokyo 162-0814 Japan
Fax +81 3 5229-7253 E-mail: intl@optronics.co.jp <http://www.optronics.co.jp>

NoIR Laser Company, L.L.C.

#6262

P.O. Box 159 South Lyon Michigan 48178
800/521-746; 734/769-5565; Fax: 734/769-708
www.noirlaser.com

New Product: NoIR announces internationally certified LaserShields for ultrafast pico- and femtosecond pulses (M L5) and for high powered pulses (IR L7).

NoIR offers internationally-certified LaserShields for medical/dental, military, aerospace, scientific, industrial, telecommunications and pharmaceutical applications. Specializing in custom frequency absorption, NoIR has developed a comprehensive line of safety eyewear for coherent and non-coherent energy by responding to the needs of customers and by quickly engineering solutions for new laser applications. NoIR produces filters for alignment, forensics, UV/Blue light curing, photodynamic therapy, and enhancement, and all LaserShields are available in a variety of comfortable frame styles, with patient, loupes clip-ins, pediatric and orbital eye-cups also available.

Noliac A/S

#6219

Hejreskovvej 18, Kvistgaard, Denmark, 3490
45 4912 5030; fax 45 4912 5031
sales@noliac.com; www.noliac.com

New Product: Multilayer piezoelectric actuators are co-fired ceramic components with up to 100 ceramic layers.

Noliac designs, develops and manufactures advanced multi-layer Piezoelectric solutions - in any shape, size or configuration. Noliac devices deliver the highest displacement per unit size, have the lowest voltage requirements in the industry and can be manufactured to meet the exact specifications of our customers' applications. Contact: Ole Wibom, Sales Director, ow@noliac.com; John Klausen, Area Sales Manager, jk@noliac.com.

North American Coating Labs.

#6271

9450 Pineneedle Dr, Mentor, OH, 44060
440/357-7000; fax 440/357-7001
www.nacl.com

Established in 1974, the NACL Industrial Optical Division provides Dip-Applied and Vacuum-Applied Optical Coatings for a wide variety of customers in both the polymer and glass optics markets. Types of Coatings include: Scratch-resistant/DLC, Reflective, Anti-reflective, Filter, -ITO/Conductive, Chemical Resistive NACL advantages: - Certified to ISO 9001:2000 -Rapid turnaround -Competitive pricing. Contact: Joe Cirincione, Sales Manager, jcirincione@nacl.com.

North Crystals

#6039

26/21 Kosmodemianskih St #33, Moscow, Russia, 125130
7 095 746 0548; fax 7 095 150 9948
info@northcrystals.com; www.northcrystals.com

North Crystals manufactures a wide range of single crystals as well as standard and custom components (wafers, cubes, slabs, etc.) for optical, scintillating and acoustical applications. All materials are grown on site at more than 150 growth stations. We gladly provide for industrial and commercial needs and fulfill small requests. Contact: Alexander Tseitline, US sales office, sales@northcrystals.com.

Northrop Grumman Synoptics

#927

1201 Continental Blvd, Charlotte, NC, 28273
704/588-2340; fax 704/588-2516
stsynoptics@ngc.com;
www.st.northropgrumman.com/synoptics

World's leading manufacturer of solid-state laser materials covering wavelengths from 500nm to 3000nm. Products include Nd:YAG, Cr,Tm,Ho:YAG, Er:YAG, Alexandrite, Nd:YLF, TGG, Nd:YVO₄, Yb:YAG, Nd:GdVO₄, Cr⁴⁺:YAG, Co:Spinel, and Hydrothermally grown KTP. R&D crystal growth is also available for the development of new materials. A line of high damage threshold 1064nm Air Spaced Polarizer cubes are also available. Contact: Scott E. Griffin, Director, Sales & Marketing, scott.e.griffin@ngc.com; Clark Tooty, Sales Engineer, clark.tooty@ngc.com.

Coffee/Dessert Break Sponsor

Northrop Grumman, Cutting Edge Optronics

#927

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

New Product: eDrive is a next generation laser system controller that manages all critical DPSS laser parameters.

Northrop Grumman Cutting Edge Optronics, designs and manufactures high power diode-pumped solid-state lasers and laser diodes and arrays for scientific, industrial and medical applications. Located in St. Charles, MO, CEO serves OEM laser manufacturers worldwide. Contact: David Jones, Director, Sales and Marketing; John Goings, North American Sales Manager.

Northumbria Optical Coatings (NOC) Ltd.

#715

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

Northumbria Optical Coatings manufacture optical filters and coatings in the range ~1.7 to ~18 micron and with sizes from ~2mm square to ~50mm diameter. We have many filters available from stock (mounted or unmounted) or we can custom manufacture to your needs. Please note: For North America sales, above 5 micron, please contact our US agents Electro Optical Components (www.eoc-inc.com). Contact: Stephen Armstrong, Sales Engineer.

Nova Phase, Inc.

#5128

43 Sparta Ave, Newton, NJ, 07860
973/579-6682; fax 973/383-6037
sales@novaphase.com; www.novaphase.com

New Product: Polarization-Insensitive and Fiber-Pigtailed Electro-Optic Modulators.

Nova Phase manufactures standard, custom and OEM optics and optical devices, including waveplates, polarizers, mirrors, beamsplitters, electro-optic modulators (amplitude and phase modulators). Specializes in the growth and application of advanced crystalline materials. Nonlinear, electro-optic and laser materials include stoichiometric lithium niobate, stoichiometric lithium tantalate and KGW/KYW tungstate crystals. Contact: Steve Rotyiano, Vice-President, Engineering, srotlyano@novaphase.com; Paul Melone, President, pmelone@novaphase.com.

Novacam Technologies Inc.

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

New Product: dOCTor-8 fast Optical Coherence Tomography detector for bio-medical applications.

Novacam Technologies is manufacturer of Optical Coherence Tomography detectors used in bio-medical applications and fiber-based profilometers used for non-destructive testing, metrology, surface mapping and inspection, process control, measuring film thickness, deposition and etching measurements and profilometry in inhospitable environments and restricted spaces. Novacam also provides system integration, consulting and contract R&D for industrial and medical imaging. Contact: Bartulovic Vuk, President.

Nozomi Photonics

174 Component Dr, San Jose, CA, 95131-1119
408/321-9872; fax 408/321-9307
info@nozomiphotonics.com; www.nozomiphotonics.com

New Product: Ultra high speed 1x4, 1x8 and 2x2-array optical switch subsystems.

World's fastest and most power-efficient optical switches subsystems are released at Photonics 2006. The Nozomi Photonics' ultra high-speed optical switch subsystems feature rise and fall time in the 100 ns to 10 ns range with very low power consumption and small form factor. Contact: Jerome Prieur, Director, jprieur@nozomiphotonics.com.

NP Photonics

9030 S Rita Rd Ste 120, Tucson, AZ, 85747
520/799-7400; fax 520/799-7403
www.npphotonics.com

New Product: Narrow-linewidth laser <200 Hz.

NP Photonics leverages its expertise in advanced micro fiber technology to design, manufacture and deliver a new class of photonics modules and systems for fiber optic sensing, spectroscopy, LIDAR and nanophotonics applications. Major markets served are: biomedical, oil & gas, utilities, homeland security and R & D. Contact: Philippe Brak, Vice President Sales & Marketing, pbrak@npphotonics.com; Anthony Pisano, Regional Sales Manager, apisano@npphotonics.com.

NTT Electronics Corp.

Shibuya Mark City, 1-12-1 Dogenzaka, Shibuya-ku Tokyo,
Japan, 150-0043
81 3 5456 4675; fax 81 3 6415 3281
sales@photo.nel.co.jp; www.nel.co.jp

New Product: Wavelength conversion lasers (available wavelength: visible and mid-IR region).

NTT Electronics Corporation (NEL) develops, produces and provides innovative semiconductor lasers for communications, sensing and medical markets. Our products include semiconductor lasers in near-IR range, SLDs, wavelength conversion lasers (WCLs) in visible and mid-IR ranges and PPLN chips. Newly developed 560/590 nm WCLs can be operated in direct modulation mode up to 1MHz. Contact: Fumiaki Hyuga, Sales Manager, hyuga@hqs.nel.co.jp.

#6006  Exhibition Map/Restaurant Guide/Coffee Break Sponsor

Nufern

7 Airport Park Rd, East Granby, CT, 06026
866/408-5000; fax 866/844-0210
info@nufern.com; www.nufern.com

Nufern designs, manufactures, sells and supports specialty fibers, fiber lasers and fiber amplifiers that enable diverse customer applications. Nufern products encompass a range of single and multimode fibers including Panda, Gyro, Visible Wavelength, Sensor, Rad-hard and Active fibers designed for performance and long service life. Nufern, a US small business, offers industry leadership with a broad range of high power active fibers and assemblies. Contact: Fred Martins, Technical Customer Support Specialist, fmartins@nufern.com; Carl Crossland, Product Line Manager, ccrossland@nufern.com.

#5124

NuSil Technology

1050 Cindy Ln, Carpinteria, CA, 93013
805/684-8780; fax 805/684-2365
silicone@nusil.com; www.nusil.com

NuSil Technology is the world's leading formulator of silicone compounds for aerospace, healthcare, electronics and commercial products requiring precise, predictable, cost-effective materials performance. 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: Steve Bruner, Marketing Director, steveb@nusil.com.

#415

Nutfield Technology, Inc.

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

New Product: Nutfield Technology's XLR8-15mm packaged X/Y Scan Head Delivers Performance and Value.

Nutfield Technology, Inc. (NTI) designs and manufactures the most advanced galvanometer-based optical scanners, scan heads, control electronics and software products available. NTI's people include many scanning industry veterans-possessing a wealth of applications and product knowledge-allowing us to offer strong solutions for a wide variety of applications. Our broad product line positions NTI as your one-stop source for complete scanning solutions. Contact: Jim Hart, Vice President Sales & Marketing, jhart@nutfieldtech.com.

#6212

Nuvonyx Inc.

3753 Penridge Dr, Bridgeton, MO, 63044
314/209-7755; fax 314/209-1728
komara@nuvonyx.com; www.nuvonyx.com

New Product: Nuvonyx now offers Passively Cooled QCW and FAPs products. Nuvonyx is an ICx Company.

Nuvonyx is a leading U.S. manufacturer of High Power Direct Diode and Fiber Coupled Diode Laser Sources. Nuvonyx also designs and builds High Power Diode Arrays, Power Supplies and Diode Array Subsystems designed for Aerospace, Defense, Industrial Manufacturing and Research Applications. Nuvonyx worldwide headquarters is located in St. Louis MO. The Company also has a European Sales and Manufacturing Facility located in Orsay, France. Nuvonyx and Nuvonyx Europe SA are both ICx Companies. Contact: Tom Pallett, Component Sales, tpallett@nuvonyx.com; Kevin Laughlin, Vice President of Sales & Marketing/System Sales, klaughlin@nuvonyx.com.

#2007

#6276

#1142

#5044

Photonics West Exhibitor Directory

O/E Land Inc.

#6006

4321 Garand, Saint-Laurent Montreal, QC, Canada, H4R 2B4
514/334-4588; fax 514/334-0216
sales@o-eland.com; www.o-eland.com



Coffee Break Sponsor

Ocean Optics, Inc.

#615

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

New Product: SpectraSuite is the first cross-platform spectroscopy software for Windows, Macintosh and Linux.

From the leader in miniature fiber optic spectroscopy comes an array of new optical-sensing products. SpectraSuite is the industry's first operating system-independent spectroscopy software platform - it runs on Windows, Macintosh and Linux operating systems. Other new products include the USB2000+ Spectrometer, which has enhanced triggering functions and generates up to 1,000 full spectral scans every second; and the QE65000, a high-sensitivity spectrometer for low-light level applications. Contact: Rob Waterbury, OEM Sales Manager, Rob.Waterbury@oceanoptics.com; Cicely Brodie, Applications Scientist, Cicely.Brodie@oceanoptics.com.

OEC

#5115

28 Des Lilas, Kirkland, QC, Canada, H9J 4A7
514/694-0336; fax 514/694-8535
nick.bertone@optoelements.com;
www.optoelements.com

New Product: Solid state single photon counting module with less than 50ps timing resolution.

Supplier of single photon counting module for visible and 1064nm, custom design and assemblies, ex: high gain low noise detector module. Contact: Nick Bertone, President, Nick.Bertone@optoelements.com, Natalie Raymond, Marketing, Natalie.Raymond@4optoelements.com.

Oehler & Fischer

#715

Rutistr 55, Zurich, Switzerland, CH-8032
41 79 670 1211; fax 41 79 261 2771
www.of-sensors.ch

New Product: Thermal IR source, externally modulated low frequency chopper, pyroelectric detector, preamplifier.

A parallel IR beam from a thermal source is produced by a parabolic reflector of 50 mm diameter. The beam diameter is reduced to 20 mm by a plane counter reflector. A low frequency chopper is driven by a high precision DC motor. It is controlled by an external 7-19 Hz TTL signal. Its phase stability is less than 0.1 %. The devices are suitable to be used with a pyroelectric element (InfraTec) or a pyroelectric array (IR Microsystems SA). The corresponding electronics is available. Contact: Oscar Oehler, oehler@phys.ethz.ch.

oenext.com

#6135

5110 N 44th St Ste 2002, Phoenix, AZ, 85018
602/343-1496; fax 602/343-1489
sales@oenext.com; www.oenext.com

New Product: Amonics Raman Amplifier - C-, L- and C+L-Band Models available.

OENEXT.COM is the premier website for all your photonics and fiber optics needs. We hold thousands of products in hundreds of categories in stock-including active and passive components, laser diodes and fiber amplifiers. Our advanced e-commerce software simplifies purchases by providing users with in-depth technical information and instant online quotes. ATTN: If you are a producer of high-quality fiber optics and photonics products, contact OENEXT.COM to discuss partnership opportunities. Contact: Henry Hung, Managing Partner, hhung@opti-lab.com; Won Huang, Business Development Manager, whuang@oenext.com.

OFR, Inc.

#433

62 Depot St, Verona, NJ, 07044
973/228-4480; fax 973/228-0915
info@ofr.com; www.ofr.com

New Product: High Power Fiber Isolators for SM, PM MM and LMA Fibers.

OFR manufactures Classical Optics, Fiber Optics and Isolators. Products include: optical isolators, precision optical components, lenses, prisms, beam expanders, polarizing optics, fiber optic products for semiconductor diode lasers, fiber isolators, fiber circulators, fiber collimators and FiberBench fiber coupling systems. Custom design, optical engineering, OEM and prototype development are also available. Contact: Robert Walz, Marketing Manager/AE; Geetha Abraham, Sales Manager.

OFS - Specialty Photonics Div.

#1915

55 Darling Dr, Avon, CT, 06001
860/678-0371; fax 860/674-8818
info@specialtyphotonics.com; www.specialtyphotonics.com

We feature a broad portfolio of specialty and custom fiber optic products for high power delivery, military, medical and industrial uses. Highlights include: FlightGuide[®] aerospace fibers/cables; FiberWire[™] 200 and 400 μ m HCS[®] fibers, cables, connectorized assemblies; coils; medical probes; metalized pigtailed; military harnesses; F07 and other connectors. ISO 9001. Contact: Jan Hansson, New Business Development Manager, jhansson@ofsoptics.com.

Ohara Corp.

#1741

23141 Arroyo Vista Ste 200,
Rancho Santa Margarita, CA, 92688-2613
949/858-5700; fax 949/858-5455
info@oharacorp.com; www.oharacorp.com

New Product: CLEARCERAM-Z Ultra-Low Expansion glass-ceramic: good transmission, machineability & homogeneity.

Ohara is a leading manufacturer of optical glass and glass-ceramic products, offering 140+ optical materials available in pressings, cut blanks, strip/slab, centerless ground blanks, fine gobs, polished substrates and ball lenses. Ohara specializes in high-homogeneity blanks, lead/arsenic-free glasses, CCZ Ultra-Low Expansion material and i-Line High-UV Transmission glass types. Accurate and timely delivery schedules are a priority. Contact: Andrea Bauer, Sales Coordinator, andreabauer@oharacorp.com; Chris Ghio, Sales Manager, chrisghio@oharacorp.com.

The Most Powerful Sources for Photonics Information



Photonics Spectra is today's leading source of technological solutions and of news and information about photonics. It is the magazine referred to worldwide by the largest audience of photonics engineers, scientists and end users. Integrating all segments of photonics, **Photonics Spectra** is unique in that it provides both technical and practical information for every aspect of the global industry. For a free subscription, please go to www.PhotonicsSpectra.com

BIOPHOTONICS INTERNATIONAL **Biophotonics International** is designed to present the latest global developments and techniques from the photonics industry to those involved in the medical and biotechnological disciplines. **Biophotonics International's** buying audience is made up of people who use photonics technology in biotechnology or medical products and procedures, plus key researchers looking for new photonic techniques and products to improve methodology and solve problems.

EUROPHOTONICS **EuroPhotonics** is a product-oriented publication dedicated to covering the growing market for photonics with a European focus. It is published bimonthly with a guaranteed distribution of 30,000 to important buyers and users of photonic products and services in Europe. Featured sections include European Show Spotlights, Product Previews and News.

THE PHOTONICS DIRECTORY™

THE PHOTONICS CORPORATE GUIDE™

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Book 1, **The Photonics Corporate Guide**, provides complete company profiles of more than 4300 international manufacturers — addresses, telecommunications numbers, company sizes, personnel and products.

THE PHOTONICS BUYERS' GUIDE™

TO PRODUCTS & MANUFACTURERS

Book 2, **The Photonics Buyers' Guide**, has more than 2000 product categories listed by manufacturer or distributor, and identifies them as custom or stock items.

THE PHOTONICS HANDBOOK™

FOR DESIGN & APPLICATIONS ENGINEERS

Book 3, **The Photonics Handbook**, contains 500 pages of practical information, with new developments and technological know-how for today's design and applications engineers. It is completely revised each year.

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Book 4, updated and expanded each year, is the only **Photonics Dictionary** in the industry, and it contains more than 5600 technical terms and definitions.

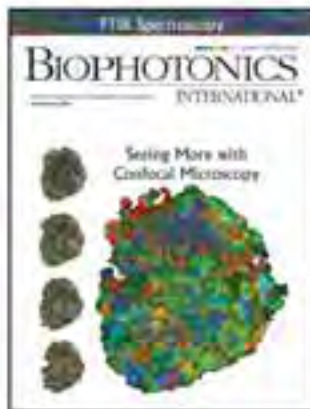
Photonics on the Internet at Photonics.com

You will find a world of information about photonics on the premier photonics Web site, **Photonics.com** combines information from **Photonics Spectra** and the largest photonics database of **The Photonics Directory**, providing an invaluable reference source.

For more information or a free subscription visit us at www.photonics.com



Berkshire Common, 2 South St., PO Box 4949, Pittsfield, MA 01202-4949
Phone: +1 (413) 499-0514; fax: +1 (413) 442-3180
e-mail: photonics@laurin.com; Web: www.Photonics.com



Olympus Partnership Development Group

#6053

180 Baytech Dr, San Jose, CA, 95134
408/514-3900; fax 408/946-3836
info@olympus-pdg.com; www.olympus-pdg.com
Olympus Partnership Development Group is part of the R&D Center of Olympus Corporation. Our mission is to establish partnerships with companies by leveraging our Optical foundry services, micro-optics, optical subsystems, MEMS foundry services and MEMS chips to accelerate design and production of new products. Olympus' lead-free aspherical optics feature high light coupling efficiency with low aberrations, high polarization preservation, more thermal stability and less residual stress. Contact: Peter Wang, Product Manager, pwang@olympus-ita.com.

O-m6 Technologies Inc.

#6006

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: Speciality fibers assemblies, Speciality jackets assemblies, Stainless steel fiber assemblies.

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; Sylvie Pouliot, Customer Service, s.pouliot@om6.com.

Omega Optical, Inc.

#214

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

Omega Optical services the world's leading OEMs & has developed one of the largest ranges of capabilities & product lines in the thin-film industry. We manufacture filters from UV to the near IR, including bandpass, longpass, shortpass, rejection band, neutral density, laser line, analytical, astronomy & fluorescence filters. Our filters are being used in the next generation of life science & industrial optical instruments.

OMG Co., Ltd.

#5118

2-16-13 Kamikuratsuri, Hirano-ku, Osaka, Japan, 547-0004
81 6 6791 2761; fax 81 6 6794 2702
info@omg-opt.co.jp; www.omg-opt.co.jp

New Product: Repressed aspherical lenses using high refractive index glass of 1.893.

Develop and manufacture optical glass products as well as optical glass materials. Products include repressed precision aspheric lenses, aspheric mirrors, prisms, camera and optical filters, etc. Optical glass materials are supplied in slabs and pressed blanks. Contact: Takashi Tsutsumi, President; Koichi Iwahara, Overseas Marketing Manager.

Omicron Laserage Laserprodukte GmbH

#1801

Raiffeisenstr 5E, Rodgau, Germany, 63110
49 6106 8224 0; fax 49 6106 8224 10
mail@lasersystem.de; www.lasersystem.de

Ondax, Inc.

#6380

850 E Duarte Rd, Monrovia, CA, 91016
626/357-9600; fax 626/357-9321
info@ondax.com; www.ondax.com

New Product: Ondax introduces the world's first low cost, stabilized diode in a miniature package.

Ondax is a leading manufacturer of Volume Holographic Gratings. Product lines include the PowerLocker VHGs for laser stabilization, diplexers, triplexers, tunable filters, single and multi-line spectral filters. Wavelengths from U.V. (300nm) to Infrared (3 microns) available. Ondax's PowerLocker is ideal for increasing spectral brightness of laser diodes, locking their wavelength and improving temperature stability and yield. Contact: Linda West, Vice President, Sales & Marketing, lwest@ondax.com; Chris Moser, Chief Executive Officer, moser@ondax.com.

ON-TRAK Photonics, Inc.

#1737

26782 Vista Terrace, Lake Forest, CA, 92630
949/587-0769; fax 949/587-9524
info@on-trak.com; www.on-trak.com

Onyx Optics Inc.

#538

6551 Sierra Ln, Dublin, CA, 94568
925/833-1969; fax 925/833-1759
www.onyxoptycs.com

Onyx Optics' product capabilities include Adhesive-Free Bonded (AFB) crystal and glass laser components such as laser rods, slabs, preforms and waveguiding structures with doped and undoped YAG, YLF, YVO4, sapphire, other crystals and glasses. Our composites enable higher efficiency, more compact and higher power solid state laser and photonic devices. Contact: Lesley Reo, Sales, lreo@onyxoptycs.com; Oliver Meissner, Chief Executive Officer, omeissner@onyxoptycs.com.

OPCO Lab., Inc.

#3011

704 River St, Fitchburg, MA, 01420-2913
978/345-2522; fax 978/345-5515
info@opcolab.com; www.opcolab.com

New Product: Replication of optical surfaces on glass and metal substrates. Gratings replicated.

Manufacturer of lenses, mirrors, prisms and all standard optics. In house coating, ion assist and e-beam, from the uv to the ir. Sub-assembly capability. Contact: Dick Donnelly, Sales Manager, ddonnelly@opcolab.com; Mario Maldari, President, mmaldari@opcolab.com.

OpHill Corp.

#6017

2900 Gordon Ave Ste 100, Santa Clara, CA, 95051
408/739-6398; fax 408/516-8097
sales@ophill.com; www.ophill.com

Ophir Optronics, Inc.

#2043

260-A Fordham Rd, Wilmington, MA, 01887
978/657-5553; fax 978/657-6054
sales@ophiropt.com; www.ophiropt.com

A complete product line of laser measurement equipment including thermal, photodiode and Pyroelectric detectors, as well as beam profilers and spectrometers. Contact: Carl Burns; Laurie Beausoleil.

Oplink Communications, Inc.

#6266

46335 Landing Pky, Fremont, CA, 94538
510/933-7200; fax 510/933-7300
info@oplink.com; www.oplink.com

New Product: Light sources, Laser Accessories, Fiber Optic Components, Optics manufacturing, Optical Subsystems.

Oplink is a leading photonic foundry providing design, integration and Optical Manufacturing Solutions (OMS) for optical networking components and subsystems. We offer expert OMS for the production and packaging of highly integrated optical subsystems and turnkey solutions. Our technology portfolio includes solutions for next-generation, all optical Wavelength-Division-Multiplexing, Amplification, Switch-routing, Monitoring/Conditioning, Dispersion Management and Transmission Applications. Contact: River Gong, Vice President of Sales, riverg@oplink.com; Jin Hong, Vice President of Technology, jhong@oplink.com.

Opnext, Inc.

#6143

Opto Device Div, 104 Treemonte Dr, Orange City, FL, 34763
386/774-2404; fax 386/774-2403
info@opnext.com; www.opnext.com

New Product: HL6354 & HL6355 LD: Drive current 635nm, 5.6mm can package, Use: Leveler, Laser marker, Barcode scanner.

Opnext, Inc. pioneers the optical engines that light the world's fiber optic systems. A global leader in high-performance active optical components, Opnext offers the industry's most comprehensive optical components portfolio. Formed out of Hitachi, Opnext brings more than 30 years experience to the design, development and manufacture of high-performance components and devices that power today's access communications, metro, information and industrial markets. Contact: Jim Brown, Director, North American Sales, JBrown@opnext.com.

OPOTEK, Inc.

#2014

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

Optec SPA

#1534

Via Mantegna 34, Parabiago Milan, Italy, I-20015
39 0331 49 1945; fax 39 0331 49 5094
gcilia@optec-spa.com; www.optec-spa.com

OptecNet Deutschland e.V.

#1801

Garbsener Landstr 10, Hannover, Germany, 30625
49 511 277 1290; fax 49 511 277 1299
info@optecnet.de; www.optecnet.de

OptecNet Deutschland is the association of the nine regional Competence Networks for Optical Technologies bayern photonics, HansePhotonik, OpTecBB, OpTech-Net, Optence, OptoNet, PhotonAix, PhotonicNet and Photonics BW. OptecNet acts as representative on both the national and international level and is the first contact point for companies, research institutes and associations from abroad. Inter-regional marketing and PR as well as inter-regional networking are the main activities of OptecNet. Contact: Hans-Juergen Hartmann, President, hartmann@optecnet.de.

OpTek Systems

#6321

14 Blacklands Way, Abingdon Business Park, Abingdon, United Kingdom, OX14 1DY
44 1235 539182; fax 44 1235 539183
info@optek.co.uk; www.optek.co.uk

OpTek Systems provides micromachining solutions for the biophotonics, drug-discovery, opto-electronics, electronics industries as well as academia and industrial R&D. Offering both sub-contract services, product development through to production-line machines for large volumes of precision micromachined parts and structures in glass, ceramic, polymers and metals. Contact: Gideon Foster-Turner, Technical Sales Consultant, gideon.ft@optek.co.uk.

Opti Temp, Inc.

#1919

484 W Welch Ct, Traverse City, MI, 49686
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, medical and other industries. Offering a complete line of re-circulating chillers, heat exchangers, water quality and fluid treatment systems, OPTI TEMP has the right solution for your liquid temperature control application. Choose from our standard line of products or work with our experienced engineers to obtain a solution tailored to your specific application requirements. Contact: Sales Department; Rob VanSumeren, Sales & Marketing Manager, rav@optitemp.com.

Opti Works, Inc.

#6127

Mitsuru Plaza 204, 1-2-4 Aduchi-chou Chuou-ku, Osaka, Japan, 541-0052
81 6 6264 7310; fax 81 6 6264 7310
dohi@optiworks.jp

New Product: Aspheric lens, Image analyzing optical system, Optical subassembly.

OptiWorks is independent optics engineering company from Osaka Japan. OptiWorks will propose and provide optical system design, prototyping and production line to all world wide 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, dohi@optiworks.jp.

Optica Software

#3034

2100 S Oak St, Champaign, IL, 61820
217/328-9847; fax 217/328-9692
support@opticasoftware.com; www.opticasoftware.com

New Product: Optica Software launches two products for modeling optical systems: Rayica and Wavica.

Optica Software is the foremost provider of tools for virtual modeling and testing complex optical systems in Mathematica. Our software tools allow scientists and engineers to flexibly specify novel and innovative optical systems for both project development and conceptual validation purposes. Almost any optical venture can benefit from the sophisticated tools that Optica Software provides. Contact: Lorenzo Kindle, Sales Executive, lorenzo@opticasoftware.com; Donald Barnhart, Lead Developer, donald@opticasoftware.com.

Optical Perspectives Group, LLC

#6042

5130 N Calle La Cima, Tucson, AZ, 85718
520/529-2950
reparks@optiper.com; www.optiper.com

New Product: Optical Engineering Consulting.

Optical Perspectives Group is an optical engineering consultancy that provides guidance in the practical aspects of component fabrication, testing, assembly and alignment of optical systems. Contact: Bob Parks, President, reparks@optiper.com.

Photonics West Exhibitor Directory

Optical Research Associates

#814

3280 E Foothill Blvd Ste 300, Pasadena, CA, 91107
626/795-9101; fax 626/795-9102
info@opticalres.com; www.opticalres.com

Optical Research Associates will exhibit two optical design software products: CODE V[®] delivers powerful lens design, optimization, analysis, and tolerancing features. The new release, CODE V 9.60, will be demonstrated. LightTools[®] is a complete illumination design software package based on 3D solid modeling. The new LightTools 5.2 release will be demonstrated, including the Illumination Optimization feature. Engineering Services representatives will also be available onsite. Contact: Stuart David, North American Sales Manager, info@opticalres.com; John Tamkin, Director of Engineering Services, Engr@opticalres.com.

Optical Society of America

#5119

2010 Massachusetts Ave NW, Washington, DC, 20036-1023
202/223-8130; fax 202/223-1096
custserv@osa.org; www.osa.org

Together OFC/NFOEC spans the entire optical communications industry, from engineers and scientists to manufacturers and service providers. The combined event offers the world's largest exposition in optical communications plus the field's finest networking opportunities, plenary session and peer-reviewed technical programming. OFC/NFOEC will take place in Anaheim, California, March 5-10, 2006. Contact: www.ofcnfoec.org, info@ofcconference.org.

Optical Support, Inc.

#6042

1011 S Ave Los Reyes, Tucson, AZ, 85748
520/546-0642; fax 520/203-0228
msavard@opticalsupport.biz; www.opticalsupport.biz

New Product: Opto-Mechanical Engineering.

Optical Support provides opto-mechanical engineering services to optical manufacturing companies. Optical Support is located in Optics Valley - Tucson, AZ. We collaborate with a high concentration of engineering professionals clustered near the University of Arizona. We specialize in Optical, Mechanical and Materials Engineering. Optical Support designs using Solidworks. Visit our website at www.opticalsupport.biz. Contact: Michael Savard, President, msavard@opticalsupport.biz.

Optical Surface Technologies LLC

#6372

2801 Broadbent Pkwy NE Ste E, Albuquerque, NM, 87107
505/341-0169; fax 505/341-1131
avritt@qwest.net; www.opticalsurfacetech.com

OST is a "print to ship" manufacturer of large custom optical components with complete fabrication, measurement, testing and coating capabilities. OST meets demanding specifications and demanding delivery schedules and works with a variety of materials including Zerodur, BK7, fused silica, molybdenum and silicon carbide. Products include lightweight mirrors and windows, aspheres, high energy laser coatings, enhanced metal coatings, filters, anti-reflection coatings and polarizers. Contact: Donald B. Avritt, Vice President, avritt@qwest.net; Reed A. Schmel, President, reedschmel@qwest.net.

OPTICS 1, Inc.

#519

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. designs, develops, manufactures and services precision optical and electro-optic assemblies, subsystems, and integrated systems for leading global technology customers. The company serves diverse customers in government and commercial markets including the military, medical, homeland security, biotech, aerospace, industrial and consumer electronics. OPTICS 1 maintains offices in Manchester, NH and Westlake Village, CA. Contact: Doug Harwood, Vice President of Business Development, dharwood@optics1.com; Lisa Gregorka, Director, Business Development, lgregorka@optics1.com.

Optics for Hire

#5123

12 Pond Ln Ste 65, Arlington, MA, 02474
781/583-7810; fax 781/583-7812
info@opticsforhire.com; www.opticsforhire.com

OFH works with companies to help reduce costs or add expertise in optical, mechanical and electronic system design. Our development teams in the US and Ukraine allowing us to take full advantage of an attractive cost structure. Our services include design, prototyping and product development. Clients range from start-up's to global giants and target a wide variety of market segments. Contact: John Ellis, President.

Optics Technology, Inc.

#347

3800 Monroe Ave Ste 6, Pittsford, NY, 14534
585/586-0950; fax 585/248-2371
info@opticstechnology.com; www.opticstechnology.com

Established in 1986, Optics Technology Incorporated has been a world leader in the micro-fabrication of precision optical and mechanical systems and assemblies. Our optical design capability is based on 20 years of experience designing and fabricating the optical systems and components for medical, industrial and defense applications. Whether it's a prototype or a production run, our commitment to superior quality and performance ensures industries of all types reach their desired goals. Contact: Dominick Polizzi, Sales & Marketing Manager.

Optikos Corp.

#1139

286 Cardinal Medeiros Ave, Cambridge, MA, 02140
617/354-7557; fax 617/354-5946
info@optikos.com; www.optikos.com

New Product: Automatic Finite Conjugate MTF Testing Suite.

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: Barry Logue, Vice President Sales and Marketing, blogue@optikos.com; Ryan McDonough, Sales and Marketing, rmcDonough@optikos.com.

Optikron GmbH

#6243

Löbstedterstr 70, Jena, Germany, 07749
49 3641 384970; fax 49 3641 384978
info@optikron.de; www.optikron.de

New Product: Micro-optics and micro-optical groups, mounted micro-optics and micro-optical subsystems.

Optikron is a manufacturer of micro-optics and micro-optical groups, mounts and mechanical supports for micro-optics, and miniaturized opto-mechanical subsystems for laser applications, endoscopy, sensor systems and measuring instruments. Contact: Gerrit Seyffert, seyffert@optikron.de.

Optimax Systems, Inc.

#337

6367 Dean Pky, Ontario, NY, 14519-8939
585/265-1020; fax 585/265-1033
jt@optimaxsi.com; www.optimaxsi.com

New Product: OptiFDTD MAX - A pioneering FDTD workstation, harnessing the power of a cluster computing network.

PROTOTYPE OPTICS IN 1 WEEK. Optimax provides rapid prototyping of precision optical components in sizes from 3 to 300mm and quantities of 1 to 100. Specializing in Asphere, Cylinder, Sphere and Plano/Flat optics. All parts are manufactured to customer supplied specifications and final inspection data is included with the optics. Contact: Rick Plympton, sales@optimaxsi.com.

OptiPro Systems

#328

6368 Dean Pky, Ontario, NY, 14519-8939
585/265-0160; fax 585/265-9416
sales@optipro.com; www.optipro.com

New Product: OptiPro ePX 150 UltraForm - Spherical, 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, TSK Accretech Surface Profilometers and STIL MicroMeasure non-contact surface measurement systems with resolution to 1 nm. Contact: Mike Bechtold, President, Mike@optipro.com; David Mohring, Design & Application Engineer, dmohring@optipro.com.

OPTIS North America, A Division of OPTIS France

#1946

15430 Pierrefonds Ste 224, Pierrefonds, QC,
Canada, H9H 4K3
514/620-2099; fax 514/620-3799
sales@optis-world.com; www.optis-world.com

New Product: Optical & laser design CAD tool providing optical and mechanical designers collaborative workspace.

OPTIS is the leading developer of software and services for the simulation of optical systems lasers and light propagation. It is the only company to offer optical design solutions fully integrated in SolidWorks and CATIA V5. Its strengths include optical and laser simulation, photometry, human vision simulation and optimization. OPTIS combines optical and mechanical design in a single software solution, thus reducing the design time and allowing concurrent collaboration between departments. Contact: George Negm, North America Business Development Manager, gnegm@optis-world.com; Pascal Martinez, Vice President Worldwide Sales, pmartinez@optis-world.com.

STANFORD COMPUTER OPTICS

Superior Imaging Intensified Cameras

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imagination
takes you*

*Unparalleled
ease of
operation*



*4 Quik Edig
14 bit digital
ICCD Camera*

*A class
by itself*

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E-mail: info@stanfordcomputeroptics.com

Europe: Paul HöB KG
PO Box 950240, 81518 München, Germany
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#241

102 Mountian Park Pl NW Ste D, Albuquerque, NM, 87114
505/792-0277; fax 505/792-0281
sales@ok;ptisourcellc.com; www.optisourcellc.com

New Product: Ultra Thin waveplates for telecommunications. Low Cost Mica Waveplates.

Manufacturer of 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. Retarders, Rotators, Waveplates, Windows. Contact: Ralph Terner, Sales Manager, ralph_optisource@msn.com; Sherry Annan, Assistant Sales Manager, sherry_optisource@msn.com.

Optiwave Systems Inc.

#6111

7 Capella Ct, Ottawa, ON, Canada, K2E 7X1
613/224-4700; fax 613/224-4206
info@optiwave.com; www.optiwave.com

New Product: OptiFDTD MAX - A pioneering FDTD workstation, harnessing the power of a cluster computing network.

Offering an unparalleled suite of design and simulation software tools, Optiwave is the leading provider of innovative design software for photonics. The acceptance of Optiwave software as the industry standard is validated through its implementation at Fortune 500 companies, universities and government research labs worldwide. Optiwave is headquartered in Ottawa, Canada. For more information, visit www.optiwave.com. Contact: Richard Rambaran, Director of Sales.

Opto Diode Corp.

#6344

750 Mitchell Rd, Newbury Park, CA, 91320
805/499-0335; fax 805/499-8108
sales@optodiode.com; www.optodiode.com

New Product: New 60 Die LED array w/ 40-degree radiation beam angle & high intensity in center of working beam.

Opto Diode Corporation supplies the global market with reliable, high quality IR LEDs and custom LEDs in the visible range. 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: Russ Dahl, Director Sales & Marketing, russdahl@optodiode.com.

Opto-Alignment Technology, Inc.

#6232,#6233

366 Crompton St, Charlotte, NC, 28273
704/587-3999; fax 704/507-5525
sales@optoalignment.com; www.optoalignment.com

We specialize in creating advanced technology for the alignment, assembly, cleaning and handling of optics. We can custom engineer optical assembly equipment or use our standard products including lint-free wipes, handling gloves, vacuum-based optical handling and preparation systems and lens assembly stations. And if you need help with optical assemblies, we offer expertise in opto-mechanical packaging design, prototyping, precision alignment, assembly and test. Contact: Sasha A. Pearlman, President, Sasha@optoalignment.com.

OPTOCRAFT GmbH Optical Metrology

#1801

Am Weichselgarten 7, Erlangen, Germany, 91058
49 9131 69 1510; fax 49 9131 69 1511
sales@optocraft.com; www.optocraft.com

Optoelectronic Industry & Technology Development (OITDA)

#6176

1-20-10 Sekiguchi, Bunkyo-ku, Tokyo, Japan, 112-0014
81 3 5225 6431; fax 81 3 5225 6435
interopt@oitda.or.jp; www.oitda.or.jp

OptoIndex - Companies and Products in Photonics

#100, #6169

Papier Muehlenweg 74, Ratingen, Germany, 40882
49 2102 1678 0; fax 49 2102 1678 29
info@opto-index.de; www.opto-index.de

New Product: Yearly Index with Companies and Products of the World of Photonics.

The proliferation of Photonics in recent years creates the imperative need for an index. This work of reference - OptoIndex for Photonics - offers a yearly updated comprehensive data source for companies and products in the sector. Who has the best solution to my problem? Where can I find a cost-effective shortcut? This catalogue and website will help you to find answers. Contact: Julia Spangemacher, juliaspa@opto-index.de.

Optometrics Corporation

#1342

8 Nemco Way, Ayer, MA, 01432
978/722-1700; fax 978/772-0017
sales@optometrics.com; www.optometrics.com

New Product: The yearly Index on the World of Photonics.

Optometrics Corporation is a world class designer and manufacturer of optical components and instruments serving research, academia and OEM customers around the world. Optometrics' broad-based manufacturing facility allows us to offer a unique "one-stop shop" of custom and stock optical products and the ability to assist customers with their choice of wavelength selection solutions. Contact: Sales Department, sales@optometrics.com.

Optonetic LLC

#1642

6901 TPC Dr Ste 450, Orlando, FL, 32822
407/857-4410; fax 407/857-4409
info@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 coating capability for glass & plastic with Ultrasonic Cleaning. Fast 24 and 48 hrs delivery. Contact: Tam Le, President, tamle@optonetic.com.

OptoSigma Corp.

#1614

2001 Deere Ave, Santa Ana, CA, 92705
949/851-5881; fax 949/851-5058
sales@optosigma.com; www.optosigma.com

OptoTech Optikmaschinen GmbH #944

PO Box 131, 413 Jefferson St, E Greenville, PA, 18041
215/679-2091; fax 215/679-2013
optotech@comcast.net; 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 1 to 800mm, 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. Contact: Matthias Pfaff, Business Unit Director Precision Optics; Heidi Hofke, General Manager.

Optrans Corp. #6172

241 Noborito, Kawasaki-Shi Tama-ku, Japan,
518/782-2330; fax 518/782-2337
info@optransuniversal.com

New Product: NEW! Ultra Violet LED(370nm)- HIGH RELIABILITY & OUTPUT POWER - for different Sensor Applications.

OPTRANS CORPORATION, headquartered in Japan, with offices in the U.S, manufactures high-end, custom-design optoelectronic devices & systems for OEMs. With extensive internal custom engineering expertise & the most-up-to-date manufacturing processes, OPTRANS guarantees superior customer service & optimum product quality. OPTRANS' product line offers a versatile original packaging, including: UV LEDs, Visible LEDs, IR LEDs, POINT SOURCE LEDs, Photodiodes & Phototransistors. Contact: Dmitry Gelfand, Vice-President, Sales & Marketing.

Optronic Laboratories, Inc. #1207

A Gooch & Housego Co, 4632 36th St, Orlando, FL, 32811-9957
407/422-3171; fax 407/658-5412
info@olinet.com; www.olinet.com

New Product: OL 756 High-accuracy UV-VIS Spectroradiometer.

Optronic Laboratories is the industry leader in industrial and research-grade light measurement instrumentation. Clients are guaranteed the industry's highest quality modular systems, standards, and accessories that provide consistent, traceable and precise measurements. Optronic Laboratories specializes in Scanning and Multichannel Spectroradiometers, LED Test and Measurement Systems, Radiometer/Photometers, Integrating Sphere Systems, NIST-traceable Standards and Calibration Services. Contact: Alex Fong, Vice-President of Sales & Marketing, afong@olinet.com; Chris Rapp, Senior Applications Engineer, chris@olinet.com.

The Optronics Co., Ltd. #6393

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

Optronics is the leading photonics magazine in Japan, providing the latest news and information on the photonics industry for the most influential buyers including design engineers, R&D supervisors, purchasing and planning personnel and operations and management personnel. Please stop by our booth for more information about the journal. Contact: Sakae Shibasaki, General Manager International Department, s_shiba@optronics.co.jp.

Oriel Instruments #1307

150 Long Beach Blvd, Stratford, CT, 06615
203/377-8282; fax 203/378-2457
oriel.sales@newport.com; www.newport.com

Oriel Instruments and Spectra-Physics are now a part of the complete solution offered by Newport. To learn more about how we will bring you more innovative products, more solutions and more expertise than ever before...from a single source, visit Newport #1307. Contact: Nancy Fernandes, nancy.fernandes@newport.com.

OSI Optoelectronics, Inc. #226

12525 Chadron Ave, Hawthorne, CA, 90250-4881
310/978-0516; fax 310/644-1727
sales@udt.com; www.ferson.com

A subsidiary of OSI Systems, Inc., OSI Optoelectronics, is a worldwide provider of opto-electronic devices, subsystems and optical components. Including standard and custom state-of-the-art silicon photodetectors for fiber optic, soft x-ray, UV and NIR applications. X-ray products and sub-assemblies for CT scanners, food processing, medical and other applications. Military/Aerospace devices which conform to the highest quality mil-specification and standards for countless military and space programs. Optics including lenses, windows, filters, prisms, cylinders, domes, and assemblies. ISO 9002 registered. Contact: Chandresh Asher, Sales Manager, casher@udt.com; Steven Cuffel, Vice President of Sales & Marketing, scuffel@udt.com; Connie Spence, Sales Engineer cspence@ferson.com.



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Osram OptoSemiconductor #1345


3870 N 1st St, San Jose, CA, 95134
408/456-4000; fax 408/456-4315
www.osram-os.com

OSRAM Opto Semiconductors, a leading supplier and manufacturer of solid-state optoelectronic products including High Power Laser Diodes, LEDs, Infrared components and OLED displays, will exhibit their latest Laser Diodes and LEDs at Photonics West. Join us in #1345 to learn about our latest product offerings.

Ottawa Life Sciences Council (OLSC) #6010

600 Peter Morand Cres Ste 100, Ottawa, ON, Canada, K1G 5Z3
613/521-1008; fax 613/521-3065
photonics@olsc.ca; www.olsc.ca

The Ottawa Life Sciences Council (OLSC) is a not-for-profit, member-supported, development corporation for the life sciences sector in the Ottawa and Eastern Ontario region. Our mandate, to catalyze the growth of the local life sciences community, is achieved through: Networking activities, consortia building, support for technology commercialization, identification of market opportunities, information resources, sector advocacy and sector specific marketing initiatives at all levels of opportunity. For more information visit www.olsc.ca.



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Ottawa Photonics Cluster

#6010

200-2625 Queensview Dr, Ottawa, ON, Canada, K2B 8K2
613/828-6274; fax 613/726-3440
photonics@ottawaphotonics.com;
www.ottawaphotonics.com

Ottawa is recognized worldwide as a photonics centre of excellence, attracting the best in R&D, investment, industry and education. The Ottawa Photonics Cluster builds on this excellence, for the benefit of our members, our community and our nation. We are dedicated in rallying photonics companies and other stakeholders, to strengthen Ottawa's ability to attract employees, investment, funding and facilities. Contact: Sandra Matthews, Manager of Business Development, smatthews@ocri.ca.

OWIS GmbH

#116

Im Gaisgraben 7, Staufen, Germany, 79219
49 7633 950 413; fax 49 7633 950 413
info@owis-staufen.de; www.owis-staufen.de

New Product: Nanopositioning Systems: closed loop stages with mm travel and nm precision.

Manufacturer of a complete line of laboratory equipment for optical mounting and position including large travel motorized goniometers, rotary and linear stages. Contact: Juergen Kiefer, Export Sales Manager, kiefer@owis-staufen.de; Peter Viglas, United States Representative, peter@piezोजना.com.

Oxford Lasers

#6114

Unit 8 Moorbrook Park, Didcot Oxon, United Kingdom, OX11 7HP
44 1235 810088; fax 44 1235 810060
oxford.inc@oxfordlasers.com; www.oxfordlasers.com

OXIDE/NIMS

#5092

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

New Product: SLN & SLT, PPMgSLT, PPMgLN, CLBO, CBO, BBO, SBN, DAST, GdVO₄, YbYAG crystals.

OXIDE was established in October 2000, as a customer-driven manufacturing company of oxide single crystals. Our technologies are based on the inventions at National Institute for Material Science (NIMS) of Japan. OXIDE manufacture SLN SLT, PPMgSLT, PPMgLN, CLBO, BBO, SBN, TiO₂, GdVO₄, Yb:YAG, DAST crystals. Aiming at being the leading supplier of new oxide single crystals, OXIDE will continue to introduce new products to meet your demands. Contact: Yasu Furukawa, President, furukawa@opt-oxide.com; Akio Miyamoto, Chief Technical Officer, sales@opt-oxide.com.

OXXIUS

#1847

4 Rue 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: SLIM-473, up to 50 mW&SLIM-532 up to 150 mW; single longitudinal mode DPSS lasers.

Oxxius is an early-stage company focused on developing innovative solid-state laser solutions for industrial and scientific applications.

The Oxxius product line features compact laser modules with wavelengths in the visible and near-ultraviolet spectrum, which combine outstanding optical performance with low-cost volume production. The lasers are used in biophotonics, spectroscopy, metrology and other instrumentation applications. Contact: Athanasios Kokorakis, Vice President Sales, akokorakis@oxxius.com; Nicolas Féat, Product Line Manager, nfeat@oxxius.com.

OZ Optics Ltd.

#1227

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

New Product: High Power Fiber Optic Patchcords.

Turnkey UV/VIS/IR Light Sources, RGB Sources and Combiners, High Power CW/Pulsed Fiber Lasers, Optical Amplifiers, High/Low Power Laser to Fiber Delivery Systems, High Power Patchcords, Laser/Laser Diode/Photo Diode to Fiber Couplers, Collimators/Focusers, Educational Kits, U-Brackets, Vacuum/Hermetic Feedthroughs, Optical Delay Lines, PM Patchcords, Polarizing/Polarization Maintaining Splitters/Combiners, Polarization Rotators/Controllers/Analyzers, Polarizers, Optical Taps/Power Monitors. Contact: Omur Sezerman, Chief Executive Officer, President; Jamie Hackett, Customer Service.

P.E. Schall GmbH

#6023A

Gustav-Werner-Str 6, Frickenhausen, Germany, 72636
49 7025 9206 610; fax 49 7025 5206 662
fuchs@schall-messen.de; www.schall-messen.de

New Product: OPTATEC.

Trade Fair Organizer for the OPTATEC Frankfurt Germany from 20-23, June 2006, the International Trade Fair for Future Optical Technologies, Components, Systems and Manufacturing. More information please find under www.optatec-messe.de. Contact: Susanne Fuchs, Project Manager.

Pavilion Integration Corp.

#2037

201 Helado Rd, Fremont, CA, 94539
510/659-8659; fax 510/659-1802
sales@pavilionintegration.com;
www.pavilionintegration.com

New Product: 30 mW 635 nm; 25 mW 532 nm; Dual 635/532 nm modules; Fiber-coupled versions.

Founded in 2003 by former JDS-Uniphase management to provide robust light engine solutions. These include full-time low-noise, cost-effective WhisperIT RGB laser modules and optical subsystems, developed to meet the demanding needs of biomedical instrumentation, graphics, metrology/inspection, display and other applications. Fully integrated in a single compact package, the PIC WhisperIT series includes highly reliable red, green, violet and multicolor lasers, including fiber-coupled versions. Contact: Tom Steele, Vice President Marketing & Sales, Tom.Steele@pavilionintegration.com.

PD-LD, Inc.

#5104

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 Raman 785nm Source, Powerful, Sharp, Compact, Intelligent and Economical.

PD-LD, Inc. located in Pennington, NJ, provides LuxxMaster™ volume Bragg gratings (VBG™) technology. This technology uses photo-sensitive glass to produce filters to stabilize laser wavelength; narrow the absorption envelope and improve wavelength accuracy. Coaxial pigtailed or receptacle short and long wavelength (635-1550nm) lasers, LEDs (850-1310nm), CWDM pigtailed laser diodes and detectors (400-1700nm) in both standard and custom packages. Bi-Directional modules. Contact: Ed McIntyre, Director of Marketing, emcintyre@pd-ld.com; Tom DeBerardine, Director of Sales, tomd@pd-ld.com.



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French Pavilion



Photonics West Exhibitor Directory

Peleton Photonic Systems

#6010

350 Palladium Dr Ste 200, Kanata, ON, Canada, K2V 1A8
613/599-7880; fax 613/599-2728
sales@peleton.com; www.peleton.com

PerkinElmer Life & Analytical Sciences

#5032

710 Bridgeport Ave, Shelton, CT, 06484
203/925-4600; fax 203/944-4914
info@perkinelmer.com; www.perkinelmer.com

The PerkinElmer LAMBDA UV/Vis/NIR and UV/Vis spectrophotometers are the industry standard for high performance, flexibility and convenience. Each model includes the same range of modular components and snap-in accessories to tackle a range of tough applications. Whatever specifications your laboratory requires, the LAMBDA Series provides best-in-class accuracy, precision and reproducibility. Contact: J. David Jones.

PFG Optics

#5063

733 Bienville Blvd, Ocean Springs, MS, 39564-2842
228/875-0165; fax 228/875-9354
sales@pfgoptics.com; www.pfgoptics.com

New Product: 5 Axis Milling & polishing with MRF Finishing.

PFG is an ISO 9001:2000 certified manufacturer of precision optics, coatings & assemblies from UV through near IR wavelengths. Our specialties include high performance lenses using CNC milling, polishing & edging techniques. Double sided & planetary polishing with MRF finishing for prisms, windows, wedges, filters. Standard and custom designed vacuum-deposited & Ion-assisted coatings on your substrate or ours. Assemblies include Telecentric, Eyepiece, Scan & Imaging Lenses. Contact: Colin (Cody) Green, Vice President of Sales, cody@pfgoptics.com; Barbara Dudiak, Customer Service.

PhaseView

#1843

37-39 rue Dareau, Paris, France, 75014
33 1 45 81 81 68; fax 33 1 45 81 81 44
michael.boasis@phaseview.fr; www.phaseview.fr

New Product: Non-contact 3D profiler for fast & accurate optical metrology.

PhaseView has patented a breakthrough technology of phase imaging. It enabled the design of an innovative product for optical metrology. Indeed, it is possible now to perform fast and accurate optical metrology, thanks to PhaseView's non-contact 3D profiler. The applications range from surface inspection (fiber optics, MEMS, wafers, PCBs) to life science microscopy. Contact: Igor Lyuboshenko, Chief Executive Officer, contact@phaseview.fr; Michael Boasis, Marketing, contact@phaseview.fr.

Phenix Optical (Guangdong) Co., Ltd.

#6088

No 11 W of Torch Development Area, Zhongshan, Guangdong, China, 528437
86 760 5991988; fax 86 760 5336339
www.phenixgd.com

Phenix Optical is the No. 1 lens supplier in China. There are three optical bases: Local Shanghai, Zhongshan, Jiangxi; production capacity is 10 Million per month. We can produce the Digital camera lens unit, Digital video lens unit, CCTV lens unit, Scanner lens unit, Projector lens unit, cell phone lens unit, etc. We can OEM or ODM various kinds of lens units for our customer.

Phoenix

#6103

PO Box 545, Enschede, Netherlands, 7500 AM
31 53 483 6460; fax 31 53 466 7415
info@phoenixbv.com; www.phoenixbv.com

Photek, Ltd.

#5131

26 Castleham Rd, St Leonards-on-Sea, E Sussex, United Kingdom, TN38 9NS
44 1424 850 555; fax 44 1424 850 051
sales@photek.com; www.photek.co.uk

New Product: ICNSGC Ultra Fast Nanosecond Gated Camera System, gating speed < 2 ns, jitter time 1 ns.

Photek is a SME that has been established as a manufacturer of image tubes and systems for use in biological, physical and military industries designed to meet customers' unique requirements. We manufacture a range of products: Image Intensifiers, Ultra-Fast Photomultipliers, Image Photon Detectors & Systems, Photon Counting Systems, ICCD Cameras, Femto & Streak Cameras and Associated Electronics. Contact: Ian Ferguson, Director, ian.ferguson@photek.co.uk.

PHOTLINE TECHNOLOGIES

#6151

16 Route de Gray Bat DF, Besancon, France, F-25001
33 381 666 622; fax 33 381 666 626
contact@photline.com; www.photline.com

New Product: MXPE-LN Very High Extinction Ratio Modulator, NIR-LN Intensity and Phase Modulators for 1000nm.

Photline Technologies is a provider of modulation solutions for high bandwidth optical applications. The company offers a complete choice of intensity modulators at various wavelengths. Served markets: Defense and aerospace, sensing and instruments, telecommunications, research. Contact: Philippe LeRoux, Sales and Marketing Director.

Photodigm, Inc.

#6050

1155 E Collins Blvd Ste 200, Richardson, TX, 75081
972/235-7584; fax 972/235-1609
kshields@photodigm.com; www.photodigm.com

Photon Design

#1834

34 Leopold St, Oxford, United Kingdom, OX4 1TW
44 1865 324990; fax 44 1865 324 991
pdadmin@photond.com; www.photond.com

New Product: CrystalWave V4: lightning speed FDTD now with dispersion, non-linearity, clustering, gain and more.

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, FIMMWAVE-a 3D mode solver, 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, info@photond.com; Stephen Day, sday@photond.com.

Photon Energy AWL GmbH

#121

Braeunleinsberg 10, Ottensoos, Germany, 91242
49 9123 99034 12; fax 49 9123 99034 22
amler@photon-energy.de; www.photon-energy.de

New Product: DPSSL AQUILA 120 for industrial use.

Photon Energy is developing and producing laser sources for industrial applications. The laser families AQUILA and LEO feature diode pumped lasers with long lifetime diode technology. They convince with extraordinary beam quality and power performance combined with a reliable design for industrial environment. They are suitable for marking, welding and general material treatment. They cover the power level from 3W up to 120W at a wavelength of 1064nm. Contact: Hans Amler, amler@photon-energy.de.

Photon Engineering, LLC

#132

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

New Product: FRED 5.20 features multi-threaded non-sequential raytracing capability using multiple processors.

FRED 5.20 is the premier proven optical engineering software to visualize and solve today's leading edge 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 directly in FRED and then propagate incoherent rays or coherent beams reflecting, refracting, scattering, diffracting or absorbing light at any surface. Contact: Michael Gauvin, Vice President of Sales & Marketing, mikeg@photonengr.com; Donna Hart, Sales Manager, donnah@photonengr.com.

Photon Gear, Inc.

#6128

245 David Pkwy, Ontario, NY, 14519
585/265-3360; fax 585/265-3364
sales@photogear.com; www.photogear.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 design services as well as systems engineering support for custom software and optical hardware. Contact: Gary Blough, President, blough@photogear.com.

Photon Inc.

#140

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: NanoModeScan — precision automatic beam propagation (M2) measurement in seconds.

Photon manufactures precision beam profilers that provide measurement data from light sources such as lasers, LDs, LEDs and VCSELs on several parameters. The NanoScan provides nanometer accuracy beam pointing and width for fast and precise optical alignment and component assembly. The High-Power NanoScan allows for direct measurement of focused lasers used in industrial applications. We also manufacture patented far-field profilers for divergent sources and a variety of camera-based profilers. Contact: Bill Hammer, Sales Engineer, bhammer@photon-inc.com; Derrick Peterman, Sales Engineer, dpeterman@photon-inc.com.

Photon Machines

#6009A

12625 High Bluff Dr Unit 108E, San Diego, CA, 92130
858/350-0703; fax 858/259-9077
info@photon-machines.com; www.photon-machines.com.

New Product: PROMASTER excimer micromachining system; super-pulse & flat beam cuts faster, cleaner, with less HAZ.

Compact, air cooled, ATLEX Series excimer lasers. Metal-ceramic construction and ultra-fast, pre-ionization yields 4ns (FWHM @ 193nm) pulse lengths, high peak power density & flat beams, enabling powerful new concepts in excimer laser equipment & applications. Plus PROMASTER & MICROMASTER super-pulsed, excimer micromachining. Versatile, turn-key, systems complete with machine vision & intuitive software enables rapid prototyping & pilot production in-house. 100+ users, all applications.

Photonic Cleaning Technologies

#3020

PO Box 435, Platteville, WI, 53818
608/467-5396; fax 608/467-5397
sales@photoniccleaning.com; www.photoniccleaning.com

New Product: The renowned surface cleaning agent First Contact polymer is now available in Red for easy viewing.

Non-toxic, inert polymer systems designed to remove dust, fingerprints, residues and other contamination from surfaces. First Contact™ cleans diffraction gratings, nanostructures as well as all precision optics like first surface mirrors and special coatings. First Contact™ also protects optics from physical and chemical damage in shipping and storage. Cleaning the Uncleanable with Green Chemistry. Get your optics Next Generation Clean! Contact: Philip Jackson, Chief Executive Officer, jacksonp@photoniccleaning.com.

Photonic Lattice Inc.

#6161

Aoba Incubation Square, 10 Aramaki Aza-Aoba Aoba-ku,
Sendai Miyagi, Japan, 980-0845
81 22 726 2076; fax 81 22 726 2078
info@photonic-lattice.com; www.photonic-lattice.com

New Product: Polarizing imager, ellipsometer, State of polarization monitor, arrayed polarizer, arrayed waveplate.

Photonic Lattice, Inc. aims to contribute the industries directly by introducing a number of highly original optical products into the market, based on our R&D for photonic crystal technology. They are unique and innovative optical materials, optical component and optical devices. Our mission is to develop diverse gifts of the Auto-cloning photonic crystal technology and to keep on introducing various new products for multiple business creation into the optoelectronics markets. Contact: Tsutomu Aoyama, Chief Executive Officer, aoyama@photonic-lattice.com; Wataru Ishikawa, Director, ishikawa@photonic-lattice.com.

Photonic Products Ltd.

#2040

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

New Product: Compact, Efficient 405nm Blue-Violet Laser Diode Modules with Modulated Output.

Photonic Products, established in 1995, is a manufacturer of optical sub-assemblies and standard and custom laser diode modules including TE cooled laser modules, green DPSS laser modules, pigtailed and receptacle packaged laser diodes and fibre-coupled laser modules. Photonic Products is also a specialist distributor of high performance industrial laser diodes and precision optical lenses, with sales offices in USA, UK and Germany offering competitive prices and fast worldwide delivery. Contact: David Stephen, Sales Manager USA, Canada and South America, salesusa@photonic-products.com; David McGuinness, Technical Sales Engineer, sales@photonic-products.com.

Photonics West Exhibitor Directory

Photonic Sense GmbH

#1415

Am Goldberg 3, Eisenach, Germany, 99817
49 3691 73180; fax 49 3691 731879
info@photonic-sense.com; www.photonic-sense.com

The Photonic Sense GmbH specializes in the manufacture and sale of raw material components comprising high grade optical germanium and silizium. Optical components made from germanium and silizium are used primarily in night sight equipment, thermal imaging and monitoring cameras and pyrometrics, particularly in automobile sensors, medicine and for high performance lasers. Contact: L. Siepe, Director, C.Siepe@photonic-sense.com.

Photonics Cluster (UK)

#2044

Faraday Wharf, Aston Business Science Park Holt St,
Birmingham, United Kingdom, B7 4BB
44 121 260 6020; fax 44 121 260 6450
info@photonicscluster-uk.org; www.photonicscluster-uk.org

Photonics Cluster (UK) is the UK's premier optoelectronics business network, securing on behalf of its membership corporate finance, research funding and access to its leading facilities, which boast automated fibre alignment equipment, a comprehensive suite of optical fibre test and measurement equipment, plus laser machining, photometric analysis, surface measurement and high speed photography. Contact: Hannah Gripton, info@photonicscluster-uk.org.

Photonics Industries International, Inc.

#627

390 Central Ave, Bohemia, NY, 11716-3147
631/218-2240; fax 631/218-2275
info@photonix.com; www.photonix.com

New Product: Pico produces pico-second pulses w/ up to 3mJ/pulse, up to 100kHz for micromachining applications.

Photonics Industries develops and manufactures a range of diode-pumped solid-state laser systems for industrial and scientific applications. TEM00 mode lasers are available in Nd:YAG, Nd:YLF, Nd:YVO4 platforms. Output powers range from 100mW-50W at 1064nm, 100mW-40W at 532nm, 50mW-20W at 355nm and 5mW-6W at 266nm. Eye-safe, OPO, Ti:Sapphire, and SLM lasers are also available. Contact: Matt Corrello, Director of Sales & Marketing, mcorrello@photonix.com.

Photonics Industry & Technology Development Association (PIDA)

#6130

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: Photonics Festival Taiwan 2006 - conferences and exhibitions of LED LIGHTING TAIWAN and OPTO TAIWAN.

PIDA is a national organization of the photonics trade, as well as a social entity with legal person status, working with private enterprises and government agencies to increase the competitiveness of Taiwan's optoelectronics industry. PIDA hosts OPTO TAIWAN annually which is the biggest international optoelectronic exposition in Taiwan since 1984. Show website: www.optotaiwan.com.tw. Contact: Pamela Hsiao, Project Manager, pamela@mail.pida.org.tw.

Photonics Industry Association of New York (PIANY)

#336

312 W Commercial St, East Rochester, NY, 14445
585/586-6906; fax 585/385-6053
rick@riversorg.com

New Product: Promoting New York State's photonics, optics, and imaging industry through cluster-based initiatives.

Programs and services to help New York State companies increase visibility, grow sales, reduce costs, and attract the best talent. Group promotions, networking, information transfer, discount purchasing, government liaison, and workforce development. Host of NYS Pavilions at major trade shows.

Photonics Spectra - Laurin Publishing

#732

Berkshire Common, 2 South St, Pittsfield, MA, 01201-6109
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: David Dover, Associate Publisher, sales@photonicsgroup.com; Anne Fisher, Senior News Editor, pseeditorial@laurin.com.

Photonics Tech Briefs

#6173

1466 Broadway Ste 910, New York, NY, 10036
212/490-3999; fax 212/986-7864
joe@abpi.net; www.ptbmagazine.com

Design engineers: Photonics Tech Briefs (PTB) is the only major photonics publication written for you. Each issue reports on innovations in optics, fiber optics, lasers and imaging that forward-thinking engineers like you can apply in new product development. Filled with practical, proven ideas, PTB is published 8x annually with NASA Tech Briefs magazine. Sign up for a free print or PDF subscription. Contact: Joe Pramberger, Publisher.

Photonics.com/ The Photonics Directory

#1912

Laurin Publishing Co., Inc., 2 South St PO Box 4949,
Pittsfield, MA, 02101
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, which averages over 175,000 user sessions each month, 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; Jeff Nichols, Regional Sales Manager, jeff.nichols@laurin.com.

Photonis - DEP

#420

Dwazziewegen 2, AB Roden, The Netherlands, NL-9300
31 50 501 8808; fax 31 50 501 1456
sales@photonis-ep.com

Photonis-DEP is the leading manufacturer of high performance Image Intensifiers, Low Light-Level Detectors, Photon Counters, Intensified CCD's (CMOS) and specific products. Sustained and continuing products development at Photonis-DEP results in products with unprecedented performance for wide ranges of analytical, industrial, scientific, surveillance and defense applications. Contact: Léon Bosch, International Sales Manager Photonis-DEP, Peggy Groff, Customer Service Department BURLE INDUSTRIES, INC. groffp@burle.com.

Photop Technologies, Inc.

#1445

1520 Centre Pointe Dr, Milpitas, CA, 95035
408/946-7858; fax 408/946-7685
contact@photoptech.com; www.photoptech.com

New Product: All-glass package, WDM, CWDM, DWDM and Isolator. VOA (MEMS-based). Magnetics Switch (1x2, 2x2).

PHOTOP is a leading photonics design & integrated manufacturing company on Fiber Optics & Optics, Projection & 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: Frank Fu, Business Development Director, frank.fu@photoptech.com; Miller Hu, Sales Manager, miller.hu@photoptech.com.

Photron USA

#1804

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 1024 PCI: Mega pixel resolution at 1,000 fps for the personal computer.

Photron is a global manufacturer of advanced high speed, high resolution imaging systems, photo-instrumentation and slow motion analysis systems for the automotive, industrial manufacturing, film and television, medical and military markets. Products include high resolution, high-speed cameras systems for R&D, commercial and defense-related motion image analysis applications. Contact: Andrew Bridges, Manager, Sales & Marketing, abridges@photron.com.

Physical Optics Corp. - Luminit

#6203

20600 Grammercy Pl #103, Torrance, CA, 90501-1821
310/320-3088; fax 310/320-8067
lnakagawa@poc.com; www.poc.com

Physics Today

#945

One Physics Ellipse, College Park, MD, 20740-3843
301/209-3393; fax 301/209-0842
www.physicstoday.org

New Product: Stop by for a limited-time FREE online subscription to physicstoday.org.

At www.physicstoday.org you can search 100+ physics journals + SPIE proceedings for articles recently published in your field. Contact: Jeff Bebee, jbebee@aip.org.

PI (Physik Instrumente) LP

#1013

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

PI is the global leader in nano precision motion control & piezo actuation systems for OEM + R&D. Products: Nanofocus Devices & Ultrafast Steering Mirrors: Resolution Enhancement; Piezo Nanopositioning Stages: Scanning Microscopy/Imaging; PICMA® Longlife Piezo Actuators; Ultrasonic Linearmotors, Piezo Drivers & Controllers; NanoAlignment Systems; Micromanipulation Actuators, Stages & Motion Controllers; Hexapod Robots for Automated 3D to 6D Alignment; ISO 9001, 30+ Years Experience. Imaging Contact: Jim Gareau, Eastern North America Sales Manager, info@pi-usa.us; David Steinberg, Western North America Sales Manager, info@pi-usa.us.

Piconics

#6032

26 Cummings Rd, Tyngsboro, MA, 01879
978/649-7501; fax 978/649-9643
www.piconics.com

New Product: Wide Band Microwave Choke to 100GHz+; Copper plated substrates with thin or thick film resistors.

Established 43 years, manufactures inductors and thin/thick film passives and modules. Testing up to 40 GHz. CDROM design guide available at booth. Contact: Herbert E. Dwyer, Sales & Marketing Manager, herb.dwyer@piconics.com; Lori Cost, Senior Sales & Customer Service, lori@piconics.com.

PicoQuant GmbH

#1233

Rudower Chaussee 29, Berlin, Germany, 12489
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.picoquant.com

PicoQuant is the leading supplier of picosecond pulsed diode lasers and intensity modulated diode lasers up to the GHz range and instrumentation for time-correlated single photon counting. Based on these core technologies, PicoQuant also builds complete systems for fluorescence lifetime measurements in sensitive analysis down to the single molecule. T.P.I. is our U.S. distributor. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com.

Piezosystem Jena, Inc.

#116

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

New Product: The "microTRITOR" is unrivaled in terms of ultra precise positioning tasks in limited space.

Piezosystem Jena is a world leading company in the development, design and engineering of Piezo electrical actuator based positioning systems. The unique know-how of Piezosystem Jena guarantees innovative products for nano and micropositioning. The products of Piezosystem Jena are designed for high precision accuracy in the nm-range and for sub- μ sec response time. They can achieve high push and pull force in the kNs. Contact: Jim Litynski, President, jim@piezोजना.com; Peter Viglas, Sales Engineer, peter@piezोजना.com.

Plan Optik AG

#6302

Unter den Eichen, Elsoff, Germany, D-56479
49 2664 50680; fax 49 2664 506891
info@planoptik.com; www.planoptik.com

New Product: MDF-polished surfaces (very low roughness, no sub surface damaging) Micro Lens Arrays.

Plan Optik offer,s a wide variety of optical components from glass, fused silica and glass ceramics for the applications of semiconductor, display, FPD, optical communication and data storage, measuring systems and laser systems. The specialty of Plan Optik are large optical components eg. substrates for measuring units or large scanning mirrors with a length up to 4000 mm (13 ft) as well as very small components eg. micro prisms and lenses for telecommunication and data storage applications. Contact: Michael Schilling, Chief Executive Officer, m.schilling@planoptik.com; Francis Zhang, United States Representative, promptar@aol.com.

PLX, Inc.

#1638

40 W Jefryn Blvd, Deer Park, NY, 11729
631/586-4190; fax 631/586-4196
info@plxinc.com; www.plxinc.com

POG Präzisionsoptik Gera GmbH #1801

Keplerstr 35, Gera, Germany, 07549
49 365 77393 0; fax 49 365 7739329
info@precisionoptic.com; www.precisionoptic.com

New Product: Standard Microstructures, Reticles on Ceramic Substrates, Custom Optical Systems.

POG is a leading European manufacturer of microstructures on glass and ceramic substrates. Reticles, calibration plates & test targets. Highest quality for large serial quantities as well as small batches. All processes and technologies in house. POG designs, develops and produces customized optical systems and components from UV to IR for applications in the semiconductor industry, machine vision and aerospace and defense industry. POG is management owned and employs a staff of 82. Contact: Ray George, Marketing Manager, ray.george@precisionoptic.com.

PolarOnyx, Inc.

#6118

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

New Product: High energy femtosecond fiber laser.

Leading company in high energy/high power femtosecond pulsed and narrowline width (kHz) fiber lasers. Wavelength ranges cover from VIS to IR. Contact: Jian Liu, President, jianliu@polaronyx.com.

Polymer Optics, LLC

#134

3100 Dutton Ave Unit 118, Santa Rosa, CA, 95407
707/573-5929; fax 707/573-5951
info@polyoptics.com; www.polyoptics.com

Manufacturer of precision plastic optical components in prototype and production volumes. In-house capabilities include optomechanical design, diamond machining, mold design and manufacturing, injection and compression molding, and thin-film design and deposition of optical coatings on plastic. Contact: Shari Powell, Vice-President, Business Development, ShariPW@polyoptics.com.

Polymicro Technologies LLC

#223

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 aluminum buffers; solarization resistant 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.

Polytec Inc.

#438

1342 Bell Ave Ste 3A, Tustin, CA, 92780
714/850-1835; fax 714/850-1831
info@polytec.com; www.polytec.de

New Product: MSA-400 Micro System Analyzer for complete, non contact, dynamic and static MEMS analysis.

Polytec manufactures the gold standard in non contact, dynamic and static MEMS analysis. The New MSA-400 Micro System Analyzer fully integrates static topography measurement with dynamic in-plane and out-of-plane motion measurement. The system is built around a custom microscope head for optimized sensitivity, minimum laser spot size and maximum utilization, convenience and performance. In combination with a wafer probe station, the Analyzer is the heart of a complete MEMS Workstation. Contact: Phillip Mitchell, Marketing Manager.

Power Technology, Inc.

#1827

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

New Product: Microprocessor controlled IQ μ with on-board, local control or with windows compatible software.

Power Technology, Inc. manufactures laser diode modules with wavelengths from 370-1600nm and output powers from 1mW to 2W. Beam circularization is available for many of their modules, as is active temperature control and pulsed or modulated output. For users seeking a specialized module outside of their standard product line, PTI performs a number of custom-design services. New products include a microprocessor controlled IQ μ with on board menu controls, as well as Super luminescent LED modules.

Precision Asphere, LLC

#5082

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 a USA based manufacturing company specializing in custom glass aspheres. With its proprietary technology and over 10 years of asphere manufacturing experience, Precision Asphere will meet your need of high precision aspheres with competitive price.

Precision Optical

#946

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. Prisms, Beamsplitters, Retroreflectors, Mirrors, Windows. Contact: Rod Randolph, President, rrandolph@precisionoptical.com; Al Lambert, Sales Engineer, 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: Micro optics (sub-millimeter).

POC, an FDA registerd, ISO 9001 certified company, is a domestic design and manufacturer of optical components and systems. All aspects of development and production are under one roof including design and fabrication of optical, thin film and mechanical components, as well as precision assembly and testing of optical systems. Contact: Susan Fox, Senior Sales Engineer, sfox@poci.com; Chuck Gerlowski, Business Development, cgerlowski@poci.com.

Precision Photonics Corp.

#1602

2901 55th St, Boulder, CO, 80301
303/444-9948; fax 303/444-9951
info@precisionphotonics.com;
www.precisionphotonics.com

New Product: Ion-beam-sputtered coatings: high-damage-threshold optics, polarizers and epoxy-free bonded optics.

Precision Photonics: your key supplier for ultraprecise optics with nanometer-level tolerances—in 10 or 10,000 quantities. We push our capabilities and metrology beyond industry limits, delivering critical optics to the most challenging of optical problems. Our capabilities include highly robust epoxy-free optical bonding, ion-beam-sputtered dielectric coatings, custom etalons and micro-optics, and precision photonics instrumentation. Precision Photonics—When Every Nanometer Counts™. Contact: Nick Traggis, Director of New Product Development, ntraggis@precisionphotonics.com; Chris Myatt, Chief Executive Officer, cmyatt@precisionphotonics.com.

Precitec, Inc.

#6286

55820 Grand River Ave, New Hudson, MI, 48165
248/446-8100; fax 248/446-9409
info@precitec.com; www.precitec.us

New Product: CHRocodile X - Xenon light for fast measuring rates on weak reflecting surfaces!

CHRocodile sets new standards in distance and thickness measurements with increased speed and precision. Non-contact measuring utilizing the chromatic coded principle by chromatic length aberation of a specialized lens allows a wide variety of surface properties to be measured. The sensor and probe are designed for topographic measurement systems as well as inline application use. Contact: Susan Sprentall, N.A. Sales & Marketing, susans@precitec.com; Robert Borgstrom, Vice President, robertb@precitec.com.

Precitech, Inc.

#6062

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

Princeton Instruments, Inc.

#1704

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

PI/Acton designs and manufactures high-performance, camera and spectrograph-based solutions for the imaging, x-ray, spectroscopy and security markets. We cater to the scientific research community and Original Equipment Manufacturers. Our commitment to continuous innovation in R&D and manufacturing process, coupled with a proven "Voice of Customer" program, ensures that our customers are always at the forefront of technology and reliability while pushing the boundaries of discovery.

Princeton Lightwave, Inc.

#6322

2555 Rte 130 S Ste 1, Cranbury, NJ, 08512
609/495-2600; fax 609/395-9113
sales@princetonlightwave.com;
www.princetonlightwave.com

Princeton Lightwave (PLI) applies its expertise in indium phosphide-based optical semiconductor devices, such as high power lasers and avalanche photodetectors, to design and manufacture optical modules and systems for emerging applications. The Company's core capabilities enable it to deliver solutions offering higher performance, reduced system costs and easier deployment to its customers in the fields of industrial processing, defense and bio-medical instrumentation. Contact: Bouchaib Nessar, Director of Marketing & Sales.

Process Materials Inc.

#442

5625 Brisa St Ste A, Livermore, CA, 94550
925/245-9626; fax 925/245-9629
sales@processmaterials.com; www.processmaterials.com

Materials: High purity targets, evaporation materials, wire, backing plates. Bonding services and plasma spraying. Products include metals, alloys and ceramics. Vacuum Equipment: Remanufactured or upgraded evaporation and sputtering systems including PLC automation. Systems include installation, training and one-year warranty. Process Materials has a global reputation for quality and service where trust is as important as technical knowledge. Contact: Pete Norlander, National Sales Manager, pnorlander@processmaterials.com; Steven Verley, Vice President Sales, sverley@processmaterials.com.

PROSystems, Inc.

#139

412 W Burr Blvd, PO Box 307, Kearneysville, WV, 25430
304/724-8876; fax 304/728-4433
info@retros.com; www.retros.com

New Product: Diamond turned optics.

As an established leader in precision optical assemblies and alignment, PROSystems, Inc. has expanded its capabilities. We now provide in-house manufacture of conventional polished optics and single point diamond turned optics ranging from prototype through production quantities. Our optical system design and testing capabilities together with over 50 combined years experience in NASA projects and production provide our customers with unsurpassed expertise. Contact: James J. Lyons III, President, jlyons@retros.com; Chris McKeever, General Manager, cmckeever@retros.com.

Pulstec Industrial Co., Ltd.

#6106

90-3 Higashimikata-Cho, Hamamatsu City, Japan, 433-8510
81 53 436 1121; fax 81 53 436 3050
sales@pulstec.co.jp; www.pulstec.co.jp

New Product: FAST WAVEFRONT SENSOR: High speed wavefront measurement system.

Pulstec Industrial Co., Ltd., a leading company in the testing systems for optical data storage. Our extensive technology background based on optics, mechanics and electronics enables to provide the high performance and cost effective solutions for your various problems on R&D or production. Contact: Nobuhiro Wakao, Assistant Manager, Sales, n-wakao@pulstec.co.jp.

QED Technologies, Inc.

#1127

1040 University Ave, Rochester, NY, 14607
585/256-6540; fax 585/256-3211
sales@qedmrf.com; www.qedmrf.com

QImaging

#1701

8081 Lougheed Hwy, Burnaby, BC, Canada, V5A 1W9
604/708-5061; fax 604/708-5081
info@qimaging.com; www.qimaging.com

QImaging is an industry leader in the design and manufacture of high performance CCD digital FireWire™ cameras for imaging in life science and industrial applications. QImaging cameras are well suited to many industrial applications due to their small size, high reliability and reputation for performance solutions. QImaging cameras support sensors from Sony to Kodak to offer a broad range of solutions and are supported by an extensive software partner network and world-class customer service. Contact: Nigel Van Luinen, Product Manager, nvanluinen@qimaging.com.

QPhotonics, LLC

#5064

1435 Crossways Blvd Ste 101, Chesapeake, VA, 23320
757/213-0560; fax 757/213-0563
info@qphotonics.com; www.qphotonics.com

New Product: Semiconductor Optical Amplifiers at 790nm, 1050nm, 1300nm, and 1550nm.

QPhotonics is a specialized supplier of semiconductor light emitting devices in wavelength range 635nm-1800nm for research, development and production. You will find a large variety of laser diodes, superluminescent diodes and semiconductor optical amplifiers in our webstore. Custom devices can be selected from stock and purchased online. Laser diode, diode laser, superluminescent diode, semiconductor optical amplifier, photodiode. Contact: George Loutts, Chief Executive Officer, gloutts@qphotonics.com.

Quality Laser Optics Ltd.

#243

Optical House, Baltham Industrial Park, Ballasalla, Isle of Man, United Kingdom, IM9 2AH
44 1624 822 724; fax 44 1624 827 166
lynne@ql-optics.com; www.QL-Optics.com

Manufacturer of optics to the highest standards for use in research and commercial applications. We supply from a single optic to many thousands. Specialist fields are flats, high damage threshold optics and very large optics up to 1 meter diameter. Test equipment includes a 12inch Zygo phase measuring interferometer. Fast delivery on stock items. Contact: Lynne Gildart, Sales & Marketing, Lynne@QL-Optics.com; Gary Thomas, Managing Director, Gary@QL-Optics.com.

Quality Thin Films, Inc.

#1634

141 Burbank Rd, Oldsmar, FL, 34677
813/855-1900; fax 813/855-5580
info@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 near IR. QTF also provides crystal fabrication and polishing, which, coupled with our AID coating, results in high damage and low loss. Products include but are not limited to mirrors, output couplers, OPOs and custom coatings. Contact: Karl George Jr., Vice President, karljr@qtf.com; Patricia Jadus, Customer Service Manager, pattyj@qtf.com.

Quanta Tech Inc.

#6151

c/o Natexis Pramex North America Corp., 34th Fl 1251 Ave of the Americas, New York, NY, 10020
646/375-2452; fax 866/978-2682
sales@quanta-tech.com; www.quanta-tech.com

New Product: Fiber Pigtailed AOM - Red - Blue- Green - Compact - Stable - Fast.

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 μ m), as well as frequency drivers up to 3 GHz, 500 Watts CW. Contact: Frederic Gonzales, Sales Manager, frederic.gonzales@quanta-tech.com; Franck Darde, Marketing Manager, franck.darde@quanta-tech.com.

Quantel

#215

BP 23, 17 ave de l Atlantique, Les Ulis, France, F-91941
33 1 6929 1700; fax 33 1 6929 1729
quantel@quantel.fr; www.quantel.fr

Pulsed Q-switched and Modelocked Nd:YAG lasers. Compact Brilliant Series Nd:YAG lasers for scientific and industrial applications. High power pulsed industrial lasers for surface treatment. Laboratory pulsed Nd:YAG and dye lasers. Contact: Philippe Aubourg, Sales Manager.

Quantronix Corp.

#1007

41 Research Way, E Setauket, NY, 11733-3454
631/784-6100; fax 631/784-6101

qinfo@quantronixlasers.com; www.quantronixlasers.com

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:YV04 lasers in IR, 2nd, 3rd and 4th harmonics. Industrial micro-machining, marking and deep engraving systems. Offers complete computer control and system integration. Contact: Melissa Rangell, Marketing & Communications Manager, mrange@quantronixlasers.com.

Quantum Composers

#6150

PO Box 4248, Bozeman, MT, 59772
406/582-0227; fax 406/582-0237
paulac@quantumcomposers.com;
www.quantumcomposers.com

New Product: 9800 Pulse Generator (flexible pulse technology) for generating and synchronizing multiple pulses.

Quantum Composers designs and manufactures Pulse Generators (standard & custom) for electro-optics, R&D test and measurement and process control applications in the electronic, semiconductor, biotechnology, military and aerospace markets. QC also continues its legacy of custom product development for the electro-optics and laser industry, designing custom electronics and instrumentation, custom software and providing design and manufacturing consulting, along with training services. Contact: Alex Palm, Director of Sales, apalm@quantumcomposers.com; Erik Larsen, Applications Engineer, elarsen@quantumcomposers.com.

Quebec Photonic Network #6006

111 rue Lapierre, BP 128 LaSalle, Montreal, QC, Canada, H8N 2J4
514/368-1677; fax 514/368-2098
francoislee@quebecphotonic.ca; www.quebecphotonic.ca

New Product: The QPN offers networking & commercializing services.

The QPN, a non-profit group with the mandate to contribute to the advancement of Photonics in Quebec by serving as an information hub and providing its members with networking services. For detailed information about our missions, services and activities, please visit our website at: www.quebecphotonic.ca or contact us. Contact: Jacques Labelle, General Manager, jacques@montrealphotonic.ca; Francoise Lee, Membership Relations, francoiselee@quebecphotonic.ca.

Quintessence Photonics Corp. #5037

15632 Roxford St, Sylmar, CA, 91342
818/986-0000; fax 818/833-1342
nkrauskopf@qpc.cc; www.qpc.cc

New Product: BrightLase™ lasers with internal gratings.

Quintessence Photonics Corporation 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, Quintessence is vertically integrated from epitaxy through packaging and performs all critical fabrication processes at its facility in Sylmar, CA. Diode Array, Diode Laser, Semiconductor Laser, Laser Bar, Single Emitter. Contact: Paul Rudy, Vice President of Marketing & Sales, prudy@qpc.cc; Mayer Engel, Director of Worldwide Sales, mengel@qpc.cc.

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www.elsevier.com

R. Mathews Optical Works, Inc. #3018

26280 Twelve Trees Ln, Poulsbo, WA, 98370
360/697-6160; fax 360/697-7417
bob@mathewsoptical.com; Bob Mathews

Manufacturer of prototype and production precision aspheric lenses from 10 to 200mm diam. utilizing all glass types. Our expanded aspheric production capabilities and unique proprietary manufacturing methods ensure a cost-effective alternative to multi-lens systems. Contact: Bob Mathews, President.

Radiant Dyes GmbH #935

Friedrichstr 58, Wermelskirchen, Germany, 42929
49 2196 81061; fax 49 2196 3422
monika@radiant-dyes.com; www.radiant-dyes.com

New Product: Pulsed Ti:Sapphire Laser; cw-ring Ti:Sa/Dye laser, ultra stable mirror mounts.

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 <math><0.06\text{cm}^{-1}</math> over the whole tuning range (695-905nm). With add. SHG the tuning range can be extended from 350 - 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, Sales Manager; Mark Mann, Sales Manager, sales@sacher.us.

Raicol Crystals Ltd. #2005

15 Giron St, Industrial Zone, Yehud, Israel, IL-56217
972 3 936 7412; fax 972 3 906 8969
info@raicol.com; www.raicol.com

Raicol manufactures nonlinear optical crystals, including KTP, HGTR KTP, RTP and PPKTP. The patented technology of PPKTP fabrication makes it possible to produce elements for high efficiency applications in wide wavelength range from visible to mid-infrared. Raicol's newest products are the RTP electrooptic Q-switch operating at 1064 nm, 2000 nm and 2940 nm for high-power high-repetition rate applications, the monolithic KTP OPO and Barium Nitrate crystals. Raicol supplies Cr:YAG, BBO and LBO. Contact: Isaac Hazony, International Projects.

Rainbow Research Optics, Inc. #1601

4880 Ironton St Unit K, Denver, CO, 80239
303/371-3000; fax 303/371-1333
sales@rroptics.com; www.rainbowoptics.com

Rainbow Research Optics, Inc. #1601

4880 Ironton St Unit K, Denver, CO, 80239
303/371-3000; fax 303/371-1333
sales@rroptics.com; www.rainbowoptics.com
New Product: High Power Polarizing Beamsplitters > 10J/cm².

Rainbow Research Optics Inc. is an optics manufacturer and optical coating provider. We offer One-Stop-Shopping with our laser quality optics, high damage threshold coatings and fast delivery. We provide custom and stock items including: Waveplates, beamsplitters, lenses, mirrors and windows ranging from 0.2" to 13" diameter. Contact: Adam Skaggs, Sales Engineer.

Raylase AG #6164

Argelsrieder Feld 2-4, Wessling, Germany, 82234
49 8153 8898 0; fax 49 8153 8898 10
info@raylase.de; www.raylase.de

New Product: RLC-USB, RLC-PCI, RLT-19, SUPERSCAN-SC -15, SUPERSCAN-SC -30, weldMARK.

RAYLASE is a worldwide leading OEM-manufacturer of scanning components and subsystems for the deflection and positioning of laser beams. Solutions are offered for industrial, medical and science applications. Its product range includes dual-axis scan heads from low-cost to high performance, multi-axis subsystems for wide field and 3-D processing, customised subsystems, control electronics also for on-the-fly applications and complete software packages. Contact: Erwin Wagner, Vice President Marketing/Sales, e.wagner@raylase.de.

Redfish Photonics #5072

5460 Skylane Blvd, Santa Rosa, CA, 94503
707/545-9800; fax 707/545-9801
info@redfishphotonics.com; www.redfishphotonics.com

Redfish Photonics, supplies solid-state heat pumps (thermoelectric coolers) as standalone modules or in hermetically sealed packages with temperature sensors, optical materials & customer furnished diode arrays or infrared sensors. We also supply header/heat pump & cap/window subassemblies. These reliable heat pumps are offered as standalone modules or hermetically packaged with sensors, optics & electronics per customer requirements. We also supply header/heat pump & cap/window subassemblies. Contact: Patricia Elias, Manager, Sales & Marketing, patti@redfishphotonics.com.

Photonics West Exhibitor Directory

Redlake

#1707

11633 Sorrento Vly Rd, San Diego, CA, 92121-1097
858/481-8182; fax 858/792-3179
info@redlake.com; www.redlake.com

For over 40 years Redlake has led the world in providing camera based solutions for both slow motion and industrial inspection applications. No matter your imaging requirements, we have designed cameras to meet your needs. Our solutions are tailored to meet the highest demands of the industrial user and both the life and physical science research communities. Redlake's investment in technological innovation is our commitment to your success.

Research Electro-Optics, Inc.

#820

5505 Airport Blvd, Boulder, CO, 80301
303/938-1960; fax 303/447-3279
sales@reoinc.com; www.reoinc.com

Research Electro-Optics, Inc. (REO) manufactures precision optical components, optical sub-assemblies, thin film coatings and Helium-Neon lasers. REO is an industry leader in super-polishing and high quality ion beam sputtered thin-film coatings. The company manufactures products for the semiconductor, telecommunications, defense, aerospace, medical and scientific industries. Contact: Mark Damery, Vice President of Sales, markd@Wreoinc.com.

Resonance Ltd.

#6052

143 Ferndale Dr N, Barrie, ON, Canada, L4N 9V9
705/733-3633; fax 705/733-1388
res@resonance.on.ca; www.resonance.on.ca

New Product: Introducing a line of miniaturized UV spectrometers wavelength range of 50 NM to 1000 nm.

Resonance Ltd. is an innovative electro-optics company. We research, develop and manufacture unique lamps, fiber optics and spectrometers for commercial, industrial and space applications. Resonance sensors have been used for detecting gas from volcanoes, exhausts from automobiles and UV light in sewage treatment systems. Our light sources have been used in semiconductor processing research and plasma etching of exotic materials. Contact: Bill Morrow, President.

RetrieverTech

#1033

228 St. Francis Dr, Santa Fe, NM, 87501
505/986-8196; fax 505/986-9266
info@retrievertech.com; www.retrievertech.com

New Product: RetrieverTech introduces the FC-Series cameras, the world's fastest 4k x 4k full frame CCD camera.

RetrieverTech is a provider of fast, low noise CCD cameras for scientific and industrial applications. We are an original equipment manufacturer and solution provider in the high-end digital imaging industry, with products centered on the world's fastest full frame CCD cameras, extremely low-noise CCD cameras for scientific imaging and electron multiplication CCD cameras for low light scientific and surveillance applications. Contact: Andrew H. Bartlett, Partner.

Richardson Grating

#1307

705 St Paul St, Rochester, NY, 14605
585/262-1331; fax 585/454-1568
grating.sales@newport.com; www.newport.com

Richardson Gratings and Spectra-Physics are now a part of the complete solution offered by Newport. To learn more about how we will bring you more innovative products, more solutions and more expertise than ever before...from a single source, visit Newport #1307. Contact: Tom Miller, tom.miller@newport.com.

Riegl USA, Inc.

#6208

7035 Grand National Dr Ste 100, Orlando, FL, 32819
407/248-9927; fax 407/248-2636
info@rieglusa.com; www.rieglusa.com

Riegl USA Inc. is a 3D airborne and laser scanning business founded on the company's 28-year heritage in research, development and manufacture of time-of-flight-based optical radar systems. In addition to 3D scanners, RIEGL offers a wide range of single-point laser measurement devices. Today, RIEGL is leading the integration of other technologies and software into hybrid systems that provide synergistic benefits to the users. Contact: Jim van Rens, Vice-President.

Rochester, NY Region

#336

100 Chestnut St Ste 1910, Rochester, NY, 14604
585/530-6200; fax 585/546-8477
support@rochesterbiz.com; www.rochesterbiz.com

New Product: Supporting the growth of optics, imaging and photonics industry in Rochester, NY.

A history of innovation has firmly rooted Rochester, NY's economy in optics, imaging and photonics. With more than 50 optics companies, world-renowned university programs, the emergence of a major Center of Excellence in Photonics and an active industry cluster, you can appreciate the potential that exists in the Rochester, NY Region. This environment is further enhanced by a low cost of doing business and highly educated workforce. Contact: Jay Martinez, Business Development Manager, Jay@RochesterBiz.com

Rockwell Laser Industries

#5081

PO Box 43010, Cincinnati, OH, 45243
800/945-2737; fax 513/271-1598
info@rli.com; www.rli.com

New Product: LAZAN 5.0 is the new laser hazard analysis software designed to compute ANSI and IEC calculations.

For over twenty-six 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: Linda Follette, Customer Service Representative, customerservice@rli.com; Leah Cridlin, Training Coordinator, training@rli.com.

General Refreshment Sponsor

Rocky Mountain Instrument Co.

#911, #1010

106 Laser Dr, Lafayette, CO, 80026
303/664-5000; fax 303/664-5001
sales@rmico.com; www.rmico.com

New Product: RMI New Optical Components and Capabilities Catalog.

Since inception, RMI has operated under a singular vision: to be the world leader in high-power, thin-film coatings and optical components for our customers' applications. Today, RMI is an international manufacturing company specializing in the design and production of optics and coatings (UV through Far IR) for a wide range of commercial and Military customers. Come see why we can say "Applying Science since 1957". Contact: Lou Primavera, Vice President Operations, sales@rmico.com. Contact: Lou Primavera, VP Operations/Sales, LouP@rmico.com; Debbie Hunt, Corporate Affairs, Debbie@rmico.com.

Rofin Australia

#1835

Unit 6 42-44 Garden Blvd, Dingley Victoria, Australia, 3172
61 3 9558 0344; fax 61 3 9558 0252
zoltan@rofin.com.au; www.rofin.com.au

High efficiency liquid light guides in 3 wavelength ranges - UV, visible, and near IR. Standard and custom light guides are available. Contact: Zoltan Sveller, Product Manager, Zoltan@rofin.com.au.

Rolyn Optics Co.

#1917

706 Arrow Grand Cir, Covina, CA, 91722-2199
626/915-5707; fax 626/915-1379
sales@rolyn.com; www.rolyn.com

Manufacturer and supplier of stock industrial and precision optical components including simple, compound, Fresnel and photo enlarging lenses, prisms, mirrors, filters, beamsplitters, reticles, irises and microscope accessories. We also supply reflective and anti-reflective coatings, both single and multi-layer. Contact: John Ross, President.

RoMack, Inc.

#1245

5583 Mooretown Rd, Williamsburg, VA, 23188
757/258-4805; fax 757/258-4694
lyoung@romackfiberoptics.com;
www.romackfiberoptics.com

RoMack, Inc., exclusively fiberoptics, manufacturers fiberoptic assemblies, components and related products specifically tailored for spectroscopic, laser, pharma and medical applications. Products include: probes, fiberoptics, connectors, adapters, patchcords, bundles, arrays, imagers, collimators, couplers, tapers and filter packages. RoMack, Inc routinely takes concept to product, creating solutions to the most difficult problems. Contact: Lisa Young, Executive Sales Manager.

RPC Photonics, Inc.

#6185

330 Clay Rd, Rochester, NY, 14623
585/272-2840; fax 585/272-2845
info@rpcphotonics.com; www.rpcphotonics.com

RPC Photonics, Inc. manufactures refractive/diffractive micro-optical components such as optical diffusers, beam shapers and microlens arrays, for various light-control applications. The engineered surfaces find use in diverse fields, e.g., semiconductors, displays, projection systems, solid-state lighting, medical illumination, military and space applications. We deliver custom components in polymer, glass or silicon and offer volume manufacturing with replication & injection molding. Contact: Rose A. Peet, Director, Contracts, peet@RPCphotonics.com.

RPM Optoelectronics

#6009

1726 Corby Ave Ste B, Santa Rosa, CA, 95407
707/573-0801; fax 707/573-1615
info@rpmopto.com; www.rpmopto.com

RPMC

#5071

203 Joseph St, O'Fallon, MO, 63366
636/272-7227; fax 636/272-3909
rpmc@rpmclasers.com; www.rpmclasers.com

New Product: Our turn-key FC systems house diode, electronics, heatsink, fiber; powers to 75W+; 100% customizable.

RPMC offers high power multimode and single mode laser diodes in wavelengths 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 Raterman, President; Dean Micke, Vice President, info@rpmclasers.com.

RSI

#1608

4990 Pearl East Circle, Boulder, CO, 80301-2476
303/786-9900; fax 303/786-9909
info@rsinc.com; www.rsinc.com

New Product: ENVI 4.2 is the most robust release of ENVI to date.

RSI, a wholly owned subsidiary of ITT Industries, provides integrated software solutions that help defense and intelligence agencies, scientists, engineers, researchers and medical professionals turn complex data into useful information. RSI's customers use IDL, ENVI and IAS to analyze data and imagery and deploy imaging applications. RSI offers the most complete data visualization, image analysis and image delivery solutions available. Contact: Matt Wood, Product Manager, mwood@rsinc.com.



Conference Bag Inserts Sponsor

RSoft Design Group

#6384

400 Executive Blvd Ste 100, Ossining, NY, 10567
914/923-2164; fax 914/923-2169
info@rsoftdesign.com; www.rsoftdesign.com

New Product: FemSim-a new general mode solver for transverse and cavity modes.

RSoft is the leader in photonics design 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. RSoft also provides design tools for optoelectronics components and subsystems as well as electromagnetic modeling software for optical metrology and lithography. Contact: Mehmet Bayrak, Sr. Sales Manager, North America, mehmet@rsoftdesign.com; Zhengyu Huang, VP Sales and Business Development, zhengyu@Rsoftdesign.com.

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



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Photonics West Exhibitor Directory

Sacher Lasertechnik GmbH #935, #942

Hannah Arendt Str 3-7, Marburg, Germany, 35037
49 6421 305 0; fax 49 6421 305 299
contact@sacher.de; www.sacher.de

New Product: Motorized Littman/Metcalf Tunable Laser, 780nm, 100mW, 100GHz, Laser Diode Controller, GPIB, USB.

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 R. Sacher, Yvonne K. Adams, Sales Manager, sales@sacher-laser.com.

SAES Getters USA, Inc. #1501

1122 E Cheyenne Mtn Blvd, Colorado Springs, CO, 80906
719/576-3200; fax 719/576-5025
www.saesgetters.com

At Photonics West the SAES Getters Group - a 60-year expertise in material science and thermal processes, 8 manufacturing plants and a worldwide-based sales & service network - displays its advanced optical crystal product line for electro-optic devices and solid-state lasers that includes congruent lithium niobate and tantalate and YAG-based crystals. Also features thin film getter technologies/solutions for wafer-level packaged MEMS. Contact: Marco Moraja, marco_moraja@saes-group.com; Marco Musolino, marco_musolino@saes-group.com.



General Refreshment Sponsor

Saint-Gobain Crystals #316

750 S 32nd St, Washougal, WA, 98671
360/835-9815; fax 360/835-2001
www.photonic.saint-gobain.com

Saint-Gobain Crystals is a world leader in the development, growth & finishing of very pure monocrytals. Materials & applications include X-Ray monochromators, Electro- & Magneto-Optics, Frequency Multipliers, LED Substrates & Semiconductor Processing. Materials include doped YAG, ruby, Ti: sapphire; optical materials for UV, visible & infrared transmission; monochromating crystals & garnets; Saphikon EFG™ sapphire tubes, rods & sheets, including CLASS™-the world's largest sapphire sheet. Contact: Philip Lomas, Regional Sales Manager, philip.k.lomas@saint-gobain.com; Joyce Monbleau, Regional Sales Manager, joyce.s.monbleau@saint-gobain.com.

Salem Distributing Co. #126

Photonics Div, 5901 Gun Club Rd, Winston-Salem, NC, 27103
336/766-1104; fax 336/766-1119
sales@salemndist.com; www.salemndist.com

New Product: ACCULAP Synthetic Optical Polishing Pitch.

Advanced surfacing and polishing materials from A to Z: Salem Distributing Co. is a leading supplier of advanced surface preparation materials to the precision and electro-optical industries. From agglomerate-free submicron aluminas to zirconia dispersions, Salem Distributing offers a "single-source" solution for the surfacing and polishing of materials that require a critical finish. Call Salem today to receive your free catalog. Contact: Bob Datz, Sales and Service Team Leader; Randy Reins, Sales and Service Team.

San Jose City College #3008

2100 Moorpark Ave, San Jose, CA, 95128
408/288-3781; fax 408/288-9023
kathy.werle@sjcc.edu; www.sjcc.edu

San Jose City College offers courses, a certificate and an associate degree in Laser Technology. Our industry-driven and derived curriculum helps photonics companies optimize productivity. Contact: Dr. Sydney Sukuta, Professor, sydney.sukuta@sjcc.edu.

Sandia National Laboratories #246

MS 1071, PO Box 5800, Albuquerque, NM, 87185-1071
505/844-9306; fax 505/844-2991
www.sandia.gov

Sandia is a national security laboratory involved in a variety of research and development programs to help secure a peaceful and free world through technology. Our primary sponsors are the Dept of Energy's National Nuclear Security Administration Department of Defense and the Department of Homeland Security. The group at this show represents the Microsystems, Science, Technology and Components Center.

Santec USA #6029

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

Santec is a leading manufacturer of Optical Components 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, Multi-Channel Tunable Lasers, Spectral Analysis Solutions, Tunable Filters, Polarization Extinction Meters and more. Contact: Max Chang, Engineer for East Coast, max@santec.com; Jonathan Evans, Engineer for West Coast, jonathan@santec.com.

Sarnoff Corp. #1538

201 Washington Rd, PO Box 5300, Princeton, NJ, 08540
609/734-2000; fax 609/734-2040
bd@sarnoff.com; www.sarnoff.com

Sarnoff's Imaging and Instrumentation business has a successful 40-year history of innovative product development in solid state imaging. Our core expertise lies in proprietary high-throughput CCD imagers and camera systems that provide unmatched sensitivity in the deep UV region of the spectrum. We offer a complete line of standard CCD camera systems as well as services for custom product development for the most challenging applications. Our developmental engineering services include application-specific CCD and CMOS device design, custom device packaging, camera design and manufacturing, and system integration services. Markets served include semiconductor wafer inspection, machine vision, spectroscopy, analytical instrumentation, hyperspectral imaging, scientific/biological imaging, and airborne remote sensing and surveillance.

Satisloh North America Inc. #841

N116 W18111 Morse Dr, Germantown, WI, 53022
262/255-6001; fax 262/255-6002
lori.heller@satisloh.com; www.satisloh.com

New Product: SP-100- a sputter coater for precision optics, optoelectronics & semiconductor applications.

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, Sales Engineer, tom.godin@satisloh.com; Lynn Stigler, Sales Engineer, lynn.stigler@satisloh.com.

Savimex

#1845

Parc d' activités des Bois de Grasse, BP 85262,
Grasse, France, F-06131
33 4 93 70 41 31; fax 33 4 93 70 77 21
infos@savimex-fr.com; www.savimex-fr.com

New Product: Mirrors: Aluminum, gold, beryllium, silicon lens up to 180 mm with patented process.

Founded in 1954, Savimex is widely specialized in the manufacture of mirrors and infrared turning. We offer our products in highly technical areas such as astronomy, spatial activities as well as the used materials in the infrared. Contact: Gregoire Bastin, Optical Engineer, gregoire.bastin@savimex-fr.com.

SB Electronics

#6375

131 S Main St, Barre, VT, 05641
802/476-4146; fax 802/476-4149
info@sbelectronics.com; www.sbelectronics.com

New Product: Non-outgassing pulse film capacitors: light, compact, designed for military/medical laser apps.

SB Electronics introduces its new non-outgassing film capacitors specifically designed for pulse laser applications. These low weight, compact size, pulse capacitors are well-suited for the challenges of compact military and medical laser applications. Capacitors designed for pulse, energy and filtering applications are also on display. SB Electronics, formerly a division of Sprague, is a leader in film capacitor technology since 1959. Laser, Pulse, Capacitor, Medical, Industrial. Contact: Mark Browning, Vice President Marketing and Sales, markb@sbelectronics.com.

SCANLAB America, Inc.

#6388

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: SCANcube 10, varioSCAN FC, hurrySCAN 30 with varioSCAN 40flex, hurrySCAN II 7, intelliSCAN.

Manufactures high performance galvanometer scanners and 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 (more than 1.150 characters/s), scan systems for kW-range lasers, customized systems and control electronics for on-the-fly processing. Contact: Dale A. Sabo, Vice President Sales & Marketing, d.sabo@scanlab-america.com.

Schafer Corp./Lightweight Optical Systems

#1033

2309 Renard Pl SE Ste 300, Albuquerque, NM, 87106
505/383-2865; fax 505/242-9975
wgoodman@schaferalb.com; www.schafercorp.com

New Product: SLMS™ and SiC-SLMS™ are the enabling technology for our FAST-SLMS™ fast steering mirror product line.

Schafer's Lightweight Optical Systems offers lightweight, dimensionally stable optical products, for operation in the far infrared to extreme ultraviolet and over temperatures of 4-400 K. Products include telescopes, imagers, fast steering mirrors and mirrors for high-energy laser applications. These products are founded upon Schafers Silicon Lightweight Mirror Systems (SLMS™) and Silicon Carbide Schafer Lightweight Mirror Systems (SiC-SLMS™) foam core mirror technologies. Contact: Bill Goodman, Lightweight Optical Systems Business Lead, wgoodman@schaferalb.com; Tom Farrell, Lightweight Optical Systems Chief Engineer, tfarrell@schaferalb.com.

Schneider Optics, Inc.

#446

OEM, 285 Oser Ave, Hauppauge, NY, 11788-3609
800/645-7239; fax 631/761-5090
oem@schneideroptics.com; www.schneideroptics.com

Schneider Optics designs and manufactures high performance lenses and filters. Our C-Mount, Macro, Line Scan & Telecentric Lenses are used in machine vision, robotics, document scanning, inspection, gauging and manufacturing applications around the world. Our Optical Engineers are available to work with you directly to determine the lens configuration that best meets your specific application requirements. Please contact us via e-mail (oem@schneideroptics.com) or telephone (631-761-5000). Contact: Stuart Singer, Vice President, Industrial Optics, stuart@schneideroptics.com; Jim Sullivan, Sales and Marketing Manager, jim@schneideroptics.com.

Stairway Strip Sponsor

SCHOTT North America, Inc.

#803

400 York Ave, Duryea, PA, 18642-2036
570/457-7485; fax 570/457-7330
sgt@us.schott.com; www.us.schott.com

Optical components, optical glasses & pressings for industrial & consumer optics; glass & interference filters for environmental protection, lighting, measurement & control, analytics & automotive; Zerodur glass-ceramics for LCD lithography & astronomical telescopes; laser glasses & passive laser components; sapphire, DWDM-substrates and GRIN-lenses, core glasses for light-guide fibers & fused fiber optics. High-tech coating solutions for plastic components. Contact: Steve Sokach, Director of Sales, steve.sokach@us.schott.com; Marlene Deily, Promotions Manager, marlene.deily@us.schott.com.

SCHOTT North America, Inc. - Electronic Packaging

#803

122 Charlton St, Southbridge, MA, 01550
508/765-3370; fax 508/765-3377
epackaging@us.schott.com; www.us.schott.com/epackaging

New Product: Wafer Level Packaging Novalay Glass Deposition.

SCHOTT Electronic Packaging operates around the globe as it develops, produces and sells materials and components for the protection of sensitive electronics, such as hermetic housings of glass/metal and ceramic/metal for opto-electronics and frequency control, i.e. laser, hybrid and quartz housings for datacom and telecom applications. New products include wafer level packaging and Novalay glass structuring.

WiFi - West Foyer Sponsor

SCHOTT North America, Inc. - Fiber Optics Division

#803

62 Columbus St, Auburn, NY, 13021
315/255-2791; fax 315/255-2695
fiberoptics.auburn@us.schott.com; www.us.schott.com/fiberoptics

Scientech, Inc.

#1610

5649 Arapahoe Ave, Boulder, CO, 80303-1332
303/444-1361; fax 303/444-9229
inst@scientech-inc.com; www.scientech-inc.com

New Product: Rad high power (1000W) water cooled laser power meter system including sensor and meter.

Scientech is a US company that has been manufacturing laser power and energy measurement systems for over 36 years. We have a full line of thermal, photodiode and pyroelectric sensors which can measure from nanowatts or nanojoules to kilowatts or kilojoules. Laser power meters, laser energy meters, joulemeters, wattmeters sensors. Contact: Tom Campbell, Chief Operating Officer/Vice-President.

Scientific Materials Corp

#2018

31948 E Frontage Rd, Bozeman, MT, 59715
406/585-3772; fax 406/585-8606
sales@scientificmaterials.com; www.scientificmaterials.com

Scientific Materials Corporation (SM) supplies high quality crystal components to the opto-electronic industry. Our primary products are laser components, including solid-state laser rods and optical components. SM provides custom crystal growth as well as materials for research in specialized applications. We also supply materials for optical limiters and optical memories. Some of the materials available from SM are; Nd:YAG, Er:YAG, Tm:YAG, Yb:YAG, Nd:YAIO3, Tm:YAIO3. Contact: Randy Equall, Vice President, rwe@scientificmaterials.com; Ron Humphrey, Marketing Consultant, rhumphrey1@carolina.rr.com.

SCIOPT Enterprises

#3022

PO Box 20637, San Jose, CA, 95160-0637
408/268-8934; fax 408/268-9050
ghsciopt@ix.netcom.com; www.sciopt.com

New Product: Paraxia-Plus Rel 2.01.06.

SCIOPT enterprises is in its 25th year of supplying innovative Optics software products. Paraxia-Plus laser beam propagation and laser design software is our premier product. SCIOPT also represents high quality instrumentation and software products from a variety of distinguished suppliers. Contact: Greg Hearn, General Manager, ghsciopt@ix.netcom.com.

Scitec Instruments Ltd.

#632

Bartles Industrial Estate N St, Redruth Cornwall, United Kingdom, TR15 1HR
44 1 209 314 608; fax 44 1 209 314 609
photonics@scitec.uk.com; www.scitec.uk.com

Bench top and OEM board level single and dual phase Lock in amplifiers. Rotating optical Choppers from 5Hz to 44.5kHz. Miniature OEM choppers from 5Hz to 8000Hz. Contact: Matt Perry, Instrument Sales, mdp@boselec.co.

Semi Conductor Devices (SCD)

#6171

PO Box 2250, Haifa, Israel, IL-31021
972 4 990 2500; fax 972 4 990 2686
marketing@scd.co.il; www.scd.co.il

New Product: Water cooled diode laser stacks for high power operation without DI water.

SCD is a primary source for IR detectors and High Power Diode Lasers. A large optoelectronic fab featuring automated operations supports the large volume scale production of optoelectronic devices. High Power Diode Laser bars and stacks fully produced at SCD are today deployed in leading defense programs. In addition, SCD water cooled diode laser stacks, emitting at diverse wavelengths enable applications of photonic power in the increasingly popular medical cosmetic field. Contact: Shlomo Risemberg, Marketing Manager and Business Development, risemberg@scd.co.il;

Semiconductor Technology Research, Inc.

#5076

12901 Mill Shed Dr, Richmond, VA, 23112
804/615-0038; fax 804/639-7114
contact@semitech.us; www.semitech.us

New Product: Software for simulation of bulk crystal growth, epitaxy and semiconductor device operation.

STR provides dedicated software and consulting services for simulation and optimization of bulk crystal growth, epitaxy and semiconductor device operation. The STR's expertise scope includes CVD of Si, SiGe, SiC, III-Vs, III-nitrides and oxide films, PVT growth of SiC and AlN, crystal growth from the melt (Si, GaAs, InP, sapphire, etc.) and advanced semiconductor devices - LEDs, laser diodes, photodetectors, transistors and Schottky diodes. Detailed info is available at: www.semitech.us. Contact: Mark Ramm, Head of Software Department, ramm@semitech.us; Alex Galyukov, Customer Support Engineer, galyukov@semitech.us.

Semrock, Inc.

#133

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

Semrock manufactures high-performance thin-film optical filters for the biotech & analytical instrumentation markets. Products include the highly-acclaimed BrightLine® series of fluorescence filters for microscopy, flow cytometry and other fluorescence-based instrumentation, exceptional filters for Raman spectroscopy and unique biomedical laser system optics. Contact: filters@semrock.com.

SensL Technologies Ltd.

#6274

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

New Product: SPMMini Silicon Photomultiplier as a replacement for PMTs.

SensL is showing the world's first silicon alternative to photomultiplier tubes for low light detection & photon counting applications. This technology is enabling new generation products for analytical equipment, fluorescence imaging, microscopy & low light imaging. Unlike PMTs these devices are immune to damage from stray light & have a low operating voltage whilst achieving comparable detection area size and gain. Photon Counting APD Avalanche Photodiode Silicon Photomultiplier Tube TCSPC. Contact: Joe O'Keeffe, Chief Commercial Officer, jokeeffe@sensl.com.

Sensors Unlimited, Inc.

#844

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

Sensors Unlimited is dedicated to the development of near-infrared (NIR) imaging products using indium gallium arsenide. Products include NIR imaging components, cameras and systems, including the world's smallest NIR Snapshot MicroCamera, and the revolutionary, dual-wavelength Visible-InGaAs MiniCam, capable of imaging in both the visible & NIR regions to produce a single combined image. Contact: Bob Struthers, Vice President, Sales & Marketing, bstruthers@sensorsinc.com.

Sensovation

#5078

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

New Product: [M]3 Miniaturized Measurement Module - sensitive area-detection of fluorescence for diagnostics & POC.

Sensovation is focused on the development and production of high sensitivity 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: HW. Mueller, Marketing-Manager, Barry Weinstein, Director of Business Development.

Servometer/PMG, LLC

#6066

501 Little Falls Rd, Cedar Grove, NJ, 07009
973/785-4630; fax 973/785-0756
info@servometer.com; www.servometer.com

New Product: IR Coldshields and Dynamic Solid Gold Electroforms.

Servometer manufactures custom metal bellows and 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. Bellows type flexible shaft couplings can accommodate axial, angular and offset deflections with zero backlash and low windup. Gold plated contact bellows can be used in applications where good contact and continuity are important. Contact: Steve Oliphant, Technical Support Associate, steveo@servometer.com.

Sextant Labs., Inc.

#1605

961 E Fillmore St, Colorado Springs, CO, 80907
719/632-9454; fax 719/442-0722
info@sextantlabs.com; www.sextantlabs.com

New Product: 2nd Generation Lens Tester, USB Interferometer, Computer Controlled PZT Staging, NIR Interferometer.

Supporting the Optical Drive industry for almost a decade, Sextant Labs products include High NA lens testers, interferometers, collimated and pinhole sources, computer controlled staging and custom optical tooling. Sextant Labs Interferometer Systems are found in the metrology laboratories and on the manufacturing lines of every major optical drive company. Tooling supplied to measure laser diodes, collimation optics, objective lenses and optical pickup heads for CD, DVD and BluRay. Contact: Nathan Coit, President, coit@sextantlabs.com.

Shanghai Optics

#3021

12 Paris Ave, Edison, NJ, 08820
732/321-6915; fax 732/875-0298
sales@shanghai-optics.com; www.shanghai-optics.com

New Product: Aspherical surfaces, plastic optics and light pipes.

From prototyping to volume-production, Shanghai Optics make a wide range of optical components, including beamsplitters, light pipes, telecommunication filters, precision optics, filters for digital imaging, reticles, aspheric surfaces, plastic optics, miniature optics and assemblies. Material used: All type of glasses, quartz, sapphire, fused silica and silicon. Please take advantage of our brand new rapid prototyping service, which we deliver in 1-3 weeks without excessive cost. Contact: Joanna Lee, Vice President of Sales and Marketing, jlee@shanghai-optics.com; David He, Director of Sales, dhe@shanghai-optics.com.

Shenyang HB Optical Technology Co., Ltd.

#6087

242 Beihai St, Dadong District, Shenyang, China, 110043
86 24 88710655; fax 86 24 88722312
info@hb-optical.com; www.hb-optical.com

Manufacturer of bandpass filters, variable neutral density filters, ellipsoidal/paraboloidal glass reflectors and so on.

Shiefman Consulting, LLC

#3009

2530 N Falling Water Ct, Tucson, AZ, 85749
520/760-8858; fax 303/253-9339
info@shiefman.com; www.shiefman.com

New Product: Both software codes have had significant enhancements in capabilities and user interface.

Offering a single source for computer simulation of optical systems including sub-wavelength structures. Marketing and supporting DIFFRACT and Sim3D_Max, the most comprehensive simulation of physical optics phenomena available. DIFFRACT has extensive optical system modeling capabilities. Sim3D_Max is a finite-difference time-domain (FDTD) Maxwell's equation solver offering non-uniform grid, numerous material and source models, and simple multi-processor implementation. Pull-o down menus enable easy transfer of fields between the two codes. Also providing consulting in the design and analysis of optical systems. Contact: Joe Shiefman, Sales Representative, joe@shiefman.com.

Shimadzu Corp.

#6054

7102 River Wood Dr, Columbia, MD, 21046
410/381-1227; fax 410/381-1222
maquaranta@shimadzu.com; www.shimadzu.com

New Product: Shimadzu's introduces its 1 million frames per second ultra-high-speed video camera.

Shimadzu's HyperVision HPV-1 ultra-high-speed video camera is capable of recording up to 1 million frames per second with full resolution (312 x 260 pixels) at all recording speeds. It employs a newly developed image sensor chip to record the video. This sensor chip combines Charge-Coupled Device (CCD) technology with a design that expands the light-sensitive area per pixel, to deliver sharp images in a very broad range of lighting conditions. Contact: Gilbert Vial, Product Manager, gvial@shimadzu.com; John Monti, Product Manager, jamonti@shimadzu.com.

Showa Optronics Co., Ltd.

#6377

5-3 s-chome Shinmachi, Setagaya-ku, Tokyo, Japan, 154-8506
81 3 5450 5133; fax 81 3 5450 5960

New Product: An optically contacted beam splitter with no glue and is suitable for UV lasers.

Showa Optronics provides High Performance, High Damage Resistance, High Stability optics with an ultimate polishing and coating technique for materials processing, instrumentation, medical, space and defence equipment, as well as laser fusion. Contact: Shiro Kawabe, Sales Manager, kawabe@soc-ltd.co.jp.

Sierra Precision Optics

#1835

12830 Earhart Ave, Auburn, CA, 95602
530/885-6979; fax 530/885-1037
sales@sierraoptics.com; www.sierraoptics.com

Flatwork - Plano Optics (Filters, Panels, Windows, Mirrors, Beam Splitters, Wedges and Prisms). Spherical Lenses, Cylindrical Lenses Specialties: Cylindrical optics, Excimer laser components, Flowtubes and Custom shaped optics, 1/20th wave optical grade metal polishing of Invar and stainless steel. Contact: Jim Stimpson, Sales Manager, jstimpson@sierraoptics.com.

SIFAM Fibre Optics Ltd.

#1937

Unit A Broomhill Way, Torquay Devon, United Kingdom, TQ2 7QL

44 1803 407784; fax 44 1803 407786
sales@sifamfo.com; www.sifamfo.com

New Product: Integrated Fibre Optics Modular solutions incorporating in house passive and active technologies.

SIFAM Fibre Optics focuses on solutions within Aerospace & Defence, Biomedical, Industrial and Telecoms. Offering the widest variety of high performance fused components ranging from taps to high power combiners. We are market leaders in this technology. Photonics Packaging is a versatile in house capability enabling the design and manufacture of a wide range of active components. SIFAM Fibre Optics has vast experience at providing integrated modular solutions, combining actives and passives. Contact: Nigel Deeley, Customer Service Officer, ndeeley@sifamfo.com; Graham Catley, Sales and Marketing Manager, gcatley@sifamfo.com.

Sill Optics GmbH & Co., KG #1246, #1801

Johann Hoellfritsch Str 13, Wendelstein, Germany, 90530
49 9129 9023; fax 49 9129 9023 23
info@silloptics.de; www.silloptics.com

New Product: Laser Optics, CCD Lenses, Profil-Projection-Lenses, OEM Optics, Telecentric 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. Scan lenses for Printing, Beam expanders, Yag Focussing Optics, Profile Projector Lenses are included in the program. Custom made Optical Systems and components for Prototypes and series. Contact: Konrad Hentschel, Research and Q.A. Manager, konrad.hentschel@silloptics.de; Markus Klahr, Sales Manager, markus.klahr@silloptics.de.

Simax Technologies

#5135

15291 Barranca Pky, Irvine, CA, 92618
949/789-7728; fax 949/789-7727
info@simaxtech.com; www.simaxtech.com

Simplex Isolation Systems

#6041

14500 Miller Ave, Fontana, CA, 92336
909/429-0117; fax 909/429-0217
info@simplexis.net; www.simplexisolationssystem.com

New Product: GatorJaw Frame work system. For building safety enclosures, benches and more.

Since 1979 Simplex has manufactured isolation products addressing contamination, quality and safety issues: AirLock modular latch-together cleanrooms — easy to assemble and expand; SIS portable softwall enclosures; AirBlock softwall and strip curtains. Largest selection of vinyl includes Polysim 509, a non-outgassing, static dissipative, Class One fire rated material. And our new Gatorjaw multipurpose aluminum framing system. Contact: Duane McKinnon, President, duanem@simplexis.net; Jake Lucas, Vice President, jakel@simplexis.net.

Sinclair Manufacturing

#6378

12 S Worcester St, Chartley, MA, 02712
508/222-7440; fax 508/226-0517
sales@sinclairmfg.com; www.sinclairmfg.com

Manufacturer of hermetic packages and windows. Detector headers and windows using glass, sapphire, quartz, CaFl. RF & Microwave packages, hybrid, power and custom packages using glass to metal and ceramic to metal technology. Contact: Michael O'Keefe, Vice President Marketing & Sales, mokeefe@sinclairmfg.com; David Freund, Engineering Manager, dfreund@sinclairmfg.com.

Sinocera Photonics, Inc.

#6312

No 355 Puhui Rd , Jiading, Shanghai, China, 201821
86 21 39160565; fax 86 21 59169897
sales@shanghaioptics.com; www.shanghaioptics.com

New Product: UV/VIA/NIR polarizers, Light housing.

Sinocera Photonics was being developed from 1991, manufactures optical components on laser optics, instrumental optics, telecom optics and biology optics. The main products including: Windows, Prisms, Lenses, Polarizers, Waveplates, Laser crystals, NLO crystals, Beamsplitters, filters. Contact: Philip Zheng, Sales Manager, philip@shanghaioptics.com; Gavin Wang, Sales Manager.

SIOS Messtechnik GmbH

#116

Am Vogelherd 46, Ilmenau, 98693
508/634-6868; fax 508/634-6688
usa@piezोजना.com; www.sios.de

New Product: Vibrometer - Interferometric (non-contact) vibration measurements.

SIOS Meßtechnik GmbH manufactures laser interferometric and other types of precision instrumentation for measuring lengths, angles, vibratory motions. The systems operate based on miniaturized laser interferometers. These fiber-coupled length measurement devices with the remarkable resolution of 1 nm are extremely stable and precise measuring distances up to 5m. The miniature interferometers are used in two-axis and multi-axis systems. Contact: Walter Schott, President, schott@piezोजना.com; Jim Litynski, United States Representative, jim@piezोजना.com.

Sira

#2044

South Hill, Chislehurst Kent, United Kingdom, BR7 5EH
44 208 468 1716; fax 44 208 468 1896
anne.crean@sira.co.uk; www.sira.co.uk

New Product: Hyperspectral imager, OCT biomedical device, glass inspection systems.

Sira supports the creative process of innovation and provides expertise in the development and commercialisation of technology-based solutions for the biomedical, environmental, manufacturing, security and space industries. Services span product innovation, R&D, manufacturing bespoke measurement solutions, impartial test and calibration of instruments and training provision. Contact: Anne Crean, Business Director, info@sira.co.uk.

Siskiyou Design Instruments

#1911

110 SW Booth St, Grants Pass, OR, 97526
541/479-8697; fax 541/479-3314
sales@sd-instruments.com; www.sd-instruments.com

Siskiyou Design Instruments 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 Design Instruments will also custom tailor devices to fit your needs.

Solid State Cooling Systems

#5065

20 Pleasant View Rd, New York, NY, 12569
845/635-5500; fax 845/635-8081
info1@sscooling.com; www.sscooling.com

New Product: Oasis 150 ultra compact liquid chiller for precise cooling of lasers, sensors and equipment.

Since 1994, SSSCS has manufactured thermoelectric temperature control products which are compact, quiet, vibration-free, reliable and energy-saving. Our family of products (chillers, heat exchangers, power supplies and cold plates) provide precise temperature control for plasma etchers, acid baths, SEM's, small enclosures, plasma ashers, diode lasers and therapeutic heating/cooling. Contact: Mark Logan, Vice President of Sales, kanderson@sscooling.com.

Sonoma Photonics, Inc.

#2032

1750A Northpoint Pky, Santa Rosa, CA, 95407
707/568-1202; fax 707/568-1201
sales@spiworks.com; www.sonomaphotonics.com

New Product: Custom IR Notch Filters & Dark Mirrors.

Manufacturer of high performance Thin Film coatings from the UV to IR. Serving the Aerospace, Life Science markets with precision bandpass filters both narrow and wide along with beamsplitters, polarizers, notch filters & dark mirrors. Supports multiple programs from small batch R&D to volume requirements. Contact: Bryan Blasutta, Business Development Manager, bblasutta@spiworks.com; Jim Brosnan, Vice President, jbroshnan@spiworks.com.

Southampton Photonics Inc - SPI #5084

3 Wellington Park, Tollbar Way Hedge End, Southampton, United Kingdom, SO30 2QU
44 1489 779 696; fax 44 1489 779 698
info@spioptics.com; www.spioptics.com

sp3 Diamond Technologies, Inc. #6015

2220 Martin Ave, Santa Clara, CA, 95050
408/492-0630
diamond@sp3inc.com; www.sp3inc.com

New Product: sp3's DiaTherm heat spreaders with 1200W/mK TC are ideal submounts for laser diodes and LEDs.

sp3 Diamond Technologies is focused on providing diamond-based solutions for electronics thermal management, diamond-on-silicon applications and enhanced cutting surfaces. Based in Santa Clara, California, USA, the company provides diamond products for thermal and cutting applications, diamond deposition services, hot filament CVD reactors and deposition consulting services to companies worldwide across a broad spectrum of industries. Contact: Dwain A. Aidala, daidala@sp3inc.com.

Space Optics Research Labs. #3005

7 Stuart Rd, Chelmsford, MA, 01824-4107
978/250-8640; fax 978/256-5605
sorl@sorl.com; www.sorl.com

New Product: Space Optics Research Lab (SORL) Mounts for Large Mirrors available for use in vacuum environments.

Space Optics Research Labs (SORL) produces reflective aspheres and other reflective optics that simplify your optical system design, and can broaden its range of operation. We actively design and fabricate wide field-of-view and low jitter airborne, as well as lightweight ground based systems. If SORL can test it, SORL can build it! We assure that aspheric and other optical components up to 1-meter diameter leave our manufacturing facility only after rigid quality control. Contact: Diane Chevalier, Executive Administrator, Diane.Chevalier@SORL.com; Barbara Green, Sales Specialist, Barbara.Green@SORL.com.

Sparkle Optics Corp. #6325

655 Deep Valley Dr Ste 170, Rolling Hills Estates, CA, 90274
310/265-8600; fax 310/265-8610
admin@sparkleoptics.com; www.sparkleoptics.com

New Product: BASU-Q-1030-72W sets a new record for TEM00 Q-switched laser power for pulsed laser machining.

Sparkle Optics Corporation manufactures high power TEM00 Q-switched lasers for laser machining of consumer electronics and medical devices. The company also specializes in R&D in the area of optical communication, remote sensing, high power laser sources from UV to infrared, space optics and space borne lasers. Contact: Santanu Basu, President.

Special Optics #326

315 Richard Mine Rd, Wharton, NJ, 07885-1659
973/366-7289; fax 973/366-7407
sales@specialoptics.com; www.specialoptics.com

Special Optics designs, develops, manufactures and tests custom OEM and catalog optics for UV, VIS and IR applications for aerospace, defense, industry, medicine, research and semiconductors. Our products include Motorized Zoom Beam Expanders, Telecentric Scanning Lenses, Diffraction-Limited Lenses, Zero Order Waveplates, Soleil-Babinet Compensators and Achromatic Focusing Objectives. Contact: Steven Morales, Sales Manager, Brian Weinberg, Director of Sales and Marketing, bweinberg@specialoptics.com.

Specialised Imaging Ltd. #2038

Unit 23 Silk Mill Industrial Estate, Brook St, Tring Herts, United Kingdom, HP23 5EF
44 1442 827728; fax 44 1442 822847
sales@specialised-imaging.com; www.specialised-imaging.com

Specialised Imaging is a dynamic company focusing on the design, manufacture, service and supply of ultra-high-speed imaging systems and parts for industrial, military and scientific applications. Using our many years experience in high speed imaging design, we are producing new innovative systems across a wide spectrum of ultra-high-speed imaging applications ranging from ballistics and detonics to plasma, microscopy, and materials testing, and providing support for all existing camera users. Contact: Wai Chan, Managing Director, wai@specialised-imaging.com; Keith Taylor, Technical Director, keith@specialised-imaging.com.

SPECTARIS German Industry Association for Optical, Medical and Mechatronical Technologies #1801

Saarbruecker Str 38, Berlin, Germany, 10405
49 30 41 40 21 10; fax 49 30 41 40 21 33
info@spectaris.de; www.spectaris.de

Spectral Instruments Inc. #535

420 N Bonita Ave, Tucson, AZ, 85745
520/884-8821; fax 520/884-8803
info@specinst.com; www.specinst.com

Spectral Instruments has dedicated itself to bring to market the finest, most advanced CCD based imaging systems in the world. We strive to understand our customer's needs, and to help provide the appropriate solution, with exceptional service and technical support. Contact: Robert W. Current, Systems Specialist, rcurrent@specinst.com.

Spectralus Corp. #6063

6580 Via Del Oro, San Jose, CA, 95119
408/754-3135
bpetrossian@spectralus.com; www.spectralus.com

Photonics West Exhibitor Directory

Spectra-Mat, Inc.

#5068

100 Westgate Dr, Watsonville, CA, 95076-2469
831/722-4116; fax 831/722-4172
sales@spectramat.com; www.spectramat.com

New Product: Lithography Grade Tungsten-Copper Substrates for Wafer Level Packaging.

SPECTRA-MAT, INC. specializes in manufacturing tungsten-copper (W/Cu), moly-copper (Mo/Cu), porous tungsten (W) and tungsten alloys. Lithography grade W/Cu substrates (up to Ø 6.0") are supplied for wafer level packaging which can result in significant cost savings. SMI's thermal management solutions using W/Cu, Mo/Cu and W alloys have low thermal expansion (CTE), matching critical requirements for optoelectronic packaging. These materials also retain effective thermal conductivity (TC). Contact: Sandra Petznick, Sales & Marketing Manager, spetznick@spectramat.com; Bud Kundich, Sales Representative, bkundich@spectramat.com.

Spectra-Physics

#1307

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

The new Spectra-Physics now offers a broad range of lasers, a wide array of components, one-stop catalog convenience and extended OEM services. Spectra-Physics is known for its industrial high power semiconductor lasers and diode pumped solid state lasers for marking, trimming, scribing, surface texturing, stereolithography, inspections and micro via drilling. Contact: Jason Eichenholz, Senior Research Market Strategy and Technology Manager, jason.eichenholz@newport.com.

Spectrogon U.S. Inc.

#5107

24B Hill Rd, Parsippany, NJ, 07054
973/331-1191; fax 973/331-1373
sales@spectrogon.parsippany.nj.us; www.spectrogon.com

Designer and manufacturer of interference filters for the ultraviolet, visible and infrared: narrowband and broad bandpass, longwave and shortwave, ND filters, atmospheric windows, AR and metallic coatings and thin film coatings. Holographic diffraction gratings: plano, concave and pulse compression/stretcher gratings. WDM and telecommunication applications: diode laser tuning gratings and network communication gratings. Contact: Sam Ponzo, Sales & Marketing Manager; Kelly Koerber, Sales Administrator.

Spectronic Devices Ltd.

#1947

106A Bedford Rd, Wootton Beds, United Kingdom, MK43 9JB
44 1234 765185; fax 44 1234 767514
info@spectronicdevices.com; www.spectronicdevices.com

New Product: UniSpec100, UniSpec60 complete compact spectrometers. Wide range of gfratings.

Design and manufacture Compact and miniature spectrometers, as well as Line cameras for attachment to spectrometers. All devices are complete and ready to run. Just install the supplied software and connect the device. For users needing to design their own application software, easy to use software drivers are supplied. Contact: Les Cronin, Director.

Spectroscopy Magazine

#5117

Advanstar Communications, Bldg F 1st Fl 485 Route 1
South, Iselin, NJ, 08830
732/596-0276; fax 732/596-0003
www.spectroscopyonline.com

Spectroscopy is the only publication dedicated to delivering a complete information solution to the largest circulation of spectroscopists in North America. By providing peer-reviewed, technical and applications-oriented information in every issue, *Spectroscopy* enables substantial productivity improvement in the laboratories of the spectroscopists leading the way in all areas of spectroscopy Contact: Mike Tesselone, Group Publisher, mtesselone@advanstar.com; Ed Fantuzzi, Publisher, efantuzzi@advanstar.com.

Spectrum Thin Films Corp.

#718

100E Knickerbocker Ave, Bohemia, NY, 11716
631/589-3502; fax 631/589-3514
tony@spectrumthinfilms.com; www.spectrumthinfilms.com

Sphere Optics

#6046

PO Box 669, 881 Main St, Contoocook, NH, 03229
603/746-2000; fax 603/746-3007
sphereoptics@sphereoptics.com; www.sphereoptics.com

New Product: LED Characterization System, complete measurement solution LEDs, Assemblies and lamps.

SphereOptics designs, produces and sells precision standard and custom radiometric and photometric products addressing the specific needs of the aerospace, automotive, electronic imaging, laser diode, LED, lighting, medical imaging and optics industries. The company offers a broad line of integrating spheres and diffuse reflectance materials and standards specializing in custom design and manufacturing services. Contact: Chris Durell, Vice President Sales, cdurell@sphereoptics.com; Justin Jacobs, Sales Engineer, jjacobs@sphereoptics.com.

SPIE Newsroom/SPIE Professional #6159

PO Box 10, Bellingham, WA, 98227
360/676-3290; fax 360/647-1445
newsroom@spie.org; http://spie.org/newsroom

New Product: Introducing our two newest information sources: SPIE Newsroom and SPIE Professional.

SPIE Newsroom is a new online source for technical and industry news articles written by experts in the field. Updated daily, this web-based resource at spienewsroom.org is divided into 13 Technical Communities representing the broad fields of optics and photonics. Pick one, or several, and sign up for monthly e-alerts on each topic to keep abreast of recent developments.

SPIE Professional is a quarterly magazine for SPIE Members. Focusing on the profession of optics and photonics, its articles will cover career and industry trends, professional ethics, and Society news.

SPIE Professional Development #5030

PO Box 10, Bellingham, WA, 98227
360/676-3290; fax 360/647-1445
education@spie.org; http://www.spie.org

Professional Development from SPIE Education Services provides continuing education and training for engineers, scientists and managers. We offer over 700 different courses taught by industry experts with topics ranging from basic optical principles to intermediate and advanced photonics and microelectronics. SPIE courses are available in the format of the works for YOU— customized In-Company courses held at your facility, courses held at SPIE symposia, and courses on DVD, video and CD-ROM.

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The International Society
for Optical Engineering

Spiricon, Inc.

#220

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

Manufactures beam profilers & universal power/energy meters for lasers & optical devices from UV - FIR. Instrumentation provides real-time beam profile display & numerical calculations in digital, analog bar, or time graph. Products include software, frame grabbers, full spectrum cameras, and portable meters with dual inputs for thermopile, pyroelectric, & semiconductor probes for power/energy, or temp measurements. Features: SD card for logging, USB control to LabVIEW on Windows, Mac, & Linux. Contact: Josh Atkinson, NW Regional Manager, josh@spiricon.com; Kenneth Ferree, Sales Manager, sales@spiricon.com.

Springer

#6227

233 Spring St, New York, NY, 10013
212/460-1600; fax 201/272-1832
exhibits-ny@springer-sbm.com; www.springeronline.com

Visit Springer to save 20% (or more!) on world-leading books on lasers, optics, photonics, quantum information science and more! Plus, get a FREE copy of any Springer journal on display and find out about SpringerLink and Springer's FREE Tables of Contents e-mail alerts! Contact: Scott Epstein, Product Manager, scott.epstein@springer.com; Fleur van Dijl, Product Manager, fleur.vanDijl@springer.com.

SRICO, Inc.

#238

2724 Sawbury Blvd, Columbus, OH, 43235
614/799-0664; fax 614/799-2116
sri@srico.com; www.srico.com

New Product: Ultra high extinction ratio optical modulators and PPLN waveguide devices.

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, President, sri@srico.com.

SSI Spectrum Scientific, Inc.

#6332

16692 Hale Ave, Irvine, CA, 92606
800/774-0334; fax 949/260-9900
info@ssioptics.com; www.ssioptics.com

New Product: Blazed Holographic Diffraction Gratings and Replicated Optics.

SSI manufactures a range of holographic diffraction gratings including sinusoidal and blazed gratings (plane or concave). We also design and manufacture OEM spectrographs. Other products manufactured include high precision replicated optics - spherical, plane and aspheric mirrors (including on or off-axis paraboloids) and retro-reflectors. Substrates available include glass, metal and plastic. Gratings, Diffraction Gratings, Aspheric Optics, Replicated Optics, Parabolic Mirrors. Contact: Daphnie Chakran, daphnie@ssioptics.com; Mark Vosloo, mark.vosloo@ssioptics.com.

Stanford Computer Optics, Inc.

#2027

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, based on 4Picos or 4QuikE camera, up to 100.000.000.000fr/s.

Analog or digital intensified CCD cameras. High-speed, ultra-fast gated (200 picosecond), 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's 4Picos/4QuikE/XXRapidFrame. Sensitivity of 1count/1photoelectron/pixel w/200 pico second gate times. MCP and diode image intensifiers and low-light cameras.

Stanford Photonics Research Center (SPRC)

#6026

AP 203 Ginzton Lab, 450 Via Palou, Stanford, CA, 94305
650/723-5627; fax 650/725-1822
photonics@stanford.edu; www.stanford.edu/group/SPRC

SPRC builds strategic partnerships between the Stanford University photonics research community and industry companies. Affiliate members gain facilitated access to Stanford faculty, students and researchers by participating in SPRC events, collaborating on research projects, mentoring students, and visiting research labs. Member benefits also include assistance with recruiting and priority alerting for Stanford photonics invention disclosures. Contact: photonics@stanford.edu. Contact: Sheri Graham, Assistant Director, photonics@stanford.edu.

Stanford Photonics, Inc.

#6288

1032 Elwell Ct Ste 102, Palo Alto, CA, 94303
650/969-594491; fax 650/969-5993
info@stanfordphotonics.com; www.stanfordphotonics.com

New Product: New proprietary image acquisition and RAID-based streaming software is now available.

STANFORD PHOTONICS, Inc. designs and manufactures electro-optic systems for applications in remote viewing, surveillance, x-ray, photometry and low light level imaging and analysis. 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: Mike Buchin, President, mbuchin@stanfordphotonics.com; Steve Herlick, Sales Engineer, sherlick@stanfordphotonics.com.

Stanford Research Systems, Inc.

#1726

1290-D Reamwood Ave, Sunnyvale, CA, 94089
408/744-9040; fax 408/744-9049
info@thinkrs.com; www.thinkrs.com

Stanford Research Systems will exhibit some of our scientific and engineering test instruments including lock-in amplifiers, digital delay/pulse generators, photon counters, preamplifiers, FFT spectrum analyzers, filters, LCR meters, thermocoupler monitors, small instrument modules and residual gas analyzers. Contact: Dave Ames, Sales Manager, davea@thinkrs.com; Janie Du, Sales Engineer, janied@thinkrs.com.

Star Tech Instruments

#5060

PO Box 1822, New Fairfield, CT, 06812
203/312-0767

info@startechinst.com; www.startechinst.com

Star Tech Instruments manufactures energy probes, imaging systems, position sensors and associated electronics for the 13 nm through 350 nm spectral band. Contact: Bill Fricke.

Statek Corp.

#6049

512 N Main St, Orange, CA, 92868
714/639-7810; fax 714/997-1256

sales@statek.com; www.statek.com

Statek Corporation is a recognized technological leader in the design and manufacture of ultra-miniature quartz crystals, oscillators and sensors. Statek's robust products feature high stability, precision, reliability, ultra-low profile, low long-term aging and excellent shock resistance and are available in frequencies from 0.00001 Hz to 250 MHz. Contact: Jeff Upton, Sales Manager, jupton@statek.com.

Stellar Industries Corp.

#6272

50 Howe Ave, Millbury, MA, 01527
508/865-1668; fax 508/865-5016
snooky@stellarind.com; www.stellarind.com

Metalized substrates with thin and thick films on Aluminum Nitride (AlN) and Beryllium Oxide (BeO) and Aluminum Oxide (Al₂O₃). Stellar specializes in wrap-around metalizations for use in optical packaging. Direct Bonded Copper on BeO and Al₂O₃. Foundry vapor deposited AuSn on substrates or on wafer Contact: John B. Snook, Vice President, snooky@stellarind.com; Eric W. Brown, Sales, ericb@stellarind.com.

StellarNet, Inc.

#235

14390 Carlson Cir, Tampa, FL, 33626
813/855-8687; fax 813/855-2279
wpierce@stellarnet.us; www.stellarnet-inc.com

New Product: UVN SpectroRadiometer 200-1100nm, Fiber Optic Multiplexer (3/4 channel).

StellarNet manufacturers ruggedized high performance, low cost, fiber optic spectrometers for the UV-VIS-NIR ranges. Detector arrays include CCD, PDA and NIR-InGaAs for 190-2200nm. The SpectraWiz software is included free to enable measurements for SpectroChemistry, SpectroRadiometry, SpectroColorimetry, OES and LIBS spectroscopy, right on your desktop or portable PC via USB-2.0 interface. Customizable LabVIEW and VBA+Excel programs also included on CDROM with software training videos. Contact: Sean Christian, Senior Scientist - Instrument Sales, sChristian@StellarNet.us; Dan Aven, Principal Scientist - Instrument Sales, dAven@StellarNet.us.

StockerYale, Inc.

#1327

32 Hampshire Rd, Salem, NH, 03079-4204
603/893-8778; fax 603/893-5604
sales@stockeryale.com; www.stockeryale.com

New Product: COBRA™ Linescan Backlight, Magnum II Laser, Model 21DC F.O. Illuminator, Model 6 Fluo Circular.

StockerYale, Inc. is a leading developer of high-quality illumination and optical products. We manufacture Lasiris™ structured light lasers, LED (light emitting diode) based technologies and fiber optic and fluorescent lighting systems, as well as specialty optical fibers for industry leading OEMs. We are at the forefront of delivering innovative solutions to a wide range of high-tech markets including machine vision, industrial inspection, telecommunications, sensors, aerospace and medical. Contact: Luc Many, Senior Vice President Sales/Marketing - Illumination, lasers@stockeryale.com; Paul Jortberg, Senior Vice President Sales/Marketing - Optical, opticalsales@stockeryale.com.

Sugitoh Co., Ltd.

#6365

4-25-10 Kohtobashi, Sumida-Ku, Tokyo, 130-0022
81 3 3634 0337; fax 81 3 3635 4779
nak@sugitoh.com; www.sugitoh.com

Contact: Takeo Nakamura, Export Manager.

Sunex Inc.

#6397

5963 La Place Ct Ste 104, Carlsbad, CA, 92008
760/602-0988; fax 760/602-0681
sales@sunex.com; www.sunex.com

New Product: Miniature Fisheye Lenses - 185-degree FOV and F/2 for CMOS and CCD sensors.

Sunex Inc. specializes in the design, development and production of miniature digital imaging lens for CMOS/CCD image sensors. Sunex provides optical design services and custom product development. Sunex Inc. is dedicated to assisting customers with all aspects of the design-to-production process, as well as providing responsive and knowledgeable support. Contact: Peter Allard, Director of Sales and Marketing, peter.allard@sunex.com.

Sunny Precision Optics

#6027

7200 Bollinger Rd, San Jose, CA, 95129
408/244-8972; fax 408/228-8789
market@yoptics.com; www.yoptics.com

New Product: Custom design optical components and film coating.

SPO offer high standard quality system with ISO9001 foundation in China. Provide variety of laser-quality catalog and custom design optics, crystal components and film coating for industry and research field, including lenses, prism, mirror, window, filter, conic, polarizer beamsplitter, aspherical lens and crystal made of optical glass, fused silica, sapphire, Si, Ge, CaF₂, MgF₂. Contact: Anna Liang, Director of Marketing.

Sunpower Corp.

#6136

430 Indio Way, Sunnyvale, CA, 94085
408/991-0900; fax 408/739-7713
www.sunpowercorp.com

New Product: Solar Cells.

SunPower (Nasdaq: SPWR) is a publicly traded solar power company located in Silicon Valley. We manufacture the world's highest efficiency solar cells and panels, and our mission is to translate this technology leadership position into a high volume, profitable mainstream business. Contact: Matt Cambell, Business Manager, mui@cypress.com; Fran Stubbles, Product Support, fsk@cypress.com.

Super Optronics Inc.

#123

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 laser.

Photonics West Exhibitor Directory

Supercool Inc.

#6225

819 A St, San Rafael, CA, 94901
415/459-3777; fax 415/258-9963
www.supercool.com

Thanks to superior material characteristics and special production processes, we provide a variety of truly outstanding thermoelectric modules, comprising not only high-temperature and sealed modules, but also thermal cycling and multistage versions. We also offer the world's most extensive selection of off-the shelf thermoelectric assemblies. Contact: Hans Agren, Sales Engineer, hansa@supercool.com; Ulf Moren, President, ulfm@supercool.com.

Superlum Diodes

#6112

Nathan House, Lavitts Quay, Cork, Ireland,
353 21 4275176; fax 353 21 4277305
sales@superlum.ie; www.superlumdiodes.com.

New Product: Broadband 200-250 nm lightsource at 1350 nm and 1430 nm. New gain modules and SOAs at 780-1000 nm.

Since 1992 Superlum offers state-of-the-art non-coherent lightsources based on superluminescent diodes for variety of applications including optical coherence tomography, fiberoptic gyros and a lot of others. Our SLDs emit at different wavelengths ranged from 650 to 1610 nm. SLD-based "Broadlighter" lightsources bring uniquely low, few micron coherence length and are the most compact and effective among other SM fiber coupled non-coherent lightsources. Contact: Vladimir R. Shidlovski.

Surface Finishes Co. Inc.

#6366

39 Official Rd, Addison, IL, 60101
630/543-6682; fax 630/543-4013
surf-fin@att.net; www.surfacefinishes.com

Contract optical polishing, lapping and diamond turning. Flatness to 1/20 wave. Contact: Mark Drzewiecki, President, surf-fin@att.net; Jose Camacho, General Manager, jcamacho@surfacefinishes.net.

SUSS MicroTec Inc.

#6273

228 Suss Dr, Waterbury Center, VT, 05677-0157
802/244-5181; fax 802/560-0001
info@suss.com; www.suss.com

New Product: SB8e LED Substrate Bonder, capable of bonding eight 2" wafers simultaneously.

SUSS MicroTec, is a leading global supplier of manufacturing equipment and process technology for microelectronics, advanced packaging, nanotechnology and MEMS markets. SUSS products serve both high volume production and R&D environments. Our complete line of products, extensive field service capabilities, after-sales support and applications assistance amplifies the value we offer our customers. Contact: Carol Menard, MarCom Manager, Wafer Bonder Division, cmenard@suss.com; Louise Jones, Sales & Marketing Support, ljones@suss.com.

Sutter Instrument Co.

#1730

51 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 & industry. Imaging products include motorized optical filter wheels, high-speed filter switchers, a xenon light source, the stepper-motor controlled SmartShutter and motorized XY translator. The P-2000 is the premier NSOM fiber tip puller. With over 30 yrs 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, Director, R&D, jack@sutter.com.

Swamp Optics, LLC

#3035

6300 Powers Ferry Rd Ste 600-345, Atlanta, GA, 30339
404/547-9267; fax 770/541-6472
linda.trebino@swampoptics.com; www.swampoptics.com

Swamp Optics offers inexpensive, compact, and easy-to-use devices for measuring ultrashort laser pulses, specializing in frequency-resolved optical gating (FROG). Swamp Optics' devices yield the most complete measurement of such pulses available with the least effort. Contact: Linda Trebino, Co-Founder & Member, Linda.Trebino@swampoptics.com.

Swift Glass Co.

#340

131 W 22nd St, Elmira Heights, NY, 14903
607/723-7166; fax 607/732-5829
quality@swiftglass.com; www.swiftglass.com

Specializing in the complete fabrication of soda lime glass, Borofloat, Pyrex, Schott and Kopp Color Filters, sapphire and other optical materials. Processes include double sided lapping and polishing, precision milling, edge grinding and polishing, drilling, heat tempering and chemical strengthening. Contact: Anthony Speciale, Sales, tspeciala@swiftglass.com; Charlie Burke, Vice President, cburke@swiftglass.com.

Swiss Jewel Co.

#6167

325 Chestnut St Ste 509, 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. Sapphire Window, Ruby, Quartz, Ball-lens.

SwissOptic AG

#1745

Heirich-Wild-Str, Heerbrugg, Switzerland, CH-9435
41 71727 3074; fax 41 71727 4686
swissoptic@swissoptic.com; www.swissoptic.com

New Product: New generation of gradient (neutral density) filter and bandpass filter.

SwissOptic, a company in the Berliner Glas Group, offers a broad variety of precision thin-film coated optical components, electro-optical assemblies, opto-mechanical modules and complex optical systems from design to series production. The range of services comprises the whole process chain incl. clean room environment and individual measurement set-up. For shortest product introduction phases. Special: band pass and gradient filters, complete systems for the entire industry using light. Contact: Fred Doss, Sales Manager, Precision Optics, fdoss@berlinerglasus.com; Matthias Zimmermann, Sales and Marketing Manager, matthias.Zimmermann@swissoptic.com.

Sydor Instruments, LLC

#349

3495 Winton Pl, Rochester, NY, 14623
585/427-9112; fax 585/427-0663
info@sydorinstruments.com; www.sydorinstruments.com

New Product: ROSS x-ray streak camera; all the features of the ROSS systems with x-ray response.

Sydor Instruments creates innovative solutions for high speed photonics measurements. We currently offer the ROSS streak camera, the only self-calibrating system with the highest precision and greatest accuracy of any commercially available instrument. Sydor Instruments can also customize or even develop new diagnostic instrumentation to meet your specific requirements. Contact: Paul Roehrenbeck, Director, Marketing and Sales, paulr@sydorinstruments.com.

Sydor Optics, Inc.

#349

One Blossom Rd, Rochester, NY, 14610-7309
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. Contact: James Sydor, President, james@sydor.com; Michael Naselaris, Operations Manager, mike@sydor.com.

Synopsys, Inc.

#6217

700 E Middlefield Rd, Mountain View, CA, 94043-4024
650/584-5000; fax 650/548-4249
info@synopsys.com; www.synopsys.com

New Product: Synopsys Sentaurus Device: Optoelectronic Capabilities.

Synopsys' TCAD Group is the leading provider of physics-based simulation software and services that enable semiconductor companies to save time and resources during IC product development. Through the use of Synopsys TCAD simulation software and services, semiconductor companies can develop and optimize processes and devices even before silicon is available. Contact: Claudia Chan, Senior Marcom Specialist, claudiac@synopsys.com; Terry Ma, Director of Product Marketing, terry.ma@synopsys.com.

Syntec Technologies, Inc.

#330

7100 Junction Rd, Pavilion, NY, 14534
585/768-2513; fax 585/768-6099
info@syntectechnologies.com;
www.syntectechnologies.com

Manufacturer of polymer optics and turnkey systems including: mold tool manufacturing; optical insert manufacturing; molding; coating; design and assembly. Capabilities: Precision optical, opaque and insert molding, Diamond turning, planetary polishing, complete mold building. Full Design and thin film coating available. Optical metrology. Full opto-electronic and mechanical assembly department. Contact: Paul Tolley, Vice President/General Manager; Rick Arndt, Vice President, Tooling.

Taboada Research Instruments, Inc.

#5106

1923 N New Braunfels, San Antonio, TX, 78208
210/224-8876; fax 210/224-8834
info@taboada.com; www.taboada.com

New Product: Omni Laser Line, Laser Ribbon, Omni Mount, Q-switched Er Glass Lasers, 5-axis Remote Positioner.

Taboada Research Instruments, Inc. was founded in 1999 and specializes in custom research, robotic and optstical 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 Taboada, President, j@taboada.com; John M. Taboada, Vice President, jm@taboada.com.

tec5USA, Inc.

#320

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

New Product: High-end Portable NIR Spectrometer Unit.

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; Dan Fields, General Manager, dan.fields@tec5usa.com.

Tecan Ltd.

#2046

Tecan Way, Granby Ind Est, Weymouth Dorset, United Kingdom, DT4 9TU
44 1305 765432; fax 44 1305 780194
sales@tecan.co.uk; www.tecan.co.uk

New Product: Tecan manufacture custom-designed encoder discs in prototype through to volume quantities.

Tecan manufacture precision metal custom components by Photo Electroforming and Photo Chemical Machining. Using Photo Electroforming we are capable of manufacturing microstructures achieving tolerances of 1 - 2 microns and even sub-micron registration and alignment accuracy. To ensure quality and repeatability all processes are completed in house including tooling, plating and forming. Contact: Noel Cherowbrier, Vice President, International Development, noel@tecan.co.uk; Shaun Mason, Sales Manager, s.mason@tecan.co.uk.

Technical Manufacturing Corp.

#714

15 Centennial Dr, Peabody, MA, 01960
978/532-6330; fax 978/531-8682
lsiraco@techmfg.com; www.techmfg.com

New Product: Mag-NetX senses and cancels ambient magnetic fields in labs with electron-beam instruments.

TMC manufactures a complete line of Optical Tops and Vibration Isolation systems. Key features include the patented CleanTop® II spill-proof tops and Gimbal Piston® isolators for vertical and horizontal vibration isolation. New products include STACIS® piezoelectric active vibration isolators, Lightweight Breadboards, Cleanroom Compatible systems and Radius Corner Tops. TMC has full custom capabilities. Contact: Kyle Erlandsen, Application Engineer, KyleE@techmfg.com.

TecOptics, Inc.

#437

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. MicroEtalons for fiberoptics communications. Substrates to 26" diameter. Diode-pumped solid state lasers from Laser Quantum, 473 nm to 1064 nm wavelengths, 100 mW to 10 W output powers, new mode-hop-free single frequency models; excellent stability and high quality at reasonable prices. Contact: Warren Gutheil, President, wgutheil@tecoptics.com.

Photonics West Exhibitor Directory

Tecport Optics, Inc.

#1637

6901 TPC Dr Ste 450, Orlando, FL, 32822
407/855-1212; fax 407/855-1213
sales@tecportoptics.com; www.tecportoptics.com

Manufacturer of coating systems for: Precision Optics, Ophthalmic, Flat Panel Displays, Imaging and Telecommunication. Systems range from bell jar to three-stages isolation box coater; manual to fully automatic; batch to cluster tool; single to in-line mass production. Tecport Optics' systems reflect reliability, flexibility and cost effectiveness. Tecport provides On-Site Service and Service Contract for all coating systems. **EXTREME COMPETITIVE PRICING.** Contact: Joseph Kim, Vice President, jkim@tecportoptics.com.

Teem Photonics

#6151

61 Chemin Du Vieux Chene, Meylan, France, 38246
33 476 04 05 06; fax 33 476 04 07 06
sales@teemphotonics.com; www.teemphotonics.com

Teem Photonics specializes in microlasers and integrated optics. We are featuring our line of passively Q-switched microlasers, acquired from JDS Uniphase. These are compact DPSSLs distinguished by their high energy, sub nanosecond pulses at high repetition rates. These lasers operate in the NIR, green and UV frequencies used in biophotonic, micromachining, marking, surveying, sensing and other applications. We also present our integrated optical components for packaged diode laser applications. Contact: Jay Liebowitz, Business Development & Strategy, GM Microlaser, j.liebowitz@teemphotonics.com; Thierry Fourrier, Product Line Manager Microlaser, t.fourrier@teemphotonics.com.

Telemark

#1740

51 Whitney Pl, Fremont, CA, 94539
510/770-8700; fax 510/770-8879
sales@tfi-telemark.com; www.tfi-telemark.com

New Product: Expanded range Optical Monitor (200nm - 1670nm), Water Vapor Cryotrap, enhanced magnetics E-Guns.

Telemark is a leading supplier of electron beam sources and related components for evaporation processes, including power supplies, water vapor cryotrap, optical monitors and quartz crystal monitors. Contact: Gary Henderson, President, garyh@tfi-telemark.com; Russ Schroy, Sales Manager, russ@tfi-telemark.com.

TELOPS Inc.

#2039

100 - 2600 ave St-Jean-Baptiste, Québec, QC,
Canada, G2E 6J5
418/864-7808; fax 418/864-7843
contact@telops.com; www.telops.com

Telops designs and manufactures high quality, innovative products. Let Telops accelerate your progress with a complete line of advanced burn-in, lifetest and characterization stations for manufacturers of optronics devices. Engage Telops' world class R&D team for state-of-the-art results in optronics for telecommunications and remote sensing. Contact: Michel Roy, Vice President, Sales & Marketing, michel.roy@telops.com; John Tessitore, Business Development Manager, john.tessitore@telops.com.

Tempo Foam Boxes for Optics

#5062

1227 N Miller Park Ct, Visalia, CA, 93291
559/651-7711; fax 559/651-0123
tempo@tempo-foam.com; www.tempo-foam.com

TeraXion Inc.

#6194

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 employing absolute frequency control for applications where a high degree of laser accuracy, and stability are required. Contact: Arkell Farr, Business Development Manager, afarr@teraxion.com; Erick Pelletier, Vice President Sales & Marketing, epelletier@teraxion.com.

Texas Instruments DLP®

#2029

DLP™ Div, 6550 Chase Oaks Blvd, Plano, TX, 75023
214/567-6839; fax 214/567-5106
dlpww@list.ti.com; www.dlp.com

New Product: DMD Discovery™ 3000 featuring the .7 XGA LVDS DMD.

DLP technology made by Texas Instruments is now available to developers to load data into the DMD and create light patterns with high update rates. Discovery products are flexible by design to facilitate exciting new products based on DLP™ technology. Contact: Cheraina Dunn, Business Development Manager, DLP Catalog, cvick@ti.com.

Thales Electro-Optics Pte

#1535

14 Fifth Lokang Rd, Jurong Town, Singapore, Singapore,
629763

65 265 5122; fax 65 265 1479

customerservice@thalesgroup.com; www.thales-eo.com.sg

New Product: Design and manufacture advanced precision optics and assemblies.

Thales Electro Optics (TEO), located in Singapore, is a leading high tech company, renowned for its quality, reliability and competitiveness in supplying and designing optical components and assemblies for defence and commercial applications. Contact: Vincent Thong, Business Manager (Commercial Optics), vincent.thong@sg.thalesgroup.com; Brian Ng, Senior Business Engineer, brian.ng@sg.thalesgroup.com.

Thales Laser

#5091

Domaine de Corbeville - RD 128, Orsay Cedex,
France, F-91401

33 1 69 33 00 00; fax 33 1 69 33 94 58

thales-laser@fr.thalesgroup.com; www.thales-laser.com

New Product: The FEMTOCUBE is a single box laser with pulse width from 30 to 150fs and full supervision software.

Manufactures Q-switched Diode-Pumped Solid-State Lasers. Products cover scientific research, precision micromachining and OEM applications. Lasers include YAG, YLF, Terawatt (over 100TW or 100Hz) and ultrafast kilohertz Ti:Sa systems. Ultrafast lasers benefit from supervision and synchronization: MASTERCLOCK offers up to 20 synchronized outputs with low jitter and adjustable delay. It equips the FEMTOCUBE, our new single box laser with pulse width from 30 to 150fs and full supervision software. Contact: Ariane Andreani, System & Product Sales Manager, ariane.andreani@fr.thalesgroup.com.

Thales OPTEM Inc.

#1535

78 Schuyler Baldwin Dr, Fairport, NY, 14450
585/223-2370; fax 585/223-3413
info@thales-optem.com; www.thales-optem.com

New Product: Fetura™ Technology is an innovative design for the next generation of high-speed vision applications.

Thales Optem specializes in the development and manufacturing of optical components for machine vision, research and imaging applications. We offer custom optical design engineering, prototyping and contract manufacturing services at component, subassembly and system solution levels. Our brands include Optem® Zoom Systems, Optem® Camera Couplers, A-Zoom2™ Automated Microscopes, OptiGrid™ Structured-Light Imaging System, and Fetura™ Advanced Zoom Imaging. For more info visit www.thales-optem.com Contact: Ron Kramer, Director of Sales, ron.kramer@thales-optem.com; José Suro, President/Chief Executive Officer, jose.suro@thales-optem.com.

Thales Optical Coatings

#1535

Lange Science Park, 1 Western Wood Way, Plympton Devon, United Kingdom, PL7 5BG
44 1752 341943; fax 44 1752 342467
www.thalesopticalcoatings.co.uk

Thales Optics

#1535

Glascoed Rd, St Asaph Denbighshire, United Kingdom, LL17 0LL
44 1745 588 002; fax 44 1745 584 258
alan.jensen@uk.thalesgroup.com; www.thales-optics.co.uk

Thales Optics specialises in the design, development and manufacture of complex optical modules and components for the defence, aerospace, industrial, commercial and space markets around the world. One of the leading European manufacturers, the company has comprehensive in-house capabilities to process infrared materials and to design, construct, polish, coat and mount optical elements. Between the team of optical designers, they have more than 160 years of optical design experience. Contact: Paul Dustain, paul.dustain@uk.thalesgroup.com; Alan Jensen, Communications Manager, alan.jensen@uk.thalesgroup.com.

Thales Optische Systeme

#1535

Industriestr 10, Asslar, Germany, 35614
49 6441 98960; fax 49 6441 989621
www.thales-optik.de

Optical blank manufacturing, achromatic lens systems, prisms, beam splitters, optical lenses, micro-optical systems, optical endoscope lens systems, plano parts, specification of optical lens systems individually for our customers, lens systems for recording and projection for CCD-/CS-Mount equipment, telecentric lens systems, 6.5 times zoom lens systems and attachment, mechanical parts, zoom-stereomicroscope, coating, lenses for the telecommunication, silicon lenses, fused silica, Gadium, sapphire lenses. Contact: Martin Hofmann, Director Marketing and Sales, martin.hofmann@thales-optik.de; Alfred Gottwald, Marketing and Business Development Director, alfred.gottwald@thales-optik.de.

Thales Optronics (Taunton)

#1535

Lisieux Way, Taunton, United Kingdom, TA1 2JZ
44 1823 331071; fax 44 1823 274413
laser.capabilities@uk.thalesgroup.com; http://
www.thalesgroup-optronics.com/dos/default.shtml

Thales Optronics (Taunton) offers an advanced Beryllium and Beryllium Composite manufacturing capability including machining, heat treatment, plating, vacuum coating, assembly and testing. The in-house facility features some of the most advanced plant and process technology permitting the manufacture of high precision optics and structures for a wide range military and civil applications. Contact: Peter Gordge, Business Development Manager, peter.gordge@uk.thalesgroup.com; Peter Nation, Product Manager, peter.nation@uk.thalesgroup.com.

THALES Polymer Optics

#1535

1318 Palomares Ave, La Verne, CA, 91750
909/593-9330; fax 909/596-1452
info@polymeroptics.com; www.polymeroptics.com

Thales Polymer Optics, Inc. is a leading manufacturer of precision molded plastic optics, equipped with a fully integrated tool shop, molding plant and diamond turning facility. We offer cost-effective polymer optical solutions, ranging from quick turnaround prototype fabrication to production runs of millions of components. The optics produced includes aspheric, off-axis parabolic mirrors, diffractive optics, hybrid optics, cylinders and conventional optics. Contact: Tim Warner, Sales Manager, Tim@polymeroptics.com.

Thermo Electron, CIDTEC

#6022

101 Commerce Blvd, Liverpool, NY, 13088
315/451-9410; fax 315/451-9421
sales.cidtec@thermo.com; www.thermo.com

Thermo Electron Corp.

#6011

5225 Verona Rd, Madison, WI, 53711
608/273-6100; fax 608/273-5046
analyze@thermo.com; www.thermo.com

Thermotek Inc.

#6265

1454 Halsey Way, Carrollton, TX, 75007
972/242-3232; fax 972/242-1195
thermotek@thermotekusa.com; www.thermotekusa.com
New Product: ThermoTek's RC rack mount chiller is 3U tall (5.25") with up to 1100W cooling and +/-0.1°C stability.

ThermoTek manufactures the highest performance and reliability thermoelectric chillers in the smallest packages. Our stand alone and rack-mount chillers offer cooling up to 1,100 watts and are used throughout the laser, industrial, medical and semiconductor industries. Their innovative designs are fully customizable, provide 0.1°C temp stability and are quiet, vibration free and energy efficient. ThermoTek's new RC rack mount chiller offers the lowest profile (5.25 inches) in the industry. Contact: David R. Grey, Director of Sales, dgrey@thermotekusa.com; Andrew, Western Regional Sales Manager, azimsen@thermotekusa.com.

Thermoteknix Systems Ltd.

#6059

Teknix House, Pembroke Ave, Waterbeach, Cambridge, CB5 9QR, United Kingdom
44 1223 204000; fax 44 1223 204010
sales@thermoteknix.com; www.thermoteknix.com

New Product: MIRICLE(r) miniature rugged IR cameras for the most demanding applications in harsh environments.

Thermoteknix offer solutions from stand-alone cameras to full systems with extensive application software. Just launched is the new range of MIRICLE(r) high performance IR cameras. Also on display will be the ground-breaking VisIR(r) IR & visual imaging compact camera with direct Wi-Fi image to PC wireless transfer. Supporting software packages designed for Predictive Maintenance, On-line inspection & the most demanding R&D applications will all be available for demo on the booth. Contact: Alistair Brown, Product Manager - Imaging, a.brown@thermoteknix.com; Dick Ludwig, Sales Manager - USA, d.ludwig@thermoteknix.com. Thin Film Technology #739
153 Industrial Way, Buellton, CA, 93427
805/688-4949; fax 805/688-8487
info@thinfilmttechnology.com; www.thinfilmttechnology.com

Photonics West Exhibitor Directory

Thorlabs, Inc.

#1427

435 Rt 206, Newton, NJ, 07511
973/579-7227; fax 973/300-3600
feedback@thorlabs.com; www.thorlabs.com

New Product: Optical Coherence Tomography Microscope, Beam Profilers, Optical power meters, Spectral Radar OCT.

Thorlabs develops and manufactures equipment and tools for the photonics industry. Products include positioning and motion control tools, optics, instrumentation, laser diodes, tunable lasers and vibration isolation tables and breadboards. New products this year include OCT Microscope, Beam profilers and the new, extensive, line of power meters.

Three-Five Epitaxial Services AG (TESAG)

#1801

Kekulé Str 2-4, Berlin, Germany, 12489
49 30 6392 4570; fax 49 30 6392 4573
info@tesag.com; www.tesag.com

New Product: Epitaxial layer structures for optoelectronic devices according to your design.

TESAG is a pure-play epiwafer foundry. We provide epitaxial layer structures to your designs. Laser bars from 800 nm to 980 nm with excellent reliability and output powers exceeding 100W and single emitters with an output power of up to 10W are produced by our customers. Wafers for LEDs, superluminescent LEDs and Schottky diodes are also in our portfolio. TESAG has implemented a stringent quality control according to ISO 9001: 2000 as the basis for high yield in our customers' processes. Contact: Markus Weyers, President; Jan Jönsson, Quality Manager.

Time-Bandwidth Products AG

#1233

Technoparkstr 1, Zurich, Switzerland, CH-8005
510/222-5406; fax 413/562-5408
sales@toptica-usa.com; www.tbwp.com

Time-Bandwidth Products AG manufactures passively mode-locked pico- and femtosecond DPSS lasers using our patented SESAM(c) 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. TPI is our distributor in the US. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com.

Tinsley Labs.

#127

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 specializing in complex aspheric surfaces for reflective and refractive systems in a wide variety of sizes and materials, including glass, beryllium and silicon carbide. Contact: Clay Sylvester, Director of Sales and Marketing, csylvester@ssginc.com; Teri Bordeau, Sales Administration, tbordeau@ssginc.com.

TopGaN

#6374

29/37 Sokolowska, Warsaw, Poland, PL-01-142
48 22 876 0315; fax 48 22 876 0314
piotr@unipress.waw.pl; www.topgan.fr.pl

New Product: 100mW, CW violet laser diode (300mW expected soon). Ultra-high quality free-standing HVPE substrates.

TopGaN Ltd. is the only company possessing the technology of production of dislocation free gallium nitride substrates. This technology is based on high-pressure crystal growth and was developed in Institute of High Pressure Physics "Unipress" in Poland. TopGaN offers pulse and CW operated violet laser diodes (100mW, CW) and high quality HVPE free standing crystals of GaN. Contact: Piotr Perlin; Agata Bering, agata@unipress.waw.pl.

Toptica Photonics, Inc.

#1233

94 N Elm St Ste 101, Westfield, MA, 01085
413/562-5406; fax 413/562-5408
sales@toptica-usa.com; www.toptica-usa.com

TOPTICA Photonics Inc., T.P.I., is the U.S. subsidiary of TOPTICA Photonics A.G., a leading German manufacturer of single mode tunable diodes offered in the 250 to 1600nm region with accessories to measure, characterize, optimize, stabilize and analyze light. We also carry ps diodes and DPY fs lasers. See www.toptica-usa.com. Contact: Alain Bourdon, Sales Director, Alain.Bourdon@toptica-usa.com.

Toshiba American Information Systems

#6179

Imaging Systems Div, 9740 Irvine Blvd, Irvine, CA, 92618
949/461-4986; fax 949/470-9390
info@cameras.toshiba.com; www.cameras.toshiba.com

New Product: The Toshiba IK-TF7 is a ultra compact, lightweight, economically priced 3CCD 1/3" camera with 1024 x 768 resolution in a progressive scan format from 30 to 90 fps with on screen setup menu including RS232C setup. Pixel size is only 7.4 x 7.4. Other feature include removable IR filter; long term integration, asynchronous reset and 60 dB S/N.

The Toshiba Image Sensing Division is part of Toshiba America Information Systems and is the sole manufacturer and distributor of Toshiba branded industrial video cameras used in high end imaging applications including medical, machine vision, non destructive testing and specialized broadcasting. We produce single piece and remote head 3 CCD analog RGB cameras' single CCD remote head "lipstick" cameras and monochrome machine vision cameras. Contact: Vincent J. Giovinco, National Sales Manager, vincent.giovinco@tais.toshiba.com.

Tower Optical Corp.

#832

3600 S Congress Ave Unit J, Boynton Beach, FL, 33426
561/740-2525; fax 561/740-2518
sales@toweroptical.com; www.toweroptical.com

New Product: Micro Prisms, Achromatic Waveplates and Sapphire parts for endoscopy.

Manufacturer of waveplates, prisms, beamsplitters, lenses, windows, mirrors and micro-optics. Source of custom optics of all kinds. Large stock of waveplates for immediate delivery. Email drawings of parts required with quantity and receive a quotation in less than a week. Contact: Joel Kramer, Director of Sales, Joel@TowerOptical.com; Mel Kantor, President, MKantor@TowerOptical.com.

Triad Technology Inc.

#935

520 Saint Andrews Dr, Longmont, CO, 80501
720/494-0717; fax 720/794-0717
sales@triadtechno.com; www.triadtechno.com

Trinity Technologies

#1837

4110 Central Ave NE Ste 101, Minneapolis, MN, 55421
763/788-8278; fax 763/788-8283
info@lasersafety.com; www.lasersafety.com

TruTouch Technologies, Inc.

#1033

800 Bradbury St SE, Albuquerque, NM, 87106
505/272-7027; fax 505/272-7112
jim.mcnally@trutouchtechnologies.com;
www.trutouchtechnologies.com

New Product: A noninvasive alcohol measurement system with inherent biometric identity verification capability.

TruTouch has developed and demonstrated noninvasive alcohol testing systems using revolutionary technology. We have successfully demonstrated working prototypes in clinical studies with results that are equivalent to breath alcohol testing, the first noninvasive alcohol-testing product with a unique differentiator—a spectral biometric identity capability. Our product is based on near infrared spectroscopy and demonstrates a superior solution for providing unsupervised alcohol testing. Contact: Jim McNally, Chief Executive Officer, Jim.McNally@trutouchtechnologies.com.

TuiLaser AG

#817

Industriesstr 15, Germering, Germany, 82110
719/481-1294; fax 719/487-8360
sales_usa@tuilaser.com; www.tuilaser.com

TuiLaser is a leading manufacturer of compact excimer lasers. TuiLaser offers laser solutions range from 1064nm (DPSSL: spin-off Bavarian Photonics) to 157nm for a variety of industrial and scientific applications, e.g. Immersion Lithography; FBG, Optic Qualification, Marking, Direct Writing on Wafer, Structuring, Scribing, Micromachining, Laser Ablation (PLD, ICP-MS) U.S. Distributor: Dan Pniak, sales-usa@tuilaser.com, 719-481-1294.

TwinStar Optics

#544

6741 Commerce Ave, Port Richey, FL, 34668
727/847-2300; fax 727/847-2304
sales@starstar.com; www.starstar.com

New Product: TwinStar is now polishing and coating diffusion bonded YAG & sapphire.

Custom manufacturer of high quality laser optics. Our product line includes etalons (solid and air-spaced), waveplates, polarization rotators, prisms, lenses, wedged substrates and the fabrication of Erbium and Phosphate Glasses. Our seven automatic e-beam ion-assisted deposition box coaters produce hard, high-damage coatings for the UV-Vis-NIR. We polish a full range of linear and non-linear laser crystals specializing in Nd:YAG slabs and Nd:YAG reworks. Contact: Peter Thomas, General Manager.

Tydex JS Co.

#6138

Stavropolskaya 10-224, St Petersburg, Russia, 191124
7 812 271 2719; fax 7 812 335 9782
tyros@peterlink.ru; www.tydex.ru

New Product: Crystalline quartz optical components for UV lithography.

Producer and supplier of optical components for various applications including passive optics for lasers, spectroscopy, pyrometry and thermography, astro-optics, optics for THz and X-ray. We supply lenses, windows, prisms, mirrors, diffraction gratings, holographic notch filters, IR-polarizers, Golyay cells, HRFZ-Si, sapphire, and UV optics, Ge-, Si-, GaAs-, and ZnSe-optics, off-axis parabolic mirrors, high precision astromirrors and systems, laser crystals. Different coatings are available. Contact: Vladimir Kopchatov, Commercial Department Manager, tyros@peterlink.ru; Grigory Kropotov, General Manager, grigorykropotov@tydex.ru.

U.S. Naval Research Lab.

#6260

Code 10041, Washington, DC, 20375
202/404-2307; fax 202/767-1319
greenway@nrl.navy.mil; www.nrl.navy.mil

Two technologies available for license will be demonstrated in the NRL booth. The Modulating Retroreflector for free space communications shows capability to transmit by laser and a modulating retroreflector real-time color video. The Immersive Input Display Device, a hand-held display which eliminates both daytime readability and nighttime illumination concerns, will also be demonstrated. Contact: Jessica Burris (mod retro), Student, jessica.burris@nrl.navy.mil; Patricia Kirsch (I2D2), Researcher, patricia.kirsch@nrl.navy.mil.

UBIFRANCE

#1942

14 Avenue D'Eylau, Paris, France, F-75116
33 1 40 73 30 00; fax 33 1 40 73 39 79
www.ubifrance.fr

UBIFRANCE, the French Agency for International Business Development, strengthen technical and business cooperation between France and partners world-wide. We offer French companies a full range of products and services designed to support them in their efforts to penetrate foreign markets. To promote French products, services and technical expertise, UBIFRANCE arranges multisector exhibitions and operates information programmes: French products presentation of abroad, visits and conferences. Contact: Romain Belveze, Project Manager, romain.belveze@ubifrance.fr; Laurence Salomon, Assistant, laurence.salomon@ubifrance.fr.

UK/US Partners Pavilion

#2044

West Court, Enterprise Rd, Maidstone Kent, United Kingdom, ME15 6JD
44 1622 754200; fax 44 1622 203048
steve.lindsey@tradefair.co.uk; www.tradefair.co.uk

Visit the UK@ Photonics West Pavilion and find the business partners you are seeking. The UK / US Partners Pavilion is sponsored by Sira, supported by UK Trade & Investment and coordinated by Trade Fair Support. The UK exhibitors are exhibiting a wide range of products, services and technologies, many of which are being seen for the first time at Photonics West 2006. Please visit the UK / US Partners Pavilion at booth 2044 for further information and a UK Group Directory.

Photonics West Exhibitor Directory

ULIS

#6189

PO Box 27 Zone Industrielle, Veurey Voroize,
France, F-38113
33 4 76 5374 70; fax 33 4 76 5374 80
ulis@ulis-ir.com; www.ulis-ir.com

New Product: new IR detector, 640x480/25 μ m, full TV resolution, for low cost equipment.

ULIS is a subsidiary of SOFRADIR and CEA (French Atomic Energy Agency). The mission of ULIS is the development and the production of uncooled infrared detectors intended 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: Jean-Luc Tissot, Technical & Commercial Director, jl.tissot@ulis-ir.com; Jean-Louis Lauront, Area Manager, jl.lauront@ulis-ir.com.

ULM Photonics GmbH

#1333

9 River Rd, Hudson, NH, 03051
603/821-7040; fax 603/821-7041
buettner@laser-components.com;
www.lasercomponents.com

New Product: Single mode VCSELs from ULM Photonics are available w/ wavelength tolerance of +/-10 to +/-1nm.

ULM Photonics is a leading edge manufacturer of VCSELs, Photodiodes and High Power VCSELs for Datacom, Automotive and Sensing. Single mode VCSELs from 760nm to 948nm 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: Paul Buettner, Sales Engineer, buettner@laser-components.com; Gary Hayes, Chief Executive Officer/General Manager, hayes@laser-components.com.

ULTRA Tec Mfg., Inc.

#2011

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.

UltraVolt, Inc.

#332

1800 Ocean Ave, Ronkonkoma, NY, 11779
631/471-4444; fax 631/471-4696
info@ultravolt.com; www.ultravolt.com

New Product: Configurable HV Rack with outputs from 62V to 40KV. 1 to 4 Channels up to 250 Watts each.

UltraVolt produces 400+ models of high-voltage dc/dc converters. Output voltages are available in ranges from 0 to 62V through 0 to 40kV. Output power is available from 4 watts to 250 watts with nominal 12V to 24V inputs. All units can be operated as low as 9VDC or as high as 32Vdc with derating. Models are analog programmable and DAC ready. Units feature output-over-current protection with self-recovery. Ultra-low ripple is available down to <3mV. Contact: Richard Bailey, Marketing Coordinator, Richard.Bailey@ultravolt.com.

Umicore Thin Film Products

#6363

4 Townsend West Unit 12, Nashua, NH, 03063
603/594-1500; 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. ISO 9001. Contact: Chaffee Tran, Sales Engineer, chaffee.tran@umicore.com.

UNCC - Center for Opto Electronics and Optical Communications

#6232, #6233

Burson 135A, 9201 University City Blvd, Charlotte, NC,
28223-0001
704/687-6078; fax 704/687-6077
mafiddy@uncc.edu; http://opticscenter.uncc.edu

Unice E-O Services Inc.

#5106

Chung Li Industrial Park, 3F No 25-2 Ji Lin Rd Chung Li,
Taoyuan, Taiwan, 320
886 3 462 6569; fax 886 3 462 5586
unice@ms4.hinet.net; www.unice.com.tw

unique-m.o.d.e. AG

#1933

Felsbachstr 7, Jena, Germany, 07745
49 3 641 5750; fax 49 3 641 575 575
info@unique-mode.de; www.unique-mode.de

New Product: UM20k/100/20 915nm - 20W from 100 μ m fiber N.A. 0.22 - high brightness fiber laser pump source.

unique-m.o.d.e. is a technology leader in the area of high-brightness OEM diode laser systems based on broad area laser diodes and diode laser bars. The globally unique brightness of these laser modules enables novel advanced applications in end pumping, medical treatment, graphic arts, processing and instrumentation. unique-m.o.d.e. innovates micro optical design and guarantees its implementation in trend setting precision manufactured volume products by partially automated assembly processes. Contact: Torsten Scheller, Chief Executive Officer, t.scheller@unique-mode.de; Thomas Wittschirk, Manager Sales & Marketing, t.wittschirk@unique-mode.de.

United Lens Co., Inc.

#1339

259 Worcester St, Southbridge, MA, 01550-1376
508/765-5421; fax 508/764-1558
www.unitedlens.com

New Product: Coatings, Polished Flat Optics, Machined Blanks, Molded Blanks, ONE STOP SHOPPING.

Custom manufacture hand molded and precision machined optical blanks; ground and polished flat optics; and thin-film vacuum coatings. Large Inventory of Optical Glass, Pyrex®, Fused Silica, Quartz, Low Expansion Materials, Filter Glass. Flexible production capabilities ensure both availability and timely delivery. Contact: Nancy Darbee, Sales Manager - Opamtical Fabrication, ndarbee@unitedlens.com; Sherry Ouellette, Sales Manager - Service Center, souellette@unitedlens.com.

Univ. of Arizona, College of Optical Sciences #419

1630 E University Blvd, Meinel Bldg #94,
Tucson, AZ, 85721-0095
520/621-4111; fax 520/626-1480
academics@optics.arizona.edu; www.optics.arizona.edu
The Optical Sciences Center offers one of the world's foremost teaching and research programs in optics. The Center's 55 professors teach over 100 graduate and undergraduate optics courses. The Center's 400 students have the opportunity to participate in a variety of pioneering research programs. The Optical Sciences Center also offers distance learning opportunities for companies and individuals, including programs leading to a Master of Science or a graduate certificate in Optical Sciences. Contact: Richard L. Shoemaker, Associate Dean, Academic Programs, shoemaker@optics.arizona.edu; Barbara Myers, Manager, Academic Services, bmyers@u.arizona.edu.

Univ. of Central Florida #1639

PO Box 162700, Orlando, FL, 32816-2700
407/823-6800; fax 407/823-6880
info@creol.ucf.edu; www.optics.ucf.edu
Located in the vibrant high-tech region of Orlando, Florida, the University of Central Florida is home to 44,000 students and The College of Optics and Photonics: CREOL & FPCE. The College of Optics and Photonics is the first college in the United States to be granted college status and has 29 faculty, 157 graduate students and \$20 million in annual funding. Contact: Courtney Lewis, Assistant Director, Academic Services & Marketing Communications, clewis@creol.ucf.edu.

The University of North Carolina at Charlotte SPIE Student Chapter #6021

Physics/Opt.Science Dept., 9201 University City Blvd,
Charlotte, NC, 28223
704/687-2817; fax 704/687-3160
spie_uncc@hotmail.com; www.sco.uncc.edu/spie

Thermatron Engineering Inc. #436

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. Thermatron enjoys an international reputation for customer service and responsiveness.

Universal Photonics, Inc. #1435

495 W John St, Hicksville, NY, 11801-1014
516/935-4000; fax 516/935-4039
info@universalphotonics.com; www.universalphotonics.com
Universal Photonics offers a comprehensive line of surfacing and polishing materials and machinery for processing all types of precision and electro-optics substrates. Universal manufactures Rhodes Unalon® polishing pads, a microcellular elastomer materials, as well as polishing and blocking pitches, waxes, Rhodol liquid polishing compounds, ultra-pure alumina powders, custom blended slurries and surfactants. Universal produces the Hastilite® series of unique ultrafine compounds, which yield sub-angstrom finishes on critical optics, as well as a comprehensive line of Rhodite® brand polishing compounds. Universal manufactures the Advantage line of precision machinery, coupled with the Swiss DAMA line to comprise a broad solution to cost effective, high quality machinery for optics production. Contact: Dave Keller, National Sales Manager; Gary Duncan, Technical Sales.

University of Applied Sciences Harz Wernigerode #1801

Friedrichstr 57-59, Wernigerode, Germany, 38855
49 3943 659 351
info@hs-harz.de; www.hs-harz.de
New Product: Optical teaching system - OPTOTEACH, using WDM-Technology, assisted through an interactive software.
With its innovative curricula in three faculties, the Harz University offers a wide range of study courses to choose from. This offer is designed for the requirements of the modern job market in Germany as well as abroad. The Harz University is a young and dynamic academic institution, founded in 1991, with presently more than 3000 students. The research institutes and its department knowledge and research transfer center provide services to enterprises of all sizes in the region. Contact: Ulrich H. P. Fischer-Hirchert, rer. nat., ufischerhirchert@hs-harz.de; Jens-Uwe Just, Dipl.-Ing. (FH), jjust@hs-harz.de.

University of Rochester, The Institute of Optics #336

Wilmot Bldg, River Campus, Rochester, NY, 14627
585/275-2322; fax 585/244-4936
www.optics.rochester.edu
The Institute of Optics is the original university Optics program in the United States, founded in 1929. More than 2400 B.S., M.S. and Ph.D. degrees in Optics have been granted, and students receive broad instruction in Optical Physics, Applied Optics and Optical Engineering. Companies can interact with The Institute through its Industrial Associates Program and 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.

Upstate South Carolina Alliance #6232, #6233

124 Verdae Blvd Ste 202, Greenville, SC, 29607
864/283-2300; fax 864/283-2310
marketing@upstatealliance.com; www.upstatealliance.com

US Conec Ltd. #6232, #6233

1555 4th Ave SE, Hickory, NC, 28602
828/323-8883; fax 828/322-7120
russgranger@usconec.com; www.usconec.com

Vacuum Engineering & Materials Co., Inc. #6283

131-B Albright Way, Los Gatos, CA, 95032
408/871-9900; fax 408/871-2900
sales@vacengmat.com; www.vacengmat.com
VEM is your source "For All Your Thin Film Needs". VEM Products include all shapes and sizes of sputtering targets and evaporation materials — in single element metals, alloys, precious metals, composites, cermets, intermetallics, dielectrics, co-metallics and ceramics. Other products and services include E-Beam liners, backing plates, PM reclaim and in-house target bonding. VEM, with their web site at www.VacEngMat.com, is the exclusive Western Area Distributor for CERAC. Contact: Gina Craig, Sales, GCraig@VacEngMat.com; Marco Garcia, Sales, MGarcia@VacEngMat.com.

V-gen #5109

1 Betzalel St, Ramat Gan, 52521, Israel
972 3 5755756; fax 972 3 5299707
eran@vg-eo.com; www.vgen.com

Photonics West Exhibitor Directory

Vacuum Process Technology, Inc. #1918

70 Industrial Park Rd, Plymouth, MA, 02360
508/732-7200; fax 508/732-0317
sales@vptec.com; www.vptec.com

Since 1991, VPT has specialized in providing cost-effective vacuum equipment and process solutions to customers' requirements. VPT supplies custom and standard equipment to a wide range of coating and treatment applications worldwide. VPT has earned the reputation as the premier supplier of Precision Optical Coating Systems. Contact: Steve Chiavaroli, Vice-President, Sales.

Valley Design Corp. #1441

West Coast Div, 151-D Harvey W Blvd,
Santa Cruz, CA, 95060
831/420-0595; fax 831/420-0592
info@valleydesign.com; www.valleydesign.com

New Product: Stainless steel and Aluminum mirrors, precision metal optics, superpolished Molybdenum mirrors.

ISO 9002 US manufacturer of substrates, wafers, windows and flat optical components. Provider of precision lapping, polishing, dicing, wafering, grinding, backthinning, optical edge polishing services. Materials processed: Fused Silica, Quartz, Optical Glasses, Sapphire, Silicon, Aluminas, Aluminium Nitride, Germanium, GaAs, PZT, LiNbO₃, Metals and many others. Many materials in stock. All processing done in house, incorporated since 1975. East and West Coast facilities. Contact: Mandi Indars, Director, Sales & Marketing, mandi@valleydesign.com.

Varian Vacuum Technologies #1242

3120 Hansen Way, Palo Alto, CA, 94304
800/882-7426; fax 781/860-5405
vpl.customer.service@varianinc.com; www.varianinc.com

Varian Vacuum Technologies is a full-service vacuum product supplier, manufacturing a wide-range of high vacuum pumps (turbopumps, ion pumps, diffusion pumps, roughing pumps, and scroll pumps). We also offer a variety of gauges, valves, hardware and leak detectors, plus local training classes. World-wide support and local service. ISO-9001 certified. Contact: Varian Vacuum Customer Service.

Varian, Inc. #520

3120 Hansen Way, Palo Alto, CA, 94304
650/424-5449; fax 650/858-0480
customercare@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 S.A. #1940

Bâtiment Tony Garnier, 8 B Rue Hermann Frenkel, Lyon,
France, F-69007
33 4 37 65 35 31; fax 33 4 37 65 35 30
john.barber@varioptic.com; www.varioptic.com

New Product: "Electrowetting" Technology to the Communications, Industrial, Security and Entertainment Markets.

Varioptic is the world leader in liquid lens technology. Varioptic pioneered the development of Electrowetting Technology to create revolutionary auto focus and zoom lenses with absolutely no moving parts. Varioptic is led by CEO Etienne Paillard and founder/inventor and CTO Bruno Berge. Contact: John Barber, Vice President Business Development.

VCT AG Vision Crystal Technology AG #1801

Lügensteinweg 27, Göxe, Germany, 30890
49 5108 6446 0; fax 49 5108 6446 11
info@vct-ag.com; www.vct-ag.de

Veeco Instruments #720, #721

100 Sunnyside Blvd, Woodbury, NY, 11797
516/677-0200; fax 513/677-0248
info@veeco.com; www.veeco.com

Veeco is a worldwide provider of metrology instruments, including optical and stylus profilers, for lab and production measurement of precision surfaces and components. Applications include optics/optical systems, MEMS, thin and thick films, semiconductors, data storage components and medical devices. Veeco also supplies the broadest line of ion sources for optical coatings and MBE research and production systems for wireless/telecommunications applications. Contact: Joan Horwitz, Marcom Manager, jhorwitz@veeco.com; Fran Brennan, Marcom Director, fbrennen@veeco.com.

Vermont Photonics, Inc. #6051

33 Bridge St, PO Box 516, Bellows Falls, VT, 05101
802/460-1790; fax 802/460-1796
mail@vermontphotonics.com; www.vermontphotonics.com

Optical testing, metrology and quality control equipment. Autocollimators, collimators, focimeters, dioptrimeters, alignment telescopes, refractometers. Instrument, TV systems and related accessories. New Tunable Terahertz radiation source. Contact: Michael Mross, Customer Service; Tom Lowell, Customer Service.

Verrillon, Inc. #6142

15 Centennial Dr, North Grafton, MA, 01536
508/890-7100; fax 508/839-6688
info@verrillon.com; www.verrillon.com

New Product: optical fiber, fiber, specialty fiber, cable.

Verrillon, Inc. develops, manufactures and markets innovative specialty optical fiber and fiber-based solutions for the telecommunications, defense, and geophysical markets. The Company is based on a business model that focuses on technology innovation and on providing its customers with rapid product development and flexible, high-volume manufacturing. Contact: Dana DuToit, Director of Sales, dutoit@verrillon.com; Imtiaz Majid, Product Manager, majid@verrillon.com.

VERTILAS GmbH #1801

Lichtenbergstr 8, Garching, Germany, 85748
49 89 5484 2000; fax 49 89 5484 2019
info@vertilas.com; www.vertilas.com

VIGO Systems S.A. #632

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

Manufacturer of stock and custom MCP IR detectors both TE cooled and uncooled with single and multiple elements. Fast detectors for laser diagnostics. Sensitive detectors for analytical instruments. Contact: Fred Perry, President, fsp@boselec.com.

Vincent Associates

#333

803 Linden Ave, Rochester, NY, 14625
585/385-5930; fax 585/385-6004
vincentassociates@uniblitz.com; www.uniblitz.com

Vincent Associates is the manufacturer of UNIBLITZ electronically programmed shutters and shutter drive systems, with standard devices (including the new CS and the VS series of high reliability shutter systems) and custom configurations available. Standard aperture sizes ranging from 1mm - 90mm with many types of microscope and video mounting systems offered for specific shutter mounting applications. OEM systems are also available. Contact: Stephen Pasquarella, Senior Vice President, spasq@uniblitz.com; Adam J. Lamb, Vice-President of Manufacturing, alamb@uniblitz.com.

Virtual Industries, Inc.

#1607

2130 Victor Pl, Colorado Springs, CO, 80915
719/572-5566; fax 719/572-5504
info@virtual-ii.com; www.virtual-ii.com

Manufacturers of a complete line of vacuum handling tools and accessories. Products are designed to handle items such as optics, electronic packages or medical devices. Parts size handling ranges from as small as .005" up to well over 12". All products are made in the USA and come with a 90 day warranty.

VisiMax Technologies, Inc.

#3027

9177 Dutton Dr, Twinsburg, OH, 44087
330/405-8330; fax 330/405-8332
dclark@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, President, dclark@visimaxtechnologies.com.

Vision GmbH

#1801

Lügensteinweg 27, Göxe, Germany, 30890
49 5108 6446 0; fax 49 5108 6446 11
info@vision-lasertechnik.de; www.vision-lasertechnik.de

Vision GmbH is a traditional German laser manufacturer with more than 20 years experience. Our primary market fields with more than 1000 installed systems are industrial welding, cutting and medical lasers. Optical and opto-mechanical components together with crystal growing and polishing underline the vertical range of manufacturing and the professionalism of our systems. Our youngest products are diode pumped mode locked femtosecond lasers for industrial medical and scientific application. Contact: Udo Buenting, Diploma in Engineering.

Vision Systems Design

#514

98 Spit Brook Rd, Nashua, NH, 03062-2810
603/891-0123; fax 603/891-0587
www.vision-systems.com

Vision Systems Design reaches a worldwide audience of engineers and engineering managers at system integrators and end-user organizations who design, develop, manufacture and integrate components and subsystems for vision and imaging-based systems. As the leading global imaging and vision publication, Vision Systems Design is dedicated to providing the latest in technology, application, new product and business information. Contact: W. Conard Holton, Editor in Chief, cholton@pennwell.com.

Visitech AS

#6196

PO Box 616, Drammen, Norway, 3003
47 3222 7700; fax 47 3222 7701
contact@visitech.no; www.visitech.no

New Product: Custom designed light engines and LUXBEAM™ Platform solutions for industrial DLP applications.

Visitech AS offers product development and engineering services for microdisplay based light engines for industrial and imaging applications. Relying on a 10 years close cooperation with Texas Instruments, Zeiss and other subsystem suppliers, Visitech has gained a leadership position in DLP based electronics and system development, system integration and production transfer. Other fields of expertise are innovative LED light sources and state-of-the-art wireless image data transfer solutions. Contact: Roy Almedal, Managing Director, roy.almedal@visitech.no; Alfred Jacobsen, Business Development Manager, alfred.jacobsen@visitech.no.

Visotek Inc.

#5126

46025 Port St, Plymouth, MI, 48170
734/453-0775; fax 734/354-3335
info@visotekinc.com; www.visotekinc.com

Provider of fiber coupled high power diode laser systems, special optics and laser production services that simplify the use of lasers in commercial, military and research applications. The laser systems are modular and range from Ws to kW delivered in fibers from 400µm to 1500µm. The systems are efficient sources for pumping of solid state lasers and typical industrial applications include hardening, soldering, plastics welding, heating silicon, DMD and laser assisted machining. Contact: Sheila Jensen, President & Chief Executive Officer, sjensen@visotekinc.com; Stefan Heinemann, Vice President & Chief Technical Officer, sheinemann@visotekinc.com.

VisQuaNet

#1801

Erfurter Str 11, Jena, Germany, 07743
49 3641 448735
www.vct-ag.com

VLOC, Inc.

#1920

7826 Photonics Dr, New Port Richey, FL, 34655
727/375-8562; fax 727/375-5300
info@vloc.com; www.vloc.com

New Product: VLOC has acquired the sales & marketing rights to Konoshima Ceramic Oxide laser materials.

Manufacturer of fluoride and oxide crystals including YAG, YLF, ruby, LiSAF, LiSGaF and YVO₄. Nonlinear materials include KTP 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: Robert Drouse, Sales and Marketing Manager.

VMI, Inc.

#3002

211 E Weddell Dr, Sunnyvale, CA, 94089
408/745-1700; fax 408/745-6721
sales@vmivideo.com; www.vmivideo.com

Sony & Tattile Visual Imaging distributor, specializing in innovative, cost effective image acquisition and processing solutions for Wafer & Defect Inspection, Biotech, Microscopy, Industrial Automation, Robotics Vision, Surveillance & Security Control & Traffic Monitoring. Cameras: Color, Monochrome, Digital IEEE-1394, Progressive Scan, HD, High Speed, IP Addressable, Pan-Tilt-Zoom, Block & UV. Also offering: Lenses, Illumination, Custom Cable Assemblies, Video Distribution Amps & Monitors. Contact: Julio Ancheta, Sales, jancheta@vmivideo.com; Steve Slade, Sales, sslade@vmivideo.com.

Volga Technology Ltd.

#5125

11 Clos Castell Newydd, Bridgend,
United Kingdom, CF31 5DR
44 700 5984 072; fax 44 700 5964 073
www.volgatechnology.com

New Product: The SLM-2-01 is a laser array with 1550 nm, 300 W peak output power.

Volga Technology supplies semiconductor superluminescent diodes and lasers from one of the longest established laser manufacturing sites. The long learning curve and stable workforce mean that we can offer reliable production in volume. Contact: Philip Owen, Director, pw@volgatechnology.com.

Volpi Manufacturing USA

#6238

5 Commerce Way, Auburn, NY, 13021-2204
315/255-1737; fax 315/255-1202
volpi@volpiusa.com; www.volpiusa.com

New Product: Volpi IX-5100 Fiber Optic Lightsource with long life EKE bulb and constant color temperature.

Volpi is a global development and manufacturing company, providing solutions in fiber optics, optics and optoelectronics. Design and manufacture of standard fiber optic lightsources and custom Fiber optics for Sensors, Laser Transmission and Medical Light Technology. Serving Microscopy, Machine Vision, Medical and Custom Component markets. Contact: Tony Ruffini, Business Unit Manager, truffini@volpiusa.com; Scott Kittelberger, Chief Technology Officer, sk@volpiusa.com.

VueMetrix

#5057

1190-H Mtn View-Alviso Rd, Sunnyvale, CA, 94089
408/734-9974; fax 408/734-7997
info@vuemetrix.com; www.vuemetrix.com

VueMetrix manufactures a broad range of laser diode control systems designed for OEM customers. Using a combination of proprietary hardware and software design a single controller can be used in the lab, as a stand-alone system controller or as an embedded controller. VueMetrix controllers combine laser diode control with multiple TEC drivers and fault monitors to provide powerful system control. Products range from low current DPSS to multi-kW bar and stack controllers. Contact: Eric Smoker, Vice-President, Sales, eric.smoker@vuemetrix.com.

WAHL optoparts GmbH

#1415

Str der Deutschen Einheit 6, Triptis, Germany, 07819
49 36 482 450; fax 49 36 482 45 111
info@wahl-optoparts.de; www.wahl-optoparts.de

New Products: CMOS camera module, Ø=5mm for different applications, esp. medical technology, flexible adaptable.

WAHL optoparts produces precision optical components in plastic. We have taken up the trend of a closed process chain in due time. Today we are able to offer our clients all procedures commenced by the development, followed by the production and coating of optical components, up to the assembling of opto-electronical and opto-mechanical systems. For us it is important to keep this process chain in one hand to reduce interfaces and accordingly save costs in production. Contact: Daniel Boehme, Member of Executive Board, d.boehme@wahl-optoparts.de.

Warsaw Univ. of Technology SPIE Student Chapter

#6102

8 SW A Boboli St, Warsaw, Poland, 02-525
48 22 660 8602; fax 48 22 660 8601
imif@mchtr.pw.edu.pl; http://imif.mchtr.pw.edu.pl

Wasatch Photonics

#838

1305 N 1000 W Ste 120, Logan, UT, 84321
925/274-1500; fax 925/930-8033
info@wasatchphotonics.com; www.wasatchphotonics.com

New Product: Wasatch Photonics now offers a line of gratings at 600, 1145, 1200 and 1800 l/mm available online.

Wasatch Photonics designs and manufactures high-performance, volume phase holographic gratings (VPHGs) using advanced DiChromated Gelatin technologies. Our transmission gratings can combine high dispersion, high S & P efficiencies and wide bandwidths. They are athermal, sealed in glass and scratch-resistant. Applications include laser, spectroscopy and telecom. Contact: Elroy Pearson, Electro-Optical Engineer, ElroyPearson@WasatchPhotonics.com; Robert W. Rallison, Professional Holographer, RobRallison@WasatchPhotonics.com.

WaveFront Sciences, Inc.

#128

14810 Central Ave SE, Albuquerque, NM, 87123-3905
505/275-4747; fax 505/275-4749
info@wavefrontsciences.com;
www.wavefrontsciences.com

New Product: Shack-Hartmann wavefront sensor with wavelength range 8.0 to 9.2 microns.

WaveFront Sciences provides full-service design and manufacturing capabilities for micro-optics and wavefront sensor based instrumentation for lasers, optics, ophthalmology and semiconductor metrology. The CLAS-2D™ system provides a complete line of products for the analysis of visible, infra-red, continuous, and pulsed lasers. CLAS-2D™ also provides advantages to most optical test requirements traditionally addressed by interferometry. Contact: Harry Skolnik, Sales Representative, hskolnik@hotmail.com.

Wavelength Electronics, Inc.

#1144

51 Evergreen Dr Ste B, Bozeman, MT, 59715-2458
406/587-4910; fax 406/587-4911
ward@teamwavelength.com; www.teamwavelength.com

New Product: LDTC2/2 Combines a 2.2A Laser Driver and Temperature Controller with convenient packaging.

Laser Diode Drivers and Temperature Controllers. Simply Advanced Control Technology that Achieves Cutting Edge Performance! WEI designs and manufactures a wide range of robust products including components, modules and instruments for many applications including Biomedical, Semiconductor, Electro-optics, Fiber optics, Spectroscopy, Military and Research. These products provide plug and play operation slow start and current limiting features for maximum protection of your laser. Contact: Ward King, Applications Engineer, ward@teamwavelength.com; Dana Hinckley, Applications Engineer, dana@teamwavelength.com.

Wavelength Technology (S) Pte Ltd. #6100

Skytech Building, Bukit Batok St 24 #06-03, Singapore, Singapore, 365940
65 65649624; fax 65 65643862
info@wavelength-tech.com; www.wavelength-tech.com
New Product: BET BeamExpander.

Wavelength Technology was established by a group of laser optics professionals in 1998 in Singapore providing laser optics solutions and services for both industrial and medical applications.

WCU - Center for Integrated Technologies #6232, #6233

164 Belk Bldg, Cullowhee, NC, 28723
828/227-2435; fax 828/227-7838
sanger@wcu.edu; http://et.wcu.edu

Welsh Development Agency #5041

c/o WDA, Llys Llewelyn, St Asaph Business Park, St Asaph Denbighshire, United Kingdom, LL17 0LJ
44 1745 586256; fax 44 1745 586259
ceri.thomas@wda.co.uk; www.wda.co.uk

New Product: The WDA assists companies seeking a top European location for opto-electronics and related sectors.

With leading edge expertise from solar cell technology to optics and optical imaging systems, an abundance of skilled graduates and an unmatched quality of life, it's clear why multinationals such as Tyco, IQE, Thales and others prosper in Wales. OpTIC Technium (an enterprise incubation, technology and business centre) located in an existing opto-electronic cluster offers exciting opportunities for companies to locate in Wales. Contact: Helen Donovan, International Services Project Manager, helen.donovan@wda.co.uk; Cari-anne Wallace, WDA West Coast Office (001 415 627 0700), cari-anne.wallace@wda.co.uk.

Westchester Technologies, Inc. #3019

8 John Walsh Blvd, Peekskill, NY, 10566
914/736-1034; fax 914/736-1217
rprahlwti@optonline.net; www.microoptics.com

Wiley #439

111 River St, Hoboken, NJ, 07030
201/748-6000; fax 201/748-6088
www.wiley.com

John Wiley & Sons provides scientific, technical and medical content in print and electronic formats. Among the numerous best-selling titles from Wiley are: the new Second Edition of Saleh/Teich: Fundamentals of Photonics; Green: Fiber to the Home; van Helvoort: SDH/SONET Explained in Functional Models; Prasad: Biophotonics; Säckinger: Broadband Circuits for Optical Fiber Communication; Buus: Tunable Laser Diodes and Related Optical Sources, 2e; and the journal: *Microwave and Optical Letters*.

Williams Advanced Materials #739

2978 Main St, Buffalo, NY, 14224
716/837-1000; fax 716/833-2926
lbruce@beminc.com; www.williams-adv.com

New Product: Visi-Lid™ Custom Hermetic Window Assembly for Packaging Optoelectronic Devices.

Williams Advanced Materials supplies a broad range of materials for vacuum coating process and packaging technologies. We support the PVD industry with extensive manufacturing facilities capable of fabricating targets, backing plates and evaporation materials into virtually all shapes and configurations. Our Packaging Product Group includes a variety of hermetic seal lids, solder performs and bonding wire and ribbon. Contact: Mike Zasowski, Product Manager, mzasowski@beminc.com.

Wilson Industries, Inc. #2013

123 Explorer St, Pomona, CA, 91768
909/468-3636; fax 909/468-3640
info@wilsonindustries.com; www.wilsonindustries.com

Wordingham Technologies #334

580 Fisher Station Dr, Victor, NY, 14564
585/924-2294; fax 585/924-7660
sales@wordingham.com; www.wordingham.com

World Star Technologies #6061

321 Lesmill Rd, Toronto, ON, Canada, M3B 2V1
416/363-3332; fax 416/363-3112
Emily@worldstartech.com; www.worldstartech.com

Wuhan Guide Infrared Technology Co., Ltd. #6093

No 26 Shucheng Rd, Hingshan District, Wuhan, China, 430070
86 27 87671925; fax 86 27 87671927
equal@guide-infrared.com; www.guide-infrared.com
Contact: Yan Zhang.

Xi'an Huanic Corp. #6084

Chuangxin Mansion, No 25 Gaoxin 1st Rd, Gaoxin, China, 710075
86 29 81881001; fax 86 29 81881011
wenhui@huanic.com

Huani Corporation specializes in designing and manufacturing industrial laser diode modules and controlling circuitry for instrument. The company is also an OEM manufacturer.

Refreshment Sponsor

Y&M Technologies, Inc. #6163

Innovation Way, Newark, DE, 19711
302/894-1151; fax 302/894-9021
sales@ymtonline.com; www.ymtonline.com

New Product: Scintillation materials. YMT now offers a new line of crystal scintillators.

YMT is a rapidly expanding supplier of a wide array of laser/high-grade optics and precision jewels designed for devices and instruments used in medical, scientific, industrial and defense applications. We provide custom components in small and large scale quantities, whether for R&D prototyping or large scale productions. Contact: Yaping Liu, Vice President of Marketing, yaping@ymtonline.com.

Photonics West Exhibitor Directory

Yokogawa Corp. of America

#3023

2 Dart Rd, Newnan, GA, 30265
770/254-0400; fax 770/254-1337
info@us.yokogawa.com; www.yokogawa.com/TM

New Product: The AQ6319 Optical Spectrum Analyzer - the latest optical measurement technology.

Yokogawa makes Optical and Digital test equipment for the Laboratory and Outside Plant. This includes Optical Spectrum Analyzers, Tunable Laser Sources, Modular Test and Measurement Systems, BERT's, OTDR's, and Handhelds. Yokogawa will showcase our latest products as well as launch new solutions. Stop by and find your solution at table #3023. Contact: Brad Byrum, General Manager, brad.byrum@us.yokogawa.com.

YUCO Optics Corp.

#6360

30 Feldland St, Bohemia, NY, 11716
631/589-7888; fax 631/207-8588
jayzhou@yucООptics.com; www.yucООptics.com

Z&Z Optoelectronic Tech. Co., Ltd. #6056

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 a professional manufacturer focusing on high precision optical components. Its products include Ge cut blank, high precision infrared optical components, laser application components made of UV fused silica and BK7. Z&Z products are widely used in military defenses, space, industry and civil and has been providing products and services to many world leading companies in the industry. Contact: Liu Ping.

ZC&R Coatings for Optics, Inc.

#947

1401 Abalone Ave, Torrance, CA, 90501
310/381-3060; fax 310/782-9951
info@zcrcoatings.com; www.zcrcoatings.com

ZC&R offers high quality precision standard and custom coatings for optical and thermal applications. Our new automated ultrasonic clean line features a class 10 self-contained environment, insuring minimal particulate contamination. New 48" and 72" deposition chambers are configured with enhanced optical and crystal quartz monitoring systems, greatly improving in-situ deposition process control and superior coating performance. Contact: Jim Walker, Thin Film Engineer, jim@zcrcoatings.com; Robert Cabrera, General Manager, robert@zcrcoatings.com.

ZEMAX Development Corp.

#6123

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: Technical Support, support@zemax.com.

Zeon Chemicals

#6045

4111 Bells Ln, Louisville, KY, 40211
502/775-7600; fax 502/775-2055
askzeon@zeonchemicals.com; www.zeonchemicals.com

Zeon Chemicals produces Zeonex® and Zeonor® cyclo olefin polymers, optical polymer resins with high clarity, purity & dimensional stability. With superb transparency and low birefringence & water absorption, they're used in high-performance video, optical & laser technology. Zeon is the sole U.S. distributor of Optes® end-use components. Optes offers tool design & custom injection-molding of optical parts, and extrusion of ZeonorFilm®, which includes base and stretched film for optical display. Contact: Aaron Grau, Senior Sales Representative, grau@zeonchemicals.com.

Z-LASER Optoelektronik GmbH

#1801

Merzhauser Str 134, Freiburg, Germany, 79100
49 761 29644 44; fax 49 761 29644 55
info@z-laser.de; www.z-laser.com

Zygo Corp.

#1927

21 Laurel Brook Rd, Middlefield, CT, 06455-0448
860/347-8506; fax 860/347-3968
inquire@zygo.com; www.zygo.com

For more than 35 years Zygo Corporation has delivered leading edge optical metrology solutions to optics and photonics manufacturers. With unparalleled experience and reputation, ZYGO provides interferometric instruments and precision optical components & assemblies to the aerospace, defense, semiconductor, automotive and optical industries. Applications include surface form, transmitted wavefront, surface roughness and precision stage motion measurements. Contact: Don Battistoni, Senior Product Manager, dbattistoni@zygo.com; Dan Musinski, Senior Product Manager, dmusinski@zygo.com.



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Photonics West Product Listing

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Advanced Microoptic Systems GmbH
Aerotech, Inc.
AF Optical Co.
Agilent Technologies, Inc.
Analog Modules, Inc.
Andor Technology
Andover Corp.
Applied Surface Technologies
Applied Technology Associates
Argyle International Inc.
Ariel Optics, Inc.
Arrayed Fiberoptics
Asahi Spectra USA Inc.
attocube systems AG
Auxora Inc.
Avantes, Inc.
B&W Tek, Inc.
Berliner Glas KGaA
Berliner Glas US
Brighten Optics Ltd
Bryson Optical Corp, A Division of FLIR Systems, Inc.
Cabot Microelectronics Corp./ Engineered Surface Finishes
Carolinas MicroOptics Triangle
Coast Electro Optics
Codixx AG
Collimated Holes, Inc.
ColorLink, Inc.
Corning Inc.
Corning NetOptix
Crystal Fibre A/S
Diffractive Optics
Electro-Optical Products Corp.
Electro-Optical Systems, Inc.
EMCO High Voltage Corp.
Evaporated Coatings, Inc.
Fiberoptic Systems, Inc.
Fraunhofer IPMS
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Glass Fab Inc.
hannoverimpuls GmbH
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Janos Technology, Inc.
Kinetic Systems, Inc.
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LASER COMPONENTS DG, Inc.
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McPherson Inc.
Mildex, Inc.
Mindrum Precision, Inc.
Model Optics
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Optical Support, Inc.
Optical Surface Technologies LLC
OptiSource, LLC
PFG Optics
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Photon Gear, Inc.
Photonic Cleaning Technologies
Photoniconline.com
Polymicro Technologies LLC
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Precision Optics Corp.
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RetrieverTech
Rockwell Laser Industries
RSI
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Sarnoff Corp.
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Sensors Unlimited, Inc.
Sensovation
Servometer/PMG, LLC
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Space Optics Research Labs.
Spectronic Devices Ltd.
Springer
Stanford Computer Optics, Inc.
Sutter Instrument Co.
SwissOptic AG
Sydor Optics, Inc.
Thales Optronics (Taunton)
Tinsley Labs.
Tydex JS Co.
United Lens Co., Inc.
Vincent Associates
Wasatch Photonics
Wavelength Electronics, Inc.

Cameras and CCD Components

Adimec
Andor Technology
Anteryon BV
Applied Surface Technologies
APS Optics
Argyle International Inc.
Arrayed Fiberoptics
ASI/Applied Scientific Instrumentation
ATI Optique
Auxora Inc.
B&W Tek, Inc.
Berliner Glas KGaA
Berliner Glas US
Brighten Optics Ltd
Bryson Optical Corp, A Division of FLIR Systems, Inc.
Cabot Microelectronics Corp./ Engineered Surface Finishes
Carolinas MicroOptics Triangle
China Daheng Group Inc.
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
Coast Electro Optics
Codixx AG
Cohu, Inc.
Collimated Holes, Inc.
ColorLink, Inc.
Cooke Corp., The
DataRay, Inc.
Davin Optronics Ltd.
Diffractive Optics
Dongwoo Optron Co., Ltd.
DVC Co.
Eastman Kodak Co. - Image Sensor Solutions
Edinburgh Instruments Ltd.
Edmund Optics
EMCO High Voltage Corp.
Enplas Nanotech, Inc.
Evaporated Coatings, Inc.
Fairchild Imaging
FJW Optical Systems, Inc.
FLIR Systems
Gentec Electro-Optics Inc.
Hamamatsu Corp.
Hamamatsu Photonic Systems
Heptagon Oy
Hoya Corp. USA
Imagine Optic
Infotonics Technology Center
Intellectual Property Insurance Services
Intevac, Inc.
Isuzu Glass Co., Ltd.
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
Lanics Co., Ltd.
LASER COMPONENTS CANADA, Inc.
LASER COMPONENTS DG, Inc.
Lumenera Corp.
McPherson Inc.
Mindrum Precision, Inc.
Model Optics
Moritex USA Inc.
Naked Optics Corp.
Newsandgy Optronics Inc.
OFR, Inc.
Opti Works, Inc.
Optical Perspectives Group, LLC
Optical Support, Inc.
OPTICS 1, Inc.
Optics Technology, Inc.
OptiSource, LLC
Photek, Ltd.
Photon Gear, Inc.
Photonic Cleaning Technologies
Photonic Lattice Inc.
Photonics Cluster (UK)
Photoniconline.com
Photron USA
Polymer Optics, LLC
Precision Asphere, LLC
Precision Optics Corp.
QImaging
Redlake
RetrieverTech
Sarnoff Corp.
SCHOTT North America, Inc.
SCHOTT North America, Inc. - Electronic Packaging
SCIOPT Enterprises
SensL Technologies Ltd.
Sensors Unlimited, Inc.
Sensovation
Servometer/PMG, LLC
Shimadzu Corp.
Sinclair Manufacturing
Sira
Solid State Cooling Systems
Space Optics Research Labs.
Specialised Imaging Ltd.
Spectral Instruments Inc.
Spectronic Devices Ltd.
Spiricon, Inc.
Stanford Computer Optics, Inc.
Stanford Photonics, Inc.
Star Tech Instruments
Sunex Inc.
Sunpower Corp.
Supercool Inc.
Swiss Jewel Co.
SwissOptic AG
Sydor Instruments, LLC
tec5USA, Inc.
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Thales OPTEM Inc.
Thales Optische Systeme
Thales Optronics (Taunton)
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Photonics West Product Listing

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Analog Modules, Inc.
Andor Technology
Arrayed Fiberoptics
Asahi Spectra USA Inc.
Auxora Inc.
Avantes, Inc.
B&W Tek, Inc.
Berliner Glas US
Blue Hill Optical Technologies
Brysen Optical Corp, A Division of FLIR Systems, Inc.
Cambridge Lasers Labs., Inc.
Canadian Photonics Fabrication Centre-CPFC
Carolinas MicroOptics Triangle
Center for Biophotonics Science & Technology
Centre for Integrated Photonics
CeramOptec Industries, Inc.
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
Coast Electro Optics
Codixx AG
Collimated Holes, Inc.
Covega
CryLaS GmbH
CVI Optical Components
Davin Optronics Ltd.
DenseLight Semiconductors Pte Ltd.
DPSS Lasers Inc.
Dynamics Research Corp.
Electro-Optical Systems, Inc.
EMCO High Voltage Corp.
ESE Embedded Systems Engineering GmbH
Evaporated Coatings, Inc.
Fiberguide Industries, Inc.
Fraunhofer IPMS
Fraunhofer-Institut für Angewandte Festkörperphysik
GWU Lasertechnik GmbH
HC Photonics Corp.
Headwall Photonics
Hellma International, Inc.
High Tech Photonics
Ibsen Photonics
Infotonics Technology Center
Innovative Photonic Solutions INO
Inta Technologies
Intellectual Property Insurance Services
Intevac, Inc.
Intex, Inc.
IR Microsystems
IRphotonics

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Isuzu Glass Co., Ltd.
JT Ingram Sales & Marketing
Keopsys Inc.
Kinetic Systems, Inc.
Koheras A/S
Kopp Glass, Inc.
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LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
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LG-Laser Technologies GmbH
Lightspeed Technologies
LIMO Lissotschenko Mikrooptik GmbH
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Micron Optics, Inc.
Mindrum Precision, Inc.
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Multiwave Photonics
Nanonics Imaging Ltd.
National Reconnaissance Office
National Research Council of the National Academies
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Ondax, Inc.
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Photon Gear, Inc.
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Sacher Lasertechnik GmbH
Santec USA
SensL Technologies Ltd.
Sensors Unlimited, Inc.
Sensovation
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Sira
sp3 Diamond Technologies, Inc.
Space Optics Research Labs.
Sparkle Optics Corp.
Spectronic Devices Ltd.
Spiricon, Inc.
SRICO, Inc.
StellarNet, Inc.
Superlum Diodes

Swiss Jewel Co.
Taboada Research Instruments, Inc.
tec5USA, Inc.
TruTouch Technologies, Inc.
U.S. Naval Research Lab.
Wasatch Photonics
Wavelength Electronics, Inc.

Clinical, Chemical and Biological Instrumentation

AF Optical Co.
Andor Technology
APS Optics
Arrayed Fiberoptics
Asahi Spectra USA Inc.
ATI Optique
Auxora Inc.
Avantes, Inc.
B&W Tek, Inc.
Berliner Glas US
Bioptigen Inc.
Blue Hill Optical Technologies
Breault Research Organization
Brighten Optics Ltd
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Collimated Holes, Inc.
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Covega
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DPSS Lasers Inc.
DTI-Nanotech
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EMCO High Voltage Corp.
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Fraunhofer IPMS
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Headwall Photonics
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Hitachi High Technologies America, Inc.
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Polymicro Technologies LLC
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Santec USA
Sensovation
Sira
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Swiss Jewel Co.
Taboada Research Instruments, Inc.
Thales Electro-Optics Pte Thermotek Inc.
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Vincent Associates
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Hoya Corp. USA
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Carolinas MicroOptics Triangle Centre for Integrated Photonics
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
Coast Electro Optics
Intellectual Property Insurance Services

Photonics West Product Listing

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Kaiser Systems, Inc.
Kinetic Systems, Inc.
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Lexel Laser Product Division
LIMO Lissotschenko Mikrooptik GmbH
Mad City Labs, Inc.
McPherson Inc.
Minus K Technology
Nalux Co., Ltd.
National Reconnaissance Office
New Scale Technologies, Inc.
OptiSource, LLC
Photonicsonline.com
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Univ. of Central Florida
Wavelength Electronics, Inc.

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Aerotech, Inc.
AIXTRON-Thomas Swan
Andor Technology
Anteryon BV
Applied Technology Associates
ASI/Applied Scientific Instrumentation
ATI Optique
Avo Photonics, Inc.
Axsys Technologies
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DenseLight Semiconductors Pte Ltd.
Diffractive Optics
Edmund Optics
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EMCO High Voltage Corp.

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ficonTEC GmbH
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FLIR Systems
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Fresnel Technologies Inc.
Gam Laser Inc.
Gigahertz-Optik, Inc.
Hamamatsu Photonic Systems
Hinds Instruments, Inc.
ICA Corp.
Infotonics Technology Center
Inta Technologies
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Isuzu Glass Co., Ltd.
JDS Uniphase
KEOS Optoelectronics, Inc.
Kinetic Systems, Inc.
Kopp Glass, Inc.
Lanics Co., Ltd.
LASER COMPONENTS IG, Inc.
Laser Optics, a PPGI Company
Lexel Laser Product Division
LightPath Technologies, Inc.
Lincoln Laser Co.
Lumenera Corp.
MathWorks Inc., The
McPherson Inc.
Melcor Corp.
Melles Griot
Micralyne, Inc.
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Morgan Technical Ceramics
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National Reconnaissance Office
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North American Coating Labs.
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OPTICS 1, Inc.
Optics for Hire
OptiSource, LLC
Opto Diode Corp.
OWIS GmbH
Photek, Ltd.
Photon Machines
Photonic Sense GmbH
Photonics Cluster (UK)
Photonicsonline.com
Photron USA
Piconics
Power Technology, Inc.
Process Materials Inc.
Redlake
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SCHOTT North America, Inc. - Electronic Packaging
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SensL Technologies Ltd.
Sensors Unlimited, Inc.

Sensovation
Shanghai Optics
Sinclair Manufacturing
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Sutter Instrument Co.
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Swiss Jewel Co.
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Thales OPTEM Inc.
Thales Optics
Thermotek Inc.
Thermoteknix Systems Ltd.
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Valley Design Corp.
VARIOPTIC S.A.
Visitech AS
VMI, Inc.
Volpi Manufacturing USA
Wavelength Electronics, Inc.

Electronics, Signal Analysis Equipment

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B&W Tek, Inc.
Becker & Hickl GmbH
Boston Electronics Corp.
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Lumina Power, Inc.
MathWorks Inc., The
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Photonicsonline.com
Polymicro Technologies LLC
Quantum Composers
Sacher Lasertechnik GmbH
SB Electronics
Scitec Instruments Ltd.
Sinocera Photonics, Inc.
Solid State Cooling Systems
Space Optics Research Labs.
Spectronic Devices Ltd.
Spiricon, Inc.
Stanford Research Systems, Inc.
Star Tech Instruments
Statek Corp.
Taboada Research Instruments, Inc.
tec5USA, Inc.
VueMetrix
Wavelength Electronics, Inc.
Yokogawa Corp. of America

EUV Lithography

Aerotech, Inc.
Agilent Technologies, Inc.
Applied Surface Technologies
Applied Technology Associates
ASML
Auxora Inc.
B&W Tek, Inc.
Berliner Glas KGaA
Berliner Glas US
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CVI Laser LLC
Electro-Optical Products Corp.
Exitech Inc.
FEMLIGHT
Fraunhofer IPMS
Gam Laser Inc.
Gestione SiLO srl
hannoverimpuls GmbH
Imagine Optic
Intellectual Property Insurance Services
International Radiation Detectors, Inc.
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LIMO Lissotschenko Mikrooptik GmbH
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McPherson Inc.
Minus K Technology

National Reconnaissance Office
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PFG Optics
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Richardson Grating
SCIOPT Enterprises
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AFL Telecommunications
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Ayase America, Inc.
B&W Tek, Inc.
BIZI International
Blue Sky Research
Brighten Optics Ltd
Brimrose Corp. of America
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Coastal Connections
Codixx AG
Collimated Holes, Inc.
Conex Systems Inc.
CorActive High-Tech, Inc.
Corning Inc.
Covega
Crosslight Software, Inc.
Crystal Fibre A/S
Del Mar Photonics, Inc.
Del Mar Ventures

DenseLight Semiconductors Pte Ltd.
Diemat, Inc.
Diffractive Optics
Dilas Diodenlaser GmbH
Dominar, Inc. - now incorporating Ellis Optical Technology
DTI-Nanotech
Dynamics Research Corp.
Electro-Optical Systems, Inc.
Elliot Scientific Ltd.
EM4, Inc.
Enplas Nanotech, Inc.
Eschenbach Optik GmbH & Co Technical Optics
Evaporated Coatings, Inc.
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EXFO
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FEMTO Messtechnik GmbH
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Fiberguide Industries, Inc.
FiberLogix Ltd.
Fiberoptic Systems, Inc.
Fibertech Optica
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Hellma International, Inc.
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High Energy Laser Joint Technology Office
High Tech Photonics
Hinds Instruments, Inc.
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IMRA America, Inc.
Incom, Inc.
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Innovative Photonic Solutions
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Inta Technologies
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International Photonics Commercialization Alliance - IPCA
Invenios
IRphotonics
Isomet Corp.

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Keopsys Inc.
KEOS Optoelectronics, Inc.
Kinetic Systems, Inc.
Koheras A/S
La Precision
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LASER COMPONENTS IG, Inc.
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Leoni Fiber Optics GmbH
Lexel Laser Product Division
LG-Laser Technologies GmbH
Light Guide Optics Germany GmbH
LightPath Technologies, Inc.
LightSmyth Technologies, Inc.
Lightspeed Technologies
Luna Technologies
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mechOnics ag
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Melles Griot
Meshtel - Intelite
Micralyne, Inc.
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Miniflex Ltd.
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PD-LD, Inc.
PhaseView
Photon Gear, Inc.
Photonic Lattice Inc.
Photonics Cluster (UK)
Photonicsonline.com
Photop Technologies, Inc.
Piezosystem Jena, Inc.
Plan Optik AG
PolarOnyx, Incow.
Polymicro Technologies LLC
Precision Asphere, LLC
Precision Photonics Corp.
Precitec, Inc.
Process Materials Inc.
QPhotonics, LLC
Radiant Dyes GmbH
Resonance Ltd.
Rocky Mountain Instrument Co.
Rofin Australia
RoMack, Inc.
RSoft Design Group
Sacher Lasertechnik GmbH
Santec USA
SB Electronics
SCHOTT North America, Inc. - Electronic Packaging
Shiefman Consulting, LLC
SIFAM Fibre Optics Ltd.
Sill Optics GmbH & Co., KG
Sinclair Manufacturing
Sinocera Photonics, Inc.
sp3 Diamond Technologies, Inc.
Sparkle Optics Corp.
Spectronic Devices Ltd.
SRICO, Inc.
SSI Spectrum Scientific, Inc.
StellarNet, Inc.
StockerYale, Inc.
Sunpower Corp.
Super Optronics Inc.
Surface Finishes Co. Inc.
Swiss Jewel Co.
tec5USA, Inc.
Teraxion Inc.
Thorlabs, Inc.
TwinStar Optics
Univ. of Central Florida
University of Applied Sciences Harz Wernigerode
Varian, Inc.
Volpi Manufacturing USA
Wasatch Photonics
Wavelength Electronics, Inc.
Y&M Technologies, Inc.

Photonics West Product Listing

Finished Optics, Filters, & Coatings, Optical Fabrication Equipment

AccuCoat, Inc.
Advanced Thin Films
Aerotech, Inc.
Agilent Technologies, Inc.
Andor Technology
Anteryon BV
Applied Surface Technologies
Applied Technology Associates
APS Optics
Argyle International Inc.
Asahi Spectra USA Inc.
ASI/Applied Scientific Instrumentation
Auxora Inc.
Avo Photonics, Inc.
B&W Tek, Inc.
Barr Associates, Inc.
Berliner Glas KGaA
Berliner Glas US
Blue Hill Optical Technologies
Brysen Optical Corp, A Division of FLIR Systems, Inc.
Cabot Microelectronics Corp./ Engineered Surface Finishes
Canadian Photonics Fabrication Centre-CPFC
Carolinas MicroOptics Triangle Casix , Inc.
Centre for Integrated Photonics
China Daheng Group Inc.
Cleveland Crystals, Inc.
Coast Electro Optics
ColorLink, Inc.
Corion Filters
CSIRO Australian Centre for Precision Optics
CVI Laser LLC
CVI Optical Components
Davin Optronics Ltd.
DCM Tech, Inc.
Del Mar Photonics, Inc.
Del Mar Ventures
Deltronic Crystal Industries, Inc.
Diffractive Optics
Dominar, Inc. - now incorporating Ellis Optical Technology
Dynamics Research Corp.
Edmund Optics
Electro Optical Components Inc.
EM4, Inc.
Enplas Nanotech, Inc.
Eschenbach Optik GmbH & Co Technical Optics
ESE Embedded Systems Engineering GmbH
Evaporated Coatings, Inc.
FEMLIGHT
FJW Optical Systems, Inc.
FLIR Systems
Foctek Photonics, Inc.

Foreal Spectrum, Inc.
Frank Optic Products GmbH
Fresnel Optics GmbH
Fresnel Technologies Inc.
Gentex Corp. Filtron
GEOMATEC Co. Ltd.
Gestione SiLO srl
Glass Fab Inc.
Gooch & Housego, PLC
G-S PLASTIC OPTICS, A Germanow-Simon Co.
Gurley Precision Instruments, Inc.
GWU Lasertechnik GmbH
Halbo Optics
hannoverimpuls GmbH
Harold Johnson Optical Labs.
HC Photonics Corp.
Hellma International, Inc.
Heptagon Oy
Heraeus Quartz America
High Energy Laser Joint Technology Office
High Plains Optics
High Tech Photonics
HOLOEYE Photonics AG
Hong Kong Photographic and Optics Manufacturers Association
HYTEC, Inc.
Ibsen Photonics
Impex HighTech
IMT Masken und Teilungen AG
Ingeneric GmbH
Inta Technologies
Intellectual Property Insurance Services
International Light, Inc.
Iridian Spectral Technologies
IRphotonics
Isomet Corp.
ISP Optics
Isuzu Glass Co., Ltd.
JDS Uniphase
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
JML Optical Industries Inc.
JT Ingram Sales & Marketing
Kaleido Technology
KEOS Optoelectronics, Inc.
Kopp Glass, Inc.
LaCroix Optical Co.
Lambda Research Optics Inc.
Larsen Equipment Design, Inc.
Laser Beam Products
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Laser Materials Corp.
Laser Optics, a PPGI Company
Laser Research Optics
LASERVISION GmbH
Lattice Electro Optics, Inc.
LEISTER Technologies, LLC
Lexel Laser Product Division

LG-Laser Technologies GmbH
LightSmyth Technologies, Inc.
LINOS Photonics, Inc.
Max Levy Autograph, Inc.
McPherson Inc.
MediVision Optics
Meller Optics, Inc.
Melles Griot
Mindrum Precision, Inc.
Minus K Technology
MLD Technologies, LLC
Model Optics
Moore NanoTechnology Systems LLC
Moritex USA Inc.
MPA Crystal Corp.
MRC a PPGI Company
mso jena GmbH
Naked Optics Corp.
Nalux Co., Ltd.
Nanjing Saifei Electro-Optics Co., Ltd.
National Reconnaissance Office
New Focus, Inc. - A Division of Bookham
Newport Corp.
Newsandgy Optronics Inc.
North American Coating Labs.
Nova Phase, Inc.
Nufern
NuSil Technology
Ocean Optics, Inc.
OFR, Inc.
Omega Optical, Inc.
OMG Co., Ltd.
Ondax, Inc.
Onyx Optics Inc.
OPCO Lab., Inc.
Oplink Communications, Inc.
Opti Works, Inc.
Optical Perspectives Group, LLC
Optical Support, Inc.
Optical Surface Technologies LLC
Optics Technology, Inc.
Optikron GmbH
Optimax Systems, Inc.
OptiPro Systems
OptiSource, LLC
OptoTech Optikmaschinen GmbH
OSI Optoelectronics, Inc.
OWIS GmbH
OXIDE/NIMS
PFG Optics
Photon Gear, Inc.
Photonic Cleaning Technologies
Photonic Sense GmbH
Photonics Cluster (UK)
Photonicsonline.com
Photop Technologies, Inc.
Plan Optik AG
POG Präzisionsoptik Gera GmbH
Polymer Optics, LLC

Polymicro Technologies LLC
Precision Optics Corp.
Precision Photonics Corp.
Process Materials Inc.
PROSystems, Inc.
Quality Thin Films, Inc.
Radiant Dyes GmbH
Research Electro-Optics, Inc.
Richardson Grating
Rocky Mountain Instrument Co.
Sacher Lasertechnik GmbH
Santec USA
Satisloh North America Inc.
Savimex
Schafer Corp./Lightweight Optical Systems
Schneider Optics, Inc.
SCHOTT North America, Inc.
Semrock, Inc.
Shanghai Optics
Sill Optics GmbH & Co., KG
Sinocera Photonics, Inc.
Sonoma Photonics, Inc.
Space Optics Research Labs.
Spectrogon U.S. Inc.
Spiricon, Inc.
SSI Spectrum Scientific, Inc.
StockerYale, Inc.
Sunex Inc.
Super Optronics Inc.
Swift Glass Co.
SwissOptic AG
Sydor Optics, Inc.
Taboda Research Instruments, Inc.
Tecan Ltd.
TecOptics, Inc.
Thales Electro-Optics Pte
Thales OPTEM Inc.
Thales Optics
Thales Optische Systeme
Thales Optronics (Taunton)
Thorlabs, Inc.
Tower Optical Corp.
TwinStar Optics
Tydex JS Co.
UltraVolt, Inc.
United Lens Co., Inc.
Vacuum Process Technology, Inc.
Valley Design Corp.
VisiMax Technologies, Inc.
Vision GmbH
WAHL optoparts GmbH
Wasatch Photonics
Wavelength Electronics, Inc.
Y&M Technologies, Inc.
ZC&R Coatings for Optics, Inc.
Zygo Corp.

High Speed Imaging and Sensing

Aculight Corp.
 Adaptive Optics Associates, Inc.
 Adimec
 Andor Technology
 Anteryon BV
 Applied Technology Associates
 attocube systems AG
 Axsys Technologies
 B&W Tek, Inc.
 Becker & Hickl GmbH
 Bioptigen Inc.
 Brimrose Corp. of America
 Brysen Optical Corp, A Division of FLIR Systems, Inc.
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle Center for Biophotonics Science & Technology
 Chemimage
 Coast Electro Optics
 Codixx AG
 Cooke Corp., The
 Covega
 Crystal Fibre A/S
 DataRay, Inc.
 Del Mar Ventures
 Denselight Semiconductors Pte Ltd.
 DVC Co.
 Dynamics Research Corp.
 Edmund Optics
 Electron Tubes
 Electro-Optical Products Corp.
 EXALOS AG
 FEMTO Messtechnik GmbH
 Femtochrome Research, Inc.
 FLIR Systems
 Hamamatsu Photonic Systems
 Headwall Photonics
 Imagine Optic
 Infotonics Technology Center
 Intellectual Property Insurance Services
 Intevac, Inc.
 IRphotonics
 Isomet Corp.
 Isuzu Glass Co., Ltd.
 JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Laser Systems
 JML Optical Industries Inc.
 Kinetic Systems, Inc.
 Koheras A/S
 Kopp Glass, Inc.
 LASER COMPONENTS CANADA, Inc.
 LASER COMPONENTS DG, Inc.
 LASER COMPONENTS IG, Inc.
 LINOS Photonics, Inc.
 Lumenera Corp.

m-u-t Group
 Mad City Labs, Inc.
 Market Tech, Inc.
 Micralyne, Inc.
 Micon Optics, Inc.
 Mindrum Precision, Inc.
 Minus K Technology
 Moritex USA Inc.
 National Reconnaissance Office
 NM Laser Products Inc.
 Novacam Technologies Inc.
 NP Photonics
 OEC
 Ondax, Inc.
 Opti Works, Inc.
 OPTICS 1, Inc.
 OptiSource, LLC
 Photon Engineering, LLC
 Photonics Cluster (UK)
 Photonicsonline.com
 Photron USA
 PolarOnyx, Inc.
 Polymer Optics, LLC
 Power Technology, Inc.
 Precision Asphere, LLC
 Precitec, Inc.
 Redlake
 RetrieverTech
 RSI
 Sacher Lasertechnik GmbH
 Santec USA
 Sarnoff Corp.
 Schneider Optics, Inc.
 Scientific Materials Corp
 SCIOPT Enterprises
 SensL Technologies Ltd.
 Sensors Unlimited, Inc.
 SIOS Messtechnik GmbH
 Sira
 Space Optics Research Labs.
 Specialised Imaging Ltd.
 Spectronic Devices Ltd.
 Spiricon, Inc.
 Stanford Computer Optics, Inc.
 Stanford Photonics, Inc.
 Sutter Instrument Co.
 SwissOptic AG
 Sydor Instruments, LLC
 tec5USA, Inc.
 Thales Electro-Optics Pte
 Thales OPTEM Inc.
 Thorlabs, Inc.
 Univ. of Central Florida
 VMI, Inc.
 Wavelength Electronics, Inc.

Illumination Engineering

AF Optical Co.
 Argyle International Inc.
 Asahi Spectra USA Inc.
 Avantes, Inc.
 Avo Photonics, Inc.
 B&W Tek, Inc.

Blue Sky Research
 Brighten Optics Ltd
 Cabot Microelectronics Corp./ Engineered Surface Finishes
 CeramOptec Industries, Inc.
 Coast Electro Optics
 Codixx AG
 Collimated Holes, Inc.
 Decade Optical Systems, Inc.
 Diffractive Optics
 Dominar, Inc. - now incorporating Ellis Optical Technology
 Edmund Optics
 Fiberguide Industries, Inc.
 Frank Optic Products GmbH
 Fresnel Optics GmbH
 Gestione SiLO srl
 Gigahertz-Optik, Inc.
 Heptagon Oy
 High Tech Photonics
 Hong Kong Photographic and Optics Manufacturers Association
 Innovations In Optics, Inc.
 Intellectual Property Insurance Services
 Isuzu Glass Co., Ltd.
 JT Ingram Sales & Marketing
 Kopp Glass, Inc.
 Labsphere, Inc.
 Lambda Research Corp.
 Lanics Co., Ltd.
 LASER COMPONENTS IG, Inc.
 Lexel Laser Product Division
 LIMO Lissotschenko Mikrooptik GmbH
 m-u-t Group
 McPherson Inc.
 Naked Optics Corp.
 Nalux Co., Ltd.
 Ondax, Inc.
 Optica Software
 Optical Perspectives Group, LLC
 Optical Support, Inc.
 OPTIS North America, A Division of OPTIS France
 Opto Diode Corp.
 Photon Engineering, LLC
 Photonicsonline.com
 POG Präzisionsoptik Gera GmbH
 PolarOnyx, Inc.
 Polymer Optics, LLC
 Polymicro Technologies LLC
 Power Technology, Inc.
 Precision Optics Corp.
 QPhotonics, LLC
 Santec USA
 Semiconductor Technology Research, Inc.
 Shiefman Consulting, LLC
 Sill Optics GmbH & Co., KG
 sp3 Diamond Technologies, Inc.
 Space Optics Research Labs.
 StockerYale, Inc.

Taboada Research Instruments, Inc.
 Thales Electro-Optics Pte
 Thales OPTEM Inc.
 Visitech AS
 Wavelength Electronics, Inc.

Infrared Sources, Detectors, Systems

Aculight Corp.
 Alpes Lasers
 Analog Modules, Inc.
 Andor Technology
 Applied Surface Technologies
 Applied Technology Associates
 Avantes, Inc.
 Avo Photonics, Inc.
 Ayase America, Inc.
 B&W Tek, Inc.
 Blue Sky Research
 Boston Electronics Corp.
 Breault Research Organization
 Bright Solutions SRL
 Brighten Optics Ltd
 Brimrose Corp. of America
 Brysen Optical Corp, A Division of FLIR Systems, Inc.
 BURLE INDUSTRIES, INC.
 Cabot Microelectronics Corp./ Engineered Surface Finishes
 Cal Sensors, Inc.
 Calmar Optcom, Inc.
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle Center for Integrated Photonics
 China Daheng Group Inc.
 China Shaanxi Haihui Imp. & Exp. Co., Ltd.
 CI Systems, Inc.
 Cobolt AB
 Codixx AG
 Corning NetOptix
 Covega
 Davin Optronics Ltd.
 Decade Optical Systems, Inc.
 Del Mar Photonics, Inc.
 Del Mar Ventures
 Diffractive Optics
 Edinburgh Instruments Ltd.
 Edmund Optics
 Electro Optical Components Inc.
 Electro-Optical Products Corp.
 Electro-Optical Systems, Inc.
 Electro-Optics Technology, Inc.
 Electrophysics Corp.
 EM4, Inc.
 Eschenbach Optik GmbH & Co Technical Optics
 EXALOS AG
 EXFO
 FEMTO Messtechnik GmbH
 FemtoLasers, Inc.

Photonics West Product Listing

- Fiberoptic Systems, Inc.
Fietje Sensor & Optoelektronik GmbH
FJW Optical Systems, Inc.
FLIR Systems
Frank Optic Products GmbH
Fraunhofer-Institut für Angewandte Festkörperphysik
Fresnel Technologies Inc.
Gestione SiLO srl
Gigahertz-Optik, Inc.
Gilway Technical Lamp Co.
GPD Optoelectronics Corp.
GWU Lasertechnik GmbH
Hamamatsu Corp.
Hawkeye Technologies LLC, TomaTech Products
HC Photonics Corp.
High Tech Photonics
id Quantique SA
Impex HighTech
Infotonics Technology Center
InfraTec GmbH
Innovative Photonic Solutions
Innovavent GmbH
INP Greifswald
INRAD, a PPGI Company
Intellectual Property Insurance Services
International Light, Inc.
Intevac, Inc.
Intex, Inc.
Ion Optics Inc.
IR Microsystems
IRphotonics
Isomet Corp.
Isuzu Glass Co., Ltd.
ITF Optical Technologies Inc.
Janos Technology, Inc.
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Laser Systems
JT Ingram Sales & Marketing
Judson Technologies, LLC
Kigre, Inc.
Kinetic Systems, Inc.
Koheras A/S
Kopp Glass, Inc.
Labsphere, Inc.
Lanics Co., Ltd.
LASER COMPONENTS CANADA, Inc.
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Laser Diode, Inc.
LaserPoint
LEISTER Technologies, LLC
Lexel Laser Product Division
LG-Laser Technologies GmbH
LightPath Technologies, Inc.
Lightspeed Technologies
LIMO Lissotschenko Mikrooptik GmbH
- Market Tech, Inc.
McPherson Inc.
Melles Griot
Meshtel - Intelite
Naked Optics Corp.
National Aperture, Inc.
National Reconnaissance Office
New England Photoconductor Corp.
Newport Corp.
Newsandgy Optronics Inc.
Novacam Technologies Inc.
NP Photonics
NTT Electronics Corp.
OEC
Oehler & Fischer
Ondax, Inc.
Optical Perspectives Group, LLC
OPTICS 1, Inc.
Opto Diode Corp.
Optrans Corp.
Oriel Instruments
OSI Optoelectronics, Inc.
Osram OptoSemiconductor
Photonics Cluster (UK)
Photonicsonline.com
POG Präzisionsoptik Gera GmbH
PolarOnyx, Inc.
Polymicro Technologies LLC
Precision Asphere, LLC
QPhotonics, LLC
Radiant Dyes GmbH
Resonance Ltd.
Rockwell Laser Industries
RPMC
Sacher Lasertechnik GmbH
Santec USA
Schafer Corp./Lightweight Optical Systems
Semi Conductor Devices (SCD)
SensL Technologies Ltd.
Sensors Unlimited, Inc.
Servometer/PMG, LLC
Sinclair Manufacturing
Solid State Cooling Systems
Space Optics Research Labs.
Sparkle Optics Corp.
Spectra-Physics
Spectronic Devices Ltd.
Spiricon, Inc.
Stanford Photonics, Inc.
StellarNet, Inc.
Sunpower Corp.
Superlum Diodes
Sydor Instruments, LLC
Taboada Research Instruments, Inc.
Thales Optics
Thermoteknix Systems Ltd.
Thorlabs, Inc.
TruTouch Technologies, Inc.
Tydex JS Co.
ULIS
ULM Photonics GmbH
- unique-m.o.d.e. AG
Univ. of Central Florida
Varian, Inc.
VIGO Systems S.A.
Volga Technology Ltd.
Wavelength Electronics, Inc.
- ## Ion-Beam Lithography
- Aerotech, Inc.
Agilent Technologies, Inc.
Andor Technology
Arrayed Fiberoptics
B&W Tek, Inc.
Canadian Photonics Fabrication Centre-CPFC
Carolinas MicroOptics Triangle
EMCO High Voltage Corp.
Inta Technologies
Intellectual Property Insurance Services
International Radiation Detectors, Inc.
Kinetic Systems, Inc.
Minus K Technology
National Reconnaissance Office
OptiSource, LLC
OZ Optics Ltd.
Photonicsonline.com
Richardson Grating
Wavelength Electronics, Inc.
- ## Lasers and Other Light Sources, Laser Accessories, Laser Systems
- Access Laser Co.
Aculight Corp.
Adaptive Optics Associates, Inc.
Advanced Photonic Crystals
Aerotech, Inc.
Agilent Technologies, Inc.
Alfalight, Inc.
Alpes Lasers
AMPLITUDE SYSTEMES
Andor Technology
Andover Corp.
Anteryon BV
Apollo Instruments, Inc.
Applied Surface Technologies
Applied Technology Associates
Asahi Spectra USA Inc.
asphericon GmbH
Avantes, Inc.
Avo Photonics, Inc.
Axcel Photonics Inc.
Axsys Technologies
Ayase America, Inc.
B&W Tek, Inc.
Becker & Hickl GmbH
Big Sky Laser Technologies, Inc.
Bitswave, Inc.
- Blue Hill Optical Technologies
Blue Sky Research
Boston Electronics Corp.
Breault Research Organization
Bright Solutions SRL
Brimrose Corp. of America
Bristol Instruments, Inc.
Cabot Microelectronics Corp./Engineered Surface Finishes
Calmar Optcom, Inc.
Cambridge Lasers Labs., Inc.
Canadian Photonics Fabrication Centre-CPFC
Carolinas MicroOptics Triangle
Cascade Technologies Ltd.
Center for Biophotonics Science & Technology
Centre for Integrated Photonics
CeramOptec Industries, Inc.
Changchun New Industries
Optoelectronics Tech. Co., Ltd.
China Daheng Group Inc.
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
Clark-MXR, Inc.
Cleveland Crystals, Inc.
Cobolt AB
Codixx AG
Coherent Inc.
ColorLink, Inc.
Conex Systems Inc.
Continuum
CorActive High-Tech, Inc.
Corelase Oy
Corning Inc.
Covega
Crisel Instruments, SRL
Crosslight Software, Inc.
CryLaS GmbH
Crystal Fibre A/S
CrystalLaser
CRYSTECH Inc.
Curamik Electronics Inc.
DataRay, Inc.
Decade Optical Systems, Inc.
Del Mar Photonics, Inc.
Del Mar Ventures
DenseLight Semiconductors Pte Ltd.
Dilas Diodenlaser GmbH
Dongwoo Optron Co., Ltd.
DPSS Lasers Inc.
Dynamics Research Corp.
eagleyard Photonics GmbH
Edinburgh Instruments Ltd.
Edmund Optics
Electro Optical Components Inc.
Electro-Optical Products Corp.
Electro-Optical Systems, Inc.
Electro-Optics Technology, Inc.
EM4, Inc.
EMCO High Voltage Corp.

- ESE Embedded Systems Engineering GmbH
 EXALOS AG
 EXFO
 Exitech Inc.
 FEMLIGHT
 Femtochrome Research, Inc.
 FemtoLasers, Inc.
 Fenix Technology
 Fianium
 Fiberguide Industries, Inc.
 Fietje Sensor & Optoelektronik GmbH
 FJW Optical Systems, Inc.
 Fotofab Corp.
 Frank Optic Products GmbH
 Fraunhofer Institute for Applied Optics and Precision Engineering IOF
 Fraunhofer-Institut für Angewandte Festkörperphysik
 Gam Laser Inc.
 Gamma Scientific, Inc.
 General Atomics
 Gentec Electro-Optics Inc.
 Gentex Corp. Filtron
 GEOMATEC Co. Ltd.
 Gigahertz-Optik, Inc.
 Gilway Technical Lamp Co.
 Gooch & Housego, PLC
 Gorman Rupp Industries
 GTI
 Guided Color Technologies GmbH
 GWU Lasertechnik GmbH
 Hamamatsu Photonic Systems hannoverimpuls GmbH
 HC Photonics Corp.
 Hellma International, Inc.
 High Energy Laser Joint Technology Office
 High Power Devices, Inc.
 High Q Laser (US), Inc.
 High Tech Photonics
 Hoya Corp. USA
 Ibsen Photonics
 Imagine Optic
 IMM Messtechnologie GmbH
 Impex HighTech
 IMRA America, Inc.
 Ingeneric GmbH
 Innolas GmbH
 Innovations In Optics, Inc.
 Innovative Photonic Solutions
 Innovavent GmbH
 INO
 INRAD, a PPGI Company
 Inta Technologies
 Intellectual Property Insurance Services
 Intense Ltd.
 International Radiation Detectors, Inc.
 Iridian Spectral Technologies
- IRphotonics
 Isomet Corp.
 Isuzu Glass Co., Ltd.
 ITF Optical Technologies Inc.
 JDS Uniphase
 JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Laser Systems
 JENOPTIK Laserdiode GmbH
 JMAR Technologies, Inc.
 JP Sercel Associates, Inc.
 JT Ingram Sales & Marketing
 Kaiser Optical Systems, Inc.
 Kaiser Systems, Inc.
 Keopsys Inc.
 KEOS Optoelectronics, Inc.
 Kigre, Inc.
 Kinetic Systems, Inc.
 Koheras A/S
 Lanics Co., Ltd.
 LASER COMPONENTS CANADA, Inc.
 LASER COMPONENTS DG, Inc.
 LASER COMPONENTS GmbH, Inc.
 LASER COMPONENTS IG, Inc.
 Laser Diode, Inc.
 Laser Drive, Inc.
 Laser Institute of America
 Laser Mechanisms, Inc.
 Laser Research Optics
 Laser-compact Co., Ltd.
 Lasertel
 LASERVISION GmbH
 LASOS Lasertechnik GmbH
 Lee Laser, Inc.
 LEW Techniques
 Lexel Laser Product Division
 LEYSOP Ltd.
 LG-Laser Technologies GmbH
 Light Age, Inc.
 Lightspeed Technologies
 LIMO Lissotschenko Mikrooptik GmbH
 LINOS Photonics, Inc.
 Lumera Laser GmbH
 Lumina Power, Inc.
 Luna Technologies
 Market Tech, Inc.
 McPherson Inc.
 Megaopto Co., Ltd.
 MegaWatt Lasers, Inc.
 Meller Optics, Inc.
 Melles Griot
 Meshtel - Intelite
 Micro Laser Systems, Inc.
 Micron Optics, Inc.
 Mindrum Precision, Inc.
 Mitsubishi Cable Industries, Ltd.
 MLD Technologies, LLC
 Morgan Technical Ceramics
 MPB Communications Inc.
 Multiwave Photonics
 National Reconnaissance Office
 NEOARK Corp.
- New Focus, Inc. - A Division of Bookham
 New Scale Technologies, Inc.
 New Source Technology, LLC
 New Wave Research, Inc.
 Newport Corp.
 Newsandgy Optronics Inc.
 nLight Corp.
 NM Laser Products Inc.
 Northrop Grumman, Cutting Edge Optronics
 Nova Phase, Inc.
 NP Photonics
 NTT Electronics Corp.
 Nufern
 Nutfield Technology, Inc.
 Nuvonyx Inc.
 Ocean Optics, Inc.
 oenext.com
 OFR, Inc.
 Ondax, Inc.
 Ophir Optronics, Inc.
 Oplink Communications, Inc.
 OpTek Systems
 Opti Temp, Inc.
 Optica Software
 Optical Support, Inc.
 OPTICS 1, Inc.
 OptiSource, LLC
 Optrans Corp.
 Oriel Instruments
 Osram OptoSemiconductor
 OXXIUS
 OZ Optics Ltd.
 Pavilion Integration Corp.
 PD-LD, Inc.
 Photon Energy AWL GmbH
 Photon Engineering, LLC
 Photon Gear, Inc.
 Photon Machines
 Photonic Products Ltd.
 Photonics Cluster (UK)
 Photonics Industries International, Inc.
 Photonicsonline.com
 Photop Technologies, Inc.
 PicoQuant GmbH
 PolarOnyx, Inc.
 Polymicro Technologies LLC
 Power Technology, Inc.
 Precision Asphere, LLC
 Precision Photonics Corp.
 Pulstec Industrial Co., Ltd.
 QPhotonics, LLC
 Quanta Tech Inc.
 Quantel
 Quantum Composers
 Quintessence Photonics Corp.
 Radiant Dyes GmbH
 Raylase AG
 Research Electro-Optics, Inc.
 Rockwell Laser Industries
 Rocky Mountain Instrument Co.
 RoMack, Inc.
 RPMC
- RSoft Design Group
 Sacher Lasertechnik GmbH
 Saint-Gobain Crystals
 Santec USA
 SB Electronics
 SCANLAB America, Inc.
 Schafer Corp./Lightweight Optical Systems
 SCHOTT North America, Inc.
 Scientech, Inc.
 Scientific Materials Corp
 SCIOPT Enterprises
 Scitec Instruments Ltd.
 Semi Conductor Devices (SCD)
 Semiconductor Technology Research, Inc.
 Sextant Labs., Inc.
 Sierra Precision Optics
 SIFAM Fibre Optics Ltd.
 Sill Optics GmbH & Co., KG
 Simplex Isolation Systems
 Sinocera Photonics, Inc.
 Sira
 Solid State Cooling Systems
 sp3 Diamond Technologies, Inc.
 Space Optics Research Labs.
 Sparkle Optics Corp.
 Spectra-Mat, Inc.
 Spectra-Physics
 Spiricon, Inc.
 Springer
 StellarNet, Inc.
 StockerYale, Inc.
 Super Optronics Inc.
 Supercool Inc.
 Superlum Diodes
 Sutter Instrument Co.
 Sydor Instruments, LLC
 Taboada Research Instruments, Inc.
 Technical Manufacturing Corp.
 TecOptics, Inc.
 Teem Photonics
 Teraxion Inc.
 Thales Electro-Optics Pte
 Thales Laser
 Thales Optronics (Taunton)
 Theratron Engineering Inc.
 Thermotek Inc.
 Thorlabs, Inc.
 Three-Five Epitaxial Services AG (TESAG)
 Time-Bandwidth Products AG
 TopGaN
 Toptica Photonics, Inc.
 Tower Optical Corp.
 U.S. Naval Research Lab.
 ULM Photonics GmbH
 UltraVolt, Inc.
 unique-m.o.d.e. AG
 VIGO Systems S.A.
 Vision GmbH
 Visitech AS
 Visotek Inc.
 Volga Technology Ltd.

Photonics West Product Listing

VueMetrix
Wavelength Electronics, Inc.
Wavelength Technology (S) Pte
Ltd.
Yokogawa Corp. of America

Law Enforcement Technologies

Andor Technology
Avantes, Inc.
B&W Tek, Inc.
Brysen Optical Corp, A Division
of FLIR Systems, Inc.
Cambridge Lasers Labs., Inc.
ColorLink, Inc.
Davin Optronics Ltd.
Electro-Optical Systems, Inc.
EMCO High Voltage Corp.
IMT Masken und Teilungen AG
Infotonics Technology Center
Intellectual Property Insurance
Services
Intevac, Inc.
KEOS Optoelectronics, Inc.
Kinetic Systems, Inc.
Kopp Glass, Inc.
LASER COMPONENTS CANADA,
Inc.
LASER COMPONENTS IG, Inc.
Lexel Laser Product Division
LIMO Lissotschenko Mikrooptik
GmbH
Lumenera Corp.
M3 Measurement Solutions Inc.
McPherson Inc.
Melles Griot
Novacam Technologies Inc.
Ondax, Inc.
Optrans Corp.
OZ Optics Ltd.
Photon Gear, Inc.
Photonicsonline.com
Polymicro Technologies LLC
RetrieverTech
Rofin Australia
Sensors Unlimited, Inc.
Sira
Space Optics Research Labs.
Stanford Photonics, Inc.
Taboada Research Instruments,
Inc.
Thales Electro-Optics Pte
Thermoteknix Systems Ltd.
TruTouch Technologies, Inc.
U.S. Naval Research Lab.
Volpi Manufacturing USA
Wavelength Electronics, Inc.

Metrology, Inspection and Process Control

4D Technology Corp.
Aculight Corp.
Adaptive Optics Associates, Inc.
Aerotech, Inc.
AF Optical Co.
Agilent Technologies, Inc.
Applied Surface Technologies
Applied Technology Associates
Arden Photonics Ltd.
asphericon GmbH
Avantes, Inc.
Axometrics, Inc.
Ayase America, Inc.
B&W Tek, Inc.
Bid Service
Blue Hill Optical Technologies
Blue Sky Research
Cabot Microelectronics Corp./
Engineered Surface Finishes
Carolinas MicroOptics Triangle
CeramOptec Industries, Inc.
Coast Electro Optics
Cobolt AB
Collimated Holes, Inc.
ColorLink, Inc.
Cooke Corp., The
Corning Inc.
Corning NetOptix
Crystal Fibre A/S
DataRay, Inc.
DenseLight Semiconductors Pte
Ltd.
Diamond Wire Technology
DPSS Lasers Inc.
Edmund Optics
Electro-Optical Products Corp.
Electro-Optical Systems, Inc.
Elite Engineering Corp.
Engineering Synthesis Design,
Inc.
EXFO
FEMTO Messtechnik GmbH
Fiberoptic Systems, Inc.
Filmetrics, Inc.
Fisba Optik LLC
FJW Optical Systems, Inc.
Frank Optic Products GmbH
Fraunhofer Institute for Applied
Optics and Precision
Engineering IOF
Fraunhofer IPMS
Frontier Semiconductor
Gam Laser Inc.
Gestione SiLO srl
G-S PLASTIC OPTICS, A
Germanow-Simon Co.
GWU Lasertechnik GmbH
hannoverimpuls GmbH
Heidelberg Instruments Inc.
Hellma International, Inc.
High Tech Photonics
Hinds Instruments, Inc.

HOLOEYE Photonics AG
Hong Kong Photographic and
Optics Manufacturers
Association
HYTEC, Inc.
Imagine Optic
IMT Masken und Teilungen AG
Infinite Graphics Inc.
Infotonics Technology Center
Innolas GmbH
INP Greifswald
Intellectual Property Insurance
Services
Intellevation Ltd.
Intevac, Inc.
Isomet Corp.
JDS Uniphase
JENOPTIK Laser, Optik, Systeme
GmbH - Business Unit Optics
Keopsys Inc.
KEOS Optoelectronics, Inc.
Kigre, Inc.
Kinetic Systems, Inc.
Koheras A/S
Kopp Glass, Inc.
Labsphere, Inc.
LEISTER Technologies, LLC
LG-Laser Technologies GmbH
LIMO Lissotschenko Mikrooptik
GmbH
LINOS Photonics, Inc.
Luna Technologies
M3 Measurement Solutions Inc.
m-u-t Group
Mad City Labs, Inc.
Max Levy Autograph, Inc.
McPherson Inc.
mechOnics ag
Mildex, Inc.
Mindready Solutions
Minus K Technology
Mitsubishi Cable Industries, Ltd.
Moeller-Wedel Optical GmbH
Nanonics Imaging Ltd.
New Focus, Inc. - A Division of
Bookham
New Scale Technologies, Inc.
Novacam Technologies Inc.
NP Photonics
Ocean Optics, Inc.
Ondax, Inc.
OpTek Systems
Opti Works, Inc.
Optical Perspectives Group, LLC
Optical Support, Inc.
Optical Surface Technologies
LLC
Optics Technology, Inc.
OptiPro Systems
OptiSource, LLC
Opto-Alignment Technology, Inc.
OZ Optics Ltd.
PhaseView
Photon Gear, Inc.

Photon Machines
Photonics Cluster (UK)
Photonicsonline.com
Piezosystem Jena, Inc.
POG Präzisionsoptik Gera GmbH
PolarOnyx, Inc.
Polymicro Technologies LLC
Polytec Inc.
Power Technology, Inc.
Precision Asphere, LLC
Precitec, Inc.
Radiant Dyes GmbH
Resonance Ltd.
RSoft Design Group
Sacher Lasertechnik GmbH
Sarnoff Corp.
Satisloh North America Inc.
SCIOPT Enterprises
Sensors Unlimited, Inc.
Sextant Labs., Inc.
Shiefman Consulting, LLC
SIOS Messtechnik GmbH
Sira
Space Optics Research Labs.
Spectronic Devices Ltd.
Sphere Optics
Stanford Computer Optics, Inc.
Statek Corp.
StellarNet, Inc.
StockerYale, Inc.
Swiss Jewel Co.
Taboada Research Instruments,
Inc.
tec5USA, Inc.
Thales Electro-Optics Pte
Thales OPTEM Inc.
Thales Optronics (Taunton)
Veeco Instruments
Vermont Photonics, Inc.
Visitech AS
VMI, Inc.
WaveFront Sciences, Inc.
Wavelength Electronics, Inc.
Zygo Corp.

Nanotechnology

Aerotech, Inc.
Andor Technology
Applied Surface Technologies
ASI/Applied Scientific
Instrumentation
attocube systems AG
Auxora Inc.
B&W Tek, Inc.
Bid Service
Bioptigen Inc.
Cabot Microelectronics Corp./
Engineered Surface Finishes
Canadian Photonics Fabrication
Centre-CPFC
Carolinas MicroOptics Triangle
Center for Biophotonics Science
& Technology
Centre for Integrated Photonics

Chemimage
 Del Mar Photonics, Inc.
 Del Mar Ventures
 Diffractive Optics
 DTI-Nanotech
 Dynamics Research Corp.
 Electro-Optical Products Corp.
 Elliot Scientific Ltd.
 Enplas Nanotech, Inc.
 EpiWorks, Inc.
 Exitech Inc.
 FEMTO Messtechnik GmbH
 Fraunhofer Institute for Applied Optics and Precision Engineering IOF
 Fraunhofer Institute for Silicate Research ISC
 Fraunhofer IPMS
 Fresnel Optics GmbH
 GWU Lasertechnik GmbH
 hannoverimpuls GmbH
 HC Photonics Corp.
 Headwall Photonics
 Heidelberg Instruments Inc.
 Ibsen Photonics
 Incom, Inc.
 Infotonics Technology Center
 Innolas GmbH
 Intellectual Property Insurance Services
 Intellevation Ltd.
 Invenios
 Kinetic Systems, Inc.
 LASERVISION GmbH
 LG-Laser Technologies GmbH
 LightSmyth Technologies, Inc.
 Lightspeed Technologies
 Logitech Product Group
 Mad City Labs, Inc.
 mechOnics ag
 Mesophotonics Ltd.
 Micralyne, Inc.
 Mindrum Precision, Inc.
 Minus K Technology
 Molecular Imprints, Inc.
 Nanonics Imaging Ltd.
 National Reconnaissance Office
 National Research Council of the National Academies
 Noliac A/S
 Novacam Technologies Inc.
 NP Photonics
 Ocean Optics, Inc.
 OptiSource, LLC
 Optiwave Systems Inc.
 Optrans Corp.
 OXIDE/NIMS
 Photon Machines
 Photonic Cleaning Technologies
 Photonic Lattice Inc.
 Photonics Cluster (UK)
 Photonicsonline.com
 PI (Physik Instrumente) LP
 Piezosystem Jena, Inc.
 Polytec Inc.

Quantronix Corp.
 Radiant Dyes GmbH
 RSoft Design Group
 Sacher Lasertechnik GmbH
 Sandia National Laboratories
 SCHOTT North America, Inc. - Electronic Packaging
 Semiconductor Technology Research, Inc.
 Sensovation
 Shiefman Consulting, LLC
 sp3 Diamond Technologies, Inc.
 Space Optics Research Labs.
 Sparkle Optics Corp.
 Springer
 SUSS MicroTec Inc.
 Tecan Ltd.
 Thales Electro-Optics Pte
 U.S. Naval Research Lab.
 Univ. of Central Florida
 Valley Design Corp.
 Veeco Instruments
 Vision GmbH
 WAHL optoparts GmbH
 Wavelength Electronics, Inc.
 Wiley

Optical Components

4D Technology Corp.
 AccuCoat, Inc.
 Advanced Microoptic Systems GmbH
 Advanced Photonic Crystals
 Advanced Photonix, Inc.
 Advanced Thin Films
 AF Optical Co.
 AFL Telecommunications
 Agilent Technologies, Inc.
 Andor Technology
 Andover Corp.
 Anson Optical Products Co., Ltd.
 Anteryon BV
 APPLIED IMAGE Group
 Applied Surface Technologies
 Applied Technology Associates
 APS Optics
 Argyle International Inc.
 Ariel Optics, Inc.
 Arrayed Fiberoptics
 Asahi Spectra USA Inc.
 asphericon GmbH
 Auxora Inc.
 Avo Photonics, Inc.
 Axsys Technologies
 Ayase America, Inc.
 B&W Tek, Inc.
 Barr Associates, Inc.
 Berliner Glas KGaA
 Berliner Glas US
 Blue Hill Optical Technologies
 Blue Sky Research
 Brighten Optics Ltd
 Brysen Optical Corp, A Division of FLIR Systems, Inc.
 Cabot Microelectronics Corp./ Engineered Surface Finishes
 Cambridge Technology, Inc.
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle Casix, Inc.
 Centre for Integrated Photonics
 Changchun New Industries Optoelectronics Tech. Co., Ltd.
 China Daheng Group Inc.
 China Shaanxi Haihui Imp. & Exp. Co., Ltd.
 Cleveland Crystals, Inc.
 Coast Electro Optics
 Codixx AG
 Collimated Holes, Inc.
 ColorLink, Inc.
 Conex Systems Inc.
 Corning Inc.
 Corning NetOptix
 Covega
 Crisel Instruments, SRL
 Cristal Laser SA
 Crosslight Software, Inc.
 Crystal Technology, Inc.
 CRYSTECH Inc.
 CSIRO Australian Centre for Precision Optics
 CVI Laser LLC
 CVI Optical Components
 Davin Optronics Ltd.
 Decade Optical Systems, Inc.
 Del Mar Photonics, Inc.
 Deltronic Crystal Industries, Inc.
 DenseLight Semiconductors Pte Ltd.
 Diemat, Inc.
 Diffractive Optics
 Digital Optics Corp.
 Dilas Diodenlaser GmbH
 Dominar, Inc. - now incorporating Ellis Optical Technology
 Dynamics Research Corp.
 Edmund Optics
 ELCAN Optical Technologies
 Electro Optical Components Inc.
 Electro-Optical Products Corp.
 Electro-Optics Technology, Inc.
 Elliot Scientific Ltd.
 EM4, Inc.
 EMCO High Voltage Corp.
 EMF Corp.
 Enplas Nanotech, Inc.
 EpiWorks, Inc.
 Eschenbach Optik GmbH & Co Technical Optics
 ESE Embedded Systems Engineering GmbH
 Evaporated Coatings, Inc.
 EXFO
 Fiberguide Industries, Inc.
 Fisba Optik LLC

FJW Optical Systems, Inc.
 Foctek Photonics, Inc.
 Foreal Spectrum, Inc.
 Fotofab Corp.
 Frank Optic Products GmbH
 Fraunhofer Institute for Applied Optics and Precision Engineering IOF
 Fraunhofer Institute for Silicate Research ISC
 Fresnel Optics GmbH
 Fresnel Technologies Inc.
 Frontier Optics Inc.
 Fujian CASTECH Crystals, Inc.
 GEOMATEC Co. Ltd.
 Gestione SILO srl
 Gilway Technical Lamp Co.
 Glass Fab Inc.
 Gooch & Housego, PLC
 Grintech GmbH
 G-S PLASTIC OPTICS, A Germanow-Simon Co.
 Guild Optical Associates, Inc.
 Gurlley Precision Instruments, Inc.
 GWU Lasertechnik GmbH
 Halbo Optics
 hannoverimpuls GmbH
 Harold Johnson Optical Labs.
 HC Photonics Corp.
 Headwall Photonics
 Hellma International, Inc.
 Heptagon Oy
 Heraeus Quartz America
 High Energy Laser Joint Technology Office
 High Plains Optics
 High Tech Photonics
 Hilger Crystals Ltd.
 Hinds Instruments, Inc.
 HOLOEYE Photonics AG
 Hong Kong Photographic and Optics Manufacturers Association
 Hoya Corp. USA
 Ibsen Photonics
 ICA Corp.
 IMM Messtechnologie GmbH
 Impex HighTech
 IMT Masken und Teilungen AG
 InfraTec GmbH
 Ingeneric GmbH
 Innovative Photonic Solutions
 INO
 Insaco, Inc.
 Intellectual Property Insurance Services
 Intellevation Ltd.
 Intense Ltd.
 Invenios
 Iridian Spectral Technologies
 IRphotonics
 Isomet Corp.
 ISP Optics
 Isuzu Glass Co., Ltd.
 ITF Optical Technologies Inc.

Photonics West Product Listing

Janos Technology, Inc.
JDS Uniphase
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
JML Optical Industries Inc.
JT Ingram Sales & Marketing
Kaiser Optical Systems, Inc.
Kaleido Technology
KEOS Optoelectronics, Inc.
Kigre, Inc.
Koheras A/S
Kopp Glass, Inc.
LaCroix Optical Co.
Lambda Research Optics Inc.
Laser Beam Products
LASER COMPONENTS DG, Inc.
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Laser Materials Corp.
Laser Mechanisms, Inc.
Laser Optics, a PPGI Company
Laser Research Optics
Lattice Electro Optics, Inc.
LEISTER Technologies, LLC
Leoni Fiber Optics GmbH
Lexel Laser Product Division
LEYSOP Ltd.
LG-Laser Technologies GmbH
LightPath Technologies, Inc.
LightSmyth Technologies, Inc.
Lightspeed Technologies
LIMO Lissotschenko Mikroskopik GmbH
Lincoln Laser Co.
LINOS Photonics, Inc.
Luna Technologies
LxSix Photonics
M3 Measurement Solutions Inc.
m-u-t Group
Market Tech, Inc.
Max Levy Autograph, Inc.
McPherson Inc.
MediVision Optics
Meller Optics, Inc.
Melles Griot
MEMS Optical Inc.
Mesophotonics Ltd.
Micralyne, Inc.
Micron Optics, Inc.
Mindrum Precision, Inc.
Miniflex Ltd.
MLD Technologies, LLC
Moeller-Wedel Optical GmbH
Moore NanoTechnology Systems LLC
Moritex USA Inc.
Moulded Optics GmbH
MPA Crystal Corp.
MRC a PPGI Company
Naked Optics Corp.
Nalux Co., Ltd.
Nanjing Saifei Electro-Optics Co., Ltd.
Nanonics Imaging Ltd.
National Reconnaissance Office
New Focus, Inc. - A Division of Bookham
New Source Technology, LLC
Newsandgy Optronics Inc.
North American Coating Labs.
North Crystals
Northrop Grumman Synoptics
Northumbria Optical Coatings (NOC) Ltd.
Nova Phase, Inc.
Nozomi Photonics
NP Photonics
NTT Electronics Corp.
Nuferrn
NuSil Technology
Ocean Optics, Inc.
OEC
Oehler & Fischer
oenext.com
OFR, Inc.
OFS - Specialty Photonics Div.
Olympus Partnership
Development Group
OMG Co., Ltd.
Ondax, Inc.
Onyx Optics Inc.
OPCO Lab., Inc.
Oplink Communications, Inc.
Opnext, Inc.
Opti Works, Inc.
Optical Perspectives Group, LLC
Optical Support, Inc.
Optics Technology, Inc.
Optikron GmbH
Optimax Systems, Inc.
OptiSource, LLC
Optiwave Systems Inc.
Opto Diode Corp.
Optonetic LLC
OSI Optoelectronics, Inc.
Osram OptoSemiconductor
OWIS GmbH
OXIDE/NIMS
P.E. Schall GmbH
PD-LD, Inc.
PFG Optics
Photek, Ltd.
PHOTLINE TECHNOLOGIES
Photon Gear, Inc.
Photonic Lattice Inc.
Photonic Products Ltd.
Photonic Sense GmbH
Photonics Cluster (UK)
Photonicsonline.com
Photop Technologies, Inc.
Piconics
Plan Optik AG
PLX, Inc.
POG Präzisionsoptik Gera GmbH
Polymer Optics, LLC
Polymicro Technologies LLC
Precision Asphere, LLC
Precision Optical
Precision Optics Corp.
Precision Photonics Corp.
PROSystems, Inc.
QPhotonics, LLC
Quality Laser Optics Ltd.
Quality Thin Films, Inc.
R. Mathews Optical Works, Inc.
Radiant Dyes GmbH
Raicol Crystals Ltd.
Rainbow Research Optics, Inc.
Raylase AG
Rocky Mountain Instrument Co.
RPC Photonics, Inc.
RSoft Design Group
Sacher Lasertechnik GmbH
Saint-Gobain Crystals
Santec USA
Savimex
Schafer Corp./Lightweight Optical Systems
Schneider Optics, Inc.
SCHOTT North America, Inc.
SCHOTT North America, Inc. - Electronic Packaging
Scientific Materials Corp
Semiconductor Technology Research, Inc.
Semrock, Inc.
Sensors Unlimited, Inc.
Servometer/PMG, LLC
Shanghai Optics
Shiefman Consulting, LLC
Showa Optronics Co., Ltd.
Sierra Precision Optics
Sill Optics GmbH & Co., KG
Sinclair Manufacturing
Sinocera Photonics, Inc.
Sonoma Photonics, Inc.
sp3 Diamond Technologies, Inc.
Space Optics Research Labs.
Sparkle Optics Corp.
Spectra-Mat, Inc.
Spectrogon U.S. Inc.
Spiricon, Inc.
SSI Spectrum Scientific, Inc.
Statek Corp.
StockerYale, Inc.
Sugitoh Co., Ltd.
Sunex Inc.
Sunny Precision Optics
Super Optronics Inc.
Swift Glass Co.
Swiss Jewel Co.
SwissOptic AG
Sydor Optics, Inc.
Taboada Research Instruments, Inc.
tec5USA, Inc.
Tecan Ltd.
TecOptics, Inc.
Texas Instruments DLP(r)
Thales Electro-Optics Pte
Thales OPTEM Inc.
Thales Optics
Thales Optische Systeme
Thales Optronics (Taunton)
THALES Polymer Optics
Thorlabs, Inc.
Three-Five Epitaxial Services AG (TESAG)
Tinsley Labs.
Tower Optical Corp.
TwinStar Optics
Tydex JS Co.
U.S. Naval Research Lab.
United Lens Co., Inc.
University of Applied Sciences Harz Wernigerode
Valley Design Corp.
VARIOPTIC S.A.
Vincent Associates
Vision GmbH
VLOC, Inc.
Volga Technology Ltd.
Volpi Manufacturing USA
WAHL optoparts GmbH
Wasatch Photonics
WaveFront Sciences, Inc.
Wavelength Electronics, Inc.
Wavelength Technology (S) Pte Ltd.
Williams Advanced Materials
Y&M Technologies, Inc.
Z&Z Optoelectronic Tech. Co., Ltd.
Zeon Chemicals
Zygo Corp.

Optical Detectors

Advanced Photonix, Inc.
Analog Modules, Inc.
Andor Technology
Asahi Spectra USA Inc.
Avantes, Inc.
Avo Photonics, Inc.
B&W Tek, Inc.
Becker & Hickl GmbH
Bitswave, Inc.
Boston Electronics Corp.
Brighten Optics Ltd
Brysen Optical Corp, A Division of FLIR Systems, Inc.
Canadian Photonics Fabrication Centre-CPFC
Carolinas MicroOptics Triangle
Centre for Integrated Photonics
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
CI Systems, Inc.
Codixx AG
Crosslight Software, Inc.
Del Mar Photonics, Inc.
Digital Optics Corp.
Edmund Optics
Electro Optical Components Inc.
Electron Tubes
Electro-Optical Systems, Inc.
Electro-Optics Technology, Inc.
EMCO High Voltage Corp.
ESE Embedded Systems
Engineering GmbH

FEMLIGHT
 FEMTO Messtechnik GmbH
 Femtochrome Research, Inc.
 Fietje Sensor & Optoelektronik GmbH
 FJW Optical Systems, Inc.
 FLIR Systems
 Frank Optic Products GmbH
 Gamma Scientific, Inc.
 Gentec Electro-Optics Inc.
 GPD Optoelectronics Corp.
 Hamamatsu Corp.
 Hellma International, Inc.
 High Tech Photonics
 Hinds Instruments, Inc.
 id Quantique SA
 InfraTec GmbH
 Intellectual Property Insurance Services
 International Light, Inc.
 Intevac, Inc.
 IR Microsystems
 JDS Uniphase
 JT Ingram Sales & Marketing
 Judson Technologies, LLC
 Labsphere, Inc.
 LASER COMPONENTS IG, Inc.
 LaserPoint
 Leoni Fiber Optics GmbH
 Lexel Laser Product Division
 Licel GmbH
 Lightspeed Technologies
 Market Tech, Inc.
 McPherson Inc.
 Melles Griot
 Meshtel - Intelite
 MRC a PPGI Company
 National Reconnaissance Office
 New England Photoconductor Corp.
 New Focus, Inc. - A Division of Bookham
 Newport Corp.
 Newsandgy Optronics Inc.
 Novacam Technologies Inc.
 OEC
 Oehler & Fischer
 Ophir Optronics, Inc.
 Optiwave Systems Inc.
 Opto Diode Corp.
 Optrans Corp.
 OSI Optoelectronics, Inc.
 OXIDE/NIMS
 PD-LD, Inc.
 Photek, Ltd.
 Photon Gear, Inc.
 Photonics Cluster (UK)
 Photonicsonline.com
 Photop Technologies, Inc.
 Precision Photonics Corp.
 Radiant Dyes GmbH
 Resonance Ltd.
 Santec USA
 Sarnoff Corp.

SCHOTT North America, Inc. - Electronic Packaging
 Scientech, Inc.
 Semiconductor Technology Research, Inc.
 SensL Technologies Ltd.
 Sensors Unlimited, Inc.
 Sensovation
 SIOS Messtechnik GmbH
 Spectronic Devices Ltd.
 Spiricon, Inc.
 Stanford Photonics, Inc.
 Star Tech Instruments
 Sunpower Corp.
 tec5USA, Inc.
 Thales Optronics (Taunton)
 Thorlabs, Inc.
 U.S. Naval Research Lab.
 ULM Photonics GmbH
 UltraVolt, Inc.
 Varian, Inc.
 Volga Technology Ltd.
 Wavelength Electronics, Inc.
 Yokogawa Corp. of America

Optical Fibers

AFL Telecommunications
 Andor Technology
 Applied Surface Technologies
 ATI Optique
 Avantes, Inc.
 B&W Tek, Inc.
 Brighten Optics Ltd
 Carolinas MicroOptics Triangle
 Center for Biophotonics Science & Technology
 CeramOptec Industries, Inc.
 China Shaanxi Haihui Imp. & Exp. Co., Ltd.
 Coastal Connections
 Collimated Holes, Inc.
 CorActive High-Tech, Inc.
 Corning Inc.
 Crystal Fibre A/S
 Del Mar Photonics, Inc.
 Del Mar Ventures
 Dominar, Inc. - now incorporating Ellis Optical Technology
 Edmund Optics
 EM4, Inc.
 Enplas Nanotech, Inc.
 EXFO
 Fibercore Ltd.
 Fiberguide Industries, Inc.
 FiberLogix Ltd.
 Fiberoptic Systems, Inc.
 Frank Optic Products GmbH
 Grintech GmbH
 Guided Color Technologies GmbH
 Hellma International, Inc.
 High Tech Photonics
 Impex HighTech
 Infrared Fiber Systems, Inc.

Ingeneric GmbH
 INO
 Intellectual Property Insurance Services
 International Light, Inc.
 IRphotonics
 JDS Uniphase
 JT Ingram Sales & Marketing
 KEOS Optoelectronics, Inc.
 LASER COMPONENTS GmbH, Inc.
 LASER COMPONENTS IG, Inc.
 Leoni Fiber Optics GmbH
 Lexel Laser Product Division
 Light Guide Optics Germany GmbH
 Lightspeed Technologies
 LIMO Lissotschenko Mikrooptik GmbH
 Logitech Product Group
 Luna Technologies
 LxSix Photonics
 Meshtel - Intelite
 Micro Laser Systems, Inc.
 Mitsubishi Cable Industries, Ltd.
 Mitsubishi Cable Industries, Ltd.
 Model Optics
 Nanonics Imaging Ltd.
 National Reconnaissance Office
 Nozomi Photonics
 NP Photonics
 Nufern
 Ocean Optics, Inc.
 oenext.com
 OFR, Inc.
 OFS - Specialty Photonics Div.
 O-m6 Technologies Inc.
 Oplink Communications, Inc.
 OpTek Systems
 Optical Society of America
 OptiSource, LLC
 Optiwave Systems Inc.
 Photon Engineering, LLC
 Photon Gear, Inc.
 Photonics Cluster (UK)
 Photonicsonline.com
 Photop Technologies, Inc.
 Polymicro Technologies LLC
 Resonance Ltd.
 Rofin Australia
 RSoft Design Group
 Sacher Lasertechnik GmbH
 Sill Optics GmbH & Co., KG
 StockerYale, Inc.
 Sunny Precision Optics
 tec5USA, Inc.
 Thorlabs, Inc.
 U.S. Naval Research Lab.
 UltraVolt, Inc.
 Univ. of Central Florida
 University of Applied Sciences Harz Wernigerode
 Verrillon, Inc.
 Volpi Manufacturing USA
 Wavelength Electronics, Inc.

Optical Materials and Substrates

Advanced Photonic Crystals
 Agilent Technologies, Inc.
 AI Technology
 Andover Corp.
 Antery
 Applied Surface Technologies
 APS Optics
 Argyle International Inc.
 Asahi Spectra USA Inc.
 Axsys Technologies
 B&W Tek, Inc.
 Barr Associates, Inc.
 Berliner Glas KGaA
 Berliner Glas US
 Brush Ceramic Products
 Cabot Microelectronics Corp./ Engineered Surface Finishes
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle
 Centre for Integrated Photonics
 CERAC, Inc.
 China Daheng Group Inc.
 Cleveland Crystals, Inc.
 Collimated Holes, Inc.
 ColorLink, Inc.
 Corion Filters
 Corning Inc.
 Cristal Laser SA
 Crystal Systems, Inc.
 Crystal Technology, Inc.
 CRYSTECH Inc.
 CSIRO Australian Centre for Precision Optics
 Curamik Electronics Inc.
 Del Mar Photonics, Inc.
 Del Mar Ventures
 Deltronic Crystal Industries, Inc.
 Diamond Wire Technology
 Dynasil Corp.
 Edmund Optics
 Electro Optical Components Inc.
 EMD Chemicals Inc.
 EpiWorks, Inc.
 Evaporated Coatings, Inc.
 Foctek Photonics, Inc.
 Frank Optic Products GmbH
 Fraunhofer Institute for Silicate Research ISC
 Fresnel Technologies Inc.
 Fujian CASTECH Crystals, Inc.
 Gestione SiLO srl
 Glass Fab Inc.
 Gooch & Housego, PLC
 Gurley Precision Instruments, Inc.
 GWU Lasertechnik GmbH
 HC Photonics Corp.
 Hellma International, Inc.
 Heraeus Quartz America
 High Plains Optics
 High Tech Photonics
 Hilger Crystals Ltd.

Photonics West Product Listing

Hoya Corp. USA
Impex HighTech
Infrared Fiber Systems, Inc.
Innolas GmbH
Insaco, Inc.
Inta Technologies
Intellectual Property Insurance Services
Invenios
IRphotonics
Isomet Corp.
ISP Optics
Isuzu Glass Co., Ltd.
JDS Uniphase
JML Optical Industries Inc.
JT Ingram Sales & Marketing
KEOS Optoelectronics, Inc.
Kigre, Inc.
Kopp Glass, Inc.
Labsphere, Inc.
Laser Beam Products
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Laser Materials Corp.
Laser Research Optics
Lattice Electro Optics, Inc.
Leoni Fiber Optics GmbH
LEW Techniques
Lexel Laser Product Division
LEYSOP Ltd.
Light Guide Optics Germany GmbH
LIMO Lissotschenko Mikrooptik GmbH
Logitech Product Group
M3 Measurement Solutions Inc.
Max Levy Autograph, Inc.
MediVision Optics
Meller Optics, Inc.
Melles Griot
Mesophotonics Ltd.
Moore NanoTechnology Systems LLC
Morgan Technical Ceramics
MPA Crystal Corp.
MTI Corp.
Naked Optics Corp.
Nanjing Saifei Electro-Optics Co., Ltd.
National Reconnaissance Office
North Crystals
Northrop Grumman Synoptics
Nova Phase, Inc.
Nozomi Photonics
Ocean Optics, Inc.
OMG Co., Ltd.
Optical Support, Inc.
OptiSource, LLC
Optonetic LLC
OXIDE/NIMS
Photon Gear, Inc.
Photonic Sense GmbH
Photonics Cluster (UK)
Photonicsonline.com

Piconics
Plan Optik AG
Polymer Optics, LLC
Precision Optical
Precision Photonics Corp.
Quality Laser Optics Ltd.
Quality Thin Films, Inc.
Radiant Dyes GmbH
Raicol Crystals Ltd.
Rocky Mountain Instrument Co.
SAES Getters USA, Inc.
Saint-Gobain Crystals
Schafer Corp./Lightweight Optical Systems
Schneider Optics, Inc.
SCHOTT North America, Inc.
Scientific Materials Corp
Semiconductor Technology Research, Inc.
Sensors Unlimited, Inc.
Servometer/PMG, LLC
Shanghai Optics
Sierra Precision Optics
Sinocera Photonics, Inc.
Sonoma Photonics, Inc.
sp3 Diamond Technologies, Inc.
Spectra-Mat, Inc.
SSI Spectrum Scientific, Inc.
Stellar Industries Corp.
Sunny Precision Optics
Swift Glass Co.
Swiss Jewel Co.
SwissOptic AG
Taboada Research Instruments, Inc.
tec5USA, Inc.
TecOptics, Inc.
Thales Optics
Thales Optronics (Taunton)
Three-Five Epitaxial Services AG (TESAG)
Tower Optical Corp.
TwinStar Optics
Tydex JS Co.
U.S. Naval Research Lab.
Umicore Thin Film Products
United Lens Co., Inc.
Univ. of Central Florida
Vacuum Engineering & Materials Co., Inc.
Valley Design Corp.
Vision GmbH
VLOC, Inc.
Williams Advanced Materials
Y&M Technologies, Inc.
Z&Z Optoelectronic Tech. Co., Ltd.
Zeon Chemicals

Optical Test and Measurement Equipment, Interferometer

4D Technology Corp.
Adaptive Optics Associates, Inc.
Aerotech, Inc.
AF Optical Co.
Agilent Technologies, Inc.
Applied Technology Associates
Arden Photonics Ltd.
Asahi Spectra USA Inc.
ASI/Applied Scientific Instrumentation
ASML
Avantes, Inc.
Ayase America, Inc.
B&W Tek, Inc.
BIZI International
Blue Hill Optical Technologies
Brealut Research Organization
Bristol Instruments, Inc.
Cabot Microelectronics Corp./Engineered Surface Finishes
Calmar Optcom, Inc.
Carolinas MicroOptics Triangle Centre for Integrated Photonics
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
CI Systems, Inc.
Coast Electro Optics
Codixx AG
Cooke Corp., The
CVI Laser LLC
DataRay, Inc.
Del Mar Photonics, Inc.
Del Mar Ventures
Dongwoo Optron Co., Ltd.
DPSS Lasers Inc.
Dynamics Research Corp.
Edmund Optics
Electro-Optical Systems, Inc.
Elite Engineering Corp.
Engineering Synthesis Design, Inc.
ESE Embedded Systems Engineering GmbH
EXFO
FEMLIGHT
FEMTO Messtechnik GmbH
Femtochrome Research, Inc.
FiberLogix Ltd.
Fisba Optik LLC
FJW Optical Systems, Inc.
FLIR Systems
Frontier Semiconductor
Gamma Scientific, Inc.
Gentec Electro-Optics Inc.
Gestione SiLO srl
Gigahertz-Optik, Inc.
Glass Fab Inc.
Guided Color Technologies GmbH
GWU Lasertechnik GmbH
Hellma International, Inc.
High Q Laser (US), Inc.
Hinds Instruments, Inc.
Hitachi High Technologies America, Inc.
Hong Kong Photographic and Optics Manufacturers Association
HYTEC, Inc.
ILX Lightwave Corp.
Innolas GmbH
INP Greifswald
Intellectual Property Insurance Services
Intellevation Ltd.
International Light, Inc.
IR Microsystems
JDS Uniphase
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
KEOS Optoelectronics, Inc.
Koheras A/S
Labsphere, Inc.
LASER COMPONENTS IG, Inc.
LaserPoint
Lattice Electro Optics, Inc.
Leoni Fiber Optics GmbH
Lexel Laser Product Division
LG-Laser Technologies GmbH
Lightspeed Technologies
LINOS Photonics, Inc.
Logitech Product Group
Luna Technologies
M3 Measurement Solutions Inc.
m-u-t Group
Mad City Labs, Inc.
McPherson Inc.
Micalyne, Inc.
Micron Optics, Inc.
Mildex, Inc.
Minus K Technology
Moeller-Wedel Optical GmbH
Moore NanoTechnology Systems LLC
MPB Communications Inc.
Multiwave Photonics
Nanonics Imaging Ltd.
National Reconnaissance Office
NEOARK Corp.
New Scale Technologies, Inc.
Newport Corp.
Newsandgy Optronics Inc.
Novacam Technologies Inc.
NP Photonics
Ocean Optics, Inc.
oenext.com
Ophir Optronics, Inc.
OpTek Systems
Opti Works, Inc.
Optica Software
Optical Perspectives Group, LLC
Optical Support, Inc.
OPTICS 1, Inc.
Optikos Corp.
OptiPro Systems

OptiSource, LLC
 Opto-Alignment Technology, Inc.
 OptoTech Optikmaschinen GmbH
 Optronik Laboratories, Inc.
 OZ Optics Ltd.
 PhaseView
 Photon Gear, Inc.
 Photon Inc.
 Photonic Lattice Inc.
 Photonics Cluster (UK)
 Photonsonline.com
 PI (Physik Instrumente) LP
 Piezosystem Jena, Inc.
 PolarOnyx, Inc.
 Polytec Inc.
 Precision Asphere, LLC
 Precision Optics Corp.
 Precitec, Inc.
 Pulstec Industrial Co., Ltd.
 Radiant Dyes GmbH
 Resonance Ltd.
 Rockwell Laser Industries
 Sacher Lasertechnik GmbH
 Santec USA
 Satisloh North America Inc.
 Sensors Unlimited, Inc.
 Sextant Labs., Inc.
 Shiefman Consulting, LLC
 SIOS Messtechnik GmbH
 Solid State Cooling Systems
 Space Optics Research Labs.
 Spectronic Devices Ltd.
 Sphere Optics
 Spiricon, Inc.
 Star Tech Instruments
 Statek Corp.
 StellarNet, Inc.
 Sugitoh Co., Ltd.
 Superlum Diodes
 Surface Finishes Co. Inc.
 SUSS MicroTec Inc.
 Swamp Optics, LLC
 Taboada Research Instruments,
 Inc.
 tec5USA, Inc.
 Telemark
 TELOPS Inc.
 Thales Optronics (Taunton)
 Thermoteknix Systems Ltd.
 Thorlabs, Inc.
 TwinStar Optics
 ULM Photonics GmbH
 UltraVolt, Inc.
 Veeco Instruments
 Vermont Photonics, Inc.
 Visitech AS
 WaveFront Sciences, Inc.
 Wavelength Electronics, Inc.
 Yokogawa Corp. of America
 Zygo Corp.

Optical/Laser Microlithography

Advance Reproductions Corp
 Aerotech, Inc.
 Agilent Technologies, Inc.
 Applied Surface Technologies
 Applied Technology Associates
 Asahi Spectra USA Inc.
 ASML
 Ayase America, Inc.
 B&W Tek, Inc.
 Berliner Glas US
 Cabot Microelectronics Corp./
 Engineered Surface Finishes
 Canadian Photonics Fabrication
 Centre-CPFC
 Carolinas MicroOptics Triangle
 Centre for Integrated Photonics
 Changchun New Industries
 Optoelectronics Tech. Co.,
 Ltd.
 Coast Electro Optics
 Codixx AG
 CryLaS GmbH
 Crystal Fibre A/S
 Del Mar Photonics, Inc.
 Digital Optics Corp.
 DPSS Lasers Inc.
 Dynamics Research Corp.
 Electro-Optical Products Corp.
 EMF Corp.
 Exitech Inc.
 Fraunhofer IPMS
 Gam Laser Inc.
 Gestione SiLO srl
 GWU Lasertechnik GmbH
 hannoverimpuls GmbH
 Heidelberg Instruments Inc.
 Hellma International, Inc.
 Heraeus Quartz America
 High Tech Photonics
 Impex HighTech
 Infinite Graphics Inc.
 Innolas GmbH
 INO
 Intellectual Property Insurance
 Services
 Isomet Corp.
 Isuzu Glass Co., Ltd.
 JDS Uniphase
 JENOPTIK Laser, Optik, Systeme
 GmbH - Business Unit Optics
 JT Ingram Sales & Marketing
 Kigre, Inc.
 Kinetic Systems, Inc.
 Koheras A/S
 LASER COMPONENTS IG, Inc.
 Lexel Laser Product Division
 LG-Laser Technologies GmbH
 LightSmyth Technologies, Inc.
 Mad City Labs, Inc.
 Max Levy Autograph, Inc.
 Melles Griot
 Micralyne, Inc.

Minus K Technology
 Moore NanoTechnology Systems
 LLC
 Nanonics Imaging Ltd.
 National Reconnaissance Office
 Newsandgy Optronics Inc.
 NM Laser Products Inc.
 Omega Optical, Inc.
 Optica Software
 Optical Research Associates
 OPTICS 1, Inc.
 OptiSource, LLC
 Photon Gear, Inc.
 Photon Machines
 Photonics Cluster (UK)
 Photonsonline.com
 POG Präzisionsoptik Gera GmbH
 PolarOnyx, Inc.
 Polymicro Technologies LLC
 Radiant Dyes GmbH
 RSoft Design Group
 Sacher Lasertechnik GmbH
 Saint-Gobain Crystals
 SCHOTT North America, Inc.
 SCHOTT North America, Inc. -
 Electronic Packaging
 SCIOPT Enterprises
 Shiefman Consulting, LLC
 Solid State Cooling Systems
 Space Optics Research Labs.
 Synopsys, Inc.
 TecOptics, Inc.
 UltraVolt, Inc.
 Wavelength Electronics, Inc.
 Zygo Corp.

Optics Manufacturing

4D Technology Corp.
 Advanced Microoptic Systems
 GmbH
 Aerotech, Inc.
 Agilent Technologies, Inc.
 Air-Vac Engineering Co., Inc.
 Alpine Research Optics Corp.
 Apollo Instruments, Inc.
 Applied Surface Technologies
 APS Optics
 Argyle International Inc.
 Ariel Optics, Inc.
 Asahi Spectra USA Inc.
 ASML
 asphericon GmbH
 Auxora Inc.
 Avo Photonics, Inc.
 Axometrics, Inc.
 Ayase America, Inc.
 B&W Tek, Inc.
 Barr Associates, Inc.
 Berliner Glas US
 Blue Sky Research
 Brighten Optics Ltd
 Brysen Optical Corp, A Division
 of FLIR Systems, Inc.

Canadian Photonics Fabrication
 Centre-CPFC
 Carolinas MicroOptics Triangle
 Casix, Inc.
 China Daheng Group Inc.
 China Shaanxi Haihui Imp. & Exp.
 Co., Ltd.
 Cleveland Crystals, Inc.
 Collimated Holes, Inc.
 ColorLink, Inc.
 Cooke Corp., The
 Corion Filters
 Corning Inc.
 Covega
 CRI, Inc.
 CSIRO Australian Centre for
 Precision Optics
 CVI Optical Components
 Davin Optronics Ltd.
 DCM Tech, Inc.
 Del Mar Photonics, Inc.
 Del Mar Ventures
 Deltronic Crystal Industries, Inc.
 Diamond Wire Technology
 Diffractive Optics
 Digital Optics Corp.
 Dominator, Inc. - now incorporating
 Ellis Optical Technology
 Edmund Optics
 ELCAN Optical Technologies
 EM4, Inc.
 EMF Corp.
 Enplas Nanotech, Inc.
 Eschenbach Optik GmbH & Co
 Technical Optics
 ESE Embedded Systems
 Engineering GmbH
 EXFO
 Fibercore Ltd.
 FiberLogix Ltd.
 ficonTEC GmbH
 Fisba Optik LLC
 FJW Optical Systems, Inc.
 FLIR Systems
 Fraunhofer Institute for Applied
 Optics and Precision
 Engineering IOF
 Fresnel Optics GmbH
 Fresnel Technologies Inc.
 Frontier Optics Inc.
 Fujian CASTECH Crystals, Inc.
 Gestione SiLO srl
 Glass Fab Inc.
 Gooch & Housego, PLC
 G-S PLASTIC OPTICS, A
 Germanow-Simon Co.
 Gurley Precision Instruments, Inc.
 GWU Lasertechnik GmbH
 Halbo Optics
 Harold Johnson Optical Labs.
 Headwall Photonics
 Hellma International, Inc.
 High Energy Laser Joint
 Technology Office
 High Plains Optics

Photonics West Product Listing

High Tech Photonics
Hilger Crystals Ltd.
Hong Kong Photographic and Optics Manufacturers Association
Hoya Corp. USA
Ibsen Photonics
Impex HighTech
Ingeneric GmbH
Innolas GmbH
Insaco, Inc.
Intellectual Property Insurance Services
Intellevation Ltd.
International Photonics Commercialization Alliance - IPCA
Iridian Spectral Technologies
IRphotonics
Isomet Corp.
ISP Optics
Isuzu Glass Co., Ltd.
Janos Technology, Inc.
JDS Uniphase
JENOPTIK Laser, Optik, Systeme GmbH - Business Unit Optics
JML Optical Industries Inc.
JT Ingram Sales & Marketing
Kaleido Technology
KEOS Optoelectronics, Inc.
Koheras A/S
Kopp Glass, Inc.
LaCroix Optical Co.
Lambda Research Optics Inc.
Laser Beam Products
LASER COMPONENTS GmbH, Inc.
LASER COMPONENTS IG, Inc.
Laser Optics, a PPGI Company
Laser Research Optics
LASERVISION GmbH
Lattice Electro Optics, Inc.
LEISTER Technologies, LLC
Leoni Fiber Optics GmbH
Lexel Laser Product Division
LEYSOP Ltd.
LG-Laser Technologies GmbH
LightPath Technologies, Inc.
LINOS Photonics, Inc.
LxSix Photonics
Market Tech, Inc.
Max Levy Autograph, Inc.
McPherson Inc.
MediVision Optics
Meller Optics, Inc.
Melles Griot
MEMS Optical Inc.
Micralyne, Inc.
Mildex, Inc.
Minus K Technology
Model Optics
Moeller-Wedel Optical GmbH
Moore NanoTechnology Systems LLC
MPA Crystal Corp.

MRC a PPGI Company
MTI Corp.
Naked Optics Corp.
Nalux Co., Ltd.
Nanjing Saifei Electro-Optics Co., Ltd.
National Reconnaissance Office
Newport Corp.
Newsandgy Optronics Inc.
North American Coating Labs.
Nova Phase, Inc.
OFR, Inc.
Olympus Partnership Development Group
Omega Optical, Inc.
OMG Co., Ltd.
Onyx Optics Inc.
Oplink Communications, Inc.
OpTek Systems
Opti Works, Inc.
Optical Support, Inc.
Optical Surface Technologies LLC
Optics for Hire
Optics Technology, Inc.
Optikron GmbH
Optimax Systems, Inc.
OptiPro Systems
OptiSource, LLC
Optiwave Systems Inc.
Optonetic LLC
OSI Optoelectronics, Inc.
PFG Optics
Photon Gear, Inc.
Photonic Products Ltd.
Photonic Sense GmbH
Photonics Cluster (UK)
Photonicsonline.com
Photop Technologies, Inc.
Plan Optik AG
PLX, Inc.
POG Präzisionsoptik Gera GmbH
PolarOnyx, Inc.
Polymer Optics, LLC
Polymicro Technologies LLC
Precision Asphere, LLC
Precision Optical
Precision Optics Corp.
Precision Photonics Corp.
PROSystems, Inc.
Quality Laser Optics Ltd.
Quality Thin Films, Inc.
Radiant Dyes GmbH
Rainbow Research Optics, Inc.
Research Electro-Optics, Inc.
Richardson Grating
Rocky Mountain Instrument Co.
RPC Photonics, Inc.
Salem Distributing Co.
Savimex
Schafer Corp./Lightweight Optical Systems
Schneider Optics, Inc.
SCHOTT North America, Inc.

SCHOTT North America, Inc. - Electronic Packaging
Shanghai Optics
Sierra Precision Optics
Sill Optics GmbH & Co., KG
Sinocera Photonics, Inc.
Space Optics Research Labs.
Sparkle Optics Corp.
Special Optics
Spectrogon U.S. Inc.
SSI Spectrum Scientific, Inc.
StockerYale, Inc.
Sugitoh Co., Ltd.
Sunex Inc.
Surface Finishes Co. Inc.
Swift Glass Co.
SwissOptic AG
Sydor Optics, Inc.
Synopsis, Inc.
Taboada Research Instruments, Inc.
TecOptics, Inc.
Thales Electro-Optics Pte
Thales OPTEM Inc.
Thales Optics
Thales Optische Systeme
Thales Optronics (Taunton)
THALES Polymer Optics
Tinsley Labs.
Tower Optical Corp.
TwinStar Optics
United Lens Co., Inc.
Valley Design Corp.
VARIOPTIC S.A.
Vision GmbH
Visotek Inc.
VLOC, Inc.
WAHL optoparts GmbH
Wasatch Photonics
WaveFront Sciences, Inc.
Wavelength Electronics, Inc.
Wavelength Technology (S) Pte Ltd.
Y&M Technologies, Inc.
Z&Z Optoelectronic Tech. Co., Ltd.
Zeon Chemicals
Zygo Corp.

Berliner Glas US
Bioptigen Inc.
Blue Sky Research
Brealut Research Organization
BURLE INDUSTRIES, INC.
Carolinas MicroOptics Triangle
Centre for Integrated Photonics
China Shaanxi Haihui Imp. & Exp. Co., Ltd.
Codixx AG
ColorLink, Inc.
Covega
Diamond Wire Technology
DPSS Lasers Inc.
Edmund Optics
Electron Tubes
Electro-Optical Products Corp.
Electro-Optical Systems, Inc.
Elliot Scientific Ltd.
ESE Embedded Systems Engineering GmbH
EXFO
FEMTO Messtechnik GmbH
FiberLogix Ltd.
ficonTEC GmbH
Finetech
Fraunhofer-Institut für Angewandte Festkörperphysik
Gamma Scientific, Inc.
Gigahertz-Optik, Inc.
Gilway Technical Lamp Co.
Gooch & Housego, PLC
Headwall Photonics
Hellma International, Inc.
High Tech Photonics
ICA Corp.
Impex HighTech
IMRA America, Inc.
IMT Masken und Teilungen AG
Innovative Photonic Solutions
Inta Technologies
Intellectual Property Insurance Services
Intellevation Ltd.
International Light, Inc.
IRphotonics
Isomet Corp.
Isuzu Glass Co., Ltd.
JDS Uniphase
JT Ingram Sales & Marketing
Kaiser Optical Systems, Inc.
Kaiser Systems, Inc.
KEOS Optoelectronics, Inc.
Kinetic Systems, Inc.
Kopp Glass, Inc.
Labsphere, Inc.
LASER COMPONENTS IG, Inc.
Lexel Laser Product Division
LG-Laser Technologies GmbH
Light Age, Inc.
Logitech Product Group
Lumenera Corp.
Luna Technologies
m-u-t Group

Photonics Equipment Manufacturer

Adaptive Optics Associates, Inc.
Aerotech, Inc.
Air-Vac Engineering Co., Inc.
AIXTRON-Thomas Swan
Andor Technology
APPLIED IMAGE Group
Asahi Spectra USA Inc.
attocube systems AG
Avantes, Inc.
Axometrics, Inc.
Ayase America, Inc.
B&W Tek, Inc.

McPherson Inc.
 Micralyne, Inc.
 Mildex, Inc.
 Mindready Solutions
 Moore NanoTechnology Systems LLC
 Moritex USA Inc.
 MPB Communications Inc.
 Multiwave Photonics
 National Aperture, Inc.
 National Reconnaissance Office
 New Focus, Inc. - A Division of Bookham
 New Scale Technologies, Inc.
 Newport Corp.
 Newsandgy Optronics Inc.
 NM Laser Products Inc.
 Novacam Technologies Inc.
 Nufern
 Nutfield Technology, Inc.
 Ocean Optics, Inc.
 OEC
 oenext.com
 OpTek Systems
 Optica Software
 Optical Perspectives Group, LLC
 Optical Support, Inc.
 Optiwave Systems Inc.
 Opto Diode Corp.
 Opto-Alignment Technology, Inc.
 OWIS GmbH
 OZ Optics Ltd.
 Photonic Lattice Inc.
 Photonics Cluster (UK)
 Photonicsonline.com
 Photron USA
 Precision Photonics Corp.
 Process Materials Inc.
 Quantronix Corp.
 Radiant Dyes GmbH
 Redfish Photonics
 Resonance Ltd.
 RetrieverTech
 Rofin Australia
 Sacher Lasertechnik GmbH
 Scientech, Inc.
 Sensors Unlimited, Inc.
 Sextant Labs., Inc.
 Simplex Isolation Systems
 SIOS Messtechnik GmbH
 Sira
 Siskiyou Design Instruments
 Space Optics Research Labs.
 Specialised Imaging Ltd.
 Spectronic Devices Ltd.
 Spiricon, Inc.
 Stanford Photonics, Inc.
 StellarNet, Inc.
 StockerYale, Inc.
 Sutter Instrument Co.
 Sydor Instruments, LLC
 Taboada Research Instruments, Inc.
 tec5USA, Inc.
 TELOPS Inc.

Thermotek Inc.
 Thermoteknix Systems Ltd.
 Thorlabs, Inc.
 UltraVolt, Inc.
 Visitech AS
 WaveFront Sciences, Inc.
 Wavelength Electronics, Inc.

Resist Technology and Processing

Avantes, Inc.
 B&W Tek, Inc.
 Bid Service
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle Intellectual Property Insurance Services
 Isuzu Glass Co., Ltd.
 Kinetic Systems, Inc.
 Max Levy Autograph, Inc.
 Micralyne, Inc.
 Photonicsonline.com
 Piconics
 Resonance Ltd.
 SUSS MicroTec Inc.

Sensor & Sensor Systems

Adaptive Optics Associates, Inc.
 Advanced Photonix, Inc.
 Analog Modules, Inc.
 Andor Technology
 Applied Technology Associates
 Arrayed Fiberoptics
 Avantes, Inc.
 Avo Photonics, Inc.
 B&W Tek, Inc.
 Bitswave, Inc.
 Brimrose Corp. of America
 Brysen Optical Corp, A Division of FLIR Systems, Inc.
 Cabot Microelectronics Corp./ Engineered Surface Finishes
 Canadian Photonics Fabrication Centre-CPFC
 Carolinas MicroOptics Triangle Center for Biophotonics Science & Technology
 China Shaanxi Haihui Imp. & Exp. Co., Ltd.
 Coast Electro Optics
 Codixx AG
 Covega
 DataRay, Inc.
 Davin Optronics Ltd.
 Dynamics Research Corp.
 Edmund Optics
 Electro Optical Components Inc.
 Electron Tubes
 Electro-Optical Systems, Inc.
 Elite Engineering Corp.

EMCO High Voltage Corp.
 ESE Embedded Systems Engineering GmbH
 EXALOS AG
 FEMTO Messtechnik GmbH
 Fiberguide Industries, Inc.
 Fiberoptic Systems, Inc.
 FJW Optical Systems, Inc.
 FLIR Systems
 Fotofab Corp.
 Fraunhofer Institute for Applied Optics and Precision Engineering IOF
 Fraunhofer IPMS
 Frontier Semiconductor
 Gigahertz-Optik, Inc.
 GPD Optoelectronics Corp.
 Headwall Photonics
 Hellma International, Inc.
 High Tech Photonics
 Ibsen Photonics
 Infotonics Technology Center
 Innolas GmbH
 Inta Technologies
 Intellectual Property Insurance Services
 International Light, Inc.
 International Radiation Detectors, Inc.
 Intevac, Inc.
 Intex, Inc.
 Invenios
 IR Microsystems
 IRphotonics
 Isuzu Glass Co., Ltd.
 JT Ingram Sales & Marketing
 Kaiser Optical Systems, Inc.
 Kinetic Systems, Inc.
 Koheras A/S
 Labsphere, Inc.
 Lanics Co., Ltd.
 LASER COMPONENTS CANADA, Inc.
 LASER COMPONENTS DG, Inc.
 LASER COMPONENTS IG, Inc.
 LaserPoint
 Lexel Laser Product Division
 LG-Laser Technologies GmbH
 Licel GmbH
 LIMO Lissotschenko Mikrooptik GmbH
 Lumenera Corp.
 Luna Technologies
 LxSix Photonics
 m-u-t Group
 Market Tech, Inc.
 McPherson Inc.
 mechOnics ag
 Mesophotonics Ltd.
 Micralyne, Inc.
 Micron Optics, Inc.
 Mindrum Precision, Inc.
 Moore NanoTechnology Systems LLC

Morgan Technical Ceramics
 Multiwave Photonics
 National Reconnaissance Office
 New England Photoconductor Corp.
 Novacam Technologies Inc.
 NP Photonics
 Ocean Optics, Inc.
 OEC
 Oehler & Fischer
 Optica Software
 Optical Research Associates
 Optical Support, Inc.
 OPTICS 1, Inc.
 Opto Diode Corp.
 Optrans Corp.
 OSI Optoelectronics, Inc.
 Osram OptoSemiconductor
 PhaseView
 PHOTLINE TECHNOLOGIES
 Photonic Lattice Inc.
 Photonics Cluster (UK)
 Photonicsonline.com
 Photron USA
 PolarOnyx, Inc.
 Polymer Optics, LLC
 Polymicro Technologies LLC
 Polytec Inc.
 Precision Optics Corp.
 Resonance Ltd.
 RSoft Design Group
 Sacher Lasertechnik GmbH
 Sandia National Laboratories
 Sarnoff Corp.
 Schafer Corp./Lightweight Optical Systems
 SCHOTT North America, Inc. - Electronic Packaging
 Scientech, Inc.
 Scientific Materials Corp
 SensL Technologies Ltd.
 Sensors Unlimited, Inc.
 Sensovation
 Servometer/PMG, LLC
 SIOS Messtechnik GmbH
 Sira
 Solid State Cooling Systems
 Spectronic Devices Ltd.
 Spiricon, Inc.
 Stanford Photonics, Inc.
 Statek Corp.
 StellarNet, Inc.
 SwissOptic AG
 Sydor Instruments, LLC
 tec5USA, Inc.
 Thales Optronics (Taunton)
 U.S. Naval Research Lab.
 UltraVolt, Inc.
 WAHL optoparts GmbH
 Wavelength Electronics, Inc.

Photonics West Product Listing

Services and Publications (Including Professional Societies)

Applied Technology Associates
B&W Tek, Inc.
Cabot Microelectronics Corp./
Engineered Surface Finishes
Centre for Integrated Photonics
CRC Press-Taylor & Francis
Group LLC
Decade Optical Systems, Inc.
East of England International
Evans Analytical Group
Fraunhofer Institute for Silicate
Research ISC
Fraunhofer IPMS
Intellectual Property Insurance
Services
International Photonics
Commercialization Alliance -
IPCA
IOP Publishing
KAPID (Korea Association for
Photonics Industry
Development)
KEOS Optoelectronics, Inc.
Kinetic Systems, Inc.
Laser Applications International
Laser Compliance, Inc.
Laser Focus World
LEW Techniques
OEC
OptecNet Deutschland e.V.
Optica Software
OptoIndex - Companies and
Products in Photonics
Optometrics Corporation
Optronics Co., Ltd. (The)
OXIDE/NIMS
Photon Engineering, LLC
Photonics Cluster (UK)
Photonics Industry & Technology
Development Association
(PIDA)
Photonics Spectra - Laurin
Publishing
Photonics Tech Briefs
Photonics.com/The Photonics
Directory
Photonicsonline.com
Physics Today
Rockwell Laser Industries
RSoft Design Group
Sira
Space Optics Research Labs.
SPIE Newsroom/SPIE
Professional
SPIE Professional Development
Stanford Photonics Research
Center (SPRC)

UBIFRANCE
Vision Systems Design
Welsh Development Agency
Wiley

Software

4D Technology Corp.
AF Optical Co.
Andor Technology
B&W Tek, Inc.
Biophtigen Inc.
Chemimage
COMSOL, Inc.
Crosslight Software, Inc.
Del Mar Photonics, Inc.
Edmund Optics
Elite Engineering Corp.
Engineering Synthesis Design,
Inc.
Fisba Optik LLC
FLIR Systems
Infinite Graphics Inc.
Intellectual Property Insurance
Services
Intellevation Ltd.
Lambda Research Corp.
LAS-CAD GmbH
Laser Institute of America
M3 Measurement Solutions Inc.
MathWorks Inc., The
National Reconnaissance Office
Nutfield Technology, Inc.
Optica Software
Optical Research Associates
OptiPro Systems
OPTIS North America, A Division
of OPTIS France
Optiwave Systems Inc.
PhaseView
Photon Design
Photon Engineering, LLC
Photonicsonline.com
Raylase AG
Rockwell Laser Industries
RSI
RSoft Design Group
SCIOPT Enterprises
Semiconductor Technology
Research, Inc.
Spiricon, Inc.
Stanford Photonics, Inc.
StellarNet, Inc.
Thermoteknix Systems Ltd.
Varian, Inc.
WaveFront Sciences, Inc.
ZEMAX Development Corp.

Vacuum, Cooling, Gas Handling Equipment

Andor Technology
Applied Surface Technologies
B&W Tek, Inc.
Bid Service
Decade Optical Systems, Inc.
Ferrotec Corp.
High Tech Photonics
Inta Technologies
Intellectual Property Insurance
Services
JT Ingram Sales & Marketing
Kinetic Systems, Inc.
Lattice Electro Optics, Inc.
Lexel Laser Product Division
Leybold Optics GmbH
Lytron, Inc.
Mad City Labs, Inc.
mechOnics ag
National Reconnaissance Office
New Scale Technologies, Inc.
Opti Temp, Inc.
Opto-Alignment Technology, Inc.
Optonetic LLC
Photonicsonline.com
Process Materials Inc.
SAES Getters USA, Inc.
Satisloh North America Inc.
Supercool Inc.
Tecport Optics, Inc.
Telemark
Thermotek Inc.
UltraVolt, Inc.
Vacuum Process Technology, Inc.
Varian Vacuum Technologies
Wavelength Electronics, Inc.

Optica Software
Photonicsonline.com
Resonance Ltd.
Saint-Gobain Crystals
Tinsley Labs.
Wavelength Electronics, Inc.

X-Ray Lithography

Aerotech, Inc.
Agilent Technologies, Inc.
Avo isPhotonics, Inc.
B&W Tek, Inc.
Carolinas MicroOptics Triangle
Electro-Optical Products Corp.
Gestione SiLO srl
Imagine Optic
Intellectual Property Insurance
Services
International Radiation Detectors,
Inc.
Kinetic Systems, Inc.
LASER COMPONENTS IG, Inc.
McPherson Inc.
National Reconnaissance Office
New Scale Technologies, Inc.
NM Laser Products Inc.



Market Seminars:

analysis, insight, and ideas
for business

FREE to all technical attendees and exhibitors. Badge required

Hear industry leaders, analysts and forecasters share market research, strategic insight and ideas for business.

*Tuesday 24 January · 8:30 to 9:45 am
Hilton Hotel: Almaden II*

Nanotech Roadmap for Optics
Scott Mize, Executive Director, Foresight
Nanotechnology Institute

**Nanophotonics: Technology
Assessment and Market
Opportunities**

Tom Hausken, Director, Optical
Components, Strategies Unlimited

*Wednesday 25 January · 8:30 to 9:45 am
Marriott Hotel: San Jose Ballroom IV*

**Executive Panel: Market Direction
and Implications for the World
of Photonics**

BOOKHAM, Giorgio Anania, President
and CEO

MELLES GRIOT, Lynn Strickland,
VP Marketing and Strategic Development

EDMUND OPTICS, John Stack,
President and COO

NEWPORT CORPORATION, Gary Spiegel,
Vice President Sales and Service

HAMAMATSU, Ken Kaufmann, New
Technology Development

COHERENT, Paul Meissner, Executive
Vice President, Global Business Operations

*Tuesday 24 January · 2:00 to 3:30 pm
Marriott Hotel: San Jose Ballroom IV*

**Seeing New Light in the Display
Industry**

Dr. Kim Allen, Director, Display
Technology and Strategy, iSuppli

**Optoelectronics Industry
Forecast: Opportunities
for Business**

Michael Lebby, Optoelectronics Industry
Development Association (OIDA)

*Thursday 26 January · 9:15 to 9:45 am
Convention Center: Room A7-A8*

Perspectives on Asia

Eugene Arthurs, Executive Director, SPIE



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Notes

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