

2008
Exhibition
Guide

SPIE Defense+Security

Exhibition: 18–20 March 2008

Courses: 16–20 March 2008

Conferences: 17–20 March 2008

Orlando World Center Marriott Resort & Convention Center
Orlando, Florida USA



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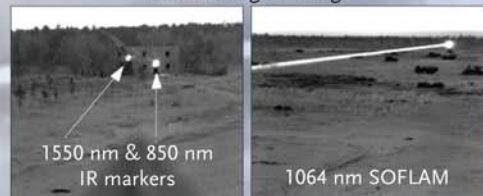
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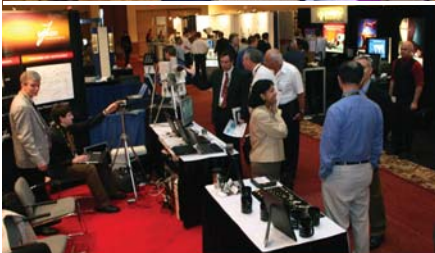
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Don't Miss These Free Presentations

Innovation and the Wealth of Nations, p. 6



Sir John Chisholm
Chairman of QinetiQ

Future Directions for CBRNE Sensors and Systems Development, p. 6



SPIE Defense+Security

Exhibition: 18-20 March 2008
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Orlando World Center Marriott Resort & Convention Center
 Orlando, Florida USA

Contents

General Information	2-4
Special Events – <i>FREE Presentations</i>	6
Daily Course Schedule	16-21

SPIEWorks Career Fair	12
Exhibition Sponsors	13
Exhibition Floor Plan	24-25
Exhibitor Index	26-28
Advertiser Index	28
Exhibitor Listing	29-86
Product Index	88-93
 SPIE Corporate Members	 94-95



2008 Symposium Chair
Dr. Larry B. Stotts,
 DARPA, Deputy Director
 for the Strategic
 Technology Office



2008 Symposium Co-chair
Dr. Ray O. Johnson,
 Lockheed Martin Corp.
 Senior Vice President and
 Chief Technology Officer

Defense+Security is an industry event sponsored by



General Information

Exhibition Hours

Orlando World Center Marriott Resort & Convention Center · Cypress Ballroom · Sabal/Sago Ballrooms
Tuesday 18 March 10:00 am to 5:00 pm
Wednesday 19 March 10:00 am to 5:00 pm
Thursday 20 March 10:00 am to 2:00 pm

Registration Hours

Orlando World Center Marriott Resort & Convention Center
Arrival Concourse next to Canary Ballroom
Sunday 16 March 7:30 am to 4:00 pm
Monday 17 March 7:15 am to 4:00 pm
Tuesday 18 March 7:30 am to 5:00 pm
Wednesday 19 March 7:30 am to 5:00 pm
Thursday 20 March 7:30 am to 2:00 pm

Course Materials Desk

Crystal Registration Desk
Open during registration hours

If you have registered to attend a course, stop by the Course Materials Desk after you pick up your badge, to obtain your course notes and course location. Pick up a copy of the latest Education Services catalog to see SPIE Courses at symposia, on video and CD-ROM, and to discover the opportunities of customized In-Company courses.

Food and Beverage Services

Breakfast Breads

Breakfast breads and coffee will be served from 7:30 to 8:30 am Monday through Thursday for registered conference attendees.

Coffee Breaks

Complimentary coffee will be served Sunday through Thursday at approximately 10:00 am and 3:00 pm. Please check the individual technical conference listings for exact times and locations.

Lunch Locations

The Marriott will provide concessions in the Sago/Sabal Ballroom with a variety of hot and cold items. There are also various choices in the Marriott Food Court. Champions and the Poolside Grill will also be open.

Desserts

Tuesday through Thursday
Dessert snacks will be served from 3:00 to 3:30 pm. Complimentary tickets for the dessert snacks will be included in attendee registration packets.

Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.

SPIE Membership

SPIE Members receive 15% off conference and course registration fees. Sign up for SPIE Membership when you register and take immediate advantage of member pricing.

Media/Press Representatives

For credentialed press and media representatives, please email contact information, title, and organization to media@spie.org.

SPIE Receipts, Badge Corrections, Cashier

Receipts - Preregistered attendees who did not receive a receipt prior to the meeting may obtain a new copy of their registration receipt onsite at the Badge Corrections and Receipts counter in the registration area.

Badge Corrections - Attendees who need a correction to their badge information onsite may do so at the Badge Corrections and Receipts counter in the registration area.

Cashier Station - If you are paying by cash or check as part of your onsite registration, wish to add a course, workshop, or special event requiring payment, or have questions regarding your registration, please see the Cashier station in the registration area.

Business Services

Concierge Desk

The Marriott Group Concierge will have a fully staffed Concierge Desk near SPIE registration to assist attendees with discounted attraction tickets, restaurant reservations, golf tee times, and local information.

SPIE Copy Center

San Diego Copy will provide a copy service during the week for symposium attendees. The rates are 5 cents per copy and \$1 per transparency (\$2.50 for color). The Copy Center will be located in the Atrium across from the Crystal Ballrooms.

SPIE Message Center

The SPIE Message Center telephone number is 407 238 4000. Messages will be taken during registration hours Sunday through Thursday. Please check the message board at the message center near SPIE registration daily to receive your messages.

Child Care

All About Kids Professional Child Care, toll free 1-800-728-6506, Phone (407) 812-9300, www.All-About-Kids.com, or email AAboutKids@aol.com

Note: SPIE does not imply an endorsement nor recommendation of these services. They are provided on an "information only" basis for your further analysis and decision. Other services may be available.



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General Information

SPIE Onsite Services

SPIE Marketplace

Grand Atrium

Open during registration hours, Monday–Thursday

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

Industry Resources

Sabal Ballroom, Booth #1B

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

SPIEWorks Career Fair

Sabal Ballroom

In addition to the onsite recruitment activities, 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 Defense+Security; post your resume, view jobs, or sign-up for “Job Alerts” and receive opportunities by email long after this event is over. For more information see p. 12.

Press & Media Center

Crystal Foyer

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

Internet Pavilion

Crystal Foyer

SPIE will have a complimentary Internet Pavilion at the meeting site Sunday through Thursday where attendees can use provided workstations or hook up their laptop to an Ethernet connection to access the Internet.

Complimentary Internet Wireless Access

Sabal Ballroom/Grand Foyer/Atrium

SPIE is pleased to provide complimentary wireless access to the Internet for all conference attendees bringing 802.11b wireless-enabled laptops or PDAs.

Marriott Village Shuttles

Shuttles are available to the Orlando Marriott World Center for attendees staying at the Marriott Village. Shuttles will operate Sunday through Thursday. Drop off and pickup will occur on the Arrival Concourse outside the Palms Ballroom. Shuttle schedule will be posted onsite.

Parking

(Note: All rates are subject to change)

Self-parking at the Marriott is \$7.00. Valet parking is \$18. Both include in/out privileges. Tax is extra @ 7.5%. Parking can be billed to the guest's room.

Policies

Audio, Video, Digital Recording Policy

In the Meeting Rooms and Poster Sessions: For copyright reasons, recordings of any kind are strictly prohibited without prior written consent of the presenter in any conference session, course or of posters presented. Each presenter being taped must file a signed written consent form. Individuals not complying with this policy will be asked to leave a given session and asked to surrender their film or recording media. Consent forms are available at the SPIE Audiovisual Desk.

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

Underage Persons on Exhibition Floor

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

Unauthorized Solicitation

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

Unsecured Items

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

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Special Events – *Presentations Free to all attendees*

Future Directions for CBRNE Sensors and Systems Development

Tuesday 18 March · 5:00 to 7:00 pm · Room: Crystal H

Chairs: **Thomas George**, ViaLogy PLC;
Patrick J. Gardner, Western Carolina Univ.

Events from recent years have shown us that awareness of Chemical, Biological, Radiation, Nuclear and Explosive (CBRNE) threats are no longer the exclusive domain of the military and first responder communities, but has spread to the civilian population at large. While a diverse set of sensors and instruments have been developed for the detection and characterization of these threats, government agencies are discovering that our capabilities for early detection, threat mitigation and decontamination operations are still woefully inadequate in order to effectively counter CBRNE threats. The various DoD and Homeland Security agencies have focused on a “detect-to-warn” system-integration strategy involving sensor fusion and the development network-centric systems. A key factor to be considered for future in-situ and standoff detection technologies is a rapid analysis capability with minimum false positives and negatives.

A distinguished panel of leading experts from academia, industry and the end-user will identify the future opportunities for research and new product development of CBRNE sensors intended for operation in both urban and non-urban environments. The panel will examine the various deficiencies of existing state-of-the-art technologies and unmet needs with regard to CBRNE threat sensing and mitigation. Mechanisms for rapidly and cost-effectively transitioning emerging sensing technologies from the laboratory to system-level applications will be discussed.

PANELISTS:

Don Buley, Deputy Joint Program Manager Guardian

Robert W. Dean, President and CEO, ViaLogy PLC

David W. Cullin, Senior VP for Technology Transition at ICx Technologies, Inc.

John C. Carrano, VP for R&D at Luminex Corp.

Augustus W. Fountain III, Senior Research Scientist-ST, U.S. Army REDCOM/ECBC

Greg Hebner, Manager Lasers, Remote Sensing, Plasma Science and Complex Systems Group, Sandia National Labs.

Paul V. Davis, Director, Expanding Markets and Collaborative Partnerships within the Civil Security and Response Programs (CSRP) Business Area of Raytheon’s Integrated Defense Systems (IDS)

Innovation and the Wealth of Nations

Wednesday 19 March · 5:00 to 6:00 pm · Room: Crystal H

Chair: **Roger Appleby**, QinetiQ Ltd. (United Kingdom)



Sir John Chisholm,
Chairman of QinetiQ

The UK Government, along with many other governments, believes that innovation is the basis of our survival in the 21st Century. But for individuals and companies, innovation can also lead to costly mistakes. This session draws on experience across a number of industries to point the way as to how you can make money while


avoiding losing it.

Sir John Chisholm’s distinguished career bridges science, government, and industry—He is uniquely situated to discuss the role of innovation in the increasingly interconnected public-private research and development arena. Sir John is currently Chairman of QinetiQ, a firm created out of the majority privatization of the UK’s Defence Evaluation and Research Agency. In 2006 the company was listed on the LSE with revenues of £1.15 bn and earnings of £90m. Sir John also serves as Chair of the Medical Research Council, the agency responsible for the UK’s £500m biomedical research program.

Sir John is an Engineering graduate of Cambridge University. He helped to found and build CAP Group plc, a diversified computer software company, which merged with French group Sema Metra SA to become the 8000 strong Sema Group plc in 1988. Sir John served as UK Managing Director. During the nineties, Sir John was central in achieving the reorganization of the UK Defence Research Establishments into the Defence Evaluation and Research Agency.

He was Knighted by the Queen in 1999 for services to Defence Science. Sir John is a Fellow of the Royal Academy of Engineering, a Fellow of the Royal Aeronautical Society, a Fellow of the Institute of Physics, and a Fellow of the Institute of Engineering and Technology. He served as President of the Electrical Engineering Association (1989) and President of the Institution of Engineering and Technology (2005/6), as a member of the 2007 Science and Technology Policy review team, and was a founding member of the UK Government’s Technology Foresight programme. Sir John is a frequent speaker on Change Management, Innovation, and Defence Science.





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FLORIDA INNOVATION SHOWCASE 2008



University
Partnership Opportunities
for Your Organization

19–20 March 2008

Co-located with SPIE Defense+Security

Florida Innovation Showcase Registration

Location: Royal Palm

Wednesday 18 March Noon to 5:00 pm

Thursday 19 March 7:00 to 11:00 am

The Florida Innovation Showcase 2008 is your opportunity to discover Florida’s hottest university technologies and research competencies for leveraging your research and development efforts. This technology development and partnership conference is presented by the Florida Research Consortium, a not-for-profit strategic partner between Florida’s universities, the business community and state government to introduce you to the many exciting discoveries being generated as a result of the tremendous volume of research taking place throughout the state of Florida.

On Wednesday afternoon, 19 March, attendees will be welcomed and given a high level briefing (Governor Crist invited) on “Florida’s Progression as a Technological Leader”. This overview will be followed by an informative panel of experts covering ways to engage and leverage universities in the commercial enterprise. The day will end with a cocktail reception featuring tasty Florida treats and opportunities to mingle with top Florida business, economic development and academic leaders.

On Thursday, 20 March a hosted continental breakfast, followed by breakout sessions and university/institute briefings that give you the opportunity to discuss trends in technology transfer and discover new developments in hot growth areas such as:

- Physical and Chemical Sensor and Diagnostic Technologies
- Data Mining and Analysis Technologies
- Imaging System Technologies
- Biomedical Technologies with Homeland Security and Defense Applications
- Biosensors and Diagnostic Technologies
- Materials Technologies
- Agriculture and Food Source Protection Technologies
- Modeling and Simulation Technologies

Plenty of time will be allowed for networking breaks throughout the day.



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See the ***NEW***

Robotics+Unmanned Systems Pavilion

FREE
to all Registered
Attendees

Location: Sago/Sabal Ballrooms, adjacent to the Exhibition Hall.

Pavilion Hours:

Tuesday 18 March10:00 am to 5:00 pm
Wednesday 19 March10:00 am to 5:00 pm
Thursday 20 March10:00 am to 2:00 pm

The Pavilion features:

- Displays and demonstrations from a select group of robotics and unmanned systems vendors
- Differentiation from the larger variety of products on display in the main hall

On Display:

- Unmanned vehicles from the DARPA Challenge
- Robotic systems used by the Army & Navy
- Unmanned Aerial Vehicles currently being used in Afghanistan and Iraq
- Companies showing the latest technology in IR Imagers, sensors, and optics utilized by Military Robots and Unmanned Systems



Credit: Swift Engineering
Swift Engineering Killer Bee



Geo Systems "SAM" Robot



University of Central Florida DARPA Challenge Vehicle



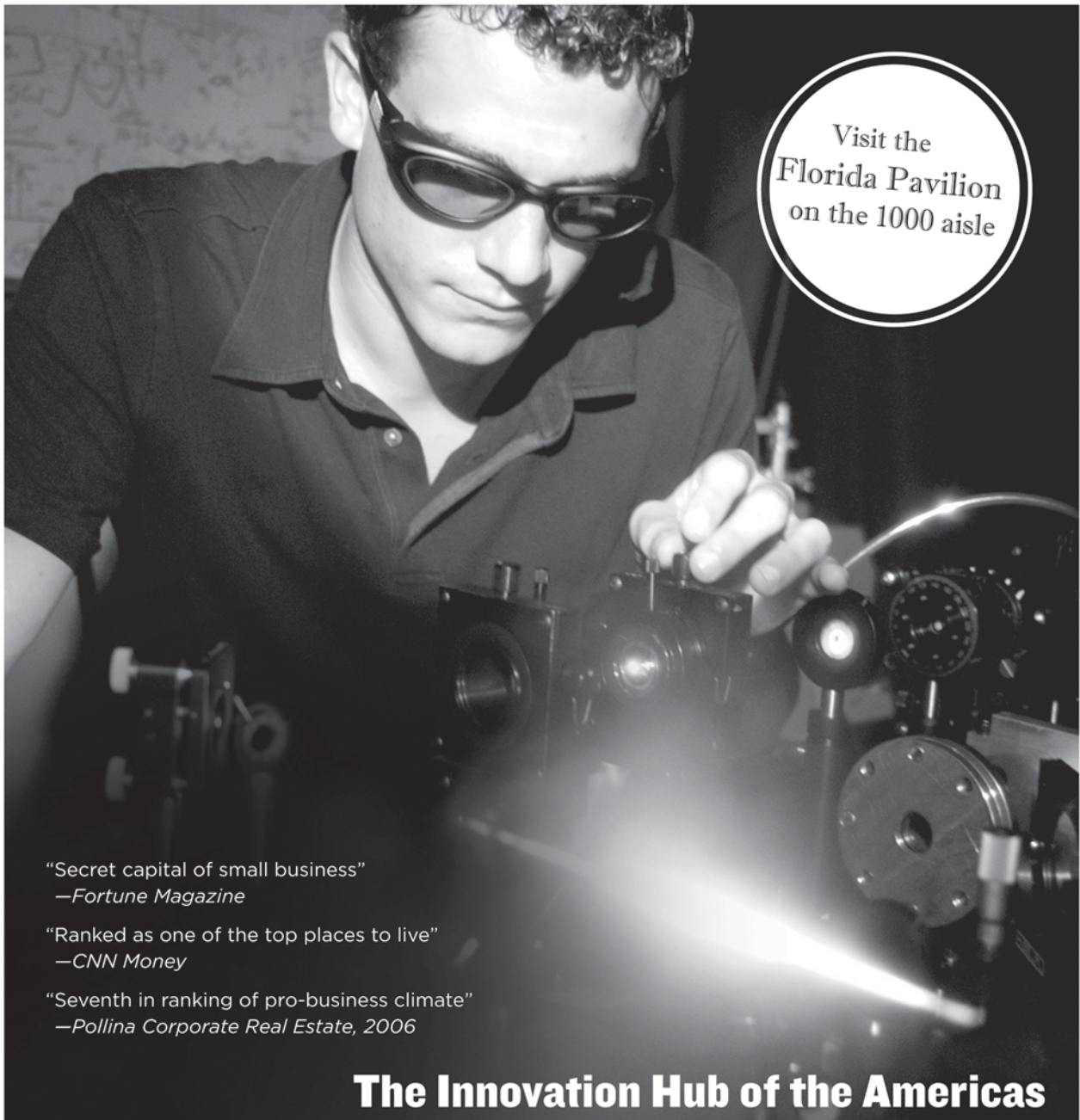
University of Florida Team Gator Nation Urban Navigator 2007



Arcturus T-15 UAV



Air Force Research Lab. "Defender"



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Florida Pavilion
on the 1000 aisle

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—*Fortune Magazine*

"Ranked as one of the top places to live"
—*CNN Money*

"Seventh in ranking of pro-business climate"
—*Pollina Corporate Real Estate, 2006*

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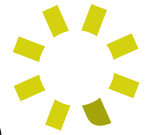


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Recruiters (as of 6 February 2008)

SPIE Works



spieworks.com

Make your way to the SPIEWorks Career Fair!

TWO DAYS ONLY · FREE ADMISSION · REGISTRATION REQUIRED

Location: Sabal Ballroom

Tuesday 18 March 11:00 am to 3:00 pm

Wednesday 19 March 11:00 am to 3:00 pm

Top employers are coming together to interview and hire talented engineers and scientists like you! The SPIEWorks Career Fair at SPIE Defense+Security is a great way to:

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

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





SPIE thanks the following sponsors for their generous support



<p>Lanyards</p>  <p>Booth #1019 www.edmundoptics.com</p>	<p>Hotel Room Key/ Meter Board</p>  <p>Booth #711 www.umicore.com</p>	<p>Internet Pavilion</p>  <p>Booth #941 www.newport.com</p>
<p>Conference Bags</p>  <p>Booth #841 www.elcan.com</p>	<p>Coffee Break</p>  <p>Booth #1241 www.sales.hamamatsu.com</p>	<p>Meter Board</p>  <p>Booth #1318 www.qioptiq.com</p>
<p>Conference Bag Insert</p>  <p>Booth #723 www.thermal-eye.com</p>	<p>Pleora Technologies</p>  <p>Booth #107 www.pleora.com</p>	<p>General Refreshment Sponsors</p> <ul style="list-style-type: none"> Adimec, Booth #1017 Agilent Technologies, Inc., Booth #329 Corning Inc., Booth #416 Electro Optical Industries, Inc. Booth #1040 Fiberguide Industries, Inc., Booth #1224 Lasertel Booth #1217 The MathWorks Inc., Booth #616 MicroSecurity Lab Inc., Booth #1442 New York Photonics Industry Association Booth #422 Rocky Mountain Instrument Co. Booth #225 SEO Precision, Booth #438
<p>Conference Bag Insert</p>  <p>Booth #2016 www.rsoftdesign.com</p>	<p>Wi-Fi Internet</p>  <p>Booth #1426 www.kollman.com</p>	

Industry Workshops



Learn new technical skills and enhance your career with these workshops from SPIE.

Intellectual Property Issues in the Defense and Security Industries

WS639 · Course level: Introductory
CEU .35 \$315 / \$365 USD
Tuesday 8:30 am to 12:30 pm

Intellectual property (IP), in the form of copyrights, trademarks, trade secrets, ideas and patents, is of great importance in the defense and security industries. Many companies and contractors are involved with developing and manufacturing specialized products or processes (read: inventions) for use by the government, often with the assistance of the government. This governmental connection creates special issues for developing, managing, protecting and leveraging IP. For many companies and government contractors, their IP is their most valuable asset, so that having a modern view of IP and the IP issues in the defense and security business is critical. The aim of this course is to provide an overview of the numerous IP issues and considerations related to doing business in the defense and security industries.

INSTRUCTORS

Joseph Gortych is a registered patent attorney and is president of Opticus IP Law PLLC.

Timothy Stanley is Intellectual Property Counsel for Lockheed Martin Corporation.

Harvey Kauget is a partner at Phelps Dunbar LLP in the firm's regional commercial litigation group.

Eric Pellenbarg is an associate at Phelps Dunbar LLP in the firm's regional commercial litigation group.

Compliance with the International Traffic in Arms Regulations (ITAR)

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

This course provides background on the ITAR and the importance to national security of licensing defense articles. An interactive format ensures students will gain a working knowledge of the ITAR and will be able to identify potential trouble spots.

INSTRUCTOR

Suzanne Palmer founded Export Compliance Solutions LLC (ECS).

Playing the SBIR Game to Win

WS843 · Course level: Introductory
CEU .35 \$315 / \$365 USD
Tuesday 1:30 to 5:30 pm

This course provides attendees with a working knowledge of the Small Business Innovation Research (SBIR) Program and presents proven strategies to win awards. The course concentrates on those elements for Phase I that will enhance the likelihood of getting a favorable review and an Agency decision to fund your research project. Many practical and useful examples that prepare you to win more funding will be included throughout. You will learn to construct and submit winning proposals.

INSTRUCTOR

Fred Patterson, is the co-founder of two of Texas' most successful SBIR companies, and a well-recognized consultant with dozens of clients nationwide.

Product Tutorial

Multispectral Analysis for Defense and Security using ENVI

Wednesday 8:30 am to 5:30 pm \$300

To Register, please visit the ITT Visual Information Systems website at <http://www.itvis.com/training/description.asp?courseid=265>, or contact :

Chris Fuentes
Direct: 303-413-3981
E-mail: cfuentes@itviss.com

This tutorial provides the opportunity to gain hands-on experience with multispectral image analysis using ENVI, the industry-leading remote sensing exploitation package. We'll begin with the fundamentals of using ENVI, including mastering the basic features, creating and managing image displays, and using the mouse. The tutorial continues with a review of the electromagnetic spectrum - the basis for all multispectral remote sensing - and how to obtain multispectral signatures using ENVI's z-Profile Tool. We'll also learn how to perform supervised multispectral target detection and explore RXD Anomaly Detection. This product tutorial will be hands-on, with participants learning by applying ENVI to real-world analysis scenarios.

INTENDED AUDIENCE

This material is intended for professionals in the defense and security industries who would like to learn about applying the industry-leading spectral analysis tools in ENVI to their unique geospatial problems. A basic level of understanding of remote sensing data analysis is necessary to take advantage of what this course has to offer.

INSTRUCTOR

Thomas Harris is a Consulting Engineer and Instructor in the Global Services group at ITT Visual Information Solutions, the developers of the ENVI and IDL data analysis and visualization software packages.

Registration is Required.
See SPIE Cashier to Register.



how

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BETWEEN IMAGERY AND IMAGING,
THERE IS ONE IMPORTANT WORD: HOW.

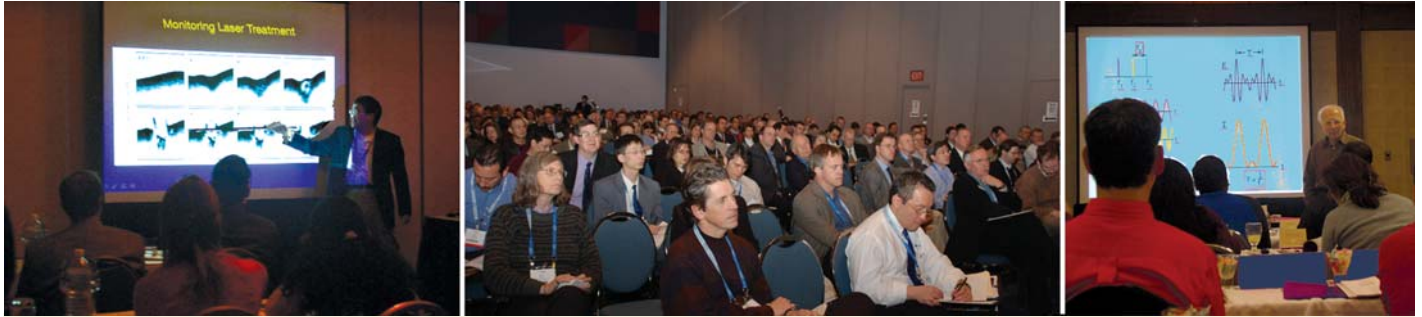
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SPIE Courses



KNOWLEDGE – NETWORKING – ADVANCEMENT

SPIE Foundation Courses

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

Money-back Guarantee

We are confident that once you experience an SPIE course for yourself you will look to SPIE for your future education needs. However, if for any reason you are dissatisfied, SPIE will gladly refund your money. We just ask that you tell us what you did not like; suggestions for improvement are always welcome.

Continuing Education Units



SPIE is an authorized provider of Continuing Education Units (CEUs) through IACET – The International Association of

Continuing Education and Training. SPIE awards CEUs to participants who successfully attend courses, and complete and return the evaluation form within 30 days of the course presentation. SPIE maintains a record of all CEUs earned for each participant for seven years.

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

SPIE instructors are the best in the business.

The Society has hand picked some of the top minds from academia and industry to lead a variety of courses at SPIE Defense+Security.

Register for a course:

- ▶ Take advantage of the industry's best instructors
- ▶ Further your career through ongoing education
- ▶ Earn CEUs for your continuing education

For full course descriptions visit the Course Materials Desk located in the Convention Center lower arcade or go online: spie.org/dss

Sunday	Monday	Tuesday	Wednesday	Thursday
16 March	17 March	18 March	19 March	20 March

Technologies for Homeland Security and Law Enforcement

<p>SC891 NEW Security of Information and Communication Networks (Kartalopoulos) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>SC719 Chemical & Biological Detection: Overview of 2 Point and Standoff Sensing Technologies (Gardner) 1:30 to 5:30 pm, \$315 / \$365</p> <p>FC</p>
	<p>SC836 Using IR Thermographic Instruments- A Primer for Thermographers (Kaplan) 1:30 to 5:30 pm, \$365 / \$415</p>

Key:

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

IR Sensors and Systems Engineering

<p>SC134 Optical Design Fundamentals for Infrared Systems (Kampe) 8:30 am to 5:30 pm, \$555 / \$655</p>	<p>SC835 Infrared Systems - Technology & Design (Daniels) 8:30 am to 5:30 pm / 8:30 am to 12:30 pm, \$1105 / \$1145</p>			
<p>SC900 NEW Uncooled Thermal Imaging Detectors and Systems (Hanson) 8:30 am to 5:30 pm, \$555 / \$655</p>	<p>SC178 Introduction to Radiometry and Photometry (McCluney) 8:30 am to 12:30 pm, \$440 / \$540</p> <p>FC</p>	<p>SC152 Infrared Focal Plane Arrays (Dereniak, Hubbs) 8:30 am to 12:30 pm, \$315 / \$365</p>	<p>SC796 Allowable Stresses in Glass and Engineering Ceramics (Pepi) 8:30 am to 12:30 pm, \$315 / \$365</p>	<p>SC789 Introduction to Optical and Infrared Sensor Systems (Shaw) 8:30 am to 5:30 pm, \$520 / \$620</p> <p>FC</p>
	<p>SC896 NEW Optical Testing of Focal Plane Array Imagers- Quick Performance Testing in the UV, Visible, and Near IR Ranges (Gazerro) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC710 NIR and SWIR Imaging Applications (Richards) 8:30 am to 12:30 pm, \$355 / \$415</p>	<p>SC545 Infrared Characterization of Sources and Backgrounds (Jacobs) 8:30 am to 5:30 pm, \$535 / \$635</p>	
	<p>SC180 Imaging Polarimetry (Dereniak, Miles, Sabatke) 1:30 to 5:30 pm, \$315 / \$365</p>	<p>SC278 Infrared Detectors (Dereniak) 1:30 to 5:30 pm, \$395 / \$445</p>		
	<p>SC892 NEW Infrared Search and Track Systems (Schwering) 1:30 to 5:30 pm, \$315 / \$365</p>			
	<p>SC836 Using IR Thermographic Instruments - A Primer for Thermographers (Kaplan) 1:30 to 5:30 pm, \$365 / \$415</p> <p>FC</p>			

Thermosense

<p>SC836 Using IR Thermographic Instruments- A Primer for Thermographers (Kaplan) 1:30 to 5:30 pm, \$365 / \$415</p> <p>FC</p>	<p>SC710 NIR and SWIR Imaging Applications (Richards) 8:30 am to 12:30 pm, \$355 / \$415</p>
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Daily Course Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday
16 March	17 March	18 March	19 March	20 March

Tactical Sensors and Imagers

SC713 Engineering Approach to Imaging System Design (Holst) 8:30 am to 5:30 pm, \$575 / \$675 FC	SC178 Introduction to Radiometry and Photometry (McCluney) 8:30 am to 12:30 pm, \$440 / \$540 FC	SC901 Sensor Array Signal Processing (Rao) 8:30 am to 5:30 pm, \$520 / \$620 NEW	SC154 Electro-Optical Imaging System Performance (Holst) 8:30 am to 5:30 pm, \$590 / \$690
SC194 Multispectral and Hyperspectral Image Sensors (Lomheim) 1:30 to 5:30 pm, \$315 / \$365	SC157 MTF in Optical and Electro-Optical Systems (Ducharme) 8:30 am to 5:30 pm, \$555 / \$655		SC789 Introduction to Optical and Infrared Sensor Systems (Shaw) 8:30 am to 5:30 pm, \$520 / \$620 FC
	SC896 Optical Testing of Focal Plane Array Imagers- Quick Performance Testing in the UV, Visible, and Near IR Ranges (Gazerro) 8:30 am to 5:30 pm, \$520 / \$620 NEW		
	SC067 Testing and Evaluation of E-O Imaging Systems (Holst) 8:30 am to 5:30 pm, \$585 / \$685		
	SC180 Imaging Polarimetry (Dereniak, Miles, Sabatke) 1:30 to 5:30 pm, \$315 / \$365		

For full course descriptions visit the Course Materials Desk located in the Convention Center lower arcade or go online: spie.org/dss

Laser Sensors and Systems

SC717 3D Visualization Techniques for Laser Radar (Roth) 8:30 am to 12:30 pm, \$315 / \$365	SC160 Precision Stabilization and Laser Pointing Systems (Hilkert) 8:30 am to 5:30 pm, \$520 / \$620
SC784 Fiber Lasers for Defense Applications: Fibers, Components and System Design Considerations (Samson, Torruellas) 8:30 am to 5:30 pm, \$520 / \$620	
SC167 Introduction to Laser Radar (Kamerman) 1:30 to 5:30 pm, \$315 / \$365 FC	

Intelligent and Unmanned Systems

SC894 Introduction to INS and INS-Based Integrated Navigation (Soloviev) 8:30 am to 5:30 pm, \$520 / \$620 NEW	SC549 Incorporating GPS Technology into Commercial and Military Applications (Uijt de Haag) 8:30 am to 12:30 pm, \$315 / \$465
	SC898 Path Planning for Autonomous Vehicles (Flann) 8:30 am to 12:30 pm, \$315 / \$365 NEW

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Sunday	Monday	Tuesday	Wednesday	Thursday
16 March	17 March	18 March	19 March	20 March

Displays

			<p>SC159 Head-Mounted Displays: Design and Applications, Including Night Vision (<i>Melzer, Browne</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	
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Modeling and Simulation

<p>SC783 How to Validate Your Models and Simulations (<i>Law</i>) 8:30 am to 5:30 pm, \$640 / \$740</p>
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Sensor Data Exploitation and Target Recognition

<p>SC174 Multispectral Image Processing (<i>Schowengerdt</i>) 8:30 am to 5:30 pm, \$545 / \$645</p>	<p>SC728 Network Centric Target Tracking and Classification (<i>Drummond</i>) 8:30 am to 5:30 pm, \$510 / \$620</p>	<p>SC893 SAR Signal Processing Laboratory (<i>Soumekh</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC158 Fundamentals of Automatic Target Recognition (<i>Nasr</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>
<p>SC162 SAR Signal Processing (<i>Soumekh</i>) 8:30 am to 5:30 pm, \$615 / \$715</p>	<p>SC181 Predicting Target Acquisition Performance of Electro-Optical Imagers (<i>Vollmerhausen</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC901 Sensor Array Signal Processing (<i>Rao</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	
<p>SC194 Multispectral and Hyperspectral Image Sensors (<i>Lomheim</i>) 1:30 to 5:30 pm, \$315 / \$365</p>			

Information Fusion, Data Mining, and Information Networks Security Related Technologies

<p>SC891 Security of Information and Communication Networks (<i>Kartalopoulos</i>) 1:30 to 5:30 pm, \$315 / \$365</p>
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Signal, Image, and Neural Net Processing

<p>SC197 Fundamentals of Digital Signal/Image Processing (<i>Dianat</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>FC SC066 Fundamentals of Electronic Image Processing (<i>Weeks</i>) 8:30 am to 5:30 pm, \$580 / \$680</p>	<p>SC893 SAR Signal Processing Laboratory (<i>Soumekh</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	<p>SC715 Independent Component Analysis and Beyond: Blind Signal Processing and its Applications (<i>Lee, Jung</i>) 8:30 am to 12:30 pm, \$430 / \$490</p>
<p>SC162 SAR Signal Processing (<i>Soumekh</i>) 8:30 am to 5:30 pm, \$615 / \$715</p>		<p>SC901 Sensor Array Signal Processing (<i>Rao</i>) 8:30 am to 5:30 pm, \$520 / \$620</p>	
<p>SC902 Compressive Sensing (<i>DeVore, Baraniuk</i>) 1:30 to 5:30 pm, \$315 / \$365</p>			

Daily Course Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday
16 March	17 March	18 March	19 March	20 March

Communications and Networking Technologies and Systems

SC891 NEW Security of Information and Communication Networks (Kartalopoulos) 1:30 to 5:30 pm, \$315 / \$365	SC728 Network Centric Target Tracking and Classification (Drummond) 8:30 am to 5:30 pm, \$520 / \$620	SC901 NEW Sensor Array Signal Processing (Rao) 8:30 am to 5:30 pm, \$520 / \$620
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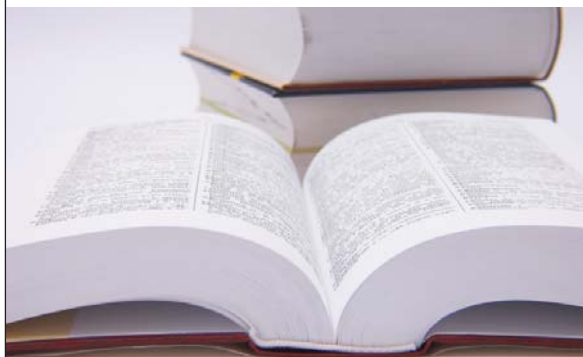
Battlespace Technologies

SC719 FC Chemical & Biological Detection: Overview of Point and Standoff Sensing Technologies (Gardner) 1:30 to 5:30 pm, \$315 / \$365	SC895 NEW Introduction to Cognitive Situation Management for Tactical Operations (Jakobson) 8:30 am to 12:30 pm, \$315 / \$365
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Optical and Optomechanical Engineering

SC156 Basic Optics for Engineers (Ducharme) 8:30 am to 5:30 pm, \$555 / \$655	SC254 Integrated Opto-Mechanical Analysis (Doyle, Genberg) 8:30 am to 5:30 pm, \$565 / \$665	SC013 FC Precision Mounting of Optical Components (Yoder, Jr.) 8:30 am to 5:30 pm, \$590 / \$690	SC796 Allowable Stresses in Glass and Engineering Ceramics (Pepi) 8:30 am to 12:30 pm, \$315 / \$365
	SC178 FC Introduction to Radiometry and Photometry (McCluney) 8:30 am to 12:30 pm, \$440 / \$540		SC781 FC Optomechanical Analysis (Hatheway) 8:30 am to 5:30 pm, \$520 / \$620
			SC220 Optical Alignment Mechanisms (Guyer) 1:30 to 5:30 pm, \$315 / \$365

SPIE Marketplace



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- Books
- Professional Development
- Membership
- Souvenirs
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Sunday	Monday	Tuesday	Wednesday	Thursday
16 March	17 March	18 March	19 March	20 March

Industry Workshops

The Business of Defense

<p>WS639 Intellectual Property Issues in the Defense and Security Industries (<i>Gortych, Stanley, Kauget, Pellenberg</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>
<p>WS843 Playing the SBIR Game to Win (<i>Patterson</i>) 1:30 to 5:30 pm, \$315 / \$365</p>

<p>WS845 Compliance with the International Traffic in Arms Regulations (ITAR) (<i>Palmer</i>) 8:30 am to 12:30 pm, \$315 / \$365</p>

Professional Development

<p>WS846 Essential Skills for Engineering Project Leaders (<i>Hinkle</i>) 1:00 to 5:00 pm, \$315 / \$365</p>

<p>WS667 The Craft of Scientific Presentations: A Workshop on Technical Presentations (<i>Alley</i>) 8:30 am to 12:30 pm, \$125 / \$175</p>
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<p>WS668 The Craft of Scientific Writing: A Workshop on Technical Writing (<i>Alley</i>) 1:30 to 5:30 pm, \$125 / \$175</p>
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Product Tutorial

<p>PT002 Multispectral Analysis for Defense and Security using ENVI (<i>Harris</i>) 8:30 am to 5:30 pm, \$300</p>
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For full course descriptions visit the Course Materials Desk located in the Convention Center lower arcade or go online: spie.org/dss

SPIE Defense+Security

Exhibition: 18-20 March 2008

Exhibition Hours

Tuesday 18 March 10:00 am to 5:00 pm

Wednesday 19 March 10:00 am to 5:00 pm

Thursday 20 March 10:00 am to 2:00 pm



The largest showcase of defense and security equipment and components.

SPIE Defense+Security has grown into the number one event in the world for infrared imaging, optics, and sensor equipment. Defense+Security is the place to connect with the right companies, discover where the industry is going, and increase your revenue.

How to use this directory

Defense+Security 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 88–94, to allow you to quickly shop for products for your engineering and business needs.

Booth numbers are provided in the Exhibitor Directory, and may be cross-referenced with the maps on pp. 24–25. The address of each exhibitor is also listed, making this Exhibition Guide an excellent reference tool.

ABB Remote Sensing Solutions for Ground-based, Airborne and Space Applications

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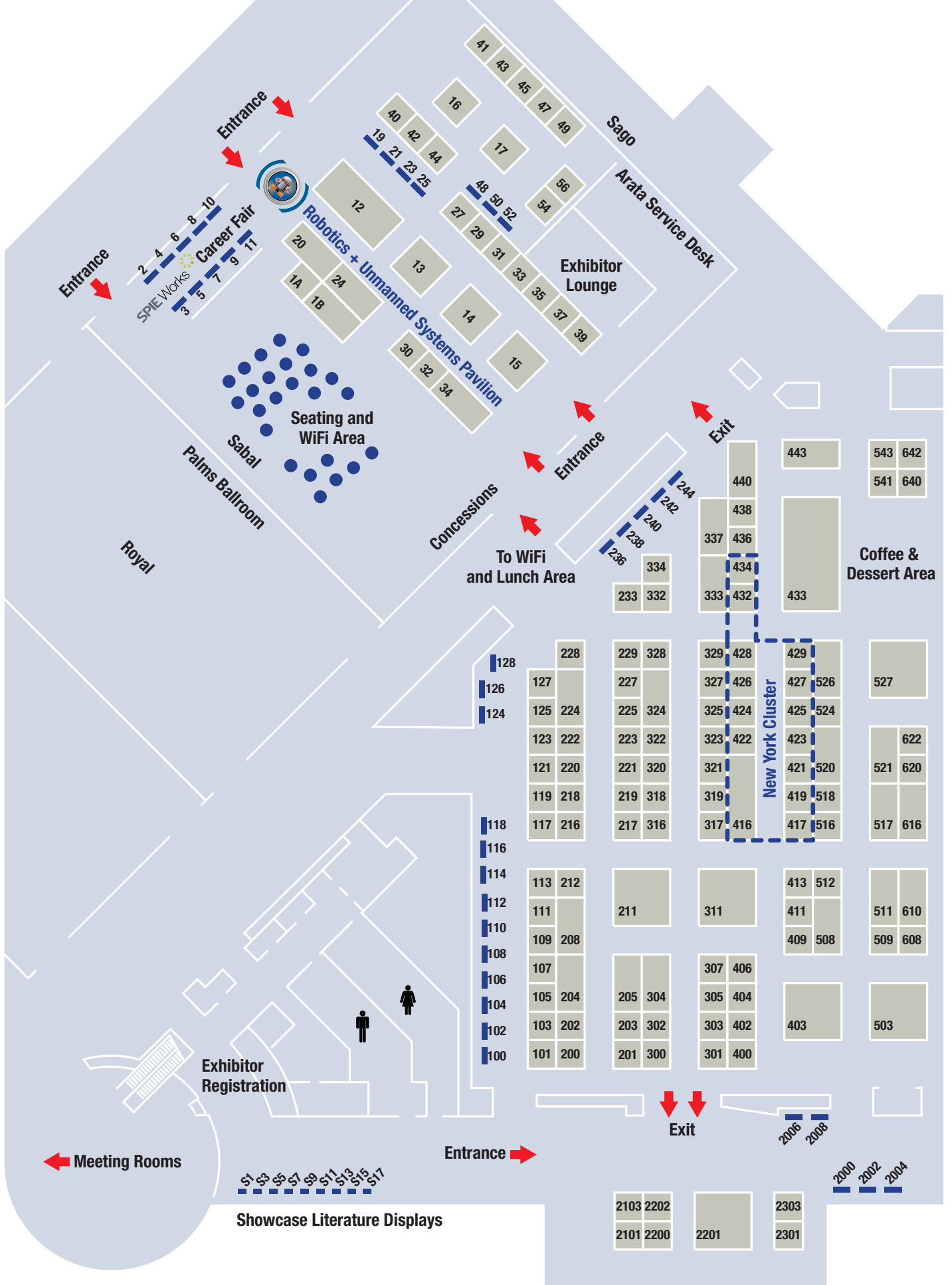
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- Early Warning and Reporting Functions
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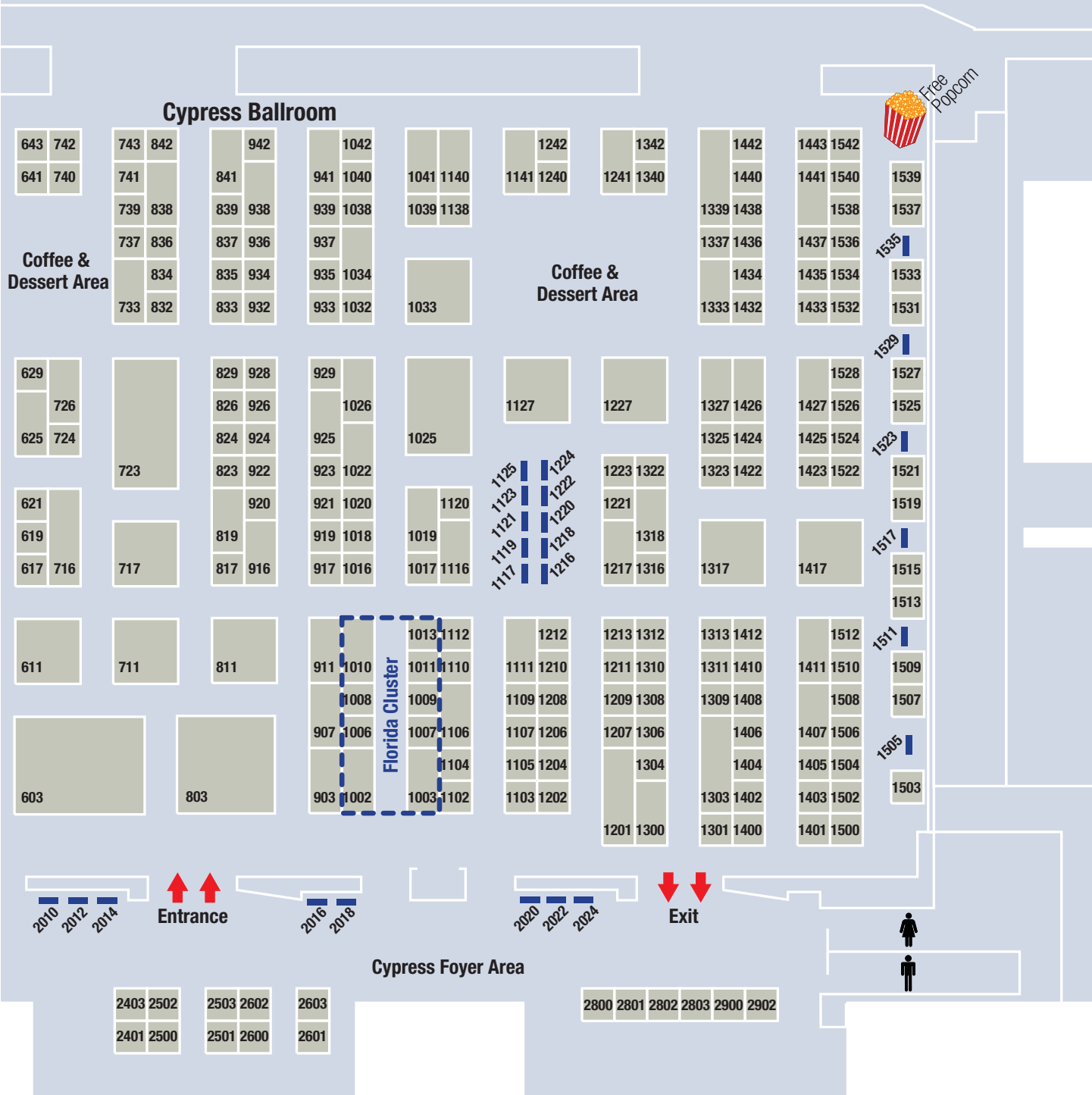
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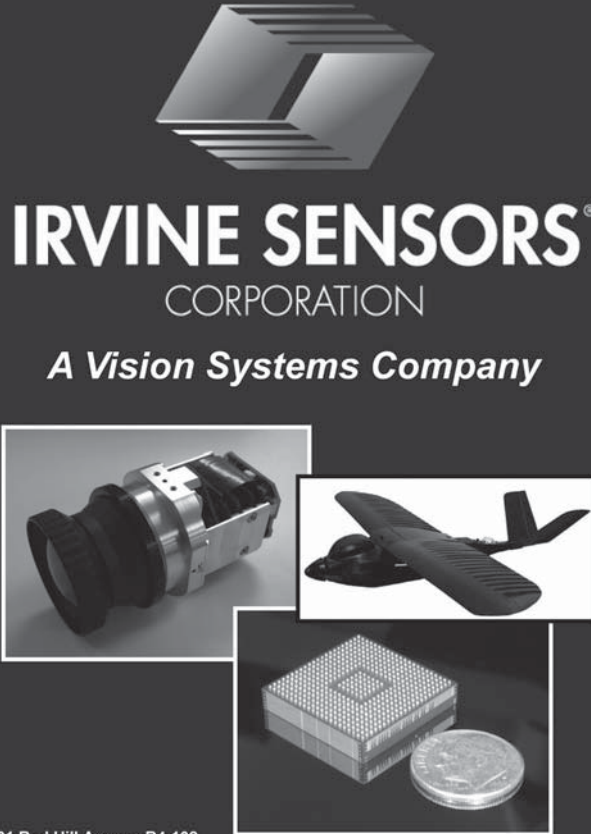
Exhibition Floor Plan



Exhibitor Index

4D Technology Corp	836	Boulder Imaging Inc.	520	Elbit Systems of America (formerly Kollsman, Inc.)	1426	IEEE	834
A.J. Tuck Co.	1103	Boulder Nonlinear Systems, Inc.	1221	Elliot Systems of America (formerly Kollsman, Inc.)	1426	II-VI Infrared	1039
AB WIBE	1527	Brijot Imaging Systems, Inc.	1106	ELCAN Optical Technologies	841	illunis LLC	35
ABB	617	Brownell Ltd.	1531	Electro Optical Industries, Inc.	1040	Imperx, Inc.	34
AccuCoat, Inc.	128	Brush Wellman Inc.	113	<i>Electro Optics Magazine</i>	S3	IMT Masken und Teilungen AG	921
Acktar Ltd.	1406	CALCULEX, Inc.	929	Electro-Optical Imaging, Inc.	1003	Infinite Optics Inc.	1206
Active Silicon Ltd.	512	Cantronic Sytems, Inc.	518	Electrophysics Corp.	413	Information System Technologies, Inc.	242
Aculight Corp.	1120	Carl Zeiss Microlmaging, Inc.	743	Eltek USA Inc.	411	Infotonics Technology Center	1436
Acutronic USA, Inc.	917	Carl Zeiss Optronics GmbH	219	EM Photonics	302	Infrared Associates, Inc.	1212
Adimec	1017	Carleton Life Support Systems Inc.	1034	EM4 Defense	204	InfraRed Integrated Systems Ltd.	211
AdTech Ceramics	27	CBC (AMERICA) Corp.	740	EMCORE Corp.	1443	Infrared Systems Development Corp.	621
<i>Advanced Imaging Magazine/ AdvancedImagingPro.com</i>	1503	Cedip Infrared Systems.	1317	Envision Product Design	2022	Innovative Wireless Technologies	1018
Aerotech, Inc.	509	Celltron Inc.	1507	Epitaxial Technologies, LLC	327	Insaco, Inc.	835
Agilent Technologies, Inc.	329	Chardon Tool	2501	Epix, Inc.	2000	Intelligent Optical Systems, Inc.	1513
AIM Infrarot-Module GmbH.	726	ChemImage Corp.	1438	Eprner Technology, Inc.	1216	Intense Ltd.	1412
Air Force Research Lab.	14	Chengdu Ultra Pure Applied Materials Co., Ltd.	1519	ET Precision Optics Inc.	203	International Light Technologies	23
ALIO Industries	2602	CI Systems, Inc.	1022	Evaporated Coatings, Inc.	1529	InterSense, Inc.	324
Ametek HCC Industries.	1220	Cincinnati Sub-Zero Products, Inc.	404	Exotic Electro-Optics	1138	Intevac, Inc.	619
Ametek Precitech, Inc. - see Precitech, Inc.	608	Clear Align	932	Fairfield Crystal Technology, LLC	118	IO Industries, Inc.	1033
Ampex Data Systems Corp.	1112	Cloud Cap Technology, Inc.	39	Fast-Vision, LLC	1424	IRCAM GmbH	S17
Analog Modules, Inc.	1013	CMC Electronics Inc.	2202	Fiberguide Industries, Inc.	1224	IRnova AB	1109
Andover Corp.	216	CMPC Surface Finishes	826	Fibertek Inc.	920	IRphotonics	1123
Angstrom Precision Optics Inc.	1511	Coastal Optical Systems, Inc.	1427	Firebird Technologies Inc.	1117	Irvine Sensors Corporation	1508, 1510
Aoptix Technologies Inc.	30	Coherent Inc.	1242	FLIR Systems, Inc. - Commercial Vision Systems	603	Isorad Ltd.	1425
APHOTIK	1538	Cohu, Inc.	1209	FLIR Systems, Inc. - Americas Thermography Division	803	ISP Optics Corp.	516
Apollo Optical Systems, Inc.	1404	Components Express, Inc.	1408	Florida Universities	1002	Isuzu Glass Inc.	924
Applied Image Group	432	Computer Optics Inc.	938	Fosta-Tek Optics	1223	ITRES Research Ltd.	304
Applied Optronics	842	Contour Fine Tooling	100	Fotofab	1512	ITT Visual Information Solutions	911
Applied Signal Technology, Inc.	1440	CorActive High-Tech, Inc.	2006	Fresnel Technologies Inc.	640	JAI, Inc.	1539
Arcturus UAV	17	Corning Inc.	416	Gamma Scientific, Inc.	1509	Janos Technology, Inc.	716
Arete Associates - Optical Systems Research	1506	C-RAM Program Office	31	GE Fanuc Intelligent Platforms	208	JASCO Inc.	108
ASD Inc.	400	Crystal Fibre	1505	General Optics, Inc.	935	Jazz Semiconductor	1536
ASML Optics	233	CTS Electronic Manufacturing Solutions, Inc.	1507	Geo Systems	15	JDSU	936
asphericon GmbH	1208	CVI Melles Griot - Albuquerque	611	Georgia Tech Research Institute	205	JENOPTIK Laser, Optik, Systeme GmbH - Optics Business Unit	1427
Atlantic Positioning Systems.	223	D&P Instruments	402	GFMesstechnik GmbH	1504	JMAR Technologies, Inc.	220
Autonosys Inc.	32	D.L.S. Electronic Systems, Inc.	1403	Glass Fab Inc.	2124	Judson Technologies, LLC- (Now Teledyne Judson Technologies).	733
Avo Photonics, Inc.	543	Dayton T. Brown, Inc.	328	Goodrich Corporation	717	K&Y Diamond Ltd.	2801
Axsys Motion Control Products	403	Defense Tech Briefs.	436	Graflex Inc.	1107	Kigre, Inc.	1339
Axsys Technologies Imaging Systems	403	Denton Vacuum, LLC	322	Graham Optical Systems	29	Kollsman, Inc.-See Elliot Systems of America.	1426
Axsys Technologies IR Systems	403	Deposition Sciences, Inc.	305	Great River Technology	1240	Kopin Corp.	1026
B&W Tek, Inc.	236	Devitech ApS.	1532	Guangzhou SAT Infrared Technology Co., Ltd.	1437	Kopp Glass, Inc.	1104
BAE Systems.	527	Dilas Diode Laser	1308	H.N. Burns Engineering Corp.	829	Kreischer Optics, Ltd.	S5
Bandwidth Semiconductor LLC- See Spire Semiconductor LLC	524	Directed Perception, Inc.	318	Hamamatsu Corp.	1241	Kugler of America LTD.	123
Barr Associates Inc.	1032	Dontech Inc.	1411	Hardin Optical Company.	2603	L-3 Communications.	723
BaySpec, Inc.	2802	DRS Technologies, Inc., Reconnaissance, Surveillance & Target Acquisition (RSTA) Segment	433	Harris Corp.	839	L-3 Communications - Infrared Products	723
BEI Precision Systems & Space Co.	114	Drytech Inc.	1522	Headwall Photonics, Inc.	2103	L-3 Communications Advanced Laser Systems Technology, Inc.	723
Biometrics Task Force.	2601	Dyna Technologies, Inc.	240	Heraeus Quartz America	1016	L-3 Communications Cincinnati Electronics	723
Bodkin Design & Engineering, LLC	244	DynaVac	2301	High Energy Laser Joint Technology Office	1038		
Bolt Systems, Inc.	37	Dynetics, Inc.	2012	High Tech Photonics	1006		
Bookham	1542	e2v.	202	Hitachi Kokusai Electric America, Ltd.	224		
Boston Electronics Corp.	625	Edmund Optics	1019	HOLOEYE Systems, Inc.	307		
		EGIDE USA	229	Hoppe Tool, Inc.	1508		
				ICx Imaging Systems	1537		
				Ideal Aerosmith	641		

L-3 Communications InfraredVision Technology Corp.	723	Nippon Avionics Co., Ltd.	1417
L-3 Communications Nova Engineering	723	nLight Corp.	724
Labsphere, Inc.	622	NoblePeak Vision Corp.	1041
LaCroix Optical Co.	409	NorPix, Inc.	303
Lambda Research Optics Inc.	332	North Dakota Department of Commerce	440
LASCAD	942	Northrop Grumman Cutting Edge Optronics	925
Laser Components IG, Inc.	823	Novotech, Inc.	200
Laser Diode, Inc.	119	NP Photonics	112
<i>Laser Focus World</i>	1300	Nu-Cast, Inc.	319
Laser Optics, a PPGI company	1202	Nuferm	2014
Laser Research Optics	406	OASYS Technology, LLC.	1140
Lasertel, Inc.	1217	Obzerv Technologies Inc.	2902
Lattice Electro Optics, Inc.	1210	Ocean Optics, Inc.	201
Lattice Materials LLC	741	Oerlikon Optics USA Inc.	323
Leybold Optics USA, Inc.	2803	Ontar Corp.	2503
Liebhmann Optical Company, Inc.	1427	Onyx Optics Inc.	739
LightPath Technologies, Inc.	1010	Opgal Optronics Industries Ltd.	1333
LightWorks Optics, Inc.	1441	Ophir Optics, Inc.	916
Lockheed Martin - Santa Barbara Focalplane . . .	311	Ophir-Spiricon Inc.	2004
Lucid Dimensions	19	Opnext, Inc.	1213
Lumenera Corp.	1533	Optical Coatings Japan.	111
Lumus Ltd.	124	<i>Optics & Laser Europe</i>	S7
Market Tech, Inc.	109	OPTICS 1, Inc.	1201
The MathWorks Inc.	616	Optics Technology, Inc.	434
Matrix Inc.	44	Optikos Corp.	629
Max Levy Autograph, Inc.	833	Optimax Systems, Inc.	419
McQ Inc.	1116	OptiPro Systems	421
Meller Optics, Inc.	406	Opto Diode Corp.	316
MEMS Optical Inc.	926	Optonetic LLC	1008
Metavac.	923	OptoSigma Corp.	737
Michigan Aerospace Corp.	2008	Optron Laboratories, Inc.	1007
Micro Laser Systems, Inc.	325	OSRAM Opto Semiconductors.	222
Micromechatronics, Inc.	1517	OZ Optics Ltd.	620
MicroSecurity Lab Inc.	1442	Panavision Federal Systems, LLC	1402
Military & Aerospace Electronics	1300	Paradigm Lasers, Inc.	1218
Mindrum Precision, Inc.	443	PerkinElmer Optoelectronics.	1405
Model Optics Inc.	425	PhaseSpace, Inc.	238
Modulight, Inc.	1534	Phoenix Diamond Turning Ltd.	933
Moore NanoTechnology Systems LLC	1110	Phoenix Infrared	1222
MOXTEK	1342	Photo Sciences, Inc.	1515
MRC a PPGI company	1202	Photon Engineering, LLC	1119
Naked Optics Corp.	933	Photon Gear, Inc.	126
NASA Tech Briefs	436	Photon Inc.	2020
National Aperture, Inc.	1322	Photonic Cleaning Technologies	1121
National Defense Industrial Association (NDIA)	1304	Photonic Sense GmbH	824
NAVAIR IBST	1502	<i>Photonics Spectra</i>	817
NEC Corp.	1417	<i>Photonics.com/Photonics Directory</i>	333
NEC San'ei Instruments, Ltd.	1417	Photo-Sonics, Inc./IMC.	1526
New Scale Technologies, Inc.	423	Photron USA, Inc.	1020
New York Photonics Industry Association	422	Physical Optics Corp.	2900
Newport Corp.	941	<i>Physics Today</i>	922
Night Vision Systems	433	Physimetrics, Inc.	1540
		Phytron Inc.	1528
		PI (Physik Instrumente) LP	832
		PixonImaging LLC.	103
		Pleora Technologies	107
		PLX, Inc.	1400
		Poco Graphite, Inc.	334
		Polaris Electronics Corp.	1434



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Polaris Sensor Technologies, Inc.	218	QuickSet International.	1141
PolarOnyx, Inc.	2403	QWIP Technologies Inc.	518
<i>Pollution Equipment News</i>	S15	R. Mathews Optical Works, Inc.	116
Polymer Optics, LLC	25	Rainbow Research Optics, Inc.	320
Polymicro Technologies, A Subsidiary of Molex Inc.	1500	Raytheon Vision Systems . . .	1025
Power Technology, Inc.	1042	Research Electro-Optics, Inc. .	511
Precision Ferrites and Ceramics, Inc.	2018	Reynard Corp.	2303
Precision Glass & Optics.	1521	RICOR - Cryogenic & Vacuum Systems.	1327
Precision Optical	217	Riegl USA, Inc.	1102
Precision Photonics Corp.	212	Rochester Precision Optics LLC.	426
Precision Solutions (MBDA UK Ltd.)	939	Rockwell Collins	819
Precitech, Inc.	608	Rocky Mountain Instrument Co.	225
Princeton Instruments.	106	Rohm and Haas Advanced Materials	1309
Process Sensors Corp.	1435	RPC Photonics, Inc.	429
Proxitronic Industries AG.	102	RPMC Lasers, Inc.	937
Pulse Instruments	2200	RSoft Design Group	2016
PVP Advanced EO Systems, Inc.	20	Saint-Gobain Crystals	521
Qioptiq.	1318	Salvador Imaging.	321
QmagiQ, LLC.	1211	Sandia National Laboratories.	1340
QPC Lasers, Inc.	1316	Santa Barbara Infrared, Inc. . .	503
Quality Thin Films, Inc.	1432		
Quantel USA - Big Sky Laser . . .	33		

Exhibitor Index

Sarnoff Corp.	526	Spectrum Detector Inc.	643	Teledyne Scientific Company	.2502	Vincent Associates	427
Satisloh North America Inc.	838	Spectrum Thin Films Inc.	424	Telops Inc.	928	<i>Vision Systems Design</i>	1300
Sawyer Technical Materials, LLC	1310	SphereOptics.	1524	Teraxion Inc.	1323	Vision4ce LLC	1535
SCD-SemiConductor Devices.	903	SPIE Industry Resources.	2701	Tessera North America	517	VOLC, Subsidiary of II-VI, Inc.	21
Schneider Optics, Inc.	1337	Spire Semiconductor, LLC	524	Tessera, Inc.	517	Voltage Multipliers Inc.	1433
School of Electrical Engineering & Computer Science, UCF	13	Stellar Industries Corp.	934	Texas Infrared	1105	Wafer Technology Ltd.	742
SCHOTT North America, Inc. - Defense	811	StellarNet, Inc.	1207	Thales	1303	Wamco, Inc.	1422
Scientific Solutions, Inc. (SSI)	1125	StingRay Optics, LLC	1311	The University of Florida	12	WaveFront Sciences, Inc.	942
SELEX Sensors and Airborne Systems	2201	Sunpower, Inc.	2101	Thermoteknix Systems Ltd.	1111	Webcom Communications	S9
Sensors Unlimited, Inc., part of Goodrich Corporation	717	Surface Optics Corp.	907	Thin Film Technology.	642	Westchester Technologies, Inc.	2002
SEO Precision, Inc.	438	Swift Engineering.	16	Thorlabs, Inc.	228	Western Photonics Technology.	105
SESO	221	Sydor Optics, Inc.	428	TNO Defense, Security and Safety	1306	Wideband Systems, Inc.	919
Shanghai Optics	1523	Syntec Optics	417	Toptica Photonics, Inc.	127	Wordingham Technologies	125
Sheaumann Laser Inc.	1407	System Control Technologies	1423	Tower Optical Corp.	2800	wzw-optics AG	2500
Snake Creek Lasers, LLC	101	Taylor & Francis	S1	ULIS.	610	XenICs	1127
SOFRADIR.	1227	tec5USA, Inc.	1313	Umicore Optical Materials	711	Z&Z Optoelectronic Tech. Co., Ltd.	1325
Solid State Cooling Systems.	1401	Technodiamant USA Inc.	227	Univ. of Central Florida	1011	ZEMAX Development Corp.	117
Solid State Scientific Corp.	301	Tecomet/Precision Technologies	1301	Univ. of Massachusetts/Lowell - Submillimeter-Wave Technology Lab	300	Zhejiang Dali Technology Co., Ltd.	2010
Space Electronics LLC	1204	Tecport Optics, Inc.	1009	Universal Photonics, Inc.	1312	Zygo Corp.	508
Special Optics, Inc.	121	Tectivity, Inc.	104	Ural Optical and Mechanical Plant	110		
Spectral Systems	2401	Teledyne Imaging Sensors	317	Vacuum Process Technology, Inc.	837		
<i>Spectroscopy Magazine</i>	1525	Teledyne Judson Technologies (Formerly Judson Technologies LLC)	733	Vectronix Inc.	541		
		Teledyne Microelectronic Technologies	24				

Advertisers

ABB Inc.	23
Adimec Electronic Imaging, Inc.	31
Axsys Technologies	3
CVI Melles Griot	5
Deposition Sciences.	7
Irvine Sensors Corp.	27
L-3 Communications	57
Laser Diode Inc.	51
Lockheed Martin/Santa Barbara Focal Plane	15
Microsecurity Lab Inc.	61
New York Photonics Industry Association	67
Northrop Grumman Corp.	41
Opto Diode Corp.	9
Optronics Co., Ltd.	35
Photonics.com/Photonics Directory	55
SAMPE	87
SCD-SemiConductor Devices	Cover 4
SCHOTT North America, Inc.	Cover 3
Sensors Unlimited Inc., part of Goodrich Corp.	Cover 2
Univ. of Central Florida	11
Voltage Multipliers, Inc.	79



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Exhibitor List as of 1/13/08

4D Technology Corp**#836**

SPIE Corporate Member

3280 E Hemisphere Loop Ste 146, Tucson, AZ, 85706
520/294-5600; fax 520/294-5601
info@4dtechnology.com; www.4dtechnology.com

New Product: PhaseCam IR laser interferometer for surface quality measurement at wavelengths from 1.05 to 3.39 μ m.

4D Technology designs and manufactures dynamic laser interferometers for non-contact metrology of optical quality surfaces even in the presence of vibration and air turbulence. 4D systems offer high speed, high resolution acquisition of phase data in as little as 1 μ s. 4D combines expertise in metrology, optomechanical design, software development and manufacturing to develop innovative products for applications in general optics, meter scale optics, aerospace, directed energy and data storage. Contact: Chip Ragan, Director North American Sales, chip.ragan@4dtechnology.com; Don Roberts, East Coast Sales, don.roberts@4dtechnology.com.

A.J. Tuck Co.**#1103**

PO Box 215, 32 Tuck Rd, Brookfield, CT, 06804
203/775-1234; fax 203/775-4705
ajtuckco@snet.net; www.ajtuckco.com

AB WIBE**#1527**

4012 Garland St, Alexandria, VA, 22304
703/751-1725; fax 703/751-4690
www.wibe.se

New Product: Manual and electric powered telescopic masts with transport, launch and antenna aiming mechanisms.

Founded in Mora, Sweden in 1929, WIBE is the Northern European market leader in all three of its business areas: Mast and Tower Systems, Ladders and Cable Support Systems. WIBE is well known to the United States and Canadian Defense Forces and their prime contractors as an established, stable and responsive engineering resource and manufacturer of telescopic masts and accessories. Over 10,000 WIBE mast systems are currently deployed with United States and Canadian Forces around the world. Contact: Howard Glock, North American Representative, hg2con@aol.com.

ABB**#617**

Analytical Business Unit, 585 Charest Blvd E Ste 300, Québec, QC, Canada, G1K 9H4
418/877-2944; fax 418/877-2834
ftir@ca.abb.com; www.abb.com/analytical

New Product: ABB MR Hyperspectral Imager.

For more than 35 years, ABB Analytical designs, manufactures and markets high-performance FTIR-FTNIR analytical systems and spectroradiometers for Petroleum, Chemical, Life Science, Academic, Semiconductor, Metallurgy and Remote Sensing/ Aerospace and Defence markets. ABB's Remote Sensing Industry continues to set the standards for FTIR Spectroradiometry used in various applications, like atmospheric sounding, military targets IR signature characterization and gas detection. ABB also develops specific solutions with reliable airborne and spaceborne optical instruments, infrared calibration systems, hyperspectral imagers, and software for ground segments and simulation. Contacts: Claude Roy, Product Line Manager, claude.b.roy@ca.abb.com; Christian Vallieres, Market Development Manager for Remote Sensing, christian.a.vallieres@ca.abb.com.

AccuCoat, Inc.**#128**

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

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

Acktar Ltd.**#1406**

1 Leshem St Entrance A, Kiryat-Gat, Israel, 82000
972 8 681 4213; fax 972 8 681 0198
customer-support@acktar.com; www.acktar.com

New Product: Fractal Black Vacuum Inorganic Coating 99% absorptance (at 9 μ m), low outgassing and extremely thin.

Acktar is a world technology leader in the development and production of black light absorbing coatings which deliver unequalled levels of performance in IR optics space and other applications. The unique qualities of the Acktar coatings are produced using proprietary vacuum deposition technology yields extremely high absorptance, low outgassing and high temperatures stability (4K-720K). Acktar coatings are ecologically clean and replace traditional painting, anodizing and plating processes. Contact: Hila Ohayon, Customer Support; David Alster, Marketing Director, david.alster@acktar.com.

Active Silicon Ltd.**#512**

Brunel Science Park, Kingston Ln, Uxbridge, United Kingdom, UB8 3PQ
44 1895 234254; fax 44 1895 230131
tradeshow@activesilicon.com; www.activesilicon.com

New Product: New PCI Express frame grabber for HD-SDI cameras, plus COM Express embedded vision systems.

Active Silicon specializes in supplying high quality frame grabber products and custom vision systems for Military, Aerospace and Security applications. Form-factor support includes PCI Express, COM Express, PMC, PC/104+ and cPCI. These provide acquisition solutions for a wide range of applications from low-cost analog cameras to high-end digital (HD-SDI, LVDS and Camera Link) formats. Available for Windows and Linux (both 32-bit and 64-bit versions) as well as DOS, VxWorks, QNX and Mac OS X. Contact: Shaun Saber, Vice President Sales/Marketing North America, shaun.saber@activesilicon.com; info@activesilicon.com.

Aculight Corp.**#1120**

SPIE Corporate Member

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

Aculight provides quality, innovative and cost-effective laser system solutions for our customers' needs in national defense, aerospace and medical applications. Our products include lightweight, compact, high performance fiber lasers for laser radar and sensing applications. We also develop custom laser solutions for our customers. Our products include: Perseus™ eyesafe pulsed fiber lasers; Teleso 1micron pulsed fiber lasers; Aquarius™ green fiber laser system; Argos™ optical parametric oscillator (OPO). Contact: Andrew Brown, Director of Business Development, andrew.brown@aculight.com; Rob Afzal, Vice President of Research and Development, robert.afzal@aculight.com.

Exhibitor Listing

Acutronic USA, Inc.

640 Alpha Dr, Pittsburgh, PA, 15238
412/963-9400; fax 412/963-0816
marketing@acutronic.com; www.acutronic.com

#917



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Agilent Technologies, Inc.

#329

5301 Stevens Creek Blvd, Santa Clara, CA, 95052-8059
408/553-7833; fax 408/ 553-2372
optics-info@agilent.com; www.agilent.com/find/optics

#1017

Adimec

SPIE Corporate Member

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

New Product: RA Family of COTS Rugged Megapixel cameras for harsh environmental conditions.

Adimec has been creating high-performance cameras and partnering with major OEMs and defense contractors around the world since 1992. Let Adimec's industry-leading image quality and object recognition capabilities make the difference in your application. Contact: Gretchen Alper, Marketing and Key Account Manager, galper@adimec.com.

AdTech Ceramics

#27

511 Manufacturers Rd, Chattanooga, TN, 37405
423/755-5510; fax 423/755-5438
sales@adtechceramics.com; www.adtechceramics.com

Advanced Imaging Magazine!

AdvancedImagingPro.com

#1503

3030 Salt Creek Ln Ste 200, Arlington Heights, IL, 60005
847/454-2707; fax 847/454-2759
info@advancedimagingmag.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.

Aerotech, Inc.

#509

SPIE Corporate Member

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

New Product: ARMS series direct-drive rotary motion simulators feature velocity stability of 0.0001% over 360°.

Aerotech manufactures motion simulators, multi-axis gimbal systems, single- and multi-axis positioning systems and advanced control systems. These include systems for angular testing/calibration of satellite sensors, missile seeker gimbals, inertial navigation guidance units, optical pointing/target tracking and more. Other products include linear, rotary and lift stages; gimbals; gantries; nanopositioners; goniometers; motion controllers; drives and linear/rotary motors. Contact: Tom Markel, Product Manager, Positioning Systems Division, tmarkel@aerotech.com.



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AIM Infrarot-Module GmbH

#726

Theresienstr 2, Heilbronn, Germany, 74072
49 7131 6212 800; fax 49 7131 178 291
http://www.aim-ir.de

AIM develops and manufactures IR-detectors and cryocoolers for missile seekers as well as targeting or pilotage sights in most renowned ground based, ship or airborne applications. Beyond components and modules, AIM has conquered a niche for thermal sights and day/night fire control systems for small arms and crew served weapons with large engagement range. Contact: Juergen Maier, Director Sales, juergen.maier@aim-ir.de; Rainer Breiter, Director Programmes, Rainer.Breiter@aim-ir.de.

Air Force Research Lab.

#14

104 Research Rd Bldg 9738, Tyndall AFB, FL, 32403
850/283-3725; fax 850/283-9710
robotics@tyndall.af.mil; www.afri.af.mil

The Robotics Research & Development Group at the Air Force Research Lab developed the Defender engagement platform for Automated Perimeter Security (APS) missions. The base vehicle is a Land Tamer II 6x6 vehicle developed by PFM Manufacturing. This vehicle was selected for its overall low cost, skid steering capability and electric over hydraulic actuator system. The engagement platform has a color camera system for video feedback, a strobe/flashing light system, and a speaker microphone system incorporated. Its non-lethal weapon system is a pepper spray fogger and the lethal weapon system is either an M-16A2 rifle or M-240/M249 machinegun.

ALIO Industries

#2602

SPIE Corporate Member

11919 W I-70 Frontage Rd N Unit 119, Wheat Ridge, CO, 80033
303/339-7500; fax 303/339-7501
sales@alioindustries.com; www.alioindustries.com

ALIO Industries, Inc. designs, manufactures and markets proprietary robotic devices that enable the world's most precise nano-scale movements. These products include hexapod and tripod robots as well as a wide variety of nano precision stages. ALIO's products give manufacturers the ability to operate at the nanometer level with high degrees of accuracy and repeatability. Contact: Jeff Johnson, President, jeff@alioindustries.com.

Ametek HCC Industries

#1220

4232 Temple City Blvd, Rosemead, CA, 91770
626/443-8933; fax 626/443-6610
denis.moore@ametek.com; www.hccindustries.com

AMETEK HCC Industries manufactures sophisticated glass-to-metal and ceramic-to-metal (HTCC) hybrid microelectronic packages and connectors and offers interconnect solutions for the defense and commercial industrial markets. With over 30 years of design and vertically integrated manufacturing, HCC is the one source for every hermetic need. Contact: Rob Winterburn, Marketing Manager, rob.winterburn@ametek.com; Traci St.Geme, traci.stgeme@ametek.com.



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.



Tailored to your requirements

Adimec's rugged COTS cameras are available in a variety of standard versions that can also be tailored to meet the specific requirements of large OEMs and prime contractors.



RA1000 family

Flexible design offers tailored COTS solutions

Stable and accurate sensor mounting

Clear images for superior object recognition

MIL-STD810F qualification tested

High dynamic range and sensitivity

The RA1000 family of digital megapixel CCD cameras is designed for prime contractors and OEMs who require high performance, high resolution imaging under harsh environmental conditions. Unlike general purpose cameras, the RA1000 cameras are designed to meet the stringent requirements of vehicle, airborne, and naval imaging systems.

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

See us at Defense & Security Symposium 2008: booth no. 1017

SPIE
Defense+Security

North America	salesus@adimec.com	(+1) 781-279-0770
Europe	saleseu@adimec.com	(+31) 40-2353920
Japan & Korea	salesjp@adimec.com	(+81) 3-5968-8377
Asia - Pacific	salesap@adimec.com	(+65) 6334-1236

Adimec
www.adimec.com

Exhibitor Listing

Ametek Precitech, Inc.

#608

Recent name change -see Precitech, Inc.

Ampex Data Systems Corp.

#1112

SPIE Corporate Member

1228 Douglas Ave, Redwood City, CA, 94063
650/367-3365; fax 650/367-2444
sales@ampexdata.com; www.ampexdata.com

New Product: MiniR700 small solid state recorder with data acquisition module for airborne collection.

Ampex Data Systems manufactures Airborne-Ruggedized and Ground-based data acquisition and storage recording systems. Product offerings include a complete line of solid state memory and hermetically-sealed disk storage systems and acquisition units. These systems are architected with a variety of robust interface for configuration flexibility. Contact: Don Downing, National Sales Manager, don_downing@ampexdata.com; Linda Nuti, Contracts Manager, linda_nuti@ampexdata.com.

Analog Modules, Inc.

#1013

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

Analog Modules is an ISO 9001 certified company where 68 full-time employees are involved in design, development and manufacturing. AMI produces a wide range of stand-alone and OEM analog electronic products primarily for the laser and electro-optics industries. These products serve applications in medical, military, scientific and industrial markets. Contact: Bruce Soileau, Product Manager, bsoileau@analogmodules.com; Kelly Pacy, Vice President Sales, kpacy@analogmodules.com.

Andover Corp.

#216

4 Commercial Dr, Salem, NH, 03079-2800
888/893-2800; fax 603/893-6508
info@andovercorp.com; www.andovercorp.com

New Product: Infrared bandpass filters and custom coatings up to 14 microns.

Andover has been designing and producing high-quality, highly specialized filters and coatings for military, aerospace, research and industrial applications for over 30 years. From ground-based to space-borne and every altitude in between. ISO 9001:2000 and ITAR registered. Contact: Rob Pursel, Senior Optical Coating Engineer, rpursel@andovercorp.com; Phil Clark, Technical Sales, pclark@andovercorp.com.

Angstrom Precision Optics Inc.

#1511

190 Bennington Dr, Rochester, NY, 14616
585/663-7230; fax 585/663-7236
info@apoptics.com; www.apoptics.com

New Product: APO now offers optical grade precision polished germanium windows and wedges.

Manufacturer of precision polished plano elements. Products are windows, wedges, filters, mirrors and post fabrication of coated optics for UV, VIS and IR applications. Capabilities include CP, DS and O.D. polishing to <0.5 arc sec wedge, <10-5 scratch dig and 1/20 wave flatness. CNC dicing and slicing services. Materials include optical glass, fused quartz / silica, filter glass, germanium, Borofloat and float glass. APO provides quality optics at a low cost with our expedited 2-3 day delivery. Contact: Ron Schulmerich, President.

AOptix Technologies Inc.

 #30

695 Campbell Technology Pkwy, Campbell, CA, 95008
408/558-3300; fax 408/558-3301
brhea@aoptix.com; www.aoptix.com

APHOTIK

#1538

5020 Old Ellis Pointe Ste 100, Roswell, GA, 30076
770/642-6858; fax 770/642-0160

A designer and manufacturer of low light night vision cameras. Contact: Ruben Uribe, President, ruben@physimetrics.com; Van Phillips, Sales Manager, vanship@physimetrics.com.

Apollo Optical Systems, Inc.

#1404

330 Clay Rd, Rochester, NY, 14623
585/272-6170; fax 585/272-6177
info@ApolloOptical.com; www.ApolloOpticalSystems.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.

Applied Image Group

#432

SPIE Corporate Member

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

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

Applied Optronics

#842

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

Applied Signal Technology, Inc.

#1440

400 W California Ave, Sunnyvale, CA, 94086
408/749-1888; fax 408/522-2960
customer@appsig.com; www.appsig.com

New Product: Neu-VISION Family of Explosives Detection Products for Aviation and Homeland Security.

Applied Signal Technology, Inc. is a leading provider of advanced signal processing products and systems in support of ISR for the defense and intelligence communities. We research, design, develop, manufacture and integrate equipment for the collection and processing of communications signals, electronic intelligence and sensor signal processing for radar, sonar, electro-magnetic and imaging missions. Contact: Corporate Marketing and Business Development.



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Arcturus UAV

600 Martin Ave Ste 100, Rohnert Park, CA, 94928
707/206-9372; fax 707/206-9372
lhirsch@arcturus-uav.com; www.arcturus-uav.com

 #17

Arete Associates - Optical Systems Research

1225 Ken Pratt Blvd Ste 206, Longmont, CO, 80501
301/651-6756; fax 301/485-6412
osr@arete.com; www.arete.com

Arete Associates is an advanced science and engineering company that provides new solutions to challenging technical problems faced by United States Defense and Intelligence agencies. Arete specializes in developing advanced systems and algorithms to detect and identify targets of interest for military and intelligence purposes. The Optical Systems Research Group, located in Colorado is focused in: custom solid state laser development, laser radar research and high-bandwidth, large-dynamic range readout imaging system. Contact: Greg Fetzer, Director, gfetzer@arete.com; James Murray, Senior Scientist, jmurray@arete.com.

#1506

ASD Inc.

(formerly Analytical Spectral Devices)

2555 55th St Ste 100, Boulder, CO, 80301
303/444-6522; fax 303/444-6825
info@asdi.com; www.asdi.com

ASD Inc. is unsurpassed in solving some of the world's most challenging materials measurement problems with customer-focused solutions. We collaborate with industrial professionals, analytical researchers and remote sensing scientists to provide the most reliable, high-performance analytical instrumentation solutions for real-world applications, exactly where it is needed, on-site or at remote locations. Established in 1990 and based in Boulder, Colorado, United States of America, ASD Inc. has customers world-wide. Contact: David Hatchell, Senior Sales/Product Line Manager, Remote Sensing, david.hatchell@asdi.com; Nate Bloomingdale, Technical Sales, Remote Sensing, nate.bloomingdale@asdi.com.

#400

ASML Optics

 Corporate Member

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

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

#233



asphericon GmbH

 Corporate Member

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

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

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

#1208

Atlantic Positioning Systems

6950 112th Circle, Largo, FL, 33773-5209
727/299-0150; fax 727/541-6403

custserv@atlanticpositioners.com; www.atlanticpositioners.com

New Product: Precision pointing and tracking single-axis, 2-axis and 3-axis gimbals and controls.

Atlantic Positioning Systems is a world leader in design and manufacturer of high accuracy, highly reliable, modular stabilized gimbals and controls that support the military Electro-Optical, C3I, and radar markets. Our systems are ideally suited for pointing optical sensors, lasers, radars and communications antennas and are designed for ground stabilization, shipboard stabilization applications. Contact: Alex Doig, Manager, Business Development, adoig@atlanticpositioners.com.

#223

Autonosys Inc.

1755 Woodward Dr Unit 310, Ottawa, ON, Canada, K2C 0P9
613/482-6569; fax 613/686-5585
inquiries@autonosys.com; www.autonosys.com

New Product: Our new Lidar 3D Video camera the LVC0702. Wider field of view, higher data rate.

AutonoSys Ltd. was created in 2004 to develop and manufacture a new generation of autonomous control systems for autonomous vehicles. AutonoSys sells the world's first lidar video cameras, the LVC0702 product line. AutonoSys Lidar video cameras measure ranges 50 times faster than conventional systems, at 500,000 ranges/second. With this amount of data per second, it becomes possible to produce a full 3D image of a scene at video rates of 5-10 frames a second. Contact: Robert Bruce, Director Business Development, robert.bruce@autonosys.com; James O'Neill, Chief Executive Officer.

 #32

Avo Photonics, Inc.

 Corporate Member

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

Avo Photonics provides advanced contract manufacturing services for photonic and microelectronic customers in the military, aerospace, medical, communications and industrial markets. High-value design, rapid prototyping, volume manufacturing, electro-optic performance testing and environmental testing are all part of Avo's standard offerings. Contact: Michael Vinson, Vice President of Business Development; Joseph Dallas, Ph.D., Chief Operating Officer, jdallas@avophotonics.com.

#543

Exhibitor Listing

Axsys Motion Control Products

#403

7603 Saint Andrews Ave Ste H, San Diego, CA, 92154
619/671-5400; fax 619/671-9292
bkent@axsys.com; www.axsys.com

Axsys Technologies is a supplier of high performance motion control components, including pan and tilt mechanisms, electro-optical assemblies, direct drive motors and resolvers. Axsys' products are used in a variety of targeting and surveillance applications for military and homeland security markets. Contact: Blanche Kent, Applications Marketing Manager.

Axsys Technologies Imaging Systems

#403

SPIE Corporate Member

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

New Product: LIDAR Fast Steering Mirror provides +/-10 degrees scanning in azimuth and elevation simultaneously.

Axsys Technologies Imaging Systems designs and manufactures high performance optical systems including telescopes, collimators, gimbals and steering mirrors used in aerospace applications ranging from weather satellites and airborne reconnaissance to missile defense and homeland security. Capabilities include diamond point turning, polishing, electro-mechanical assembly and environmental testing. Axsys' highly sophisticated test and metrology labs verify performance under extreme conditions. Contact: George Murray, West Regional Sales Manager, gmurray@axsys.com; John Brower, East Regional Sales Manager, jbrower@axsys.com.

Axsys Technologies IR Systems

#403

SPIE Corporate Member

24 Simon St, Nashua, NH, 03060
603/864-6300; fax 603/864-6450
www.axsys.com

For over 40 years, Axsys has been designing and delivering accurate and reliable optical and motion control solutions to the United States government and to high performance commercial markets. The demonstrated technology and reliability of Axsys products is evidenced by Axsys' role as a strategic supplier for a variety of space and defense programs. Contact: Peter Kornik, Business Development Manager Optics, pkorkik@axsys.com; Mike Amorelli, Assistant GM-Cameras, mamorelli@axsys.com.

B&W Tek, Inc.

#236

SPIE Corporate Member

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

New Product: MiniRam™ II: Portable Raman Spectrometer System with hand-top computer.

B&W Tek, Inc. is leading the way in the development of photonic instrumentation. With emphasis on low cost, high performance lasers and spectrometers, we strive for versatility - innovating solutions to security, defense, analytical, industrial, medical, biophotonic and diagnostic applications. We lead worldwide sales of Raman spectrometers. Our ISO 9001 and ISO 13485 certified facility and patented technologies ensure high quality products, consistently proven and growing every day. Contact: Meghana Kakade, Marketing Coordinator, megk@bwtek.com.

BAE Systems

#527

65 Spit Brook Rd, Nashua, NH, 03060
603/885-3522; fax 603/885-4490
www.baesystems.com

BAE Systems is a leading provider of high performance uncooled IR modules and system level solutions, based on our MicroIR Technology, to government and commercial integrators and end-users. Contact: David Smialek, Manager, Business Development, david.c.smialek@baesystems.com; Simon Pongratz, Manager, MicroIR Sales, simon.pongratz@baesystems.com.

Bandwidth Semiconductor LLC

#524

Recent name change - see Spire Semiconductor LLC

Barr Associates Inc.

#1032

SPIE Corporate Member

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

New Product: Dualband - MWIR (3-5μ)/LWIR (8-12μ), or NIR/MWIR, for single aperture viewing.

Barr Associates, Inc. offers custom optical interference filters and coatings over the spectral range of 200nm to 50μ, for use in defense, aerospace, commercial and astronomy. Defense applications include Imaging and other Direct View Optics for Night Vision, Surveillance, and Targeting. Commercial uses include Night Vision, gas analysis and biomedical instrumentation. Barr deploys the widest range of coating deposition technologies and manufacturing capacities to service diverse markets. Contact: Jack Bosch, Business Development Manager, Defense Applications, jbosch@barrassociates.com.

BaySpec, Inc.

#2802

SPIE Corporate Member

101 Hammond Ave, Fremont, CA, 94539
510/661-2008; fax 510/661-2009
sales@bayspec.com; www.bayspec.com

New Product: IntelliGuard™ Optical Spectrum Analyzers, 1230-1650nm range, MILSPEC 810F.

Based on BaySpec's Volume Phase Gratings (VPG<0x00AE>), based telecom devices, customers in optical telecom, optical test and measurement, fiber sensing, NIR spectroscopy and biomedical industries are benefiting and building systems to meet the world's current optical system challenges. Devices are manufactured to meet Telcordia and MILSPEC-810F, while significantly lowering capital and operating expenditures. Contact: Sales Manager.

BEI Precision Systems & Space Co.

#114

1100 Murphy Dr, Maumelle, AR, 72113
501/851-4000; fax 501/851-5476
sales@beiprecision.com; www.beiprecision.com

Biometrics Task Force

#2601

8260 Willow Oaks Corp Dr #800, Fairfax, VA, 22031
703/602-2122; fax 703/602-7441
http://www.biometrics.dod.mil

The Biometrics Task Force (BTF) leads Department of Defense activities to program, integrate, and synchronize biometric technologies and capabilities to support the National Security Strategy. The BTF collaborates with stakeholders and the biometric community to lead in the development of biometric capabilities that empower the warfighter. Contact: Chantel Ramzey, Outreach TeAM, cramzey@brtrc.com; Gregory Johnson, Outreach Team, gjohnson@brtrc.com.



LASER EXPO 2008

www.optronics.co.jp/en/le/

LENS EXPO 2008

Lens Design and Manufacturing Expo

www.optronics.co.jp/en/ls/

FIBER EXPO 2008

Optical Fiber Integrated Technologies Exhibition

www.optronics.co.jp/en/fib/

April 23 Wed. - **25** Fri. 10:00 - 17:00

Pacifico Yokohama Yokohama, Kanagawa Japan

For further information

The Optronics Co., Ltd. International Dept.

Fax +81 3 5229-7253 E-mail: intl@optronics.co.jp

Exhibitor Listing

Bodkin Design & Engineering, LLC

#244

PO Box 81368, Wellesley, MA, 02481
617/795-1968; fax 617/795-1969
info@bodkindesign.com; www.bodkindesign.com

New Product: IR zoom camera IRZ 2575 3X optical 11x digital zoom. Hyperspectral imagers: VNIR 20 and VNIR 90.

Bodkin Design & Engineering provides innovative product design, development and engineering services to the industrial, commercial, military and research communities. Founded in 1998, the firm has developed numerous patented devices and overseen the successful introduction of a diverse spectrum of products, from Hyperspectral instruments for defense applications, to dental imagers, to miniature IR cameras. Please visit us at www.bodkindesign.com. Contact: Barbara Darnell, Project Manager, sales@bodkindesign.com; Andrew Bodkin, Principal, wab@bodkindesign.com.

Bolt Systems, Inc.



#37

3535 Ross Ave Ste 100, San Jose, CA, 95124
408/448-8860; fax 206/339-4551
boltsystems@photonicstraining.com; www.photonicstraining.com

Bookham

#1542

Caswell, Towcester, United Kingdom, NN12 8EQ
44 1327 350581; fax 44 1327 356775
highpower@bookham.com; www.bookham.com

New Product: State of the art 8xx nm multi-mode laser bars for YAG pumping conversion efficiency.

Bookham's world class facilities have been producing industry leading laser diodes for over 20 years. Proprietary core technologies such as E2 mirror passivation and fully automated hard soldering process, deliver diodes with high brightness and outstanding reliability. Our products from single emitters and bars to highly integrated laser diode based solutions are designed for demanding applications in industrial, medical, printing and defense. Wavelengths from 790nm - 1580nm are available. Contact: Mike Cutler, HPL / VCSEL United States Sales, michael.cutler@bookham.com; Gunnar Stolze, HPL / VCSEL Global Sales, gunnar.stolze@bookham.com.

Boston Electronics Corp.

#625

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

New Product: Quantum Cascade Lasers at "magic" wavelengths in TO-style or butterfly packages with coolers.

Specialist in photodetectors, photon sources and related signal processing electronics and instruments. Contact: Fred Perry, fsp@boselec.com; Jim Melnyk, jmm@boselec.com.

Boulder Imaging Inc.

#520

1500 Cherry St Ste C, Louisville, CO, 80027
303/604-2368; fax 720/890-7731
info@boulderimaging.com; www.boulderimaging.com

New Product: VisionRecorders™ - cutting-edge, 1GB/s digital video recording systems for project-critical imaging.

A proven partner for military and critical imaging projects providing VisionRecorder™ systems for cutting-edge, real-time digital video recording, image processing, analysis and archiving. Complete high quality systems support any number of simultaneous video inputs (HOTLink, CameraLink, LVDS/RS422, DVI, Firewire, NTSC/PAL, RS170, RGB/VGA) and continuously record for hours, with zero data drops, at speeds exceeding 1 GB/s for image capture in military testing, tracking, security and research. Contact: Darlene Davis, Marketing and Sales Manager, ddavis@boulderimaging.com; Danna Gurari, Technical Sales Engineer, dgurari@boulderimaging.com.

Boulder Nonlinear Systems, Inc.

#1221

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.

Brijot Imaging Systems, Inc.

#1106

5422 Carrier Dr Ste 107, Orlando, FL, 32819
407/641-4370; fax 407/357-9455
info@brijot.com; www.brijot.com

Brijot Imaging Systems, Inc., a market leader in millimeter wave technology, designs, manufactures and sells a passive object detection and people screening system. The BIS-WDS® GEN 2 with full-motion, real-time imaging and remote operation capability offers a quick and discrete solution for detecting items concealed beneath a person's clothing. Visit our booth for live demonstrations. Contact: Courtney Lewis, Marketing Communications Manager, clewis@mail.ucf.edu; Dana Strawser, Marketing Manager, dstrawser@brijot.com.

Brimrose Corporation of America

#2600

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

Brownell Ltd.

#1531

Unit 2 Abbey Rd Industrial Park, Commercial Way, London,
United Kingdom, NW10 7XF
44 208 965 9281; fax 44 208 965 3239
info@brownell.co.uk; www.brownell.co.uk

New Product: Nitrogen Purging System - NEPS 1000.

Brownell /AGM Container Controls manufacture desiccators, desiccant bags, humidity indicators and pressure relief valves. Their main purpose is to protect against moisture and atmospheric related problems which can occur in electronics, optics and lasers. Brownell/AGM Container Controls is pleased to launch a new product, the "pumped NEPS1000 advantage" which is the next generation in dry gas purging equipment. NEPS1000 can also quantify the amount of moisture within an equipment or system. Contact: Robert Beasley, Technical Sales Manager, beasleyr@brownell.co.uk; Jim McCorry, Sales Manager, mccorry@agmcontainer.com.

Brush Wellman Inc.

#113

14710 W Portage River S Rd, Elmore, OH, 43416-4173
419/862-2745; fax 419/862-4174
www.brushwellman.com

New Product: AIBeWeld, a new process for near net shaping Aluminum Beryllium materials.

Brush Wellman, Inc. is the world's leading supplier of engineered materials. The exhibit will highlight AIBeMet materials for electro-optical applications for the defense and security markets. Contact: Tom Parsonage, Director, Market Development, tom_parsonage@brushwellman.com; Larry Ryczek, Vice President Sales and Marketing, lawrence_ryczek@brushwellman.com.



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CALCULEX, Inc.

132 W Las Cruces Ave, Las Cruces, NM, 88001
505/525-0131; fax 505/524-4744
sheril@calculex.com; www.calculex.com

CALCULEX designs and manufactures state of the art electronics for military, aerospace and commercial markets. CALCULEX solid state recorders are used worldwide in mission critical applications including USAF's 46th Test Wing at Eglin AFB, Boeing F-18 flight testing for the United States Navy, Lockheed Martin F-22 flight test program and reconnaissance programs at Recon/Optical and ELOP. Contact: Tom Beams, Executive Vice President/Chief Operations Officer, tbeams@calculex.com; Bill Taylor, National Sales Manager, billt@calculex.com.

Cantronic Sysyems, Inc.

63A Clipper St, Coquitlam, BC, Canada, V3K 6X2
604/516-6667; fax 604/516-6618
info@cantronics.com; www.cantronics.com

New Product: InterceptIR: Long range security system using visual and thermal cameras, illuminators.

Cantronic Systems, Inc. is your infrared solution. Cantronic Systems provides fully-engineered solutions for monitoring, protecting and managing facilities and people using infrared imaging and night vision technologies. Cantronic's high-performance "QWIP-CHIP" infrared sensors provide excellent image quality at low cost. Call 1-866-391-6970 or visit Cantronic Systems online at www.cantronics.com. Contact: Jon Chynoweth, Executive Vice President, Sales and Marketing, jchynoweth@cantronics.com; Mark Mandell, Managing Director QWIP Technologies, mmandell@cantronics.com.

Carl Zeiss Microlmaging, Inc.

SPIE Corporate Member

One Zeiss Dr, Thornwood, NY, 10594
800/233-2343; fax 914/681-7446
micro@zeiss.com; www.zeiss.com/photo

New Product: ZEISS ZF Lenses are high-quality, prime lenses for industrial cameras using the F-Mount.

Carl Zeiss is a leading international company, operating in the optical and opto-electronic industry. The business groups are generally ranked first or second in the markets of medical and research solutions, industrial solutions and lifestyle products. They offer products and services for biomedical research and medical technology, system solutions for the semiconductor, automotive and mechanical engineering industries, as well as high-quality consumer goods such as camera lenses and binoculars. Contact: Richard Schleuning, National Sales Manager, International Sales Americas, photo@zeiss.com.

Carl Zeiss Optronics GmbH

Carl-Zeiss-Str 22, Oberkochen, Germany, 73447
49 7364 20 6530; fax 49 7364 20 3697
optronics@zeiss.de; www.zeiss.com/optronics

Carl Zeiss Optronics designs, develops and produces state-of-the-art optronic instruments for military and civilian applications. They are used to monitor, identify and classify, as well as for precise measurement, evaluation and targeting. As a subsidiary of the globally recognized Carl Zeiss Group, we are armed with years of experience and know-how in optronics, highly accurate optics and precision engineering. Contact: Rudolf Koller, Business Development North America, r.koller@zeiss.de.

#929

Carleton Life Support Systems Inc.

2734 Hickory Grove Rd, Davenport, IA, 52804
563/383-6000; fax 563/383-6323
info@carletonls.com; www.carletonls.com

Carleton Life Support Systems Inc., part of the Cobham Life Support Division, is a world leader in the application of air separation technology for aviation applications and in the design and manufacture of miniature stirling cycle cryogenic coolers. Contact: Bob Nelson, Business Development Manager, bnelson@carletonls.com; Asif Ahmed, Marketing Manager, ahmed@carletonls.com.

#1034

CBC (AMERICA) Corp.

55 Mall Dr, Commack, NY, 11725
631/864-9700; fax 631/543-5426
www.cbcamerica.com

New Product: Continuous zooms for 3-5 and 8-14 thermal; introducing affordable housed thermal surveillance cameras.

CBC (America) Corp is a subsidiary of CBC Co., Ltd. and part of a global network of import, export, trading and distribution companies with 20 offices worldwide. CBC is involved in the production of CCTV security and other products. With sales and distribution centers in New York and California, we are able to meet the needs of the North, South and Central American markets. Contact: Jan Ter Louw, Senior Vice President, jterlouw@cbcamerica.com.

#740

Cedip Infrared Systems

19 Blvd Georges Bidault, Croissy-Beaubourg, France, F-77183
33 1 60 37 01 00; fax 33 1 64 11 37 55
emilie.cornee@cedip-infrared.com; www.cedip-infrared.com

New Product: SW/MW/LW IR System (320-256 and 640*512), Titanium, for R&D or Thermography applications.

Cedip Infrared Systems provides world class infrared imaging cameras and systems to industrial, R&D organizations worldwide. Our technology is actively assisting customers in a wide variety of thermal imaging and thermographic applications including: Measuring, imaging and controlling temperature in industrial processes, NDT, stress analysis and mechanical testing; Infrared signature analysis and day/night surveillance and observation of sensitive sites (defence, security, law enforcement). Contact: Emilie Cornée, Marketing and Communication; Pierre Brémond, Export Sales Manager Industrial Application and Thermography, cedip-marketing@cedip-infrared.com.

#1317

Celltron Inc.

1110 W 7th St, Galena, KS, 66739
620/783-1333; fax 620/783-1332
ditto.john@celltron.com; www.celltron.com

#1507

Chardon Tool

115 Parker Ct, Chardon, OH, 44024
440/286-6440; fax 440/286-7165
info@chardontool.com; www.chardontool.com

#2501

ChemImage Corp.

7301 Penn Ave, Pittsburgh, PA, 15208
412/241-7335; fax 412/241-7311
info@chemimage.com; www.chemimage.com

#1438

ChemImage's patented high-speed, wide-field Chemical Imaging technologies enable you to see your chemistry quickly and clearly, allowing you to make better decisions faster. Our chemical and biological imaging and analysis technologies drive product development-and competitive advantage-for a wide and deep range of industries. Contact: Tracey Vogt.

Don't Miss the NEW

Robotics+Unmanned Systems Pavilion

Located in Sago/Sabal Ballrooms

See p. 10 for pavilion details.

Exhibitor Listing

Chengdu Ultra Pure Applied Materials Co., Ltd. #1519

No 3 Zhen Jianzou Rd, Henzuo West High-Tech District, Chengdu Sichuan, China, 611731
86 28 66113286; fax 86 28 87958501
sales@upam.cn; www.upam.cn

Chengdu Ultra Pure Applied Materials Co., LTD (UPAM) was the leading Laser/Infrared/DLC thin film coating maker and the major manufacturer of Sputtering Targets and Evaporation Materials and Optical Elements OEM in China. We supplied the kind of films and accordly Si/Ge polishing chips to the world. Our targets and evaporation materials were used by optical and semiconductor manufacturers. UPAM always insisted to supply the high quality products and had very strictly inspection equipment and programme to guarantee the quality. UPAM are warmly welcome your visiting.

CI Systems, Inc. #1022

 SPIE Corporate Member

90 W Cochran St Ste D, Simi Valley, CA, 93065
805/520-2233; fax 805/520-2234
contactus@ci-systems.com; www.ci-system.com

CI Systems develops and manufactures sophisticated electro-optical test, measurement and simulation systems for defense, industrial and scientific markets worldwide. Our line of instruments and systems includes blackbodies, collimators, complete range of remote sensing systems, early warning and countermeasure testing products, automatic testing software, boresight units and laser test systems. We are known for reliable systems that support development and production and for our highly responsive service. Contact: Garrick Matheson, Director, garrick@ci-systems.com; Tim Ownes, Sales, Tim.Owens@ci-systems.com.

Cincinnati Sub-Zero Products, Inc. #404

12011 Mosteller Rd, Cincinnati, OH, 45241
513/772-8810; fax 513/772-9119
indsales@cszinc.com; www.cszindustrial.com


New Product: New rapid cycling test chamber with small footprint for testing small electronics and assemblies.

CSZ offers a complete line of standard and built-to-order environmental test chambers including temperature cycling, humidity, thermal shock, accelerated stress-screening, AGREE vibration, altitude, low temperature freezers, wind & rain, dust, etc. Chamber sizes range from small benchtop chambers to full walk-in/drive-in rooms. Standard temperature ranges include -84°C to +190°C with relative humidity from 10% to 98%. Contact: Mark Chrusciel, Sales Director, chrusciel@cszinc.com; Carl Burgjohann, Regional Sales Manager, burgjohann@cszinc.com.

Clear Align #932

2550 Boulevard of the Generals Ste 280, Eagleville, PA, 19403
484/956-0510; fax 484/956-0511
angelique.irvin@clearalign.com; www.clearalign.com

Clear Align designs, prototypes and manufactures custom imaging, sensing and fiber optic systems for defense and aerospace industries. Clear Align's imaging expertise spans the UV, visible, NIR, SWIR, MWIR and LWIR portions of the spectrum, delivering both narrow and wide field-of-view systems. Fiber optics and sensing expertise includes optical integration for communications, remote sensing and targeting. Our optics expertise ensures fast, reliable and cost-effective solutions. Contact: Micheal Finlan, Vice President Imaging, mike.finlan@clearalign.com; Robert Irvin, Vice President Fiber Optics, robert.irvin@clearalign.com.

 = Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

Cloud Cap Technology, Inc. #39

 SPIE Corporate Member

2621 Wasco St, PO BOx 1500, Hood River, OR, 97031
541/387-2120; fax 541/387-2030
sales@cloudcaptech.com; www.cloudcaptech.com

CMC Electronics Inc. #2202

600 Dr Frederick Philips Blvd, Ville Saint-Laurent, QC, Canada, H4M 2S9
514/748-3148; fax 514/748-3100
www.cmcelectronics.ca

CMC Electronics designs and produces highly reliable military and commercial electronics products for the aviation and global positioning markets. CMC's Custom Electronics business specializes in the design and manufacture of electronic components for the military and commercial aerospace markets as well as the military ground vehicle and manpack communications market. Contact: Andrew Krilick, Director, Andrew.Krilick@cmcelectronics.ca; Angela Mc Cune, Marketing Manager, Angela.McCune@cmcelectronics.ca.

CMPC Surface Finishes #826

39 Official Rd, Addison, IL, 60101
630/543-6682; fax 630/543-4013

Coastal Optical Systems, Inc. #1427

 SPIE Corporate Member

16490 Innovation Dr, Jupiter, FL, 33478-6428
561/881-7400; fax 561/881-1947
sales@coastalopt.com; www.coastalopt.com

Jenoptik VarioCAM® HiRes LWIR cameras feature wi-fi control, 60 Hz frame rates, IP54 environmental rating, aluminum housing and ORI® for 1.2 megapixel resolution. The camera comes in hand held and laboratory versions with 640 x 480 or 384 x 288 pixels. VarioCAM® HiRes cameras are sold exclusively in North America by Jenoptik-IR (www.jenoptik-ir.com), a division of Coastal Optical Systems. Contact: Ray Watts, Sales Manager - Jenoptik-IR, ray.watts@jenoptik-ir.com; Ray Malcom, Vice President, Sales and Marketing, ray.malcom@coastalopt.com.

Coherent Inc. #1242

 SPIE Corporate Member

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

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

Don't Miss This Free Presentation
Innovation and the Wealth of Nations, p. 6



Sir John Chisholm
Chairman of QinetiQ

Cohu, Inc.

#1209

Electronics Div, 3912 Calle Fortunada, San Diego, CA, 92123-1827
858/277-6700; fax 858/277-0221
info@cohu.com; www.cohu.com/cctv

New Product: Thermal and high performance CCTV cameras on high speed positioners.

Security and defense professionals turn to Cohu for CCTV cameras and systems that are a cut above average. For thermal imaging, only the Cohu 5960 Series has the wide variety of thermal imagers and lens options on a high speed positioner. With Cohu Analytics, the i-view.net cameras are now fully armed to run best-of-breed automated site surveillance. Contact: Charley Gilbert, Sales Director, cgilbert@cohu.com; Jan Seigler, Sales Manager, jseigler@cohu.com.

Components Express, Inc.

#1408

10330 Argonne Woods Dr Ste 100, Woodbridge, IL, 60517-4995
630/257-0605; fax 630/257-0603
cei@componentsexpress.com; www.componentsexpress.com

New Product: NEW...40 Meter / 85 MHZ. Certified Camera Link assemblies!

We are a leading manufacturer of custom electronic cable assemblies serving the Machine Vision Industry. An ISO: 2000 certified company, which is an active member of the AIA and EMVA that specializes in molded RoHs compliant assemblies and custom patch panels. Products: Camera Link Cables, Gigabit Ethernet Cables, IEEE 1394 Firewire Cables, Power Supplies, Patch Panels, SCSI Cables, Networking Cables, Electronic Connectors and Hardware. Business Activity: Manufacturer/Distributor/Exporter. Contact: Ray Berst, President, rberst@componentsexpress.com; Steve Mott, Vice President, smott@componentsexpress.com.

Computer Optics Inc.

#938

120 Derry Rd, Hudson, NH, 03051
603/889-2116; fax 603/889-2393
sales@computeroptics.com; www.computeroptics.com

New Product: The VIDA continuous infrared zoom lens. MWIR 4x zoom available now.

Computer Optics Inc, debuted the World's first commercial infrared zoom lens over five years ago featuring COI's patented optical zoom lens technology. Come by our booth to learn about new additions to our lens family in the Visible, SWIR, LWIR and MWIR wavelength regions of the spectrum. Contact us with your infrared zoom lens requirements. Contact: info@irzoom.com.

Contour Fine Tooling

#100

143 Jaffrey Rd, Marlborough, NH, 03455
603/876-4908; fax 603/876-4911
dennis@contour-diamonds.com; www.contour-diamonds.com

New Product: Contour MCVD diamonds resists wear, has high purity, no inclusions and greater consistency.

Contour Fine Tooling supplies single crystal diamond tools for manufacturing I/R, transmissive and reflective optics for Aero-Space/ Defense and Consumer industries in addition to Ultra-precision mechanical components. Diamond tools for 2-axis, Freeform and Fast Tool Servo technologies supplied with edge waviness down to 50 nm P-V and < 2 micron tip radius. Contour tools achieve part-cutting results that can be measured in Angstrom Ra value for surface finish and Nanometer form accuracy. Contact: Dennis Keating, Vice President Sales and Marketing; Jeffrey Tomlin, Vice President and General Manager, jeff@contour-diamonds.com.

CorActive High-Tech, Inc.

#2006

SPIE Corporate Member

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

CorActive is a well financed independent developer and manufacturer of advanced Specialty Optical Fiber (SOF) products for OEM customers serving the LASER, telecommunications, sensor, defense and aerospace industries. CorActive uniquely offers a full line of standard SOF products, including Double Clad, erbium doped, mid-IR transmission, ultra violet sensitive and attenuating optical fiber, plus custom fiber development services for specific applications. Contact: Jean Dube, Vice President Sales; David Beiko, Sales Director.



GENERAL REFRESHMENT SPONSOR

Corning Inc.

#416

SPIE Corporate Member

1 Riverfront Plaza, Corning, NY, 14831
607/974-9000; fax 607/974-8177
www.corning.com

A world leader in specialty glass and ceramics, with components that enable high-technology systems for consumer electronics, mobile emissions control, telecommunications and life sciences. Corning succeeds with sustained investment in R&D, 150 years of materials science and process engineering knowledge. A leading supplier of reflective and refractive optical systems and specialty glass solutions for a number of industries including semiconductor, aerospace, defense, astronomy and metrology. Contact: Dave Young, youngdj@corning.com; Elijah Baity, baityea@corning.com.

C-RAM Program Office

#31

121 Research Blvd, Madison, AL, 35758
256/774-6028; fax 256/774-0773
june.mckay@us.army.mil;

Crystal Fibre

#1505

SPIE Corporate Member

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

CTS Electronic Manufacturing Solutions, Inc.

#1507

34 Londonberry Rd, Londonberry, NH, 03053
703/201-3702; fax 703/779-5624
richard.oconnor@ems.ctscorp.com; www.ems.ctscorp.com

CVI Melles Griot - Albuquerque

#611

Corporate Member

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

CVI Melles Griot gets you what you need, when you need it. From the UV to the IR we offer unmatched breadth and flexibility in lasers, optical components, and electro-optical assemblies. Our extensive catalog, along with our custom and build-to-print capabilities deliver solutions from prototype to high-volume, OEM quantities. Providing solutions for aerospace, defense, biotechnology, material processing, and basic research applications, CVI Melles Griot manufactures on three continents, and maintains sales and engineering centers in 11 countries worldwide. Contact: Jim Scott, East Coast, jscott@cvimellesgriot.com.

Exhibitor Listing

D&P Instruments

#402

1280 Hopmeadow St Unit E, Simsbury, CT, 06070
860/658-0458; fax 860/651-0698
microfts@aol.com; www.dpinstruments.com

Manufacturer of portable remote sensing FTIR spectrometers and accessories, such as blackbodies and fore-optics. Software included to acquire data and compute absolute radiance, emissivity and sample temperature with non-contact measurement. Contact: Win Wadsworth, President.

D.L.S. Electronic Systems, Inc.

#1403

SPIE Corporate Member

1250 Pterson Dr, Wheeling, IL, 60090
847/537-6400; fax 847/537-6488
www.dlsemc.com

Dayton T. Brown, Inc.

#328

1175 Church St, Bohemia, NY, 11716
800/232-6300
contactus@dtbtest.com; www.dtbtest.com

With its extensive laboratory facilities and equipment, DTB has been a major participant in quality assurance testing and engineering support programs for the defense and security industry. We work closely with clients to provide world-class reverse engineering and product improvement services, environmental and dynamics testing. No other testing lab offers the variety of testing services that we can provide to you in one location with a 24/7 schedule. Please visit us at www.dtbtest.com. Contact: Tom Volpe, Business Development Manager, tvolpe@dtbtest.com.

Defense Tech Briefs

#436

1466 Broadway Ste 910, New York, NY, 10036
212/490-3999; fax 212/986-7864
www.abpi.net

The largest-circulation engineering magazine for the mil/aero market, reaching 100,000 design engineers and executives, *Defense Tech Briefs* is your one-stop resource for the latest technology breakthroughs and licensing opportunities from Department of Defense labs. Coverage spans electronics, photonics, materials, software, bio-med, manufacturing and more. Plus you can access hundreds of free white paper reports online at www.defensetechbriefs.com. Contact: Joe Pramberger, Publisher, joe@abpi.net; Linda Bell, Editorial Director, linda@abpi.net.

Denton Vacuum, LLC

#322

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

New Product: Discovery HDG; Ion Beam Deposition and Ion Beam Assisted Deposition.

Denton Vacuum is a world-class supplier of PVD vacuum deposition equipment. Deposition systems include the Integrity®; precision optical coaters, Desk®; SEM sample preparation systems, Discovery®; RF/DC sputtering systems, Explorer®; series for R&D; our new HDG (horizontal dual gun) Ion Beam deposition system. DLC, optical interference, metal, metal oxide coatings are our specialty. Contact: Jim Colbridge, Sales/Marketing Manager, jcolbridge@dentonvacuum.com.

Deposition Sciences, Inc

#305

SPIE Corporate Member

3300 Coffey Ln, Santa Rosa, CA, 95403
707/573-6700; fax 707/573-6748
www.depsci.com

New Product: DSI Offers Expanded Optical Coating Services in the Infrared Spectrum for Defense Applications.

For over 20 years, Deposition Sciences, Inc. (DSI) has produced the most durable optical thin film filter coatings in the industry. DSI's coating capability ranges from the Ultraviolet (UV), through the visible (VIS), near infrared (NIR), Middle infrared (MIR or IR) and out to the far infrared (FIR). DSI's patented MicroDyn® reactive sputtering technology enables superior multilayer thin film coatings for optics, MEMS and other thin film nano-technologies. Contact: Bob Crase, Program Manager, solutions@depsci.com; Tatiana Goobanoff, Customer Service Supervisor, solutions@depsci.com.

Devitech ApS

#1532

Sundsholmen 12, Norresundby, Denmark, 9400
45 70 26 56 26; fax 45 70 26 56 27
info@devitech.dk; www.devitech.dk

New Product: IR-011 and IR-031 High Performance VOx Uncooled Thermal Cameras.

Devitech is a pioneering company specializing in development and manufacture of advanced digital camera products for civil and military applications. Based on high performance VOx technology and flexible interfacing, Devitech's IR-011 and IR-031 Thermal Cameras are built and designed to meet high customer and performance requirements. Product offerings include standard lenses targeting a wide range of applications including Drivers Vision Enhancers and Situation Awareness for Armoured Vehicles. Contact: Niels Heeser Nielsen, Managing Director, nhn@devitech.dk; Christina Lademann Wiederholt, Marketing Manager, clw@devitech.dk.

Dilas Diode Laser

#1308

SPIE Corporate Member

9070 S Rita Rd Ste 1500, Tucson, AZ, 85747
520/232-3480; fax 520/232-3499
sales@dilas-inc.com; www.dilas.com

DILAS, the diode laser company, is focused on delivering the most innovative technologies and advanced product solutions in the industry. With operations in Mainz, Germany, Tucson, Arizona and Shanghai, China, DILAS designs, develops and manufactures high power, high brightness semiconductor laser components, modules and systems, including fiber coupled products within the defense market enabling applications in high energy lasers, illumination, targeting, range finding, LIDAR and many others. Contact: John Angello, Sales, j.agnello@dilas-inc.com.

Directed Perception, Inc.

#318

SPIE Corporate Member

1485 Rollins Rd, Burlingame, CA, 94010
650/692-3900; fax 650/692-3930
info@dperception.com; www.dperception.com

New Product: PTU-D100 mid-range, precision pan-tilt now shipping.

Directed Perception manufactures a complete line of rugged, precision pan-tilt systems with advanced features such as stabilization and geo-pointing. For over 16 years, leading aerospace, military and industrial customers have depended on Directed Perception for advanced sensor control solutions for man-portable, ground vehicle, airborne, maritime, security and surveillance and other industrial applications. Precision. Speed. Reliability. www.DPerception.com. Contact: David Gaw, Vice President Sales and Marketing, dgaw@dperception.com; Marilyn Elperin, melperin@dperception.com.

Don't Miss This Free Panel Discussion

Future Directions for CBRNE Sensors and Systems Development, p. 6

Chairs: Thomas George, ViaLogy PLC; Patrick J. Gardner, Western Carolina Univ.

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Electronic Warfare (EW) threat environments are constantly changing. Northrop Grumman has developed a system that instills confidence in the warfighter before the battlefield is even seen. We've created a reliable, high-quality, realistic IR/EO training solution. Our system provides the very best in open-air range and battlefield simulated conditions, so pilots can train for real-world threats in the most realistic environment possible. With realistic training, victory is that much closer.

www.northropgrumman.com

Exhibitor Listing

Dontech Inc.

#1411

700 Airport Blvd, Doylestown, PA, 18902
215/348-5010; fax 215/348-9959
jblake@dontechinc.com; www.dontechinc.com

New Product: Dontech Thermo-Klear transparent heaters for low temperature operation of optical sensors, cameras.

Since 1971 Dontech, Inc has designed and manufactured custom optical products for avionic, military and medical applications including: Precision optical assemblies in glass, acrylic, polycarbonate, ZnS, BK7, Sapphire EMI/RFI optical shielding filters - ITO and mesh Antireflective, antiglare, bandpass and band rejection coatings Thermo-Klear transparent heaters for camera, sensor and LCD application Nightvision filters. Display enhancement services and optical bonding. Contact: jblake, Director - Sales and Marketing; Bill Cusack, Eastern Regional Sales Manager, wcusack@dontechinc.com.

DRS Technologies, Inc., Reconnaissance, Surveillance & Target Acquisition (RSTA) Segment

#433

 SPIE Corporate Member

3520 U.S. Hwy 1, Palm Bay, FL, 32905
321/308-4804; fax 321/956-0126
www.drs.com

The DRS Technologies RSTA business segment, including its Infrared Technologies and Night Vision Systems Divisions, develops, manufactures and supports electro-optical technologies, including advanced cooled and uncooled infrared detector technologies and thermal-imaging solutions for man-portable, ground vehicle, airborne and maritime as well as for industrial, security, public safety and firefighting applications. DRS Infrared. A Better Way to See Your World.

Drytech Inc.

#1522

54 Wrightstown-Cookstown Rd, PO Box 128,
Cookstown, NJ, 08511
609/758-1794; fax 609/758-1774
drytech@drytechinc.com; www.drytechinc.com

Drytech designs and manufactures a range of moisture control and air purification products. These products including desiccators, molecular sieve filters and desiccant breathers, protect electrooptical components and systems from the degrading effects of moisture and condensation. Typical applications include airborne turret mounted optical sensors and infrared sensor pods. Contact: Tony Jones, Sales Director; Anika Jones, Sales Administrator, jonesa@drytechinc.com.

Dyna Technologies, Inc.

#240

 SPIE Corporate Member

1670 Tropic Park Dr, Sanford, FL, 32773
401/330-6423; fax 401/330-6121
information@dti-fla.com; www.dti-fla.com

New Product: A compact press designed for compression molding of glass optical elements for product development.

A manufacturer of a precision glass molding presses for production of optical elements such as aspheric lenses. The presses feature a fully enclosed design for vacuum and inert gas purging operation. Programmable feedback controls provide high precision position, force, heating and cooling profiles throughout the molding process. Contact: Brent Binkley, Director of GMT, bbinkley@dti-fla.com; Howard Painter, President, hpainter@dti-fla.com.

DynaVac

#2301

110 Industrial Park Rd, Hingham, MA, 02043
781/740-8600; fax 781/740-9996
sales@dynavac.com; www.dynavac.com

DynaVac manufactures high vacuum systems for thin film deposition and environmental testing applications. Systems are available in a wide variety of sizes and configurations. Custom-engineered solutions are offered for unique process and production requirements. Systems are fully automated and well suited for production environments. Full service installation and technical support is provided. Contact: Liz Clafin, lclafin@dynavac.com; Tom Foley, President, tfoley@dynavac.com.

Dynetics, Inc.

#2012

PO Box 5500, Huntsville, AL, 35814
256/964-4000; fax 256/964-4031
business.development@dynetics.com; www.dynetics.com

Dynetics founded in 1974 and headquartered in Huntsville, AL has field offices in Shalimar, Florida; Washington, District of Columbia; Colorado Springs, Colorado; Detroit, Michigan; Dayton, Ohio; White Sands Missile Range, New Mexico; Tullahoma, Tennessee and San Antonio, Texas. We provide products and services to Government and industry customers with 2007 annual sales of \$244M. Products include IR Scene projectors, UAV telemetry and instrumentation equipment and EO calibration equipment. Contact: John Watson, Director of New Product Development, john.watson@dynetics.com; Mark Hunter, Manager, Technology Evaluation and Transition Department, mark.hunter@dynetics.com.

e2v

#202

 SPIE Corporate Member

106 Waterhouse Ln, Chelmsford, United Kingdom, CM1 2QU
44 1245 493 493; fax 44 1245 492 492
enquiries@e2v.com; www.e2v.com

e2v designs and manufactures solid-state image sensors and cameras for night vision applications. Using non-intensified L3Vision™ technology, 24/7 real-time surveillance is truly possible in one sensor. L3Vision™ offers clear, crisp video all day and all night, smooth day/night transition, optimization options for low light scenes, and now a new 2/3" format option. Applications include UAV reconnaissance, driver viewer enhancement, underwater ROVs and military video applications. www.e2v.com. Contact: Ivan Noy, Marketing Manager - Defence Imaging, ivan.noy@e2v.com.



LANYARD SPONSOR

Edmund Optics

#1019

 SPIE Corporate Member

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

Edmund Optics (EO) is a leading producer of optics, imaging and photonics technology. Supporting the R&D, military, electronics, semiconductor, pharmaceutical and biomedical markets around the globe. EO products are used in applications ranging from night vision to DNA sequencing to high-speed factory automation. For their military applications, EO's in-house manufacturing locations have been audited by an independent organization for compliance to United States State Department guidelines. Contact: Marisa Edmund, Vice President of Marketing and Communications, Medmund@edmundoptics.com.



= Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

EGIDE USA

#229

4 Washington St, Cambridge, MD, 21613
410/901-6200; fax 410/901-6250
www.egide.fr

EGIDE designs and manufactures hermetic glass-to-metal and ceramic-to-metal packaging for telecommunications, industrial, military and aerospace applications. Products include: 14 pin butterflies, minidil and various plug-in and flat pack style packages. Our products protect optical devices and circuits that control wave monitoring, guided missiles, flight control operations and more. Contact: Kirk Williamson, Sales Manager, kirk.williamson@egideusa.com.

WI-FI SPONSOR

Elbit Systems of America

#1426

(formerly Kollsman, Inc.)

220 Daniel Webster Hwy, Merrimack, NH, 03054
603/889-2500; fax 603/889-2007
www.kollsman.com

A leader in providing US Defense EO systems, Kollsman provides Fire Control Systems, Tactical Laser Systems, EO/IR Payloads, Panoramic Night Vision, Enhanced Vision Systems and Thermal Imaging Systems for aircraft, ships, ground vehicles and soldiers. These products and systems also meet the growing demand for Precision Targeting and Situational Awareness. Kollsman US Defense Systems: Providing Products, Systems and Services that enhance the safety and survivability of soldiers and civilians. Contact: Ed Seibel, Executive Director, Business Development, eseibel@kollsman.com.

CONFERENCE BAG SPONSOR

ELCAN Optical Technologies

#841

SPIE Corporate Member

450 Leitz Rd, Midland, ON, Canada, L4R 5B8
705/526-5401; fax 705/526-5831
sales@elcan.com; www.elcan.com

New Product: Polarization Differential Imaging.

ELCAN provides the technology to transform with a complete range of precision optics and electronics for military platforms. ELCAN supplies mission critical components to major military contractors in North America and Europe. With a legacy spanning nearly 160 years in design and fabrication of fine optics, ELCAN's founding companies include Ernst Leitz (Germany) and Texas Instruments (USA). Today, ELCAN is part of the Raytheon company with more than 1200 employees and manufacturing facilities in Midland Ontario, Richardson Texas and Málaga Spain. Contact: Ricky Freeman, Regional Sales Manager, South East, r-freeman@raytheon.com; John Reddy, Regional Sales Manager, jreddy@elcan.com.

GENERAL REFRESHMENT SPONSOR

Electro Optical Industries, Inc.

#1040

859 Ward Dr, Santa Barbara, CA, 93111-2960
805/964-6701 ; fax 805/967-8590
www.electro-optical.com

New Product: VIP 100 is the Visible Image Projector, a complete test and calibration system.

Electro Optical Industries is the world leader in advanced infrared and visible light spectrum test and calibration equipment. EOI provides the world's best performance in Primary Triple Point Radiance Standards with the Industry's longest freeze times, highest temperature blackbody sources (to 3000C), highest emissivity blackbody sources (to 0.999), smallest and largest diameter blackbody cavities (0.04", 2.0" respectively). Contact: Brent Lindstrom, Senior Sales Account Manager, lindstrom@electro-optical.com; Stephen Scopatz, President, sscopatz@electro-optical.com.

SHOWCASE LITERATURE DISPLAY

Electro Optics Magazine

#S-3

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

Electro-Optical Imaging, Inc.

#1003

SPIE Corporate Member

4300 Fortune Pl Ste C, West Melbourne, FL, 32904
321/435-8722; fax 321/435-8723
info@eoimaging.com; www.eoimaging.com

New Product: Model 7005-Camera Link and 7005- High Definition VME based video trackers.

Electro-Optical Imaging, Inc. is a leader in the development and manufacture of high performance Video Trackers and Tracking Systems, Quality Products and Customer Support are our number one priority. The company offers a diverse line of off-the-shelf video tracker products easily adapted to the most complex and demanding test range, tactical and surveillance applications. E-O Imaging is committed to providing customers with innovative, cost-effective tracking solutions. Contact: George Downey, President, gdowney@eoimaging.com; Nathan Harris, Vice President of Engineering, NHarris@eoimaging.com.

Electrophysics Corp.

#413

373 Rte 46 W, Fairfield, NJ, 07004-2442
973/882-0211; fax 973/882-0997
info@electrophysics.com; www.electrophysics.com

New Product: HotShot HD - The World's First Affordable 640 x 480 Resolution Infrared Cameras.

Electrophysics, a leader in infrared imaging and night vision will be introducing HotShot HD, a new line of high performance microbolometer 640x480 portable infrared cameras. The company will also show InSb and MCT-based MWIR and LWIR cameras. As well as its AstroScope line of night vision modules for high definition cameras and camcorders. Contact: Art Stout, Vice President, astout@electrophysic.com; Chris Alicandro, Director of Sales - Infrared Products, calicandro@electrophysics.com.

Eltek USA Inc.

#411

25 Orchard View Dr, Londonderry, NH, 03053
603/421-0020; fax 603/421-0023
www.eltekglobal.com

Eltek is the leading Israeli Printed Circuit Boards (PCB) manufacturer. Incorporated in 1970; Eltek provides the electronics industry with innovative solutions based on its commitment to advanced technology and intensive customer service. Eltek's products are used in some of the most demanding environments within the Medical, Military and Aerospace market sectors. Contact: Jim Barry, North American Sales and Marketing Manager, jbarry@eltek.us; Janice Hock, Customer Service Manager United States of America, jhock@eltek.us.

EM Photonics

#302

51 E Main St Ste 203, Newark, DE, 19711
302/456-9003; fax 302/456-9004
galloway@emphotonics.com; www.emphotonics.com



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.

Exhibitor Listing

EM4 Defense

SPIE Corporate Member

7 Oak Park, Bedford, MA, 01730
781/275-7501; fax 781/275-7569
wgateway@em4inc.com; www.em4inc.com

EM4, premiere United States based manufacturer of optoelectronic components for the Defense and Industrial markets. Products include high power (up to 200mW) DFB lasers (1060nm-1620nm), High power (up to 8W) single emitter Multimode pumps (780nm-980nm), high power (up to 800 mW) SM pumps (915nm-1064nm), RF links and receivers up to 20GHz, high power fiber isolators and splitters (CW up to 10W) and Acousto-Optic Modulators (1060nm-1550nm). Contact: Ed McCartin, Director Defense Sales, emccartin@em4defense.com; Winn Gateway, Customer Service Representative.

EMCORE Corp.

2015 W Chestnut St, Alhambra, CA, 91803
626/293-3626; fax 626/293-3432
sales@emcore.com; www.emcore.com

New Product: See the new EMCORE PB7100 Terahertz Spectrometer in Booth 1443.

Terahertz spectrometer systems and RF fiber-optic products for: microwave/satcom and military/aerospace applications, microwave fiber-optic delay-lines; lithium-niobate optical modulators and transceivers for FOGs and other systems; photonic systems for microwave/mm-wave frequency synthesis and signal processing. Contact: Dave Wojciechowski, Director of Sales, dave_wojo@emcore.com; Ron Logan, Managing Director and Chief Engineer, rlogan@emcore.com.

Envision Product Design

7800 King St, Anchorage, AK, 99518
907/563-1141; fax 907/563-1142
kyh@cmosxray.com; www.cmosxray.com

Epitaxial Technologies, LLC

1450 S Rolling Rd, Baltimore, MD, 21227
410/455-5594; fax 410/455-5595
info@epitaxialtechnologies.com; www.epitaxialtechnologies.com
Epitaxial Technologies develops and produces breakthrough sensor products including photon counting photodetector arrays and ultrasensitive photoreceivers with widespread applications in free-space lasercomm, ladar and infrared imaging for missile defense, homeland security and commercial applications. Contact: Olaley Aina, President, oaina@epitaxialtechnologies.com.

Epix, Inc.

381 Lexington Dr, Buffalo Grove, IL, 60089
847/465-1818; fax 847/465-1919
epix@epixinc.com; www.epixinc.com

New Product: PIXCI S14 four camera frame grabber and 5 megapixel cameras for multiple camera vision applications.

Manufacturer of cameras, frame grabbers and image processing software for computer based imaging applications. High quality images from low cost CMOS cameras. Camera link frame grabbers for all camera link cameras. Camera control software for almost all cameras. Royalty free image processing software for flow analysis, multispectral imaging, part inspection, quality control and more. Contact: Charlie Dijk, Sales Engineer, cad@epixinc.com; Kevin Roos, Customer Support Engineer, ksr@epixinc.com.

#204

Epner Technology, Inc.

78 Kingsland Ave, Brooklyn, NY, 11222-5603
718/782-5948; fax 718/963-2930
info@epner.com; www.epner.com

A broad range of electroplating, optical fabrication and coating technologies including electroformed cold shields, custom designed infrared lightpipes, laser pump cavity reflectors, Laser Gold®, the NIST infrared standard exhibits theoretically low emissivity and Laser Black® which "swallows light". Contact: David Epner, President, david@epner.com; Paul Brancato, General Manager, paul@epner.com.

ET Precision Optics Inc.

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

Since 1992, ET Precision Optics specializes in precision component machining. Our customers are optical manufacturers, medical, telecommunication, aerospace and military industries. We utilize 5-axis CNC mills, 9-axis lathes and EDM to machine high precision rotational and prismatic components. We hold tolerances as close as $\pm 0.0002''$ and finishes of four RA. What sets us apart is our customer focus, commitment to quality (ISO-9001:2000 registered), attention to detail and on-time delivery. Contact: John Gligora, Product Engineer Manager, jgligora@etprecision.com.

Evaporated Coatings, Inc.

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

New Product: Bandpass Filters on large area and custom optics.

ECI is a custom manufacturer of vacuum-deposited thin films including metal and dielectric mirrors, anti-reflection coatings, large area LWP/SWP and bandpass filters, partial mirrors, beamsplitters, solderable films and transparent conductive coatings. We offer a variety of films specifically designed for deposition onto temperature sensitive polymer optics, semiconductor materials and fiberoptic components. Visit www.evaporatedcoatings.com. Contact: Patrich Wenrich, Sales Engineer; Stephen Schaffer, Vice President, sschaffer@evapcoat.com.

Exotic Electro-Optics

36570 Briggs Rd, Murrieta, CA, 92563-2347
951/926-2994; fax 951/926-1984
eeosales@exotic-eo.com; www.exotic-eo.com

EEO is a supplier of high quality infrared optics/optical subassemblies for military IR systems. We offer missile domes/electro-optical windows/subassemblies/imaging lenses and other components. Our precision optical products utilize infrared optical materials such as Sapphire/Zinc Sulfide/Zinc Selenide/Germanium and Silicon. EEO offers a number of optical coatings (i.e. Anti-reflection and Hard Carbon). Contact: Katherine St. John, Business Development Manager, KStjohn@exotic-eo.com.

#1216

#203

#1529

#1138



Fairfield Crystal Technology, LLC

#118

SPIE Corporate Member

8 S End Plz, New Milford, CT, 06776
860/354-2111; fax 860/354-3093
info@fairfieldcrystal.com; www.fairfieldcrystal.com

New Product: Calcium Fluoride, Magnesium Fluoride and Barium Fluoride windows, lenses, prisms and custom optics.

Fairfield Crystal Technology develops and manufactures advanced crystal materials for precision optics and semiconductor devices used in diverse applications: Solid-state Lighting, Excimer and High Power Lasers, Microlithography, Optical Storage, Thermal and Medical Imaging, Wireless Communications and more. Our crystal technology enables customers to capitalize on the unique properties of crystal materials to make their products better. Contact: Andy Timmerman, Sales Manager, atimmerman@fairfieldcrystal.com; Chris Snyder, Sales Associate, csnyder@fairfieldcrystal.com.

Fast-Vision, LLC

#1424

71 Spit Brook Rd #200, Nashua, NH, 03060
603/891-4317; fax 603/891-1881
sales@fast-vision.com; www.fast-vision.com

Provides high-speed megapixel digital cameras and systems based on state-of-the-art imagers and having high-speed, scalable, integrated FPGA processors and memory subsystems, which enable stand-alone, high-speed in-camera image processing. Offers lossless or lossy compressed image recording. Advanced IP and optimized software is available that can be added to allow stand-alone processing modes or integration. Contact: Joseph Sgro, Chief Executive Officer, joe@fast-vision.com; Dov Mordowicz, President/Director of Sales, dov@fast-vision.com.



GENERAL REFRESHMENT SPONSOR

Fiberguide Industries, Inc.

#1224

SPIE Corporate Member

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

New Product: Line of high fiber placement tolerance linear arrays.

Line of multimode, single mode and graded index optical fibers. Design and engineer assemblies with the widest range of custom and standard endfittings/connectors and outer jackets to tailor a product to technical requisites. Design and manufacture 2D and V-Groove arrays; cables for SERCOS digital interface and VersaLink industrial automation and reflection/backscattering probes for measuring specular or diffuse reflection from a surface. Contact: Patrick Fung, Manager, Technical Sales, pfung@fiberguide.com; Ron Atanesian, Eastern Regional Sales Manager, ratanesian@fiberguide.com.

Fibertek Inc.

#920

510 Herndon Pkwy, Herndon, VA, 20170
703/956-3600; fax 703/471-5806
email@fibertek.com; www.fibertek.com

Fibertek, Inc. produces state-of-the-art lasers and electro-optics systems primarily for the military and aerospace markets. We specialize in the design, development and manufacturing of advanced diode-pumped solid-state lasers and highly sophisticated electro-optical sensor systems. Fibertek, Inc. is at the forefront of advanced laser and sensor technology; our pioneering work in electro-optics systems has allowed us to become a globally-recognized industry leader. Contact: Gary Stevenson, Director of Business Development, gstevenson@fibertek.com.

Firebird Technologies Inc.

#1117

SPIE Corporate Member

2950 Highway Dr, Trail, BC, Canada, V1R 2T3
250/364-5605; fax 250/364-5643
www.firebird.bc.ca

New Product: Stress free 100 mm InSb wafers and High Purity >6N5 Indium.

Firebird Technologies Inc. specializes in the production of antimonide-based substrates, specifically InSb and GaSb and the high purity metals; Antimony, Indium and Tin. Production processes include zone-refining, crystal growth, custom fabrication and damage free polishing. We are also capable of zone refining bulk Germanium and have just started development on 5N5 Cadmium. Firebird remains fully dedicated to our customers by providing high quality products and services. Contact: Paul McKay, Business Development Manager, paul@firebird.bc.ca; Don Freschi, General Manager, don@firebird.bc.ca.

FLIR Systems, Inc. - Commercial Vision Systems

#603

27700A Parkway Ave, Wilsonville, OR, 97070
877/773-3547; fax 503/498-3904
sales@flir.com; www.flir.com

New Product: FLIR's Photon 640 is a compact thermal imager with outstanding image quality and 640x480 resolution.

FLIR offers a full line of uncooled and cooled infrared sensors and component products under the "Core by Indigo" brand. FLIR's volume detector fabrication capability, ROIC development, OEM packaging and program management gives you with the highest quality sensors at the lowest cost. Contact: Jay James, Vice President Cores Business Development, jay.james@flir.com; Stan Laband, Director OEM Sales, stand.laband@flir.com.

FLIR Systems, Inc. - Americas Thermography Division

#803

25 Esquire Rd, N. Billerica, MA, 01862
978/901-8000; fax 978/901-8532
info@flir.com; www.go infrared.com

New Product: FLIR's SC8000 IR camera produces images with output of 1024 x 1024 pixels at 132 frames per second.

For over 35 years, FLIR Systems, Inc. has designed and manufactured more infrared camera technology innovations than any other company in the world. FLIR™s state-of-the-art thermal imagers are used in diverse applications such as defense, navigation, public safety, electronic news gathering and search and rescue. Contact: Steve Chisholm, Inside Sales Manager, steve.chisholm@flir.com.

Florida Universities

#1002

150 S Monroe St Ste 300, Tallahassee, FL, 32302
850/425-5223
jsullivan@nettally.com; www.florida research.org

Fosta-Tek Optics

#1223

320 Hamilton St, Leominster, MA, 01453
978/534-6511; fax 978/537-2168
info@fosta-tek.com; www.fosta-tek.com

Fosta-Tek Optics, Inc. is a state of the art manufacturer of quality molded optical and display components serving the electronics, medical and military markets. Our integrated operations include mold design, UV and siloxane optical hardcoats, mirror and AR thin film coatings, precision injection molded aspheric lenses and instrument displays. In addition, Fosta-Tek Optics, Inc. is a leading manufacturer of cast resin CR39 laser cut display windows. Contact: Thomas Long, National Sales Manager, tlong@fosta-tek.com; Danielle Provencher, Sales and Marketing, dprovencher@fosta-tek.com.

Exhibitor Listing

Fotofab

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: Alison Anzalone, Sales and Marketing Manager, alison@fotofab.com; Dan Sima, Sales and Marketing Assistant, dsima@fotofab.com.

#1512

General Optics, Inc.

5390 Kazuko Ct, Moorpark, CA, 93021
805/529-3324; fax 805/529-4298
www.generaloptics.com

New Product: Expanded line of Research grade optics and custom beryllium optics and beryllium structures.

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. The company also manufactures beryllium optics and structures. It is distinguished from other manufacturers 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. Contact: Jim Diamond, Sales Manager, jdiamond@gsig.com; Peter Nation, Sales Manager Beryllium Products, pnation@gsig.com.

#935

Fresnel Technologies Inc.

 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, Inc. manufactures infrared-transmitting materials and optics made from them, as well as plastics Fresnel lenses and related optical components. Specialties include lens arrays for passive infrared applications and optics for environmental monitoring at 3.4 microns. We also offer diamond turning for prototypes, tooling and production, including four-axis diamond machining of freeform optical surfaces, in plastics, metals and infrared materials such as Ge, ZnSe and others. Contact: Nelson Claytor, Ph.D., President, nclaytor@fresneltech.com; Richard Claytor, Ph.D., Founder and Member of Technical Staff, rclaytor@fresneltech.com.

#640

Geo Systems

 #15

210 S Washington Ave, Titusville, FL, 32796-3553
321/383-9585; fax 321/383-9599
woodruff@geosystemsinc.com; www.geosystemsinc.com

Georgia Tech Research Institute

#205

400 10th St NW, Atlanta, GA, 30332
404/407-7280; fax 404/407-9280
kirk.inglehardt@gtri.gatech.edu; www.gtri.gatech.edu

Georgia Tech Research Institute (GTRI) is a world renowned R&D, T&E organization with expertise in all aspects of sensor systems (EO, IR & RF). The Military Sensing Information Analysis Center, SENSIAC, the DoD & US Government's Center of Excellence in military sensing technologies, is resident at GTRI. SENSIAC brings together experts in acoustics, magnetic, seismic and chem-bio-nuclear sensing. When combined with GTRI's expertise, SENSIAC provides complete Military Sensing expertise for DoD. Contact: Duane Tate, Senior Research Engineer, duane.tate@gtri.gatech.edu.

Gamma Scientific, Inc.

#1509

8581 Aero Dr, San Diego, CA, 92123
858/279-8034; fax 858/576-9286
info@gamma-sci.com; www.gamma-sci.com

New Product: NVG-4040 the world's first ANVIS spot radiometer with NVIS Class C testing capabilities.

Providers of class leading light measurement devices from UV to IR. Specialists in Photopic, NVIS and Optical performance quantification. Offering precision spectroradiometers and radiometers to robotic goniometric systems, for the improvement and characterization of NVIS displays for the R&D, QA and manufacturing line. Manufactures analog and digital light sources for calibration and spectral matching capability. Provides NIST traceable contract measurement, test and calibration services. Contact: Eric Nelson, Sales Manager, enelson@gamma-sci.com; Tonda Arbaugh, Sales Executive, tarbaugh@gamma-sci.com.

GF Messtechnik GmbH

#1504

Warthestr 21, Teltow Berlin, Germany, 14169
49 3328 31676 0; fax 49 3328 30518 8
http://www.gfmesstechnik.com/en/

Glass Fab Inc.

#2124

 SPIE Corporate Member

PO Box 31880, 257 Ormond St, Rochester, NY, 14603
585/262-4000; fax 585/454-4300
info@glassfab.com; www.glassfab.com

Manufacture of custom blanks. Products include fused quartz, fused silica, optical glasses, filter glasses and low/ultralow expansion glasses. Capabilities include annealing, slumping, sawing, grinding, edging, drilling, waterjet cutting, CNC shaping and CNC generating. Contact: Dan Saltzman, President, d_saltzman@glassfab.com; George Dean, Sales Representative, g_dean@glassfab.com.

GE Fanuc Intelligent Platforms

#208

7401 Snaproll St NE, Albuquerque, NM, 87109
505/875-0600; fax 505/875-0400
info@gefanucembedded.com; www.gefanucembedded.com

GE Fanuc Intelligent Platforms, a unit of General Electric, offers an extensive line of embedded boards and fully integrated rugged systems available in a range of environmental grades. We serve a variety of customers including those involved in communications, government/aerospace, medical, energy, semiconductor, industrial, test and measurement and military systems.

Goodrich Corporation

#717

 SPIE Corporate Member

3490 US Route 1 Bldg 12, Princeton, NJ, 08540
609/520-0610; fax 609/520-0638
sui_sales@goodrich.com; www.goodrich.com

Goodrich Corporation, a Fortune 500 company, is a global supplier of systems and services to aerospace, defense and homeland security markets. With one of the most strategically diversified portfolios of products in the industry, Goodrich serves a global customer base with significant worldwide manufacturing and service facilities. For more information visit <http://www.goodrich.com>. www.isr.goodrich.com. Contact: Mark Ceccorulli, Manager of Tactical Optics, Mark.Ceccorulli@Goodrich.com; Bill Fox, Program Manager, William.Fox@Goodrich.com.



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Exhibitor Listing

Graflex Inc.

#1107

15855 Assembly Loop Ste 100, Jupiter, FL, 33478
561/691-5959; fax 561/691-5983
sales@graflex.com; www.granflex.com

Graflex Incorporated is a small but highly capable manufacturer of precision Muzzle Boresight Devices, Video Related Control and Enhancement Software and Hardware, and precision, but economically priced, Sensor Positioning Systems (Pan & Tilt Devices). Additionally, we offer a limited line of specialty optics intended to serve specific customers and/or markets. We pride ourselves in developing, designing and manufacturing the most innovative, durable, and technologically advanced products possible in each of the markets we serve.

Graham Optical Systems

 #29

9530 Topanga Canyon Blvd, Chatsworth, CA 91311-4011
818/700-1263; fax: 818/700-1627
techinfo@grahamoptical.com; www.grahamoptical.com

Great River Technology

#1240

6121 Indian School Rd NE Ste 141, Albuquerque, NM, 87110
505/881-6262; fax 505/883-1375
info@greatrivertech.com; www.greatrivertech.com

New Product: ARINC 818 Video IP CORE for high speed, mission critical video applications.

Great River Technology (GRT) specializes in high-performance digital video frame grabbers, graphics generators, IR camera emulators and data capture systems for missiles, cockpit displays, mission processors, IR cameras and satellite communications. GRT's systems are used in programs such as C130AMP, F-18, 787, A400M, ATIRCM, LAIRCM and COSMO-SkyMed. GRT is the global leader in HOTLink 2 data, HOTLink 2 video, Fibre-Channel Audio-Video and ARINC 818 test equipment. Contact: Tim Keller, Director of Marketing, tkeller@greatrivertech.com; Jon Alexander, Chief Executive Officer, jalexand@greatrivertech.com.

Guangzhou SAT Infrared Technology Co., Ltd.

#1437

GETDD, No 10 Dongjiang Ave, Guangzhou, China, 510730
8620 8222 9925; fax 8620 8222 7967
sat@sat.com.cn; www.sat.com.cn

H.N. Burns Engineering Corp.


#829

3275 Progress Dr Ste A, Orlando, FL, 32826-3230
407/273-3770; fax 407/273-0642
burnseng@hnbec.com; www.hnbec.com

COFFEE BREAK SPONSOR

Hamamatsu Corp.

#1241


 360 Foothill Rd, Bridgewater, NJ, 08807-2932
908/231-0960; fax 908/231-1218
usa@hamamatsu.com; www.sales.hamamatsu.com

New Product: High QE photomultiplier tubes for high-sensitivity detection of low-level light.

Hamamatsu Corporation is the North American subsidiary of Hamamatsu Photonics K.K. (Japan), a leading manufacturer of devices for the generation and measurement of infrared, visible and ultraviolet light. These devices include photomultiplier tubes, photodiodes, image sensors, mini-spectrometers and light sources. Hamamatsu Photonics is dedicated to the advancement of photonics through extensive research. Contact: Ryan Griffin, Customer Support Engineer, rgriffin@hamamatsu.com.

Hardin Optical Company

#2603

 PO Box 219, Bandon, OR, 97411
541/347-9467; fax 541/347-8176
bob@hardinoptical.com; www.hardinoptical.com

Harris Corp.

#839

1025 W NASA Blvd, Melbourne, FL, 32919
321/674-4587; fax 321/674-2701
kshields@harris.com; www.harris.com

Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. Headquartered in Melbourne, Florida, the company has annual revenue of over \$4 billion and 16,000 employees, including nearly 7,000 engineers and scientists. Harris is dedicated to developing best-in-class assured communications™ products, systems and services. Additional information about Harris Corporation is available at www.harris.com. Contact: Kacey Dunbar, Marketing, kdunba02@harris.com.

Headwall Photonics, Inc.

#2103


 601 River St, Fitchburg, MA, 01420
978/353-4100; fax 978/348-1864
information@headwallphotonics.com;
www.headwallphotonics.com

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

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

Heraeus Quartz America

#1016

 100 Heraeus Blvd, Buford, GA, 30518
678/714-4350; fax 678/714-4358
bambi.everett@heraeus.com; www.heraeusoptics.com

New Product: SUPRASIL® KrF/ArF excimer grade silica glass is 100% inspected and documented for consistency and laser durability.

World's premier producer of silica glass for optical applications, offering the industry's broadest range of windows, lenses, prisms, and mirrors, as well as lamp tubing. ISO certified in all facilities, Heraeus is committed to quality in everything from raw material purity to exceptional customer service and technical support. Contact: Ron Mazzuca, National Sales Manager; Michele Holyak, Inside Sales.

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Innovation and the Wealth of Nations, p. 6



Sir John Chisholm
Chairman of QinetiQ

High Energy Laser Joint Technology Office #1038

901 University Blvd SE Ste 100, Albuquerque, NM, 87106
505/248-8200; fax 505/245-2195
nancy.wilson@jto.hpc.mil;

The HELJTO, located in Albuquerque, New Mexico, supports basic and applied research aimed at developing future DoD HEL force protection systems. The JTO supports a broad range of technology such as gas lasers, solid-state lasers, beam control, free-electron lasers and advanced laser concepts. Research is conducted by universities, government laboratories and industry. The program funds theoretical, computational and experimental investigations as well as lethality and modeling and simulation. Contact: Nancy Wilson, Office Manager.

High Tech Photonics #1006

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

New Product: MID IR fiber optic probes for FTIR and process control.

Manufacturers of UV, VIS, NIR and MID infrared fiber optics including probes for FTIR, raman, reflection/transmission, ATR etc. Manufacturers of fiber optic assemblies including arrays, bundles, spot to slit converters as well as accessories including couplers, collimators, focus optics, etc. New products include Diamond ATR Probes for use in process control. Contact: Jim Ingram.

Hitachi Kokusai Electric America, Ltd. #224

150 Crossways Pk Dr, Woodbury, NY, 11797
516/682-4404; fax 516/496-3718
www.hitachikokusai.com

New Product: KP-DE500 EM-CCD, Hi Res, Hi Sensitivity, Low Light color camera. 100 x better than CCD.

Hitachi Kokusai Electric America, Ltd was formed in 1963, and is headquartered in Woodbury, New York. For over 45 years, the Industrial Video Systems Division (IVS), of Hitachi Kokusai Electric America, Ltd. has been selling miniaturized, solid state, analog and digital cameras that are used in the imaging, vision and security markets. All of the cameras in the product line are manufactured under quality control certification in accordance with the ISO 9002 international standards. Contact: Lawrence Ottaviano, Sales Manager, larry.ottaviano@hitachikokusai.us.

HOLOEYE Systems, Inc. #307

2260 Townsgate Rd Bldg 3, Westlake Village, CA, 91361
805/214-1007; fax 805/494-4767
contact@holoeyesystems.com; www.holoeyesystems.com
HOLOEYE Systems is a professional integrator of microdisplay technologies for specialty applications and markets and offers complete solutions and development services: LCOS Microdisplay Components; LCOS Microdisplay Drive Board Components and Development; Optical System Design; Electronic Design; Prototype to High-Volume Manufacturing Services. Besides that HOLOEYE offers Spatial Light Modulator developer kits and standard and customized Diffractive Optical Elements. Contact: Pete Zeidler, Vice President Sales and Marketing, pete@holoeyesystems.com.

Hoppe Tool, Inc. #1508

107 First Ave, Chicopee, MA, 01020
413/592-9213; fax 413/592-4688
dwalker@hoppetool.com; www.hoppetool.com

ICx Imaging Systems #1537

515 Cooper Commerce Dr Ste 150, Apopka, FL, 32703
407/884-0202; fax 407/884-8282
david.norman@icxt.com; www.icximagingsystems.com

Ideal Aerosmith #641

1510 Gateway Dr NE, East Grand Forks, MN, 56721
218/773-2455; fax 218/773-7665
sales@idealaero.com; www.ideal-aerosmith.com

Ideal Aerosmith, Inc. is a leading supplier of precision inertial guidance test systems, rotational rate table and centrifuges and electric/hydraulic high dynamic FMS table systems. Our systems test inertial sensors and navigation and guidance systems and provide dynamic motion simulation for missiles, aircraft, launch vehicles, UAVs and automobiles. www.ideal-aerosmith.com. Contact: Bob Mitchell, Advanced Products Manager, bmitchell@idealaero.com; Mike Brooks, Vice President, Business Development, mbrooks@idealaero.com.

IEEE #834

445 Hoes Ln, Piscataway, NJ, 08824
800/701-4333; fax 732/465-6430
salesadmin@ieee.org; www.ieee.org

The IEEE offers online resources vital to engineers and researchers worldwide. A leading authority on a wide variety of areas ranging from aerospace systems, homeland security to biomedical engineering, electric power and satellite communications, the IEEE publishes 30 percent of the world's literature in the electrical and electronics engineering and computer science fields and has developed over 900 active industry standards. Visit us at <http://www.ieee.org/digitalsubscriptions>. Contact: Mike Petro, Government Account Manager, m.petro@ieee.org.

II-VI Infrared #1039

375 Saxonburg Blvd, Saxonburg, PA, 16056-9449
724/352-1504; fax 724/360-5991
info@iiviinfrared.com; www.iiviinfrared.com

II-VI INFRARED, the world leader in CO₂ laser and infrared optics, designs and produces a complete line of lenses, mirrors, nozzles, partial reflectors, beam splitters, phase retarders, rhombs, beam expanders, polarizers, wave plates, modulators and more. IR materials include ZnSe, ZnS and ZnS MultiSpectral. Capabilities include optics design and engineering, optics manufacturing, diamond turning, thin film coating, optical assemblies, world-class quality assurance and international sales/support. Contact: Tom Neff, bwalker@ii-vi.com.

illunis LLC  #35

14700 Excelsior Blvd, Minnetonka, MN, 55345
952/975-9203; fax 952/294-8308
info@illunis.com; www.illunis.com

New Product: Our new RMV product line features resolutions of 2 to 16 million pixels and 12 bit digital output.

illunis LLC provides customized and standard high resolution digital cameras for Persistent Imaging, Industrial and Scientific applications. Our RMV product line features resolutions from 2 to 16 million pixels, electronic shutter, high frame rates and 12 bit digital output via Camera Link or GigE vision. Contact: Terry Guy, Vice President Sales and Marketing, terry@illunis.com; Dave Krekelberg, Partner, dave@illunis.com.



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Exhibitor Listing

Imperx, Inc.

 #34

SPIE Corporate Member

6421 Congress Ave Ste 204, Boca Raton, FL, 33487
561/989-0006; fax 561/989-0045
sales@imperx.com; www.imperx.com

Imperx makes CCD cameras ranging from 16 Megapixels to VGA. Our cameras feature 8/10/12-bit output, high-dynamic range, low noise, field-upgradeability with another 50 programmable options including triggering, look-up-table and more. Other camera options are deep UV, thermo-electric-cooled and are available in GigE or Camera Link output. Ideal for testing, security, biometrics, terrestrial-mapping, scientific-imaging. Laptop frame grabbers in Camera Link and Analog inputs. Contact: Nathan Cohen, Sales Manager.

IMT Masken und Teilungen AG

#921

Im Langacher, Greifensee, Switzerland, CH-8606
41 1 943 1900; fax 41 1 943 1901
rtrottini@imtmask.com; www.imtag.ch

New Product: Our new plasma etch machine allows us to achieve feature sizes as small as 250 nm (0.25 micron).

IMT, a leader in the field of microlithography, manufactures high quality reticles, calibration stages, encoder disks and EO modulators. All of our structured coatings are performed in a clean room environment using automated equipment to ensure the highest quality and repeatability from delivery to delivery. All coatings, including antireflective and dielectric, are produced in-house by our experienced staff. Contact: Robert Trottini, Sales Manager.

Infinite Optics Inc.

#1206

SPIE Corporate Member

1712-F Newport Cir, Santa Ana, CA, 92705
714/557-2299; fax 714/557-2170
info@infiniteoptics.com; www.infiniteoptics.com

Infinite Optics is committed to customer satisfaction providing personalized service, technical solutions, coating and manufacturing precision optics, ranging from UV to far-IR for a wide variety of applications, encompassing many industries. Contact: Geza Keller, geza@infiniteoptics.com.

Information System Technologies, Inc.

#242

425 Mulberry W Ste 108, Fort Collins, CO, 80521
970/224-2556; fax 970/224-2556
mo@infsyst.biz; www.infsyst.biz

Infotonics Technology Center

#1436

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

New Product: State of the art wafer-level and device level assembly for MEMS, photonics and optoelectronics.

ITC is a New York State Center of Excellence in MEMS/NEMS Microsystems development, fabrication and packaging. ITC provides vertically integrated services from product concept through production in our "defining-the-art" facility. ITC supports commercialization of Microsystems and chip scale devices that integrate mechanics, optics, fluidics and chemistry on a microelectronics chip. Contact: Glenn Fricano, Vice President Sales, glenn.fricano@itcmems.com; Mark Boysel, Chief Scientist, mark.boysel@itc.com.



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Infrared Associates, Inc.

#1212

2851 SE Monroe St, Stuart, FL, 34997
772/223-6670; fax 772/223-6671
irassoc@gate.net; www.irassociates.com

New Product: TE MCT detectors with response to 6, 7, 8 and 9µm cutoff. 3-Stage cooler and 0.25 and 1.00mm sizes!

Manufacturer of PV InSb, PV MCT and PC MCT detectors. Multielement PC MCT arrays are available up to 128 elements in a linear or 2x format with wavelength response up to 16µm can be provided. Matched electronics for either single element or multielement arrays are available. Room temperature detectors to 5µm, TE cooled to 10.6µm and cryogenically cooled detectors (LN2 or Stirling Cooler) to 25µm! Contact: Irwin Kudman, Director of Sales & Marketing; Fred Rothe, President.

InfraRed Integrated Systems Ltd.

#211

Park Circle, Tithe Barn Way, Northampton, United Kingdom, NN4 9BG
44 1327 357824; fax 44 1327 352825
sales@irisys.co.uk; www.irisys.co.uk

Irisys develops and manufactures intelligent infrared products for people counting, Tailgate detection and thermal imaging. People counting solutions are used in retail and banking where the data is used for conversion rate analysis and staff optimization. Tailgate detectors provide increased protection for higher Security Access Control applications, like cash centers, airports and defense installations. Irisys Thermal Imaging Cameras are for law enforcement and maintenance applications. Contact: Ross Neville, Sales Director Americas, ross.neville@isisys.co.uk; Andrew Rimmer, Business Development Director, andrew.rimmer@irisys.co.uk.

Infrared Systems Development Corp

#621

SPIE Corporate Member

7319 Sandscove Ct Ste 4, Winter Park, FL, 32792
407/679-5101; fax 407/679-5520
sales@infraredsystems.com; www.infraredsystems.com

New Product: IR-150 500C 12" x 12" Blackbody, IR-0144 Femto-Second Laser Pulse Acquisition System.

Designs and manufactures heated and cooled blackbody sources of all sizes, Detector array processors, high speed integrators and custom electro-optical systems for all aspects of infrared analysis. Femto-Second Laser Pulse Spectroscopy Systems, multi-spectral target simulators, low noise detector preamplifiers, Infrared Detector and FPA test stations. Spectral and Multi-Channel Discrete Radiometer systems for R&D, production and field testing of IR Targets and countermeasures. Contact: Andrew Duran, President/Chief Executive Officer; Kimberly Griffin, Sales Administrator.

Innovative Wireless Technologies

#1018

1047 Vista Park Dr Ste A, Forest, VA, 24551
434/316-5230; fax 434/316-5232
www.iwtwireless.com

Innovative Wireless Technologies (IWT) is a leading supplier of wireless mesh sensor and communication networks. IWT provides DOD end users and system integrators with radios, radio network management software, integrated wireless sensors and design services. IWT applications include unattended ground sensors, LPI/LPD wideband and UWB radios with geolocation and active RFID asset tracking. Contact: John Gargas, Director Sales and Marketing, jgargas@iwtwireless.com; Phil Carrier, Vice President Marketing and Sales, pcarrier@iwtwireless.com.

High Power Military Lasers



Range Finding, Weapon Simulation and Missile Fuzing

For over 40 years, Laser Diode Incorporated (LDI) has proudly served the Military, Security, Industrial, Commercial and Medical communities with **L**eadership, **D**ependability and **I**ntegrity. LDI was the first company to manufacture lasers for defense and aerospace applications decades ago. Today, we continue the tradition of excellence by offering high quality, high power eye-safe lasers for range finding, weapon simulation, ordnance initiation, guidance and safety systems.



LDI's high power CW and Pulsed laser diodes are manufactured using state-of-the-art MOCVD – wafer processing technologies. From prototype to high volume manufacturing, devices are available that fit all of your Electro-Optical requirements. Customizations of specific parameters to your precise specifications are also offered.

LDI's highly experienced staff is dedicated to quality and unsurpassed customer service. Call us or visit our website today for complete details about our high power Military lasers.

The logo for Laser Diode Incorporated, consisting of the letters "LDI" in a bold, stylized font. The "L" and "D" are blue with a red outline, and the "I" is red with a blue outline.

www.laserdiode.com

The logo for Tyco Electronics, featuring a stylized "E" symbol followed by the text "Tyco Electronics".

Tyco Electronics



Laser Diode Incorporated / 2 Olsen Avenue / Edison, New Jersey 08820 / 732-549-9001

Exhibitor Listing

Insaco, Inc.

#835

1365 Canary Rd, Quakertown, PA, 18951-9006
215/536-3500; fax 215/536-7750
sales@insaco.com; www.insaco.com

A precision machining company that fabricates parts to customer specification from most technical ceramics including sapphire and quartz by diamond grinding technology. Engineers are available to discuss design concepts and material choices in an unbiased way since we purchase from all sources. Contact: Scott Mittl, Sales Engineer; Klaus Burckhardt, PE, Sales Engineer.

Intelligent Optical Systems, Inc.

#1513

2520 W 237th St, Torrance, CA, 90505
310/530-7130; fax 310/530-7417
business@intopsys.com; www.intopsys.com

Intense Ltd.

#1412

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

New Product: Hermes are high power, QWI enabled, 8xx and 9xx nm QCW laser bars and stacked arrays.

Utilizing its patented Quantum Well Intermixing (QWI) technology, Intense creates innovative laser products that enable unrivalled levels of power, brightness & reliability. State-of-the-art, high volume manufacturing delivers exceptional performance in high power visible and IR diodes, bars & stacked arrays, fiber lasers & individually addressable arrays. From targeting & rangefinding to illumination, Intense is revolutionizing the way diode lasers solve evolving defense applications. Contact: Kevin Laughlin, Vice President, kevin_laughlin@intenseco.com; Steve Klunk, Sales, steve_klunk@intenseco.com.

International Light Technologies

 #23

10 Technology Dr, Peabody, MA, 01960
978/818-6180; fax 978/818-6181
ilsales@intl-lighttech.com; www.intl-lighttech.com

InterSense, Inc.

#324

36 Crosby Dr, Bedford, MA, 01730
781/641-6330; fax 781-541-6329
info@intersense.com; www.intersense.com

New Product: IS-1200 LandHawk inertial-optical helmet tracking system for ground vehicles and aircrafts.

InterSense Inc. is a precision motion technology company delivering real time positioning, tracking and alignment capabilities to bring higher speed and quality to enhanced vision, navigation and visual simulation applications. Contact: Dean Wormell, Director, Visualization & Applications Marketing, deanw@intersense.com; Mike Donfrancesco, Vice President of Sales, mikedon@intersense.com.

Intevac, Inc.

#619

 SPIE Corporate Member

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

Intevac's E-O sensors and cameras permit highly sensitive detection of photons in the visible and near IR portions of the spectrum, enabling imaging in extreme low light. Intevac's sensor technology is known as the Digital Image Intensifier or DI2™, which is based on use of a III-V semiconductor photocathode in proximity focus with a high resolution, back thinned, CMOS anode. Intevac's imaging products include LIVAR® long range target ID camera and NightVista® low light level camera. Contact: Mike Mohawk, Director of Business Development, mmohawk@intevac.com; Kathleen Sinclair, Marketing Specialist, ksinclair@intevac.com.

IO Industries, Inc.

#1033

 SPIE Corporate Member

12-1510 Woodcock St, London, ON, Canada, N6H 5S1
519/663-9570; fax 516/663-9571
asharpe@ioindustries.com; www.ioindustries.com

IRCAM GmbH

#17

NÄ1/4rnberger Str 71, Erlangen, Germany, 91052
49 9131 970 0980; fax 49 9131 970 09899
info@ircam.de; www.ircam.de

IRnova AB

#1109

Electrum 236, Kista, Sweden, SE-16440
46 8 632 77 80; fax 46 8750 5430
info@ir-nova.se; www.ir-nova.se

New Product: IRnova DDCA (Detector Dewar Cooler Assembly), (384X288 and 640X480).

IRnova is supplying high quality infrared detectors to leading infrared module and system manufacturers. The main focus is on development and production of QWIP Focal Plane Arrays. IRnova is also offering DDCA's (Detector Dewar Cooler Assembly). Compact integral solutions for small size/weight applications, as well as long life split cooler DDCA's. IRnova has a long track record with thousands of supplied detectors and well established manufacturing with high yield and capability. Contact: Lars Karlsson, Vice President Sales and Marketing, lars.karlsson@ir-nova.se.

IRphotonics

#1123

627 McCaffrey St, St-Laurent, QC, Canada, H4N 1T3
514/345-6982; fax 514/227-5210
corporate@irphotonics.com; www.irphotonics.com

New Product: MM-85 Multimode Infrared Fiber Offering Finest Transmission and Wide and Uniform Spectral Response.

IRphotonics is a leading manufacturer of mid infrared (MIR) optical fibers and materials that can be customized for specific wavelengths and applications that include homeland security, aerospace, process analytics, medical and telecommunications among others. Using an enhanced patented ZBLAN (Fluoride Fiber) manufacturing technology and unique chemical compositions, IRphotonics provides high quality glass and fiber at the lowest cost. Contact: Antoine Kasprzak, Director of Business Development, akasprzak@irphotonics.com; Eric Geoffrion, President and Chief Executive Officer, egeoffrion@irphotonics.com.

Don't Miss This Free Panel Discussion
Future Directions for CBRNE Sensors and
Systems Development, p. 6

Chairs: Thomas George, ViaLogy PLC; Patrick J. Gardner,
Western Carolina Univ.



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Irvine Sensors Corporation**#1508, 1510**

3001 Red Hill Ave Bldg 4 Ste 108, Costa Mesa, CA, 92626
714/549-8211; fax 714/444-8823
www.irvine-sensors.com

New Product: Introducing new technologies Nighthawk UAS, VADR (Video and Data Recorder) and Cognitive Processing.

Irvine Sensors Corporation (ISC), Costa Mesa, California, is a vision systems company engaged in the development and sale of miniaturized infrared and electro-optical cameras, ultra high speed image processors, 3D laser imaging systems and stacked chip assemblies. ISC also manufactures optical systems for United States military current force platforms. ISC conducts research and development. Contact: Buck Holly, Director, Business Development and Programs, bholly@irvine-sensors.com; Jule Hughes, Executive Assistant to the President and Chief Executive Officer, jhughes@irvine-sensors.com.

Isorad Ltd.**#1425**

POB 239, Yavne, Israel, 81100
972 8 943 4688; fax 972 8 942 1446
bonnie@soreq.gov.il; www.isorad.co.il

Isorad Ltd., a government-owned company and commercial interface for Soreq Nuclear Research Center (SNRC), an applied R&D institute, affiliated with the Israeli Atomic Energy Commission. Soreq develops Electro Optics, Remote Sensing, Magnetic and Radiation-based technologies for Defense and Homeland Security applications and advanced Detection & Prevention technologies. Isorad provides licensing, marketing/manufacturing services for SNRC technologies and develops partnerships/collaborations. Contact: Israel Laufer, General Manager, laufer@soreq.gov.il; Amos Sonn, Head, Applied Technologies Division, asonn@soreq.gov.il.

ISP Optics Corp.**#516**

1 Bridge St, Irvington, NY, 10533
914/591-3070; fax 914/591-3715
josephm@isptoptics.com; www.isptoptics.com

New Product: Aspheric and Diffractive Optics.

ISP is a manufacturer of high precision optical elements for the infrared spectral range including lenses, aspherics, windows, domes, prisms, wedges, beamsplitter, polarizers, filters, diffusers, mirrors 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. Catalog, Custom and OEM items. Contact: Fred White, Sales Manager, FredW@isptoptics.com; Joe Mignano, Sales Manager, JoeM@isptoptics.com.

Isuzu Glass Inc.**#924**

SPIE Corporate Member
23505 Crenshaw Blvd Ste 130, Torrance, CA, 90505
310/517-1866; fax 310/517-1869
sales@isuzuglass.com; www.isuzuglass.com

New Product: Molded Chalogenide lenses for IR applications.

Manufacturer of molded glass optics, lens arrays, optical filter glass. Applications include display, medical, sensing, laser safety glasses and CPC's for solar power. From design prototype to large scale production runs. High quality with excellent economies of scale for quantity. Contact: Mike Preston, Sales, mike@isuzuglass.com; Hiro Yokoi, Vice President, hiro@isuzuglass.com.

ITRES Research Ltd.**#304**

3553 31st St NW Ste 110, Calgary, AB, Canada, T2L 2K7
403/250-9944; fax 403/250-9916
www.itres.com

New Product: MASI - MidWave (IR) Airborne Spectrographic Imager. Hyperspectral MWIR, 64 ch, 3-5 microns.

ITRES (1979) provides digital airborne hyperspectral imaging technologies and environmental mapping services. Sensors cover visible, shortwave, midwave and thermal wavelengths. Services include high-resolution hyperspectral data worldwide for physics-based applications in wetlands, coastlines, water quality, forestry, minerals/geology, biochemical, landmine detection, fire mapping. TASI spotlight: 32 TIR ch. Hotspot, hydrology, soil moisture, geology, mineral and UXO mapping, vulcanology. Contact: Steven Mah, Vice President, Business Development, smah@itres.com; Tyme Wittebrood, Director, Project Management and Finance, twittebrood@itres.com.

ITT Visual Information Solutions**#911**

4990 Pearl East Circle, Boulder, CO, 80301-2476
303/786-9900; fax 303/786-9909
info@ittvis.com; www.ittvis.com

ITT provides integrated software to get timely and accurate information from geospatial imagery. ENVI and IAS are the leading solution for defense and intelligence to analyze and deliver information from imagery. See demonstrations on Automated Image Processing Workflows perform common and advanced image processing routines. Feature Extraction, extract features from pan and multispectral imagery and data. Rapid Image Delivery, compress and stream large images quickly. Visit www.ittvis.com. Contact: Nigel Brown, Director of Sales West/ROW/Academic, nbrown@ittvis.com; Tammy Owen, Director of Sales DC/East, town@ittvis.com.

JAI, Inc.**#1539**

625 River Oaks Pkwy, San Jose, CA, 95134
408/383-0300; fax 408/383-0301
www.jai.com

JAI manufactures high quality, industrial-grade cameras used in machine vision, mil-aero, homeland security, medical and scientific applications. JAI's broad product line features both CCD and CMOS technologies, spatial resolutions from VGA to multi-megapixel, progressive and interlaced formats and sensitivity to light levels as low as .00001 lux. Camera types include visible, near-IR, UV and ICCD, with a wide variety of interfaces including analog, Camera Link and the GigE Vision standard. Contact: camerasales.americas@jai.com.

Janos Technology, Inc.**#716**

55 Black Brook Dr, Keene, NH, 03431
603/757-0070; fax 603/757-0069
contact@janostech.com; www.janostech.com

Manufacturer of infrared optical components and assemblies. Combining optomechanical design, automated fabrication and coating and extensive metrology solutions to provide high performance optical solutions across a broad IR spectrum. Products include thermal imaging lenses, complex collimators and missile seeker heads, certified to MIL-STD specifications. Contact: Karl Martinson, Director of Business Development, kmartinson@janostech.com; Joel Murphy, Business Development Specialist, jmurphy@janostech.com.

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#108

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800/333-5272; fax 410/822-7526
sales@jascoinc.com; www.jascoinc.com

2008 marks a major milestone for JASCO...50 years in business. JASCO specializes in analytical instrumentation in the areas of Spectroscopy and Chromatography and is experienced within the academic, pharmaceutical, biotechnology and industrial markets worldwide. We offer a full line of instrumentation: Specializing in Raman including RMP, NFS 320 and 330, FT-IR Microscopy, FTIR, UV-Vis/NIR, Fluorescence, CD, Dissolution, FT-Raman, Polarimeters, SFE/SFC, HPLC and X-LC (Extreme Pressure LC). Contact: Customer Service Representative.

Jazz Semiconductor

#1536

9620 Palomas Ave NE, Albuquerque, NM, 81709
505/823-1293; fax 505/821-5908
www.jazzsemi.com

New Product: CMOS and SiGe to 130nm for imager applications. Also die stitching for large format imagers and ROIC's.

Jazz Semiconductor® is a leading independent wafer foundry focused on Analog-Intensive Mixed-Signal (AIMS) specialty CMOS process technologies. We offer a broad product portfolio including Enhanced RFCMOS, SiGe, SiGe BiCMOS and High Voltage CMOS designed for customers who seek to produce analog and mixed-signal semiconductor devices that are smaller and more highly integrated, power-efficient, feature-rich and cost-effective than those produced using standard process technologies. Contact: Chuck Tabbert, Director Aerospace and Defense Applications, chuck.tabbert@jazzsemi.com; Marco Racanelli, Vice President Engineering, marco.racanelli@jazzsemi.com.

JDSU

#936

SPIE Corporate Member

430 McCarthy Blvd, Milpitas, CA, 95035
408/546-5000; fax 408/546-5087
info@jdsu.com; www.jdsu.com

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

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

JENOPTIK Laser, Optik, Systeme GmbH - Optics Business Unit

#1427

SPIE Corporate Member

Goeschwitzer Strasse 25, Jena, Germany, 07745
49 3641 65 3307; fax 49 3641 65 3658
optics@jenoptik.com; www.jenoptik-los.com

New Product: Large IR lenses of high surface quality, DLC coatings, Multifunctional optical elements for the IR.

Utilizing light as a tool in the infrared region, JENOPTIK gained many years of practical experience by doing business to the benefit of its customers. We are your reliable and innovative OEM partner for components, lenses and complete subsystems for the IR range. Serving the civil and military markets, our IR optics are applied in sensor technology, pyrometry, thermography, gas analysis, spectroscopy as well as in defense and security e.g. image recognition and target acquisition. Contact: Michael Kahlke, Manager Sales Optics, michael.kahlke@jenoptik.com; Thomas Weyh, Sales Optics, thomas.weyh@jenoptik.com.

JMAR Technologies, Inc.

#220

SPIE Corporate Member

10905 Technolgy Pl, San Diego, CA, 92127
; fax 858/946-6899
biosentry@jmar.com; www.jmar.com

New Product: BioSentry provides an early warning system for the real-time detection of waterborne microorganisms.

JMAR Technologies, Inc. is a late-stage technology company with expertise in the development and early commercialization of detection and laser-based technologies for nano-scale imaging, chemical and biological analysis and fabrication. The company is leveraging over a decade of laser and photonics research in developing a portfolio of products with market applications in high interest areas such as homeland security, biological monitoring of water quality and hazardous materials detection. Contact: David McCarty, Vice President Business Development, dmccarty@jmar.com; Kathi Kirchmeier, Marketing Communications, kkirchmeier@jmar.com.

Judson Technologies LLC

#733

Recent name change - see Teledyne Judson Technologies

K&Y Diamond Ltd.

#2801

2645 Diab, St Laurent, QC, Canada, H4S 1E7
514/333-5606; fax 514/339-5493
kydiamond@kydiamond.ca; www.kydiamond.ca

Kigre, Inc.

#1339

SPIE Corporate Member

100 Marshland Rd, Hilton Head Island, SC, 29926
843/681-5800; fax 843/681-4559
info@kigre.com; www.kigre.com

New Product: MK-81-88 compact eye-safe 1.54µm lasers for laser range-finding, range-gated imaging and LIBS.

Kigre manufactures laser transmitters, glass and components. We specialize in compact eye-safe high power diode pumped 1.54µm lasers for laser range-finding, range-gated imaging, laser radar and laser spectroscopy (LIBS). The MK-88 and MK-81 examples of a new family based upon conduction cooled High Efficiency Side Pump, (HESP) Diode Pumped Solid State Lasers (DPSS). Kigre's lasers and laser components are used in military, medical, scientific and industrial applications. Contact: Michael Myers, President; Jeffrey Myers, Vice President, jeffmyers@hargray.com.

Kollsman, Inc.

#1426

Recent name change - see Elbit Systems of America

Kopin Corp.

#1026

225 Technology Cir, Scotts Valley, CA, 95066
831/430-0688; fax 831/430-0689
ruggedolutions@kopin.com; www.kopin.com

New Product: Ultra-Low Power LV640 Microdisplay, 20mW. The LV640 is a monochrome 640 x 480 display.

Kopin is the leading supplier of Ruggedized Microdisplays to the United States Army through programs such as TWS-I, TWS-II and ENVG. In addition to displays Kopin provides higher level integration of display sub-systems. Contact: Tony Bacarella, Business Development Manager, tbacarella@kopin.com; Mike Presz, Vice President Government Programs, mpresz@kopin.com.

photonics.com

A vibrant, futuristic cityscape with glowing buildings and a rocket ship in space. The city is composed of various structures, some with blue and orange lights, set against a colorful, starry background. A rocket ship is visible in the lower left corner, moving towards the right.

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#1104

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World's leading glass manufacturer for night vision, aviation and technical filter applications. Moldable heat resistant colored glasses for LEDs, IR absorbing and covert glasses. Wide line of moldable Night Vision Imaging System (NVIS) glasses for incandescent or white LED sources that meet MIL-STD-3009 chromaticity and NVIS radiance requirements. Kopp's color filter offering has expanded to include many competitor equivalents. Contact: Gregg Bako, Product Manager, Color Filters & NVIS, gbako@koppglass.com; Darin Bernardi, Sales Manager, dbernardi@koppglass.com.

SHOWCASE LITERATURE DISPLAY

Kreischer Optics, Ltd.

#S-5

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815/344-4220; fax 815/344-4221
optics@kreischer.com; www.kreischer.com

Kugler of America LTD

#123

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860/749-6400; fax 860/749-6600
info@kuglerofamerica.com; www.kuglerofamerica.com

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L-3 Communications

#723

SPIE Corporate Member
600 Third Ave, New York, NY, 10016
212/697-1111; fax 212/682-9553
sales@l-3communications.com; www.l-3com.com

L-3 drew from the best and most innovative companies to form the EO/IR Group and Communications Systems-West. The EO/IR Group supplies crucial technologies in infrared imaging; advanced lasers and laser ranging systems for air, land and sea. Next generation communication systems for satellite communications as well as high-data rate, wideband, secure, communications systems for surveillance, reconnaissance and navigation are the domain of Communications Systems West.



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info@l-3com.com; www.thermal-eye.com

L-3 Communications Infrared Products delivers superior, high-performance infrared technology solutions and camera systems for a wide variety of thermal imaging applications. Whether performing critical missions, gathering intelligence or conducting situation analysis, our products perform when the stakes are high. Contact: Jennifer Tillman, Marketing and Communications Manager, jennifer.tillman@l-3com.com; Amanda Rainieri, Marketing Analyst, amanda.rainieri@l-3com.com.

L-3 Communications Advanced Laser Systems Technology, Inc.

#723

2500 N Orange Blossom Trail, Orlando, FL, 32804
407/295-5878; fax 407/770-2984
marketing.alst@l-3com.com; www.l-3com.com/alst

New Product: Advanced Technology Diode-Pumped Laser Designator Rangefinder and the Falcon III Rangefinder.

L-3 Advanced Laser Systems Technology (L-3 ALST) is an experienced manufacturer of custom and standard eyesafe laser rangefinders (LRF) and laser designator rangefinders (LDRF) that meets the customer's demanding performance and packaging requirements. As an ISO 9001:2000 certified company, L-3 ALST is committed to a process of continual improvement providing a focus on innovative development, cost effective manufacturing, quality and service of rugged, reliable LRF's and LDRF's. Contact: Norman Abramson, Director, Business Development, marketing.alst@l-3com.com; Lynda Swartz, Business Development Administrator, marketing.alst@l-3com.com.

L-3 Communications Cincinnati Electronics #723

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7500 Innovation Way, Mason, OH, 45040
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L-3 Communications InfraredVision Technology Corp.

#723

140 Industrial Way, Buellton, CA, 93427
805/686-8848; fax 805/686-8858
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L-3 Communications Nova Engineering #723

#723

5 Circle Freeway Dr, Cincinnati, OH, 45246
513/642-3000; fax 513/642-3300
sales.nova@l-3com.com; www.nova-eng.com

L-3 Nova provides wireless data communication solutions such as remote imagery systems, mobile ad hoc wireless routers and a handheld DF unit, using RF Hybrid, Multi-Chip Module and RF ASIC techniques to produce size/power/weight optimized products for specialized applications. An Engineering Design Services organization with unparalleled expertise in software-defined-radio (SCA) architecture design and advanced waveform development (JTRS WNW and SINCGARS) augments Nova's COTS products. Contact: Tanya Heid, Marketing and Sales, Tanya.Heid@l-3com.com; Kevin Bobier, Vice President, Advanced Programs, kevin.bobier@l-3com.com.

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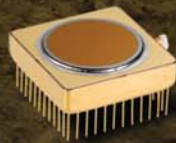
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#622

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603/927-4266; fax 603/927-4694
labsphere@labsphere.com; www.labsphere.com

Labsphere provides innovative light measurement technology, producing best-in-class test and measurement systems for light measurement and sensor calibration, diffuse reflectance materials and reflectance spectroscopy accessories. Products include uniform light sources to calibrate imaging devices and camera systems in the visible and IR; light measurement systems for lasers, LEDs and traditional light sources and reflectance standards for calibrating spectroscopic measurement systems. Contact: Brian Lai, Eastern Regional Sales Manager, blai@labsphere.com; Ed Cammerota, Western Regional Sales Manager, ecammerota@labsphere.com.

LaCroix Optical Co.

#409

SPIE Corporate Member

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

For over 60 years, LaCroix Optical Co. has manufactured custom precision optics including achromats, lenses, windows, prisms, wedges and mirrors. LaCroix Optical Co. is an ISO 9001:2000 registered company that can supply your optical components in any volume. A combination of modern and conventional production equipment plus an in-house coating facility allows LaCroix Optical Co. to be responsive to your needs. Contact: David Cossey, Manufacturing Engineer, david@lacroixoptical.com; Tom Cox, Manufacturing Engineer, tom@lacroixoptical.com.

Lambda Research Optics Inc.

#332

SPIE Corporate Member

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

Our products include standard and custom UV Excimer Optics such as high-power mirrors and lenses; polarizing Optics such as polarizing and non-polarizing beamsplitter cubes and plates; Infrared Optics such as windows, lenses (spherical, cylindrical, aspheric), mirrors (total reflectors, phase retarding mirrors). Also provide thin-film coatings. Contact: Jae Oh, Technical Sales Engineer; Yingwu Lian, Technical Sales.

LASCAD

#942

5 Echo Pl, Larkspur, CA, 94939
415/924-6300; fax 415/924-6399
www.las-cad.com

LAS-CAD GmbH announces a new version of simulation tools for Laser Cavity Analysis and Design. Thermal and Structural Finite Element Analysis, Gaussian ABCD Algorithm and Wave Optics Beam Propagation Code are integrated in one software package to analyze thermal lensing, stability and efficiency of 3-level and 4-level diode-pumped solid state lasers. The new version 3.4 allows for multiple crystals inside and outside the cavity as well as for misalignment analysis. Contact: Harry Skolnik, United States Sales Representative, hskolnik@hotmail.com; Konrad Altmann, President, dr.altmann@las-cad.com.



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.

Laser Components IG, Inc.

#823

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: Avalanche Photodiodes at 1064nm with 80 micron active areas and in many package configurations.

Avalanche Photodiodes and Pulsed Laser Diodes, high power laser optics (193nm -10.6µm). IR lead salt diode lasers (3-25 µm) and SPECNILAS diode lasers (750 to 2050nm), including VCSEL's and DFB's. Quantum Cascade Lasers and Flexpoint laser modules. Glass polarizing filters, fiberoptic assemblies and color sensors. Spectroscopic instrumentation: NIR Spectrometers and Echelle spectrum analyzers. Contact: Matt Robinson, Sales Engineer, robinson@laser-components.com; Paul Buettner, Sales Engineer, buettner@laser-components.com.

Laser Diode, Inc.

#119

2 Olsen Ave, Edison, NJ, 08820
732/549-9001; fax 732/906-1559
sales@laserdiode.com; www.laserdiode.com

Laser Diode Incorporated offers a full line of high power CW and short pulse lasers. CW lasers from 0.5-5W and pulsed lasers from 1-100W are from 635 to 1550nm. LDI also produces a comprehensive range of lasers ELEDs and PINFETs for fiber-optic data transmission and OTDR lasers for instrumentation applications. Our products also include commercial and ruggedized transmitter-receiver modules compliant with SONET and FDDI hierarchies. Contact: Peggy Scarillo, Inside Sales Manager, pscarillo@tycoelectronics.com; Steve Lerner, Product Manager, steve.lerner@tycoelectronics.com.

Laser Focus World

#1300

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603/891-0123; fax 603/891-0574
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Laser Optics, a PPGI company

#1202

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201/767-1910; fax 201/767-9644
sales@laseropticsinc.com; www.laseropticsinc.com

Manufacturer of optics, coatings and sub-assemblies for military, industrial and medical applications. Components from glass, fused silica, zinc selenide, silicon and germanium include plano, spherical and prismoid optics. Custom fabrication of mirrors, lenses, prisms, waveplates and cavity optics. Specialists in coatings for high power lasers. Contact: Iris Friedman, Sales Manager, ifriedman@laseropticsinc.com.

Laser Research Optics

#406

120 Corliss St, Providence, RI, 02904
401/331-3838; fax 401/331-4004
sales@laserresearch.net; www.laserresearch.net

Laser Research Optics supplies CO₂ laser optics for 25 to 200 watt lasers, factory direct and optimized for 10.6 micron. Featured are ZnSe positive focusing lenses in plano-convex, plano-concave and meniscus configurations in 1/2" to 2" dia., focal length 1" to 20". CO₂ laser turning mirrors offered are made from molybdenum for harsh environments; other mirrors include copper, dual band, silicon and phase retardation. These OEM quality replacement optics ship from stock within 12 hours. Contact: Scott Roullard, Sales, scott@melleroptics.com.



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Lasertel, Inc.

#1217

SPIE Corporate Member

7775 N Casa Grande Hwy, Tucson, AZ, 85743
520/744-5700; fax 520/744-5766
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New Product: Lasertel's patented array technology delivers unparalleled output power in demanding operations.

Lasertel's semiconductor laser manufacturing facility includes state-of-the-art epitaxy, wafer processing and packaging. Our vertical-integration enables consistent delivery of standard and customer-specific diode solutions. Chips, bars, array packages and fiber-coupled devices are available with peak wavelengths from 770nm to 1030nm and peak powers from 200mW to several kW. Contact: Robert Walker, Director of Sales and Marketing, rwalker@lasertel.com; Robin Stroud, Sales and Marketing Representative, rstroud@lasertel.com.

Lattice Electro Optics, Inc.

#1210

SPIE Corporate Member

1324 E Valencia Dr, Fullerton, CA, 92831
714/449-0532; fax 714/449-0531
latticeoptics@gmail.com; www.lattice-eo.com

New Product: CaF2 optics: lens, prism, windows; High Energy Beam Expanders; High Finesse Etalons from stock.

EXCIMER (193 & 248nm), YAG, CO₂ and FEMTOSECOND optics. OPO and Laser Rod coatings. Sandia National Labs' Level 1 Supplier. 24 Hours turn around on coating. High Power Beam Expanders are available. High Damage Threshold Optics and Coatings. Mirrors, Windows, Beamsplitters, polarizing optics, Waveplates. Cylindrical/aspheric lenses, ETALONS, Filters, Prisms. EXCIMER (193 & 248nm), YAG, CO₂ and FEMTOSECOND optics. OPO and Laser Rod coatings. Contact: Scott Kim, Application Engineer, scott.latticeoptics@gmail.com.

Lattice Materials LLC

#741

516 E Tamarack St, Bozeman, MT, 59715
406/586-2122; fax 406/587-9055
marketing@latticematerials.com; www.latticematerials.com

Lattice Materials LLC is the world's leading producer of custom silicon and germanium machined parts. We provide blanks for infrared optics and laser mirrors, as well as silicon and germanium coating sources. We also machine complex shapes for many custom applications. Lattice possesses unsurpassed capabilities in custom crystal growth, allowing us to meet demanding transmission and resistivity requirements. Contact: Michael Foster, Sales and Marketing, mikef@latticematerials.com; Bob Spetz, Sales Engineer, bobs@latticematerials.com.

Leybold Optics USA, Inc.

#2803

SPIE Corporate Member

539 James Jackson Ave, Cary, NC, 27513
919/657-7100; fax 919/657-7101
www.leyboldoptics.com

Leybold Optics is a standard-setting, technologically innovative company in the business of vacuum coating systems. The SYRUSPro IR is a coating tool with eb-gun and thermals sources with ion plasma assisted deposition for production of dense and shift free optical coatings. This is especially suited for IR coatings on common IR materials such as Ge, Si, ZnSe. The Leybold Optics DLC system delivers hard AR coating for layers from 3 - 5 and 8 - 12 microns. Contact: Tobias Haecker, Regional Sales Manager, tobias.haecker@leyboldoptics.com.



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Liebmann Optical Company, Inc.

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1 Industrial Pky, Easthampton, MA, 01027-1164
413/527-0079; fax 413 527 5132
sales@liebmann.com ; www.liebmann.com

Liebmann Optical - Focused on Quality. Liebmann specializes in the manufacture of precision spherical optical components from as small as 0.5mm diameter, used in endoscopic applications, to 10-150mm diameter lenses used on Medical, Industrial and Mil-Aerospace applications. AR coatings in house; 24000 sq ft; 43 people with over 400 years optics manufacturing experience, metal and glass assemblies. ISO 9000:2001 Registered. Contact: Beth Saunders, Customer Service Representative, BSAunders@Liebmann.com.

LightPath Technologies, Inc.

#1010

2603 Challenger Tech Ct Ste 100, Orlando, FL, 32826
407/382-4003; fax 407/382-4007
sales@lightpath.com; www.lightpath.com

LightPath Technologies, Inc. is a recognized leader in optical solutions for medical, industrial, defense and communication applications. We offer a full line of UV to long wavelength infrared optics and assemblies, including aspheric, GRADUUM[®] and traditional optics, fiber collimators, optical isolators and optical assemblies. Complete custom engineering and design support is available. Contact: Jim Magos, Corporate Vice President Sales and Marketing, jmagos@lightpath.com; Ray Pini, Product Manager, rpini@lightpath.com.

LightWorks Optics, Inc.

#1441

SPIE Corporate Member

14242 Chambers Rd, Tustin, CA, 92780
714/247-7100; fax 714/247-7101
www.lwoptics.com

Lockheed Martin - Santa Barbara Focalplane

#311

346 Bolly Dr, Goleta, CA, 93117
805/571-2300; fax 805/562-8993
www.sbfpc.com

Santa Barbara Focalplane (SBF) is a merchant vendor of the very latest in thermal infrared components, imaging systems, cameras and technology. SBF specializes in designing and manufacturing the highest quality indium antimonide (InSb) focal plane arrays (FPAs) in many configurations from linear through large staring formats. Product groups include FPAs, Integrated Detector/Dewar/Cooler Assemblies (IDDCAs), digital camera heads, and complete imaging systems.

Lucid Dimensions

#19

SPIE Corporate Member

168 CTC Blvd Ste E, Louisville, CO, 80027
720/890-4371
www.luciddimensions.com

Lumenera Corp.

#1533

7 Capella Ct, Ottawa, ON, Canada, K2E 8A7
613/736-4077; fax 613/736-4071
info@lumenera.com; www.lumenera.com

New Product: Lumenera's 11 Megapixel CCD USB2.0 and Ethernet digital cameras, 3.5fps, 4008x2672 resolution and low noise.

Lumenera manufactures high quality megapixel COTS and custom USB2.0, Ethernet and Intelligent digital cameras that are perfectly suited for the most demanding security and industrial applications. Lumenera leverages its leading edge technology to provide custom designs and licensing options to OEM partners. Contact: Corey Fellows, Director of Business Development- Industrial division corey.fellows@lumenera.com; John Recesso, Director of Business Development- Security division john.recesso@lumenera.com.

Exhibitor Listing

Lumus Ltd.

#124

Rabin Science Park, 2 Bergman St, Rehovot, Israel, 76705
972 8 947 3361; fax 972 8 947 3362
www.lumus-optical.com

New Product: PD-18- transparent Personal Display designed for Professionals for Pilots, Physicians and Soldiers.

Lumus provides a new dimension for the human visual experience. Enriching human vision with completely natural-looking, see-through eyewear based on the company's patented, breakthrough LOE technology, Lumus is generating a paradigm shift in display technology, changing behavior patterns and establishing new horizons in the world of displays. Lumus is headed by a team of visionary leaders and pioneers in the world of optics and personal displays. Contact: Eli Glikman, Product Line Manager - Professional Products, eglikman@lumus-optical.com.

Market Tech, Inc.

#109

PO Box 67037, Scotts Valley, CA, 95067-7037
800/326-5714; fax 831/461-1136
www.markettechinc.net



GENERAL REFRESHMENT SPONSOR

The MathWorks Inc.

#616

3 Apple Hill Dr, Natick, MA, 01760-2098
508/647-7000; fax 508/647-7001
info@mathworks.com; www.mathworks.com

Every major aerospace and defense organization in the world uses MathWorks™ products and services to develop air, naval, land and space systems. Engineers and scientists rely on MathWorks tools for Model-Based Design and technical computing in programs such as the Airbus A380, F-35 Joint Strike Fighter, Mars Exploration Rover, as well as unmanned aerial vehicles and advanced wireless systems.

Matrix, Inc.

#44

One Catamore Blvd, East Providence, RI, 02914
401/434-3040
scot@matrixinc.net; www.matrixincorporated.com

Max Levy Autograph, Inc.

#833

SPIE Corporate Member

220 W Roberts Ave, Philadelphia, PA, 19144-4298
215/842-3675; fax 215/842-3637
sales@maxlevy.com; www.maxlevy.com

Max Levy Autograph specializes in precise patterned components and metrology standards for the photonic, machine vision, mil-aerospace and semiconductor industries. Major capabilities include photolithography, electroforming and diamond turning. Product breath ranges from submicron features on exotic materials to 3' x 10' NIST traceable calibration grids. Contact: Tom Cinque, Sales Manager, tom@maxlevy.com; Rich Rosenfeld, Office Manager, richr@maxlevy.com.



McQ Inc.

#1116

1551 Forbes St, Fredericksburg, VA, 22405
540/373-2374; fax 540/371-1358
info@mcqinc.com; www.mcqinc.com

New Product: iScout® detects people, vehicles and gunfire using two AA batteries and lasts for 2 weeks.

McQ is recognized as the high technology leader in remote surveillance, security and environmental monitoring products. For over 20 years, McQ has earned a reputation for delivering rugged, state of the art surveillance and remote sensor systems that are networked and have very low false alarms. McQ has a varied client base with a wide range of commercial, industrial and government clients. McQ is located in Fredericksburg, Virginia with Engineering and Production facilities. Contact: Karen Lindsey, Director of Marketing and Sales, klindsey@mcqinc.com; Amy Slocum, Product Manager, aslocum@mcqinc.com.

Meller Optics, Inc.

#406

120 Corliss St, Providence, RI, 02904-2602
401/331-3717; fax 401/331-0519
sales@melleroptics.com; www.melleroptics.com

Meller Optics has been providing high quality optics to defense, medical, laser and industrial markets for over 50 years. Specializing in grinding and polishing of hard, durable materials. Meller has developed high-speed, low-cost finishing processes for Sapphire, Ruby, Laser Glasses, Fused Silica, Zinc Selenide, Germanium, Silicon, Fluorides and Ceramics. Configurations include windows, substrates, lenses, domes and prisms. Meller Optics is an ISO 9002 certified company. Contact: Craig Schweriner, National Sales Manager, craig@melleroptics.com; Steve Lydon, Sales, steve@melleroptics.com.

MEMS Optical Inc.

#926

SPIE Corporate Member

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

MEMS Optical, Inc. is a leading supplier and manufacturer of high performance refractive and diffractive microoptics and MEMS devices. MEMS Optical provides solutions to diverse markets such as defense and security, information and communications, industrial and semiconductor equipment, general illumination and healthcare and life sciences. MEMS Optical continues to develop and improve microoptics applications through the use of grayscale technology and other proprietary processes.

Metavac

#923

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

New Product: Metavac's next generation of thin film engineering and application packages offer surface solutions consistent with today's real world harsh environmental and rigorous handling requirements.

Metavac is a global leader in the manufacture and development of thin film, optical and electro-optical products serving the defense and security industries since 1945. Products include ruggedized display shields, transparent heater panels, NVIS compatible filters, EMI/RFI shielding, contrast enhancement and polarized display filters and specialty coatings for optoelectronic applications. Metavac is a part of Thermo Fisher Scientific. Contact: Richard Zinkiewicz, Sales Manager, richard.zinkiewicz@thermofisher.com; Joseph Pozzolano, Business Development Manager, joseph.pozzolano@thermofisher.com.



= Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

MICROSECURITY LAB

Anti-Counterfeiting Security and Authentication Solutions. Light-years ahead of counterfeiters™

Counterfeiting is a global problem that affects all legitimate businesses with all the related problems of lost revenue, sales, customers, and associated liability issues. MicroSecurity Lab offers innovative and cost-effective anti-counterfeiting and authentication solutions for counterfeit detection and protection of lives and safety of people, revenue, brand names and Intellectual Property for the following industries:



The parts were marked with a company logo, serial number, or standard DataMatrix, which are easy to reproduce on counterfeit parts. The same parts were laser marked with **Anti-Counterfeiting SecureMark™** that contains security information and part serial number, and offers protection against counterfeiting and unauthorized copying. MicroSecurity Lab's reader can distinguish between genuine and counterfeit parts by validating the secure marks.

Product	Description
SecureMark™	Standalone system for secure laser marking, reading, validation, and authentication
SecureMark for Factory Automation™	Enterprise-level conveyor-based system for secure laser marking, reading, validation, and authentication for mass production on the factory floor
SecureRead Standalone™	Standalone or conveyor-based reader for secure reading, validation, and authentication
SecureRead Handheld™	Handheld reader for secure reading, validation, and authentication

Laser Marking Anti-Counterfeiting, MRO, and UID Technologies	
Anti-Counterfeiting SecureMark™	Anti-Counterfeiting Secure Barcode™
High Capacity Micro Barcode™ (HCMB™)	EasyUID™
High Capacity MicroMRO™ (Maintenance, Repair, and Overhaul)	Anti-Counterfeiting SecureUID™
Anti-Counterfeiting SecureMRO™	MicroUID™
Anti-Counterfeiting MicroUID™	Standard Linear and 2D barcodes, text, graphics

MicroSecurity Lab Inc. www.MicroSecurityLab.com

Michigan Aerospace Corp.

#2008

1777 Highland Dr Ste B, Ann Arbor, MI, 48108
734/975-8777; fax 734/975-0239
www.michiganaero.com

New Product: LIDAR (ground and airborne) for wind, density, temperature and atmospheric constituents.

Michigan Aerospace Corp. provides innovative optical, opto-mechanical and mechanical systems and image processing, pattern recognition and machine learning software, from conceptual design through production and field implementation, including: LIDAR Systems to measure winds from the ground, air and space; Data Exploitation of 2D and 3D image and video data; Optical Diagnostics for CBRN and Improvised Explosive Device (IED) detection systems and optical early diagnosis solutions for the medical community. Contact: John Dodds, Business Development Coordinator, jdodds@michiganaero.com; Katy Lee, Administrative Assistant, klee@michiganaero.com.

Micro Laser Systems, Inc.

#325

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: High Power Fiber Collimator.

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

Exhibitor Listing

Micromechatronics, Inc.

#1517

200 Innovation Blvd Ste 155, State College, PA, 16803
814/861-5688; fax 814/861-1418
contact@mmech.com; www.mmech.com

New Product: Word's first piezoelectric-based compact high voltage DC-DC converters.

Micromechatronics aims to become "Your development partner in Smart Actuators". Our portfolio ranges from piezoelectric actuators, transformers, ultrasonic-motors to Finite Element smart-structure design software. Micromechatronics is also the USA distributor of several key industry players, including: NOLIAC (DK) a global leader on multilayer-piezo-actuators, CEDRAT (FR) the expert on amplified-piezoactuators and positioning systems such as XY stages for Infra Red cameras, NIHON-CERATEC (JP) a large volume manufacturer of multiple piezoelectric-devices. Contact: Alfredo Vazquez Carazo, President, avc@mmech.com.



GENERAL REFRESHMENT SPONSOR

MicroSecurity Lab Inc.

#1442

SPIE Corporate Member

10656 Oak Lake Way, Boca Raton, FL, 33498
561/699-5785
www.microsecuritylab.com

New Product: SecureMark™, SecureMark for Factory Automation™, SecureRead Standalone™, SecureRead Handheld™.

MicroSecurity Lab develops and markets unique, easy to use, cost effective, fast, reliable, durable laser marking and authentication solutions for protection against counterfeiting and unauthorized copying as well as automatic counterfeit detection. The company offers the following technologies: 1. Anti-Counterfeiting SecureMark; 2. High Capacity Micro Barcode™; 3. Anti-Counterfeiting SecureMRO; 4. EasyUID; 5. Anti-Counterfeiting SecureUID; 6. MicroUID; 7. Anti-Counterfeiting MicroUID. Contact: Andriy Knysh, President and Chief Executive Officer; aknysh@microsecuritylab.com; Bradford Goetz, Chief Operations Officer, bgoetz@MicroSecurityLab.com.

Military & Aerospace Electronics

#1300

98 Spit Brook Rd, Nashua, NH, 03062-5737
603/891-0123; fax 603/891-9290
www.milaero.com

Military & Aerospace Electronics reports on the technologies and issues that impact the design, development and integration of today's and tomorrow's military and aerospace electronics design.

Mindrum Precision, Inc.

#443

SPIE Corporate Member

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

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

Model Optics Inc.

#425

SPIE Corporate Member

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

MODEL OPTICS, INC. Manufacturer of custom precision optics including spherical, flat, prism and toroidal components. Full optical coating services, and design and assembly of opto-mechanical units on site. Specializes in prototype services and limited production volume. High volume double-sided lapping production capacities for precision plano-plano windows. Established 1969, Employees 12, Area: 8000 sq ft. Contact: Robb Sawyer, Director of Sales and Marketing, robb@modeloptics.com; Larry Kim, President, lkim@modeloptics.com.

Modulight, Inc.

#1534

Hermiankatu 22, Tampere, Finland, 33720
358 20 743 9000; fax 358 20 743 9009
sales@modulight.com; www.modulight.net

New Product: Semiconductor lasers for illumination, range finding and perimeter security.

Modulight, Inc. provides value-adding solutions to optical applications for industrial, communication, medical, space and defense industries. Our product lines include various types of semiconductor laser diodes covering a broad selection of wavelengths, from visible to infrared (IR), with output power levels ranging from milliwatts to over one hundred watts. Modulight's critical success factors are: Agility, Profitability, Customer focus and Reliability.

Moore NanoTechnology Systems LLC

#1110

426A Winchester St, Keene, NH, 03431-0605
603/352-3030; fax 603/352-3363
www.nanotechsys.com

Nanotech® Ultra-Precision Machining Systems are available in various models with 2 to 5 axes of CNC motion control for single point diamond turning or deterministic microgrinding. All Nanotech machines utilize a programming resolution of 1.0 nanometer and a system feedback resolution of only 0.034 nanometer. Our 10,000rpm heavy duty work holding spindle allows for high speed machining of IR crystals but is not limited by the same weight load restrictions as other high speed spindles. Contact: Bob Cassin, Sales Manager; cassin@nanotechsys.com; Jeff Perra, Sales Engineer, perra@nanotechsys.com.

MOXTEK

#1342

452 W 1260 N, Orem, UT, 84057
801/225-0930; fax 801/221-1121
www.moxtek.com

New Product: Polarizers now extending into Ultra Violet and Infrared. Check out new Absorptive and Ultra Products.

MOXTEK specializes in wire-grid polarizers up to 8-inches in diameter for use in consumer displays, scientific instruments, industrial and military applications ranging from the UV to LWIR. MOXTEK is interested in high-volume and custom applications of wire-grid polarizers and other nanophotonic devices. Contact: Matt Free, Marketing Director, mfree@moxtek.com; Jim Meyer, Applications Engineer, jmeyer@moxtek.com.

MRC a PPGI company

#1202

6455 Parkland Dr, Sarasota, FL, 34243
947/753-8707; fax 947/751-4249
mrccsales@mrcptics.com; www.mrcptics.com

Manufacturer and designer of precision metal and infrared optical components, systems and sub-assemblies. Full in-house aspheric diamond machining, plating, polishing and testing capability. Materials include all non-ferrous metals, crystals, beryllium and composites. Products include polygons, aspheric components, off-axis parabolics, large flat mirrors and multi-mirror systems. Contact: Tom Crafts, Director of Sales, tcrafts@mrcptics.com.

Naked Optics Corp.

#933

SPIE Corporate Member

16 Mt Bethel Rd Ste 374, Warren, NJ, 07059
908/685-0352; fax 908/325-0250
info@nakedoptics.com; www.nakedoptics.com

Supplier of IR optics and diamond-turned components with aspheric, diffractive and hybrid surfaces in IR materials, plastics and metals; optical design services; IR materials including ZnSe, ZnS, CaF2, BaF2 and optical glasses in finished and blank forms: raw strip glass, molded and CNC-machined blanks of all optical materials. Contact: Buzz Nesti, buzz@nakedoptics.com; Glen Dunn, glen@nakedoptics.com.

NASA Tech Briefs

#436

1466 Broadway Ste 910, New York, NY, 10036
212/490-3999
joe@abpi.net; www.techbriefs.com

National Aperture, Inc.

#1322

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

New Product: NAI's: MM-1M Servo Motor Micro-stage! 15-20nm resolution, Hi-load Capacity, Ultra-precise!

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

National Defense Industrial Association (NDIA)

#1304

2111 Wilson Blvd Ste 400, Arlington, VA, 22201
703/247-2566; fax 703/527-6945
www.ndia.org

America's leading non-profit Defense Association providing education, networking and knowledge exchange between industry and all military branches. Participation is through local chapters, 32 divisions for corporate involvement and numerous conferences and trade-shows. Corporate, individual and free government/military memberships are available. NDIA dates back to 1919 and was formerly known as the American Defense Preparedness Association. Contact: Patty Cleasby, Membership, pcleasby@ndia.org.

NAVAIR IBST

#1502

Bldg 2109 Ste N 220, 48150 Shaw Rd Unit 5, Patuxent River, MD, 20670-1970
www.navair.navy.mil

IBST is a national asset and state of the art facility that combines integrated sim/stim laboratories and synthetic environment generation providing test scenarios that reproduce actual combat. IBST provides the real time man in the loop, hardware in the loop combat environment simulations for aircraft and weapons system ground testing, such as, installed systems, hardware in the loop, integration, operational and developmental testing and prototype simulator design. Contact: John Kriz, Science Advisor, john.kriz@navy.mil; Brian Woode, Branch Head, brian.woode@navy.mil.

NEC Corp.

#1417

7-1 Shiba 5-Chome, Minato-ku, Tokyo, Japan, 108-8001
81 3 3454 1111
windows@geo.fc.nec.co.jp; http://www.nec.com

New Product: NEC officially announces the release of new IR Detector Module HX3100M1 with 640x480 VGA format.

NEC Corp. is one of the world leading IT and Network Solutions providers from Japan. In furtherance of the long and significant experiences in the infrared products development, NEC is now promoting uncooled infrared detectors and modules for world commercial market. HX0830 and HX3100 are VOx microbolometer with 23.5µm pixel pitch and HX0830M1 and HX3100M1 are camera module based on those detectors. Visit our booth #1417 and enjoy the fascinating images created by our detectors. Contact: Jun Mochizuki, Senior Manager, windows@geo.fc.nec.co.jp.

NEC San'ei Instruments, Ltd.

#1417

1-25-12 Akebono-cho, Tachikawa-shi, Japan, 190-8537
81 42 522 0411; fax 81 42 522 0421
www.necsan-ei.co.jp

New Product: TS9230/TS9260 is new fixed-mount Thermal Imaging camera, rugged and reliable with network capability.

NEC San-ei provides and supports high-quality measuring system, which satisfies various measurement needs from sensors to data processing. Our new concept, Sensors Fusion Solution (SFSolution), is aimed to incorporate our technical specialties-Thermal Imaging & Analog Data Acquisition technologies. DF1100 (SFSolution Analyzer) can measure voltage, vibration, strain, temp, pressure, etc and is also capable to simultaneously display/save thermal images from TS9230/TS9260 (Thermal Imaging Camera). Contact: Masa Kuramoto, Senior General Manager, m-kuramoto@necsan-ei.co.jp; Tomo Nakasone, Sales, nakasone@necsan-ei.co.jp.

New Scale Technologies, Inc.

#423

SPIE Corporate Member

121 Victor Heights Pkwy, Victor, NY, 14564
585/924-4450; fax 585/924-4468
sales@newscaletech.com; www.newscaletech.com

New Product: World's smallest linear motor now 40% faster, 50% stronger.

Tiny piezoelectric SQUIGGLE motors have high efficiency, force and precision. Use for miniature optics and imaging, surveillance, electronic locks and fasteners, micro UAVs, gun sight stabilization, microfluidics (lab-on-a-chip pumps and valves) and more. Our newest model is only 1.8 x 6 mm and pushes 200x its own weight! Patented ultrasonic motor uses less power than electromagnetic micro-motors. Ask about motors for UHV, cryogenic and high magnetic fields. Contact: Fred Haas, Sales Manager, fhaas@newscaletech.com.



GENERAL REFRESHMENT SPONSOR

New York Photonics Industry Association #422

150 Lucius Gordon Dr Suite 117, West Henrietta, NY, 14586
585/329-4029; fax 585/214-2458
tbattley@newyorkphotonics.org; www.newyorkphotonics.org

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.

Exhibitor Listing



INTERNET PAVILION SPONSOR

Newport Corp. #941

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

Newport has been enabling high-precision aerospace and defense technology development and production for over 30 years. We're a global leader in precision motion systems, vibration control, optics, lasers and photonics instrumentation, providing the foundation of many development, test, assembly and calibration systems that ensure the accuracy and reliability of our defense systems worldwide. Contact: Randy Heyler, Senior Marketing Director- Defense and Security, randy.heyler@newport.com; Kim Abair, Director, Advertising and Marketing, kim.abair@newport.com.

Night Vision Systems #433

542 Kemmerer Ln, Allentown, PA, 18104
800/797-2849; fax 610/391-9220
orders@nightvisionsystems.com; www.nightvisionsystems.com

Night Vision Systems (NVS) specializes in the sale of night vision and thermal imaging technologies for military, security and public safety applications for federal, state and local governments. NVS offers rapid delivery of quality security and surveillance systems for complete around-the-clock vision day or night. For more information, please contact us at 1-800-797-2849 or visit www.nightvisionsystems.com. Contact: Orders and Information.

Nippon Avionics Co., Ltd. #1417

1-5 Nishi-Gotanda 8 Chome, Shinagawa-Ku, Tokyo, Japan, 141-0031
81 3 5436 0625; fax 81 3 5436 0639
product-tvse@avio.co.jp; www.avio.co.jp

New Product: Nippon Avionics is pleased to present new "TVS" series thermography with latest infrared technology.

Nippon Avionics Co., Ltd or "Avio" is a Japanese manufacture who has been providing TVS series thermography to the worldwide market for 30 years. Avio has rich history and expertise for FPA based thermography from high-end InSb based camera to uncooled camera for wide variety of application such as PPM, R&D and process control. In addition, Avio intends to add infrared module as a new addition to the product line. Please come see us at booth #1417. Contact: Yukinori Kimura, Manager, Partner Business Department, yknr-kimura@avio.co.jp; Akihiko Ichikawa, Marketing Manager, Partner Business Department, ichikawa-aki@avio.co.jp.

nLight Corp. #724

SPIE Corporate Member

5408 NE 88th St Bldg E, Vancouver, WA, 98665
360/566-4460; fax 360/546-1960
sales@nlight.net; www.nlight.net

New Product: nLIGHT Summit™ offers unparalleled reliability and a wide range of packaging options and wavelengths.

nLIGHT designs and manufactures industry leading fibers, semiconductor lasers and tailored integrated solutions. By improving efficiency, power and reliability in wavelengths from 635 - 2100nm, nLIGHT enables differentiated advantages in photonic components and assemblies for military and aerospace applications. Development through production needs are met in nLIGHT's ISO-certified, ITAR-compliant and United States based facilities. Contact: Jeff Smith, Defense Sales Manager.

NoblePeak Vision Corp. #1041

585 Edgewater Dr, Wakefield, MA, 01880
781/224-9740; fax 781/224-9747
info@noblepeak.com; www.noblepeak.com

New Product: TriWave® imagers and camera cores have 744 x 576, 10µ pixels and 400nm to 1650nm sensitivity.

NoblePeak Vision is developing a new generation of visible to SWIR (400nm to 1650nm) video surveillance camera cores and components with breakthrough night vision performance and costs. At the heart is TriWave®, a revolutionary germanium enhanced monolithic CMOS image sensor technology, whose high resolution (744 x 576 pixels) and zero blooming design enables the rapid detection and identification of people and objects; in zero ambient lighting conditions or with covert laser illumination. Contact: Phil Davies, Vice President Marketing, phil.davies@noblepeak.com; Ove Salomonsson, Director Product Marketing, ove.salomonsson@noblepeak.com.

NorPix, Inc. #303

1751 Richardson St Ste 6117, Montreal, QC, Canada, H3K 1G6
514/846-0009; fax 514/846-0117
sales@norpix.com; www.norpix.com

New Product: StreamPix digital video recording software. TroublePix event capture and monitoring software.

NorPix Inc is a developer of digital video recording software used in the machine vision, scientific and monitoring industries. NorPix has a team of software and machine vision experts with many years of experience in the machine vision industry. Our team has extensive knowledge of industrial, scientific and high speed cameras used in the vision industry along with experience in the fields of optics and triggering. Contact: Luc Nocente, President, ln@norpix.com.

North Dakota Department of Commerce #440

1600 E Century Ave Ste 2, Bismarck, ND, 58503
701/328-5300; fax 701/328-5320
www.dakotadefensealliance.com

The Dakota Defense Alliance in partnership with the North Dakota Department of Commerce works to expand defense industry job opportunities in North Dakota and provide greater visibility for our heartland manufacturers. Commerce leads the state's efforts to attract, retain and expand wealth through primary sector business growth. The Dakota Defense Alliance is providing enhanced communication to policy makers to identify opportunities the state's companies to advance in the defense industry. Contact: Paul Lucy, Director, Economic Development and Finance, plucy@nd.gov; Eric Icard, Business Development, North Dakota Department of Commerce, eicard@nd.gov.

Northrop Grumman Cutting Edge Optronics #925

20 Point W Blvd, St Charles, MO, 63301
636/916-4900; fax 636/916-4994
st-ceolaser-info@ngc.com;

www.st.northropgrumman.com/ceolaser

Northrop Grumman Cutting Edge Optronics is a leading manufacturer of Diode Pumped Solid State Lasers, Laser Gain Modules, Laser Diodes and Diode Arrays for Military, Aerospace and Commercial applications. CEO specializes in lasers for LIDAR, LADAR, Bathymetry, Illumination, Remote Sensing, Tracking and Ranging. CEO is also a leading supplier of High Power Micro CW and QCW Diode Arrays for defense and industrial applications. Contact: Wade Collins, Sales Manager Military and Aerospace Lasers, wade.f.collins@ngc.com; David Jones, Director of Sales and Marketing, david.b.jones@ngc.com.

Novotech, Inc.**#200**

916 Main St, Acton, MA, 01720
978/929-9458; fax 978/929-9459
contact@novotech.net; www.novotech.net

New Product: Suppliers of Infrared Optics including Germanium, ZnSe, Silicon, GaAs, Sapphire, Quartz.

Novotech, Inc.: Supplier of infrared optical and semiconductor materials and services. Infrared germanium is our core product, stocked from ingots to polished or coated optics. Germanium is sourced as a by-product, refined and grown to be very price competitive. Our crystal growth, fabrication and coating capabilities offer experience that can be applied to your programs. Contact: Rich Feinen, Sales Manager, rfeinen@novotech.net; Peter Schwarzer, Account Manager, peters@novotech.net.

NP Photonics**#112**

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

Nu-Cast, Inc.**#319**

29 Grenier Field Rd, Londonderry, NH, 03053
603/432-1600; fax 603/432-0724
jtb@nucast.net; www.nu-cast.com

Nuferm**#2014**

SPIE Corporate Member

7 Airport Park Rd, East Granby, CT, 06026
860/408-5000; fax 860/408-5080
info@nuferm.com; www.nuferm.com

Nuferm® is a leading United States manufacturer of specialty optical fibers, fiber lasers and amplifiers serving diverse markets. Current products include over 300 standard fibers and range from sub-assemblies to complete turn-key fiber lasers and amplifiers. From its headquarters in East Granby, Connecticut, USA, Nuferm's integrated fiber and fiber laser teams also provide rapid and cost-effective OEM fiber laser design, assembly and contract manufacturing services. Contact: Mike O'Connor, Manager, Government Accounts, moconnor@nuferm.com; Bryce Samson, Vice President of Business Development, bsamson@nuferm.com.

OASYS Technology, LLC**#1140**

SPIE Corporate Member

645 Harvey Rd Ste 9, Manchester, NH, 03103
603/232-8221; fax 603/628-0222
www.oasys-technology.com

New Product: Multi-Spectral 3rd Gen FLIR with 4 fields-of-view and variable f/no. aperture settings.

OASYS Technology specializes in providing rugged and reliable solutions to the complex and challenging electro-optical specifications of our customers. Products are segmented into 4 primary markets: Military Products and Accessories, Laboratory and Test Instrumentation, Optical Assemblies and Precision Optical Components. In-house optical and mechanical fabrication includes numerous multi-axis machines for quick-turn response to customer needs. An ISO 9001:2000 Certified Company. Contact: Brett Rosner, Chief Operations Officer, brosnr@oasys-technology.com; Jim Wing, Director, Precision Optical Component, jwing@oasys-technology.com.

Obzerv Technologies Inc.**#2902**

400 Jean Lesage Ste 201, Quebec, QC, Canada, G1K 8W1
418/524-3522; fax 418/524-6745
info2007@obzerv.com; www.obzerv.com

Obzerv Technologies Inc. specializes in the design and manufacturing of night vision camera for long-range application based on active imaging. Thanks to its range-gating capability and DALIS™ illuminator, Obzerv's cameras operate in complete darkness, in degraded weather conditions and provide real time imagery. The needs to identify individuals, to read license plate or any registration marks and to see through glass are now essential for the success of surveillance operations. Contact: Sylviane Lelièvre, Business Development Director, sylviane.lelievre@obzerv.com; Deni Bonnier, President, deni.bonnier@obzerv.com.

Ocean Optics, Inc.**#201**

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: LAMPS is a leap forward in LIBS technology, with a microwave cavity to enhance plasma discharge.

Ocean Optics is the leader in optical sensing and spectroscopy solutions. Ocean Optics has applications in defense environmental monitoring. Our extensive line includes open-air pathogen monitors, LIBS systems and Raman solutions and complementary technologies including sampling accessories, sensors and optics. Visit our website, OceanOptics.com for more information. Contact: Application Sales Engineer; Bob Kearton, System Sales Manager, Bob.Kearton@OceanOptics.com.

Oerlikon Optics USA Inc.**#323**

SPIE Corporate Member

16080 Table Mtn Pky Ste 100, Golden, CO, 80403
303/273-9700; fax 303/273-2995
sales.optics@oerlikon.com; www.oerlikon.com

Ontar Corp.**#2503**

SPIE Corporate Member

9 Village Way, North Andover, MA, 01845-2000
978/689-9622; fax 978/681-4585
sales@ontar.com; www.ontar.com

New Product: PcModWin MODTRAN PcLnWin FASCODE PcNvMod NvTherm 2D3D graphical weather atmospheric virtual reality.

Ontar Corporation is a research and development company founded in 1981 to provide service contracts for government, academic and industrial facilities. Ontar specializes in atmospheric science and in technical and advanced distributed learning software. New models such as 2D/3D weather/atmospheric virtual reality programs are currently being incorporated in to our software products. We provide custom online, onsite and offsite workshops. Contact: Alyssa Douglass, Sales and Marketing, adouglass@ontar.com.

Onyx Optics Inc.**#739**

6551 Sierra Ln, Dublin, CA, 94568
925/833-1969; fax 925/833-1759
www.onyxoptics.com

Onyx Optics' product capabilities include Adhesive-Free Bonded (AFB®) crystal and glass laser components such as laser rods, slabs, disks and waveguiding structures. We work with materials such as doped and undoped YAG, YLF, YVO4, sapphire, diamond and spinel, as well as many others. Our patented composite technology enables higher efficiency, more compact and higher power solid state laser and photonic devices. Contact: Lesley Reo, Sales and Marketing Manager, lreo@onyxoptics.com; Corinna Meissner, President, cmeissner@onyxoptics.com.

Exhibitor Listing

Opgal Optronics Industries Ltd.

#1333

Industrial Area 5, PO Box 462, Karmiel, Israel, IL-20100
972 4 995 3903; fax 972 4 995 3900
www.opgal.com

New Product: Eye R160 - Uncooled Low Price Engine; Eye Lite - Cooled advanced, continuous zoom camera; DTV-EYE - Uncooled Driver Thermal Vision Kit.

OPGAL has over 20 years of experience as an innovative developer of thousands of cooled and uncooled thermal imaging products, with sales throughout the world. Through our vast product offering, OPGAL demonstrates its proven ability to maximize the detector's performance and optimize it to various applications, using only the most sophisticated digital signal processing with proprietary software algorithms. Contact: Sylvie Dascalu, Vice President Sales & Contracts, dascalu@opgal.com; Dror Sharon, Vice President Marketing, sharon@opgal.com.

Ophir Optics, Inc.

#916

SPIE Corporate Member

1600 Osgood St, N. Andover, MA, 01845
978/657-6410; fax 978/657-6056
www.ophiropticsinc.com

Ophir-Spiricon Inc.

#2004

SPIE Corporate Member

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

New Product: New Wireless Power/Energy Meters and Color Display!

Laser power/energy meters and beam profilers for lasers and optical devices from UV - FIR. Products include software, full spectrum cameras and Thermopile, Pyroelectric and Photodiode detectors covering pJ to KW. Complete OEM capabilities for all your custom applications! Contact: Ophir-Spiricon Inc.

Opnext, Inc.

#1213

SPIE Corporate Member

1 Christopher Way, Eatontown, NJ, 07724
732/544-3400; fax 732/544-3540
info@opnext.com; www.opnext.com

Optical Coatings Japan

#111

3F 7-2 Nihonbashi-Honcho 3-Chome, Chuo-Ku, Tokyo, Japan, 103-0023
81 3 5695 6631; fax 81 3 5695 6630
yamaguchi@ocj.co.jp; www.ocj.co.jp

SHOWCASE LITERATURE DISPLAY

Optics & Laser Europe

#S-7

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

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OPTICS 1, Inc.

#1201

SPIE Corporate Member

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

New Product: Miniature Multi-Spectral Stabilized Turret with LWIR, SWIR, LLL and Visible Payload Options.

OPTICS1, Inc. is a global technology leader in the design, engineering and production of precision optical and electro-optical systems for commercial and government sectors. Our product segments include Soldier Systems, Surveillance Systems, Precision Optical Systems and Commercial Metrology Systems. Our expertise resides in our ability to work in a cooperative environment with our customers to provide the best possible Optical Systems solution and ultimate product for the end user community. Contact: Douglas Harwood, Vice President of Business Development, dharwood@optics1.com.

Optics Technology, Inc.

#434

3800 Monroe Ave, Pittsford, NY, 14534
716/586-0950; fax 716/248-2371
sales@opticttechnology.com; www.opticttechnology.com

Optikos Corp.

#629

SPIE Corporate Member

107 Audubon Road, Bldg. 3, Wakefield, MA, 01880
617/354-7557; fax 617/354-5946
sales@optikos.com; www.optikos.com

New Product: The Photometric Camera simulates the human eye by characterizing II tubes, CRT's, LCD's and more.

Optikos Corporation is the world's largest manufacturer of equipment for the measurement of optical image quality and a leading provider of optical product development services. As the world leader in the field of MTF testing, Optikos offers complete solutions for both component and system level tests on imaging systems operating from the ultraviolet to the far infrared. Optikos' product line includes testing suites for measuring the performance of optical and electro-optical imaging systems. Contact: Jamie Hutchins, Vice President, Sales and Marketing, jhutchins@optikos.com; Ryan McDonough, Senior Sales Executive, rmcdonough@optikos.com.

Optimax Systems, Inc.

#419

SPIE Corporate Member

6367 Dean Pky, Ontario, NY, 14519-8939
585/265-1020; fax 585/265-1033
sales@optimaxsi.com; www.optimaxsi.com

Optimax is dedicated to small volume, high quality and quick delivery of precision optical components. Specializing in aspheres, cylinders, plano-optics and spheres, manufactured to customer-supplied specifications. Final inspection data is provided with the optics. We enjoy a good challenge, call us! Contact: Rick Plympton, Vice President.

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Exhibitor Listing

OptiPro Systems

#421

SPIE Corporate Member

6368 Dean Pky, Ontario, NY, 14519-8939
585/265-0160; fax 585/265-9416
sales@optipro.com; www.optipro.com

New Product: OptiPro UltraForm Finishing (UFF) - Aspherical and Conformal 5-axis CNC Polishing machine.

Fabrication products include CNC Optical Machining Centers and Cad/Cam software for 4/5 axis grinding and polishing of spherical, aspherical and conformal optics. Popular low-cost "eSX 150" is quickly becoming the industry standard for manufacturing complex optical components. Manufacturer and distributor of optical / surface metrology equipment - Electronic Spherometers, Zeiss Surface Profilometers and STIL MicroMeasure non-contact surface measurement systems with resolution to 1 nm. Contact: Mike Bechtold, President, mike@optipro.com.

Opto Diode Corp.

#316

SPIE Corporate Member

750 Mitchell Rd, Newbury Park, CA, 91320
805/499-0335; fax 805/499-8108
sales@optodiode.com; www.optodiode.com

New Product: High Power LED arrays and Silicon Photodiodes with integrated amplifiers.

Opto Diode Corporation specializes in the design and manufacture of LEDs, IRLLEDs, LED arrays, Silicon Photodiodes, GaAlAs Photodiodes and opto-electronic assemblies. We offer a broad range of standard products primarily in metal packages for high reliability. We also specialize in providing custom solutions for your applications. Examples include line and point sources, custom geometry photodiodes, custom packages and high power LED and LED arrays. Contact: Ken Vensel, Regional Sales Manager, kvensel@optodiode.com; Russ Dahl, Director, Sales and Marketing, russdahl@optodiode.com.

Optonetic LLC

#1008

6901 TPC Dr Ste 500, Orlando, FL, 32822
407/857-4410; fax 407/857-4409
sales@optonetic.com; www.optonetic.com

OptoSigma Corp.

#737

2001 Deere Ave, Santa Ana, CA, 92705
949/851-5881; fax 949/851-5058
sales@optosigma.com; www.optosigma.com

Precision Optics, Optical Coatings, Ion-assist deposition, Opto-mechanics, Holders, mounts, posts, rails, bread-boards, plates, Manual and Motorized positioners, standard and metric, Optical and mechanical application support engineers, 3-D model drawings, catalog or custom, OEM production, right product, right price, right now. OptoSigma headquarters - Santa Ana, California, 949 851 5881. Contact: Brad Kaup, Southern Region Sales Manager, brad@optosigma.com; Dan Denison, Western Regional Sales Manager, dan@optosigma.com.

Optronic Laboratories, Inc.

#1007

4632 36th St, Orlando, FL, 32811
407/422-3171; fax 407/658-5412
info@olinet.com; www.olinet.com

New Product: HSi-300 Hyperspectral imaging System.

Contact: Alex Fong, Vice President, Sales and Marketing, afong@olinet.com; Alan Tirpak, Applications Engineer, atirpak@olinet.com.

OSRAM Opto Semiconductors

#222

SPIE Corporate Member

2650 San Tomas Expressway Ste 200, Santa Clara, CA, 95051
888/446-7726; fax 408/844-9350
www.osram-os.com

New Product: SMT Laser the world's smallest and first surface-mountable high-power laser for continuous wave mode.

OSRAM Opto Semiconductors, a leading supplier and manufacturer of solid-state optoelectronic products including HPL laser diodes, IR components and LEDs, will exhibit their latest laser diode products and IR components in booth 222. Learn about our new SMT laser technology, Cs mounts and microchannel cooled vertical stacked diode laser arrays, laser bars, pulsed laser diodes and various IR products. Contact: Rolf Kojima, Product Marketing Manager, rolf.kojima@osram-os.com; Rolf Weber, Senior IR Application Engineer, rolf.weber@osram-os.com.

OZ Optics Ltd.

#620

SPIE Corporate Member

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

Panavision Federal Systems, LLC

#1402

21300 Victory Blvd Ste 840, Woodland Hills, CA, 91367
818/316-2155; fax 818/316-1121
www.panavision.com

New Product: New Periscope for the Navy.

Designs and manufacturers custom electro optical devices, including, prisms, fixed focal length systems, zoom lenses, multi channel, IR, near IR and visible lenses and systems. Also designs and manufacturers custom CMOS imagers. Contact: Clive Towndrow, Director of Marketing, Clive_Towndrow@Panavision.com; Bob Bell, Bob_Bell@Panavision.com.

Paradigm Lasers, Inc.

#1218

SPIE Corporate Member

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

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

Paradigm Lasers, Inc. designs and develops advanced Solid-State Laser Systems (IR and UV), pump modules, laser power supplies, electronic tools for laser developers, Night Vision Illuminators and Night Vision Sensors including a Personal Protection Device that notifies you if you are being illuminated and an Illumination Direction Indicator that displays the direction of the illumination source. Contact: Judy Irwin, Vice President, judi@paradigmlasers.com; Tim Irwin, President, timi@paradigmlasers.com.

PerkinElmer Optoelectronics

#1405

35 Congress St, Salem, MA, 01970
978/224-4100; fax 978/745-0884
opto@perkinelmer.com; www.perkinelmer.com

PerkinElmer Optoelectronics is a global technology leader in digital imaging, specialty lighting, sensor and optical detection technologies and has been providing mission critical solutions to the defense and aerospace industries for over 50 years. All of our products, whether standard or designed to exact customer specifications, are engineered to meet stringent performance requirements and operate in extreme environments. Contact: Beth Haskel, beth.haskel@perkinelmer.com.

PhaseSpace, Inc.**#238**

1933 Davis St #294, San Leandro, CA, 94577
510/633-2864; fax 510/633-2865
direct@phasespace.com; www.phasespace.com

New Product: VISION Camera - 8MP High resolution tracking camera; IMPACT - Desktop Motion Capture System.

PhaseSpace, Inc. specializes in highly accurate, real-time motion capture solutions. With both active LED and markerless solutions, PhaseSpace provides real-time data for HMDs, VR simulations, robotics controls and other specialized projects. A Python API also allows for interfacing with custom projects. To find out more about PhaseSpace, visit us at www.phasespace.com. Contact: Tracy McSheery, Lead Engineer, tracy@phasespace.com; Milton Garcia, Sales Manager, milton@phasespace.com.

Phoenix Diamond Turning Ltd.**#933**

Glascoed Rd, St Asaph Denbighshire, United Kingdom, LL17 0LJ
44 1745 584484; fax 44 1745 584050
sales@nakedoptics.com; www.phoenix-dt.co.uk

New Product: Free-form diamond-turned optical components.

Manufacturer of IR optics and diamond-turned components with aspheric, free-form, diffractive and hybrid surfaces in IR materials, plastics and metals; optical design services; optical materials in finished and blank forms: molded and CNC-machined blanks of all optical materials. Contact: Caroline Gray, Director, c.gray@phoenix-dt.co.uk.

Phoenix Infrared**#1222**

3 Foundry St, Lowell, MA, 01852
978/458-8328; fax 978/458-8414
sales@phoenixinfrared.com; www.phoenixinfrared.com

New Product: CVD ZnSe Material, Generated Blanks, Optics.

Phoenix Infrared is a leading provider of IR materials and optics. Lead by a 35 year industry veteran, Phoenix Infrared has seen the tremendous evolution of the IR and CO₂ laser marketplace. Phoenix Infrared sells ZnSe, MS ZnS, Ge, GaAs, CaF₂, BaF₂ and other materials. We can provide generated parts and optics made from these materials. Contact: Stephen Allen, Vice President, Stephen.Allen@PhoenixInfrared.com.

Photo Sciences, Inc.**#1515**

2542 W 237th St, Torrance, CA, 90505
310/784-7460; fax 310/634-1574
www.photo-sciences.com

New Product: Advanced Patterning

Photo Sciences manufactures high quality Patterned Infrared Optics, Calibration Targets, Rifle Scope Reticles, Scene Generators and Diffractive Objects. Established in 1972, we are a LANL approved vendor. Contact: Roger Horstman, Advance Patterning Product Manager, rogerh@photo-sciences.com; Wayne Henry, Director of Sales, wayneh@photo-sciences.com.

Photon Engineering, LLC**#1119**

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

New Product: FRED 7.10 is the optical engineering software to solve sensor-related defense and security problems.

Photon Engineering, LLC is a consulting and software development firm based in Tucson, Arizona. Photon Engineering sells FRED, the premier proven optical engineering software to solve today's leading edge sensor-related defense and security problems. FRED is ideal for simulating thermal emission, thermal imaging, ghosting, stray light and narcissus effects in defense and surveillance systems. FRED uses a 3D virtual prototyping CAD environment to model virtually any type of optical system. Contact: Carolyn Johnson, Sales Manager, sales@photonengr.com.

Photon Gear, Inc.**#126**

245 David Pkwy, Ontario, NY, 14519
585/265-3360; fax 585/265-3364
sales@photongear.com; www.photongear.com

Photon Gear specializes in the design, assembly and characterization of precision optical systems. Custom assemblies are verified with interferometers between 1600 nm and 266 nm or MTF testing. Application areas include night vision, displays and simulators, goggles, laser communications, ultra accurate nulls and precision laser optics. We also provide contract optical engineering and design services as well as systems engineering support for custom software and optical hardware.

Photon Inc.**#2020**

6878 Santa Teresa Blvd, San Jose, CA, 95119-1205
408/226-1000; fax 408/226-1025
beam@photon-inc.com; www.photon-inc.com

Photon beam profilers measure light sources such as lasers, LDs, LEDs and optical fiber on several parameters. NanoScan slit profilers provide fast, precise and accurate optical alignment; FireWire BeamPro (CCD) and USBeamPro (CMOS) are our camera-based profilers. The ModeScan 1780 is a real-time M2 instrument for pulsed and CW lasers with 250-1100nm wavelengths and Far-Field Profilers characterize divergent sources. Photon offers NIST-traceable calibration on all profiling instruments. Contact: Derrick Peterman, Sales Engineer, dpeterman@photon-inc.com.

Photonic Cleaning Technologies**#1121**

SPIE Corporate Member
1895 Short Ln Bldg 1, Platteville, WI, 53818
608/467-5396; fax 608/467-5397
sales@photoniccleaning.com; www.photoniccleaning.com

New Product: Red Spray First Contact-Safe, easy application. Prevents recontamination, always mission-ready.

Photonic Cleaning Technologies manufactures First Contact Polymer products, the next generation of optics cleaning and protection materials. The only 'cleaning and protection system' in a bottle, apply First Contact by spraying, dipping or manually. Easy to use, environmentally friendly, safe and effective. We provide complete manual spray systems and brush application kits. Available worldwide from authorized distributors, see the Independent Distributors page on www.PhotonicCleaning.com. Contact: Philip Jackson, jacksonp@PhotonicCleaning.com.

Photonic Sense GmbH**#824**

Am Goldberg 3, Eisenach, Germany, 99817
49 3691 73180; fax 49 3691 731879
info@photonic-sense.com; www.photonic-sense.com

Photonic Sense is the foremost manufacturer of Germanium lenses, blanks, windows and mirrors. Please visit our booth and explore the exciting new possibilities of what only the future of our material can do for you. Think Photonic Sense. Think Germanium. Contact: Dawn Jennings, Sales & Marketing Manager, North America, dawn@photonic-sense.com.

Photonics Spectra**#817**

Berkshire Common, 2 South St, Pittsfield, MA, 01201-6109
413/499-0514; fax 413/442-3180
photonics@laurin.com; www.photonics.com

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: Rebecca Pontier, Regional Manager, advertising@photonicsgroup.com; Anne Fischer, Senior Editor, pseditorial@laurin.com.

Exhibitor Listing

Photonics.com/Photonics Directory #333

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Pittsfield, MA, 02101

413/499-0514; fax 413/442-3180

Directory@laurin.com; www.photonics.com

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Photo-Sonics, Inc./IMC #1526

820 S Mariposa St, Burbank, CA, 91506

818/842-2141; fax 818/842-2610

mestrada@photosonics.com; www.photosonics.com

Photron USA, Inc. #1020

SPIE Corporate Member

9520 Padgett St Ste 110, San Diego, CA, 92126-4446

858/684-3555; fax 858/684-3558

image@photron.com; www.photron.com

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

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

Physical Optics Corp. #2900

20600 Grammercy PI Bldg 100, Torrance, CA, 90501

310/320-3088; fax 310/320-5961

www.poc.com

Physical Optics Corporation is a "Small Systems Integrator" of advanced opto-electronic technology. POC's new and emerging technologies are: FAERITO® digital data video, audio, flight recorder; real-time 3D video display; IHC and HD video compression; OmniView 360° video monitoring system, LEXID™ hand held IED detection. OptiKey® Optical Authentication. The WPIC™ personal information carrier system for medical records and WEARNET™ wearable personal area network. Contact: Dave Silvestris, Director Business Development Army Programs, DSilvestris@poc.com.

Physics Today #922

One Physics Ellipse, College Park, MD, 20740-3843

301/209-3393; fax 301/209-0842

www.physicstoday.org

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Physimetrics, Inc. #1540

SPIE Corporate Member

5020 Old Ellis Point Ste 100, Roswell, GA, 30076

770/642-6858; fax 770/642-0160

www.physimetrics.com

Physimetrics, Inc. specializes in framegrabbers, analog cameras, digital cameras, image processing software, machine vision software, lighting and lenses. We also offer custom systems, integration, consultation and other related services. Our products service such applications as microscopy, security, law enforcement, aerospace, pulp and paper, textile, electronics, medical, R&D and many others. Contact: Ruben Uribe, President, ruben@physimetrics.com; Van Phillips, Sales Manager, vanp@physimetrics.com.

Phytron Inc. #1528

600 Blair park Rd Ste 220, Williston, VT, 05495

802/872-1600; fax 802/872-0311

info@phytron.com; www.phytron.com

Established in 1947, Phytron is a leading manufacturer of stepper motors and positioning systems for use in ambient as well as extreme environments such as vacuum, radiation, cryogenic and space. Our motor size range from 19 mm to 160 mm in diameter. Phytron enjoys the reputation for customer stepper motor solutions. Contact: Wahid Lahmadi, Sales Manager, wahid@phytron.com; Douglas Finan, Applications Engineer, doug@phytron.com.

PI (Physik Instrumente) LP #832

SPIE Corporate Member

16 Albert St, Auburn, MA, 01501

508/832-3456; fax 508/832-0506

info@pi-usa.us; www.pi-usa.us

Global leader in Nanopositioning Systems and Engineered Piezo Actuation Solutions for OEM and Research. Products: Hexapod 6D Alignment Systems; Piezo Nanopositioning Stages (Closed-Loop); Scanners for SPM, AFM, SNOM; Piezo Actuators; Ceramic Linear Motors, Piezo Drivers and Digital Controllers, Advanced Multiaxis Micropositioning Systems; Advanced Motion Controllers; Ultrafast Steering Mirrors/Active Optics; MicroMotion Robots for automated 3D to 6D photonics alignment; NanoAutomation Solutions. Contact: David Steinberg, Sales Director Western Region.

PixonImaging LLC #103

4930 Longford St, San Diego, CA, 92117-2156

619/227-2739; fax 858/408-1818

info@pixonimaging.com; www.pixonimaging.com

New Product: PixonImaging real-time video image processors provide stabilization, dehazing and color restoration.

PixonImaging develops leading-edge image processing solutions based on the patented Pixon Method. The powerful Pixon Method provides unparalleled increases in sensitivity and resolution. We offer software-based/real-time hardware solutions to long-distance imaging problems such as haze, blurring and atmospheric warping. Contact: Chiyoko Lord, Vice President Business Development, chiyoko.lord@pixonimaging.com; Skip Powers, Business Development, skip.powers@pixonimaging.com.



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.



CONFERENCE BAG INSERT SPONSOR

Pleora Technologies

#107

359 Terry Fox Dt Ste 230, Kanata, ON, Canada, K2K 2E7
613/270-0625; fax 613/270-1425
info@pleora.com; www.pleora.com

New Product: The iPORT PT1000-ST is a high-performance OEM board for adding GigE connectivity to any product.

Pleora Technologies is a leading supplier of Gigabit Ethernet connectivity solutions for military, medical, scientific and machine vision applications. Pleora's high-performance iPORT products stream imaging data and video between cameras and PCs in real-time over GigE networks. The iPORT portfolio supports a wide range of analog and digital formats and includes products for in-camera, OEM, end-user and custom applications. Many models comply with the AIA's GigE Vision standard. Contact: Rudi Rincker, Vice President of Sales, sales@pleora.com; Mats Lindeberg, Marketing Communications.

PLX, Inc.

#1400



40 W Jefryn Blvd, Deer Park, NY, 11729
631/586-4190; fax 631/586-4196
info@plxinc.com; www.plxinc.com

Poco Graphite, Inc.

#334



300 Old Greenwood Rd, Decatur, TX, 76234
940/627-2121; fax 940/393-8435
info@poco.com; www.poco.com

Leading manufacturer of silicon carbide mirrors and optical components for laser, sensor, surveillance and astronomy applications. The flexibility of POCO's SUPERSiC® Material System allows for the efficient manufacture of lightweight, complex geometries and structures. Components can then be finished with optional CVD SiC coating, silicon cladding and/or diamond turned and polished. Material of choice for advanced optical applications; including Beryllium replacement and high flux scenarios. Contact: Chris Duston, cduston@poco.com.

Polaris Electronics Corp.

#1434

630 S Rogers Rd, Olathe, KS, 66062
913/764-5210; fax 913/764-5045
www.polariselectronics.com

Hermetic sealing equipment including AC or CD projection welders, parallel seam sealers, parallel gap welders, spot welders, lid tackers, atmosphere chambers and vacuum bake out ovens. We also provide contract hermetic sealing and processing services for small electronic packages. Contact: Stan Mitchell, Sales/ Exhibits Manager, stan@polariselectronics.com; Cara McAdams, Sales, cara@polariselectronics.com.

Polaris Sensor Technologies, Inc.

#218

200 Westside Square Ste 320, Huntsville, AL, 35801
256/562-0087; fax 256/562-0088
www.polarissensor.com

New Product: Polarimeters measure the polarization state of light emitted or reflected from scenes.

Polaris applies electrooptical imaging technologies to discrimination, sensing, guidance and detection problems. Research and development efforts yield prototype 3-D displays, polarimeters, long wave IR to visible sensors, imaging and non imaging seekers, calibration and characterization services and instrumentation for all branches of the Armed Forces. Polaris provides support and innovation, performance modeling and prototype optical sensing systems to meet demanding customers' requirements. Contact: David Chenault, President, david.chenault@polarissensor.com.

PolarOnyx, Inc.

#2403



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

New Product: Tunable Repetition Rate and Pulse Width High Power Nanoseconds Fiber Laser.

PolarOnyx is a world leading company in high energy/power ultrashort and narrow linewidth fiber laser for Scientific, Defense and Industrial markets. The unique features are compactness, superior stability and maintenance free operation for applications of include material processing, micromachining, spectroscopy, microscopy and optical sensing. Wavelength ranges cover from VIS to IR. Contact: Jian Liu, President, jianliu@polaronyx.com, Lihmei Yang, Director, lihmeiyang@polaronyx.com.

SHOWCASE LITERATURE DISPLAY

Pollution Equipment News


#S-15

Rimbach Publishing Inc, 8650 Babcock Blvd,
Pittsburgh, PA, 15237
412/364-5366; fax 412/369-9720
info@rimbach.com; www.rimbach.com

Pollution Equipment News provides information on products and services offered in the industrial and municipal environmental abatement and control field. *Industrial Hygiene News* features products and services in the occupational safety, IAQ, industrial hygiene and emergency response industries. Contact: Raquel Rimbach.

Gifts

Visit the SPIE Marketplace for science and optics related gifts for the little (and not so little) ones at home.



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Exhibitor Listing

Polymer Optics, LLC

18019 N 25th Ave Unit 118, Santa Rosa, CA, 95407
707/573-5929; fax 707/573-5951
info@polyoptics.com; www.polyoptics.com

 #25

Polymicro Technologies, A Subsidiary of Molex Inc.



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

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

#1500

Power Technology, Inc.



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

New Product: Ask us about our newly formed division, the Photonic Component Group!

Power Technology, Inc. designs, manufactures and distributes laser diode products for OEM analytical, biomedical and industrial applications. Products include laser diode modules with wavelengths from 263 to 2330nm, temperature stabilized modules, lasers with beam circularization and CW, pulsed and modulated lasers. Contact: James Jackson, Sales Engineer, jjackson@powertechnology.com; Daren Ford, Sales Engineer, dford@powertechnology.com.

#1042

Precision Ferrites and Ceramics, Inc.

5432 Production Dr, Huntington Beach, CA, 92649
714/901-7622; fax 714/901-2008
sales@semiceramic.com; www.semiceramic.com

#2018

Precision Glass & Optics




3600 W Moore Ave, Santa Ana, CA, 92704
714/540-0126; fax 714/540-1482
info@pgo.com; www.pgo.com

New Product: New Product: PG&O now offers laser marking and waterjet cutting capabilities.

PG&O combines the high volume, low cost manufacturing of the commercial glass industry with the technical precision of optical and thin film coating. This single facility approach makes us uniquely qualified to satisfy today's optical component needs. We focus on both technical needs and the cost controls so vital to customer satisfaction. Our experts will work with your staff to make the transition from prototype to production both smooth and cost-effective. Contact: Greg Quinn, Sales, greg@pgo.com; DK, Sales, DK@pgo.com.

#1521

 = Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

Precision Optical

869 W 17th St, Costa Mesa, CA, 92627-4336
949/631-6800; fax 949/642-7501
sales@precisionoptical.com; www.precisionoptical.com

#217

New Product: PO Recd ISO 9001:2000 Management System Certified. New Equip Tecport 1200mm plasma assist vapor deposition system.

Manufacturer of laser-quality precision optical assemblies and components (VUV to IR) including prism, mirrors, windows, retroreflectors, filters, plate-type beamsplitters, alignment cubes, polarizing and nonpolarizing cube beamsplitters and coatings. Contact: Rod Randolph, President; Jim Mc Clure, Sales Engineer.

Precision Photonics Corp.

3180 Sterling Circle, Boulder, CO, 80301
303/444-9948; fax 303/444-9951
info@precisionphotonics.com; www.precisionphotonics.com

#212

New Product: High-energy polarizing beamsplitters for 266-1100nm.

At Precision Photonics, your success is our focus. Whether you need 1 or 10,000 units, you can count on us for high-energy optical components and state-of-the-art photonic instrumentation. Our manufacturing capabilities include epoxy-free optical bonding, ion-beam-sputtered (IBS) dielectric coatings, custom etalons and high-volume micro-optic assemblies. Our line of precision instruments includes <100-fs fiber lasers at 1560nm and servo controllers. Contact: Emily Kubacki, Director of Sales and Marketing, emily.kubacki@precisionphotonics.com; Joe Jordan, Business Development Manager, joe.jordan@precisionphotonics.com.

Precision Solutions (MBDA UK Ltd.)

Six Hills Way, Stevenage Herts, United Kingdom, SG1 2DA
44 1438 755767; fax 44 1438 755198
www.mbdaps.com

#939

Precision Solutions are pleased to present at this year's Defense & Security our INTERFIRE 3-5 mid-IR interferometer, as well as the capabilities of our optical and sensor teams, which include IR Hardware-in-the-Loop sensors and synthesizers and Enhanced Vision avionics landing aids. Contact: Robin Addison, Head of Sales, robin.addison@mbda.co.uk; Peter Gordge, Business Development Manager, peter.gordge@mbda.co.uk.

Precitech, Inc.



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

#608

AMETEK® Precitech, Inc., the leader in ultra-precision machine and metrology systems located in Keene, New Hampshire, United States of America. We have a complete line of ultra-precision single point and multi-axes diamond turning, grinding, grooving and milling machines for both rotationally symmetric and freeform applications in non-ferrous and ferrous materials. Our established list of brands include: the Nanoform® and Optoform® Lathes, Freeform® Systems, Planoform® Flycutter and a series of Drum Roll Lathes. Contact: Chris Stroshine, North America Sales manager, cstroshine@precitech.com; Kirk Rogers, North America Sales manager, krogers@precitech.com.

Don't Miss the NEW



Robotics+Unmanned Systems Pavilion

Located in Sago/Sabal Ballrooms

See p. 10 for pavilion details.

Princeton Instruments

#106

SPIE Corporate Member

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

New Product: Protected and Enhanced Silver Coatings for Durability and Longevity in the Harshest Environments.

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

Process Sensors Corp.

#1435

113 Cedar St Ste 1, Milford, MA, 01757
508/473-9901; fax 508/473-0715
apasqualone@processsensors.com; www.processsensors.com

New Product: Process Sensors Corporation will be introducing its high performance product line of portable and fixed process thermal imaging systems.

Process Sensors Corporation, PSC, has been manufacturing process sensing equipment since 1995. PSC has expanded its sensing line to include a specialty line of non-contact infrared thermometers, thermal imaging systems and portable thermal imaging cameras. PSC is very fortunate to have experienced application specialist who can provide unique infrared sensor solutions for a diverse temperature applications. PSC is a company totally dedicated to customer support.

Proxitronic Industries AG

#102

Robert-Bosch-Str 32B, Bensheim, Germany, 64625
49 6251 1703 70; fax 49 6251 1703 90
info@proxitronic.com; www.proxitronic.com

Proxitronic is the world-leading manufacturer of solar-blind image intensifiers and related systems. We specialize on customer-specific electrooptical imaging and photon counting systems and corresponding test equipment. Contact: Klaus Loos, Chief Executive Officer, klaus.loos@proxitronic.com; Paul Ecker, Business Development Manager, paul.ecker@proxitronic.com.

Pulse Instruments

#2200

1234 Francisco St, Torrance, CA, 90502
310/515-5330; fax 310/515-0068
sales@pulseinstruments.com; www.pulseinstruments.com

New Product: Multi-channel high speed data acquisition automated test solutions.

We have been supplying test equipment to the IR, CCD and CMOS imaging industry for over 30 years. We have recently updated our equipment to be cPCI based and added data acquisition and real time display capabilities. We can supply fully integrated electronic test solutions. Contact: Scott Williams, Director of Engineering, scott@pulseinstruments.com; Steven Kan, Vice President, Steven@pulseinstruments.com.

PVP Advanced EO Systems, Inc. #20

SPIE Corporate Member

14312 Franklin Ave, Tustin, CA, 92780
714/508-2740; fax 714/508-2136



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Qioptiq

#1318

SPIE Corporate Member

Glascoced Rd, St Asaph Denbighshire, United Kingdom, LL17 0LL
44 1745 588 002; fax 44 1745 584 258
sales@uk.qioptiq.com; www.qioptiq.com

Qioptiq is one of the major world players in optics with capabilities ranging from high-precision visible and infrared assemblies to advanced optical coatings and from machine vision and micro-optics to polymer components. We are able to offer our customers unrivalled access to optical technology. Qioptiq Defence Inc., located in Rochester New York, is the latest addition to the Group bringing Design, Development and Manufacturing expertise to the United States Defense and Aerospace sectors. Contact: Wallace Latimer, Managing Director, qioptiq.defence@ny.qioptiq.com; Alan Jensen, Communications Manager, alan.jensen@uk.qioptiq.com.

QmagiQ, LLC

#1211

1 Tara Blvd Ste 102, Nashua, NH, 03062
603/821-3092; fax 603/821-3094
www.qmagiq.com

QmagiQ is a leading manufacturer of infrared imaging components and hardware, from focal plane arrays based on Qwip technology, to sensor engines, to full fledged camera systems. Its detector arrays come in a variety of sizes (mid, large and very large format) compatible with a variety of readout integrated circuits and cover a choice of wavelengths. QmagiQ also offers two-color focal planes producing simultaneous and spatially registered images in two different spectral bands. Contact: Mani Sundaram, Chief Executive Officer/President, msundaram@qmagiq.com; Axel Reisinger, Chief Technical Officer.

QPC Lasers, Inc.

#1316

SPIE Corporate Member

15632 Roxford St, Sylmar, CA, 91342
818/986-0000; fax 818/833-1568
info@qpclasers.com; www.qpclasers.com

New Product: BrightLase® Ultra-500™ delivers up to 110W “cladding-free” power from 200µm fiber at 976nm.

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

Quality Thin Films, Inc.

#1432

141 Burbank Rd, Oldsmar, FL, 34677
813/855-1900; fax 813/855-5580
sales@qtf.com; www.qtf.com

New Product: New coating chamber provides plasma assisted shift-free coatings.

Quality Thin Films, Inc. is a full in-house optics, crystals and coating facility, providing optics, crystals and coatings from the UV to the IR. QTF has developed a new process for severe abrasion resistant coatings on many IR substrates, improving longevity and reliability. Contact: Karl George, Jr., Vice President.

Exhibitor Listing

Quantel USA - Big Sky Laser

 #33

SPIE Corporate Member

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

New Product: Compact rugged Nd:YAG and OPO laser systems. CW and QCW laser diode bar and arrays.

Since 1981, Quantel USA - Big Sky Laser has designed and built specialty pulsed solid-state laser systems for the following defense and security applications: target acquisition, range finding, target designation, collision avoidance, remote sensing, space sensors and secure communications. Combined experience in military and commercial laser design and manufacture enables COTS technology responsiveness and adherence to MIL-Spec qualification. Contact: Brad Butterfield, Sales Engineer, bbutterfield@quantelusa.com.

QuickSet International

#1141

3650 Woodhead Dr, Northbrook, IL, 60062-1895
847/498-0700; fax 847/498-3658
www.quickset.com

QuickSet International, a Moog Company, is the industry leader in rugged camera positioning systems. QuickSet's robust, high performance products support security and surveillance, for Homeland Security, other Federal, State and local law enforcement agencies and military departments. Many products are tailored to meet unique requirements.

QWIP Technologies Inc.

#518

499 Nibus St Ste D, Brea, CA, 92821
714/529-7947; fax 714/529-7946
sales@qwip.com; www.qwip.com

R. Mathews Optical Works, Inc.

#116

26280 Twelve Trees Ln NW, Poulsbo, WA, 98370
360/697-6160; fax 360/697-7417
bob@mathewsoptical.com; www.mathewsoptical.com

Manufacturer of custom precision aspheric lenses from all glass types from 10mm diameter to 265mm diameter. Contact us for your requirements in prototype and production quantities.

Rainbow Research Optics, Inc.

#320

4880 Ironton St Unit K, Denver, CO, 80239
303/371-3000; fax 303/371-1333
sales@rroptics.com; www.rainbowoptics.com

New Product: 45Deg Thin Film Polarizer; Double BBAR 3-5µm and 8-10.6µm.

Manufacturing and coating facility in Denver, CO. We offer high precision custom optics with competitive pricing and fast deliveries. Our optics range from 193nm to 16microns. Sizes range from 5mm to 17inch. Materials include: UV, VIS and IR materials. Prototypes to Production Quantities. ISO 9001:2000 ITAR Compliant Contact: Hollie Marinecz, Sales Manager, h.marinecz@rroptics.com; Eli Bruner, Sales Engineer, e.bruner@rroptics.com.

Raytheon Vision Systems

#1025

SPIE Corporate Member

75 Coromar Dr, Goleta, CA, 93117
805/562-4787
mdweinberg@raytheon.com; www.raytheon.com

New Product: New products include Uncooled FPAs, Large format (>1k x 1k) SWIR and MWIR camera engines and large format dual band camera engines.

Raytheon Vision Systems develops and produces state-of-the-art detection and imaging devices for applications across the optical spectrum from x-ray to visible to infrared to terahertz and millimeter wave regions. Our product line depth offers solutions for nearly every conceivable imaging challenge. Over 450,000 devices have been delivered to date, enabling advanced military, scientific and commercial sensing systems. Contact: Michael Gray, Business Development, mgray@raytheon.com; Leonard Chen, Business Development, lpchen@raytheon.com.

Research Electro-Optics, Inc.

#511

SPIE Corporate Member

5505 Airport Blvd, Boulder, CO, 80301
303/938-1960; fax 303/447-3279
sales@reoinc.com; www.reoinc.com

REO is a precision optics manufacturing and services company, focused on applications where optical coatings, components and assemblies are needed to enable system performance, durability and stability. REO is the recognized world leader in Ion Beam Sputtered thin film coatings and ultra-low loss optics and maintains a world class technical staff to rapidly serve our customers' needs for design and applications support. REO is an ISO9001:2000 certified financially stable small business. Contact: Mark Damery, Vice President and General Manager of Worldwide Sales, markd@reoinc.com; Ed Yousse, National Sales Manager, edy@reoinc.com.

Reynard Corp.

#2303

SPIE Corporate Member

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

New Product: Impedance matched custom Heated Windows for stabilizing environmental variances.

Reynard has over 35 years of experience in supplying IR optical components to Military and Aerospace markets. Many of these components require utilization of exotic materials: InAs, InP, InSb, CaF₂, CdTe, ZnSe, ZnS, PbS to name a few. Reynard has ongoing partnerships with major customers to do Research and Development in areas of thin film coatings, optical fabrication and unique photolithography processes to meet customer requirements. We offer turnkey development with full MIL-SPEC environmental testing and QC. Contact: Randy Reynard, Government Programs Manager, randy@reynardcorp.com; Beth Kinchyk, Sales Manager, beth@reynardcorp.com.

RICOR - Cryogenic & Vacuum Systems

#1327

Ein Harod Ihud, Israel, 18960
972 4 6530800; fax 972 4 6532424
marketing@ricor.com; www.ricor.com

New Product: K562S: Integral Stirling 0.2W Mini Microcooler; K527: Linear Split Stirling Low Power Mini Microcooler.

RICOR develops, manufactures and markets a wide range of advanced products and solutions. Ranging from Cryocoolers for Infrared, X-Ray and Gamma Detectors, Scientific Instrumentation and Vacuum Cryo Pumps to Wafer Storage Purge Systems for the Semiconductor Industry, Solutions for High Temperature Superconductivity Devices and Advanced Acoustic Noise and Vibration Control. Founded in 1967, RICOR has steadily advanced with a commitment to quality, innovation and customer focused solutions. Contact: Yoav Zur, Marketing Manager; Ramon Brody, Marketing and Sales Project Manager, r@ricor.com.

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Innovation and the Wealth of Nations, p. 6



Sir John Chisholm
Chairman of QinetiQ

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SPIE Connecting minds.
Advancing light.

Riegl USA, Inc.

#1102

7035 Grand National Dr Ste 100, Orlando, FL, 32819
407/248-9927
info@rieglusa.com; www.rieglusa.com

New Product: The Riegl LD321-3K full waveform distance meter with all digital signal processing and 3km range.

Riegl is the global leader in the innovation of LiDAR technology for range measurement. The Riegl LMS-Q560 Airborne Laser Scanner has full waveform digitization technology and is an advanced digital instrument with state of the art signal processing. The LMS-Q560 operates at operates at a laser pulse repetition frequency up to 240 kHz, 2 km range with accuracy within 20 mm. Riegl lead the industry with hybrid systems providing synergistic benefits to the users. Contact: Jim Van Rens, Vice-President; Sue Martin, Operations Manager, smartin@rieglusa.com.

Rochester Precision Optics LLC

#426

SPIE Corporate Member
850 John St, W. Henrietta, NY, 14586
585/292-5450; fax 585/292-5459
sales@rpoptics.com; www.rpoptics.com

New Product: Diamond turning infrared materials and Germanium broadband AR and hard DLC coatings.

Manufacturer and designer of precision molded glass aspherical lenses and optical assemblies for Defense, Imaging, Industrial and Medical industries. Vertically integrated manufacturing for prototype and high volume. The latest automated optical manufacturing, diamond turning, advanced thin film coating and precision machine centers based on over 25 years of development and production experience at Kodak Optical Imaging Systems. Visible to Infrared molded aspherics from 1mm to 60mm diameters. Contact: Edward Patton, Director Sales and Marketing, epatton@rpoptics.com; Matt Pembroke, Sales Manager, mpembroke@rpoptics.com.

Rockwell Collins

#819

SPIE Corporate Member
400 Collins Rd NE, M/S 124-302, Cedar Rapids, IA, 52498
319/295-1000; fax 319/295-4333
www.rockwellcollins.com

At Rockwell Collins, we are committed to providing the right information to the warfighter at the right time to keep them safe on the ground, in the air or at sea. With our extensive product and solutions offerings, we enable enhanced interoperability helping United States and coalition forces make informed, time-critical decisions. Contact: Ben Mall, Director, Optronics Marketing, bjmall@rockwellcollins.com; Chris Lawler, Senior Business Development Specialist, cjlawler@rockwellcollins.com.



GENERAL REFRESHMENT SPONSOR

Rocky Mountain Instrument Co.

#225

SPIE Corporate Member
106 Laser Dr, Lafayette, CO, 80026
303/664-5000; fax 303/664-5001
sales@rmico.com; www.rmico.com

New Product: RMI will be producing ZnSe this year!

From UV to Far IR, RMI is a leader in the field of optics and coatings. We manufacture Laser and Imaging optics for aerospace, military, medical, industrial and information processing applications. We have a complete environmental testing lab and are ISO 9001:2000 certified. Send your request to our technical sales and receive a response within 24 hours. Contact: Helen Arseneault, Account Manager, helen.arseneault@rmico.com; Heath Kirin, Account Manager, heath.k@rmico.com.

Exhibitor Listing

Rohm and Haas Advanced Materials #1309

185 New Boston St, Woburn, MA, 01801
781/933-9243; fax 781/933-5142
www.cvdmaterials.com

Rohm and Haas Advanced Materials supplies high quality infrared optical materials for military IR systems. We have pioneered the development and manufacture of CVD Zn-based optical materials such as Multispectral ZnS (Cleartran), Zinc Sulfide and Zinc Selenide. Rohm and Haas offers the best in class material solutions, as well as the fabrication capability to suit most design and format needs. Electrooptical windows, domes, imaging lenses and other components are all possible. Contact: Rosanna Gizzi, rgizzi@rohmmaas.com; Keith Waryold, kwaryold@rohmmaas.com.

RPC Photonics, Inc. #429

SPIE Corporate Member

330 Clay Rd, Rochester, NY, 14623
585/272-2840; fax 585/272-2845
info@rpcphotonics.com; www.rpcphotonics.com

RPC Photonics, Inc. manufactures precision micro-optical components - optical diffusers, beam shapers, microlens arrays, diffractive optics - for illumination, display, solid state-lighting, semiconductor, medical, military and space applications. Products can be made in fused silica, silicon, polymer replicas, IR materials, CaF₂ or injection-molded polymers. Complete solutions from design to manufacturing of unique low-volume components and high-volume replicated and injection-molded optics Contact: Rose Peet, Contracts Manager.

RPMC Lasers, Inc. #937

SPIE Corporate Member

203 Joseph St, O'Fallon, MO, 63366
636/272-7227; fax 636/272-3909
terry@rpmclasers.com; www.rpmclasers.com

RPMC offers high power multimode and single mode laser diodes from 622nm through >2300nm. We also offer collimated modules, high brightness and high power fiber coupled modules. RPMC also offers 500kHz picosecond micromachining lasers, custom nanosecond lasers from 213nm - 10µm and 2 and 5 nanosecond air cooled industrial lasers. Contact: Dean Micke, Vice President, dean@rpmclasers.com.



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RSoft Design Group #2016

SPIE Corporate Member

400 Executive Blvd Ste 100, Ossining, NY, 10562
914/923-2164; fax 914/923-2169
info@rsoftdesign.com; www.rsoftdesign.com

RSoft Design Group 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 award-winning design tools for optoelectronics components and subsystems.

Saint-Gobain Crystals #521

33 Powers St, Milford, NH, 03055
603/673-5831; fax 603/673-1256
www.photonic.saint-gobain.com

New Product: Saint-Gobain Crystals home of Alpine Research Optics precision OEM laser optics and subassemblies.

Saint-Gobain Crystals is the premier supplier of CLASS®, the largest area sapphire in the world for UV - VIS - MWIR windows. Available 225mm or 300mm wide up to 660mm long. Saint-Gobain Crystals is now home of Alpine Research Optics (ARO) offering precision OEM laser optics and subassemblies. Saint-Gobain Crystals offers optimum optical performance for the most demanding environments. Contact: Jeff Rioux, Market Manager - Aerospace and Defense, jeffrey.b.rioux@saint-gobain.com.

Salvador Imaging #321

5061 N 30th St, Colorado Springs, CO, 80919
719/598-6006; fax 719/598-6556
sales@salvadorimaging.com; www.salvadorimaging.com

New Product: 1280 x 960 EMCCD camera running at 50 fps for your low-light applications.

Salvador Imaging has earned a reputation for supplying low-noise, high-speed CCD, EMCCD and CMOS imaging systems to the most technically demanding customers. For over 15 years, our staff has provided innovative camera solutions for a variety of high-performance imaging applications ranging from color night vision to semiconductor, printed circuit-board and flat-panel inspection to medical imaging, laser-beam profiling and ballistic imaging. Standard products and custom designs are available. Contact: Kevin Heher, Director of Sales, kheher@salvadorimaging.com; David Gardner, President, dgardner@salvadorimaging.com.

Sandia National Laboratories #1340

1615 Eubank SE, Albuquerque, NM, 87125-1081
800/417-2634
www.sandia.gov

Santa Barbara Infrared, Inc. #503

30 S Calle Cesar Chavez, Santa Barbara, CA, 93103
805/965-3669; fax 805/963-3858
sales@sibir.com; www.sibir.com

New Product: The RIPS system captures and plays back a 512x512 video image at a 200Hz with 16 bit resolution.

SBIR designs and manufactures the most innovative IR and E-O test instrumentation available. Our products offer the highest level of performance and are designed for laboratory, production, depot and field testing environments. Products include: blackbody sources, visible sources, laser test sets, collimators, target projectors, spectral radiometer, test automation software, multi-spectral test sets, detector test sets and MIRAGE dynamic IR scene projectors. Contact: Steve White, Sales Manager, swhite@sibir.com; Greg Willis, Sales/Marketing, gwillis@sibir.com.

Sarnoff Corp. #526

201 Washington Rd, Princeton, NJ, 08543
609/734-2400
bd@sarnoff.com; www.sarnoff.com

Sarnoff's Embedded Vision capabilities offer increased control of video and imagery, generating clear and actionable information. Our advanced suite of algorithms produces practical results in real-time image processing and can be integrated into systems, boards, chips or a variety of software solutions. From video and information networking to object detection and tracking, our array of technologies provides a commanding advantage to any application." Contact: Stuart French, Business Development Director, spfrench@sarnoff.com.

Satisloh North America Inc. #838

SPIE Corporate Member

N116 W18111 Morse Dr, Germantown, WI, 53022
262/255-6001; fax 262/255-6002
lori.heller@satisloh.com; www.satisloh.com

New Product: SPM/S 60 360° multi-functional swivel head with 2-tool spindle technology and process flexibility.

The Satisloh line includes generators, polishers, laser centering and coating machines (with a PDS option) for all applications. A supplier of diamond wheels and pellets, spherometer rings and spare parts, we offer a complete range of consumable products including distribution of Mueller Diamonds, Desmopan and Desmoflex polishing pads and Borer Chemical ultrasonic cleaning products. Contact: Tom Godin, Sales, tom.godin@satisloh.com.

Sawyer Technical Materials, LLC**#1310**

35400 Lakeland Blvd, Eastlake, OH, 44095
440/951-8770; fax 440/951-1480
sales@sawyerllc.com; www.sawyerllc.com

New Product: Inclusion-free quartz for waveplate and 193nm laser applications now available up to 6" diameter.

Manufacturer of single crystal quartz for waveplates, polarizers, prisms and other custom optical components. Select material available for use with 193nm lasers. Experienced fabricator of quartz wafers for SAW and BAW applications. Lithium tantalate (LiTaO₃) and lithium niobate (LiNbO₃) also grown for commercial applications. Contact: Paul Hrich, Product Manager, ph@sawyerllc.com; Ann Marie Dages, Sales Representative, amd@sawyerllc.com.

SCD-SemiConductor Devices**#903**

PO Box 2250, Haifa, Israel, 31021
972 4 990 2535 ; fax 972 4 990 2627
marketing@scd.co.il; www.scd.co.il

New Product: BIRD 640, the large-format uncooled array, 25µm based on VOx technology.

Semi Conductor Devices (SCD) develops and manufactures cooled and uncooled infrared detectors and laser diodes. SCD offers a range of off-the-shelf and custom-designed detectors in various configurations. SCD's products are applied in IR seekers, thermal imagers, smart munitions, night navigation systems, laser rangefinders and laser designators. Among SCD's products: InSb two dimensional arrays 320x256 and 640x512, MCT 240x1, TDI 288x4 and 480x6, VOx Microbolometers 320x256 and 640x512. Contact: Fabian Schapiro, Marketing Manager, fabian@scd.co.il; Yirmi Katz, Vice President Marketing, yirmi_k@scd.co.il.

Schneider Optics, Inc.**#1337**

SPIE Corporate Member

285 Oser Ave, Hauppauge, NY, 11788-3609
631/761-5000; fax 631/761-5090
industrial@schneideroptics.com; www.schneideroptics.com

Design and Manufacturer of High Performance OEM Industrial lenses (Visible thru Near IR Corrected) in both manual and motorized irises. Schneider's ultra-high performance digital video lenses for: Machine Vision, Robotics Vision, Documentation Scanning, Parcel Scanning, Industrial Inspection, Gaging (Telecentric), Surveillance, Flat Panel Glass Inspection and Macro Inspection. Precision Industrial Filters for: Machine Vision, Industrial Inspection. Precision Electronic Shutter mechanisms. Contact: Jim Sullivan, Sales and Marketing Manager, jsullivan@schneideroptics.com; Stuart Singer, Vice President, Industrial Optics, ssinger@schneideroptics.com.

School of Electrical Engineering & Computer Science, UCF**#13**

PO Box 162362, Orlando, FL, 32816-2362
407/823-2750; fax 407/823-1488
harper@eecs.ucf.edu; www.eecs.ucf.edu

SCHOTT North America, Inc. - Defense**#811**

2451 Crystal Dr Ste 450, Arlington, VA, 22202
703/418-1409; fax 703/418-4762
defense@us.schott.com; www.us.schott.com/defense

For over 40 years, SCHOTT has delivered a wide range of leading edge glass and glass-ceramic solutions for defense and security applications. SCHOTT's optics, fiber optic, armor material and electronic packaging products are being used in the field today to keep soldiers safe and to improve their effectiveness. Contact: Katie MacIntyre, Manager Marketing and Public Relations, katie.macintyre@us.schott.com.

Scientific Solutions, Inc. (SSI)**#1125**

SPIE Corporate Member

55 Middlesex St Unit 210, North Chelmsford, MA, 01863-1561
978/251-4554; fax 978/251-8822
info@sci-sol.com; www.sci-sol.com

New Product: LCFP housing allows for polarization adjustment, free-space or fiber-optic use and digital control.

SSI specializes in the design and fabrication of both classic Air-Gap Fabry-Perot Interferometers and next-generation Liquid Crystal Fabry-Perot (LCFP) tunable optical filters. The award-winning LCFPs are available with stock or custom specifications and provide simple, rapid, solid-state wavelength selection with only 0-10V. SSI also provides a range of services including optical system and coating design, spectroscopic consulting and distribution of Avantes products to the Northeast. Contact: Michael Dorin, Applications Engineer/Sales and Marketing, dorin@sci-sol.com.

SELEX Sensors and Airborne Systems**#2201**

Christopher Martin Rd, Basildon Essex, United Kingdom, SS14 3EL
44 1268 883203; fax 44 1268 885232
janet.footer@selex-sas.com;

SELEX Sensors and Airborne Systems combine the full range of technologies to deliver integrated sensor solutions. Across air, land, sea and space SELEX Sensors and Airborne Systems offers both integrated sensor solutions and through capability management for defense systems and homeland security applications. SELEX S&AS is part of the Finmeccanica defense electronics sector and employs 7200 people in the United Kingdom, Italy and the United States. Contact: David Bishton, Head of Sales and Marketing, david.bishton@selex-sas.com; Sarah Marcham, Sales Manager, sarah.marcham@selex-sas.com.

Sensors Unlimited, Inc., part of Goodrich Corporation**#717**

SPIE Corporate Member

3490 US Route 1 Bldg 12, Princeton, NJ, 08540
609/524-0208; fax 609/520-0638
sui_sales@goodrich.com; www.sensorsinc.com

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

GENERAL REFRESHMENT SPONSOR

SEO Precision, Inc.**#438**

PO Box F, 101 S Main St, Crosby, ND, 58730
701/965-5653; fax 701/965-5666
coo@seoprecision.com; www.seoprecision.com

New Product: VirtuFSM KZ2 encompasses EMI protection, thermal management, radiation shielding and power reduction.

SEO Precision Inc. is an expert in electro-optical technologies and provides hardware solutions for all markets. SEO's VirtuFSM products deliver high bandwidth, broad range of motion and minimal power consumption. A higher level of accuracy and control over competitors' beam steering systems, with negligible space requirements delivers a beam steering product easily adaptable to customers' technical requirements. Contact: Esther Oehlke, Chief Operating Officer, esther@seoprecision.com; Bruce Fagerland, Chief Executive Officer, bruce@seoprecision.com



= **Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms**

Exhibitor Listing

SESO

#221

Pole ActivitÃ(c)s Aix-les Milles, 305 Rue Louis Armand, Aix En Provence, France, 13792

33 4 42 16 85 00; fax 33 4 42 16 85 85

info@seso.com; www.seso.com

SESO is a French company (SME type, 70 people, more than 30% engineers and technicians) involved in design (optical + mechanical) and manufacturing of customized optical components as well as complete integrated optomechanical-optoelectronic-optronic systems for applications in Space, Astronomy, Industry, X-Rays mirrors and Military optics. Contact: Denis Fappani, Commercial Engineer, fappani@seso.com; Jean-Jacques Ferme, Assistant General Manager, jffseso@wanadoo.fr.

Shanghai Optics

#1523

SPIE Corporate Member

148 Main St, Metuchen, NJ, 08840

732/321-6915; fax 732/875-0298

sales@shanghai-optics.com; www.shanghai-optics.com

New Product: CaF₂, MgF₂, ZnSe, Silicon and Ge optics and blanks for IR and UV applications.

Shanghai Optics is a full service manufacturer of high precision optical flats, lenses, beamsplitters, light pipes, telecom filters, precision laser optics and filters for digital imaging, aspheric surfaces, plastic optics, miniature optics and excimer laser optics. Materials include: fused silica, BK7, crystal quartz, sapphire, CaF₂, MgF, GaAs, Germanium, Zinc Selenide, Zinc Sulfide, Silicon and more. Contact: Joanna Lee, Vice President of Sales; Brad Lewis, Director of Sales, blewis@shanghai-optics.com.

Sheamann Laser Inc.

#1407

SPIE Corporate Member

140 Locke Dr, Marlborough, MA, 01752

508/970-0600; fax 508/970-0610

sales@sheamann.com; www.sheamann.com

Sheamann Laser Inc. manufactures high-power, high-brightness fiber-coupled laser modules in small form factor packages. Sheamann began with their cornerstone product; the SheauPac - a 2 pin laser module. However they have expanded their product line to include a number of innovative configurable laser packages such as the SheauPac Plus (up to 20 W) and the PowerPac (up to 50 W). Options include visible beam and internal thermistor. All products are available at wavelengths 780 nm to 1850 nm.

Snake Creek Lasers, LLC

#101

1 Technology Dr, Hallstead, PA, 18822

570/879-4992; fax 570/879-0912

www.snakecreeklasers.com

New Product: Extended-Temperature-Range options for our MiniGreen Series-world's highest power-density laser.

Snake Creek Lasers a world leader in the manufacture of miniature solid-state lasers with wavelengths of 1064nm, 532nm and 473nm. Our products include our MicroGreen™ laser the world's smallest DPSS green laser, which produces up to 30mW of output power and the MiniGreen™ laser, the highest density commercial DPSS green laser, which produces greater than 200mW of output power. Our lasers are suitable for alignment, biofluorescence, laser displays and illumination applications. Contact: Sten Tornegard, Marketing Manager, STornegard@snakecreeklasers.com; Ed Marra, Marketing Specialist, EMarra@snakecreeklasers.com.

SOFRADIR

#1227

43-47 rue Camille Pelletan, Chatenay-Malabry, France, F-92290
33 1 41 13 45 30; fax 33 1 46 61 58 84

www.sofradir.com

New Product: JUPITER: 1280x1024 MCT MW 15µm; SIRIUS: 640x512 QWIP LW 20µm.

SOFRADIR offers a full range of high performance (cooled) IR detectors MCT and QWIP, off-the-shelf and custom-designed detectors. Turnover 150M\$(2007). Applications: Thermal imagers, seekers, MWS and EVS, IRST, surveillance, spectrometry, hyper spectral and space (European leader). Products 288x4 LW, 480x6 LW, 320x256 MW and LW and also 288x384 MW and LW, 640x512 MW and LW, 1280x1024 MW, 1000x256 visible to SW, dual band staring arrays. Success: Space and mass production of 15µm pitch IDCCA. Contact: Marc Larive, Marketing Manager, marc.larive@sofradir.com.

Solid State Cooling Systems

#1401

20 Pleasant View Rd, New York, NY, 12569

845/635-5500; fax 845/635-8081

kanderson@sscooling.com; www.sscooling.com

Since 1994, SSSCS has manufactured solid state 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 drone lasers, analytical labs, SEM's, cool jackets and portable cooling. Contact: Mark Logan, Vice President of Sales, mlogan@sscooling.com; Steve Huchro, East Coast Sales Manager, shuchro@sscooling.com.

Solid State Scientific Corp.

#301

27-2 Wright Rd, Hollis, NH, 03049

603/598-1194; fax 603/598-1197

www.solidstatescientific.com

Solid State Scientific Corporation designs, develops, and manufactures spectral-temporal sensors and high-throughput hyperspectral imaging systems from the visible through the long-wave infrared, including real time miniature multi-spectral imagers on display at our booth number 301. As a leader in spectral sensing technologies, we combine knowledge, phenomenology, hardware and software engineering acumen to create innovative and comprehensive spectral sensors from concept to prototype to production, and from source to data product to analysis.

Space Electronics LLC

#1204

81 Fuller Way, Berlin, CT, 06037

860/829-0001; fax 860/829-0005

sales@space-electronics.com; www.space-electronics.com

New Product: Our Gimbalance now provides dynamic and static balance solutions for gimbaled sensors.

Space Electronics is the world's leading manufacturer of aerospace balancing instrumentation. For nearly 50 years, we have maintained our strong focus on products and services of high accuracy and reliability. Our inventions include the force restoration concept of CG measurement, the inverted torsion pendulum method of measuring MOI, the spherical gas bearing spin balance machine with true two-plane measurement and the Gimbal Balance machine. Contact: Eric Grandjacques, Vice President, Sales and Marketing, egrandjacques@space-electronics.com; Paul Kennedy, Executive Vice President, pkennedy@space-electronics.com.

Special Optics, Inc.

#121

SPIE Corporate Member

315 Richard Mine Rd, Wharton, NJ, 07885
973/366-7289; fax 973/366-7407
sales@specialoptics.com; www.specialoptics.com

New Product: 100 mm Large Output Beam Expander and 1-4X Motorized Variable Beam Expander.

Special Optics effectively designs, develops and manufactures Custom, OEM and Catalog diffraction-limited optical assemblies including Beam Expanders, Scanning and Imaging Lenses and Polarization optics for applications such as vision correction, military reconnaissance, semiconductor inspection and laser engraving. Contact: Steven Morales, Sales Manager; Brian Weinberg, Director of Sales and Marketing, bweinberg@specialoptics.com.

Spectral Systems

#2401

35 Corporate Park Dr., Hopewell Junction, NY, 12533
845/896-2200; fax 845/896-2203
info@spectral-systems.com; www.spectral-systems.com

New Product: FTIR Beamsplitters. Ge lens diamond turning. High volume window production. Coating Service.

Spectral Systems based in mid-state New York, employs 50 people consisting of 80% optical technicians. Engineering staff including coating designers with 30 plus years experience are on site. Producing nearly 200K optical components per year, including lenses, prisms, precision flats and intricate geometry. Nearly 40% of the product lines include sub-assembly. Contact: Carlos Guajardo, Sales Manager, cguajardo@spectral-systems.com; Frank Wesley, Engineering Manager, fwesley@spectral-systems.com.

Spectroscopy Magazine

#1525

Bldg F 1st Fl 485 Route 1 South, Iselin, NJ, 08830
732/596-0276; fax 732/596-0003
www.spectroscopyonline.com

Spectroscopy, with an audited circulation of 24,300, is the only publication dedicated exclusively to the spectroscopic sciences, providing peer-reviewed technical and applications-oriented information to the largest audited circulation of influential spectroscopists in the United States. Contact: Jim Colford, Sales Representative, jcolford@advanstar.com; Ed Fantuzzi, Publisher, efantuzzi@advanstar.com.

Spectrum Detector Inc.

#643

5825 Jean Road Center, Lake Oswego, OR, 97035
503/697-1870; fax 503/697-0633
ruths@spectrumdetector.com; www.spectrumdetector.com

New Product: Thermoelectrically stabilized Pyroelectric Radiometric Detector, spectrally flat response 0.2 to 14.

Design and manufacture Broadband Pyroelectric Hybrid Detectors, Analog and Digital Radiometers, Optical Power Meters, Laser Energy Meters, Optical and Thermal TRAP Detectors and THz sensors. Products are used to measure power from pW to W, energy fJ to J over a broad spectrum from 0.1 μm to 3000 μm . All products include NIST traceable calibration. See many new products at the SPIE Defense and Security Show. Contact: Don Dooley, President, dond@spectrumdetector.com.



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.

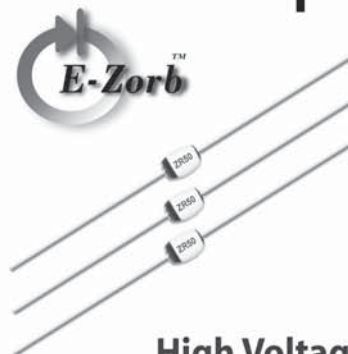
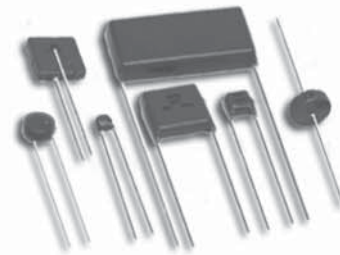
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Exhibitor Listing

Spectrum Thin Films Inc.

#424

SPIE Corporate Member

135 Marcus Blvd, Hauppauge, NY, 11788
631/589-3502; fax 631/589-3514
info@spectrumthinfilms.com; www.spectrumthinfilms.com

New Product: Hydrophobic Coating, a water repellent coating for 300nm to near IR, can be applied to most glasses.

Manufacturer of high quality optics and optical coatings. Our line of optical coatings ranges from simple cost effective coatings to complex State of the Art. Spectrum has many decades of experience. Our coatings range from .193 to 20 Microns. In-house testing includes UV-VIS-IR Spectrophotometers and Envio chambers. Contact: Wayne Griffith, General Manager, wayne@spectrumthinfilms.com; Harry Sudwischer, Technical Specialist, Harry@spectrumthinfilms.com.

SphereOptics

#1524

SPIE Corporate Member

One Horse Shoe Pind Ln, Concord, NH, 03301
603/715-3000; fax 603/225-3089
sphereoptics@sphereoptics.com; www.sphereoptics.com

New Product: TX Tungsten Halogen Xenon Uniform Sources.

SphereOptics designs, produces and sells standard and custom radiometric and photometric products for the LED, lighting and optics industries. We offer a broad line of integrating spheres, light measurement systems and instruments, uniform light sources and diffuse reflectance materials. We specialize in custom design and production services to provide integrated solutions for our customers'. Contact: Chris Durell, Vice President Sales, cdurell@sphereoptics.com; Sid Rane, Eastern Regional Sales Manager, srane@sphereoptics.com.

SPIE Industry Resources

 #1B

PO Box 10, Bellingham, WA, 98227
360/676-3290; fax 360/647-1445
courtenep@spie.org; http://spie.org

SPIE provides valuable resources to industry that support your marketing, R&D, training and recruiting efforts. For example, exhibitions, advertising and sponsorships increase visibility of your organization and help you educate the market about your offerings. Access to scientific and engineering information published in the SPIE Digital Library and on the SPIE Newsroom help your R&D team to discover the innovations and breakthroughs that lead to successful new products. Leadership in this fast-evolving, knowledge-driven environment requires continuous learning and education of technical staff to retain your competitive advantage, making SPIE In-Company Training invaluable. And when growth drives demand for new skilled employees, the SPIEWorks job site is the place to find the specialized talent you want to hire.

Spire Semiconductor, LLC

#524

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

New Product: II-VI materials for specialty applications. GaAs Solar Concentrator Cells.

Spire Semiconductor (formerly Bandwidth) is a pure play foundry operation specializing in III-V and II-VI specialty materials. Our large capacity production and custom designed research reactors allow us to fully address large production volumes as well as unique and demanding research requirements. In addition we have a state of the art Fabrication facility capable of fabrication to the chip level for GaAs, InP, Lithium Niobate, Silicon, Quartz, Glass and Alumina. Contact: Paul Lamarche, Product Manager, plamarche@bandwidthsemi.com.

Stellar Industries Corp.

#934

50 Howe Ave, Millbury, MA, 01527
508/865-1668; fax 508/865-5016
sales@stellarind.com; www.stellarind.com

New Product: Ceramic Copper Submounts to replace Copper Tungsten (Cu-W) heatsinks for performance and lower cost.

Stellar offers high performance, high power Copper on Ceramic for Laser Submounts and for RF Microelectronic hybrids. Stellar also offers vapor deposited AuSn for precision mounting and a complete line of custom ceramic machining and metallization services. Contact: John Snook, Vice President, snooky@stellarind.com; Barbara Corley, Administration Assistant, barbarac@stellarind.com.

StellarNet, Inc.

#1207

SPIE Corporate Member

14390 Carlson Cir, Tampa, FL, 33626
813/855-8687; fax 813/855-0394
contactus@stellanet.us; www.stellanet.us

New Product: Super Range Spectrometers for UV-VIS and NIR (0.2-2.3µm).

StellarNet makes extremely ruggedized UV-VIS and NIR Spectrometers and SpectroRadiometers that measure light for lab and field applications.

Since 1995 StellarNet has been shipping portable instrumentation worldwide with high performance at a surprisingly "low cost". The free SpectraWiz software makes measurements a snap and also includes customizable programs for LabView and VBA-Excel. Contact: Ryan Flaherty, Principal Scientist, ryan@stellanet.us; Will Pierce, Chief Scientist, wPierce@StellarNet.us.

StingRay Optics, LLC

#1311

310 Marlboro St, Keene, NH, 03431
603/358-5577; fax 603/358-5579
info@stingrayoptics.com; www.stingrayoptics.com

New Product: 75-150-300mm LWIR F/2 motorized lens assembly available in dual, triple or zoom configurations.

Specializing in custom optical design, product development and prototyping services, StingRay delivers exceptional performance and superior service with an emphasis on meeting project schedules and budgetary constraints. A combined 75 years experience in optical and opto-mechanical design, metrology, optical fabrication and testing knowledge has enabled our engineers to identify, develop and deliver solutions that meet our customer's needs and offer a competitive edge in the imaging market place Contact: Jennifer Myers, Sales and Marketing Manager, jmyers@stingrayoptics.com; Christopher Alexay, President & Chief Optical Designer, calexay@stingrayoptics.com.

Sunpower, Inc.

#2101

182 Mill St, Pickerington, OH, 45701
740/594-2221
www.sunpower.com

Surface Optics Corp.

#907

11555 Rancho Bernardo Rd, San Diego, CA, 92127-1441
858/675-7404; fax 858/675-2028
lwh@surfaceoptics.com; www.surfaceoptics.com



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Swift Engineering

1141-A Via Callejon, San Clemente, CA, 92673
949/492-6608; fax 949/366-8249
info@swiftengineering.com;

 #16

System Control Technologies

3390 Viso Ct, Santa Clara, CA, 95054
408/988-0400; fax 408/988-0903
danielc@systemcontroltechnologies.com; www.
systemcontroltechnologies.com

#1423

Sydor Optics, Inc.

31 Jet View Dr, Rochester, NY, 14624
585/271-7300; fax 585/271-7309
sales@sydor.com; www.sydor.com

#428

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, glass wafers, wedges and windows. Contact: James Sydor, President; Michael Naselaris, General Manager.

SHOWCASE LITERATURE DISPLAY

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325 Chestnut St Ste 800, Philadelphia, PA, 19106
800/354-1420
julie.sikora@taylorandfrancis.com; www.taylorandfrancis.com

#S-1

Syntec Optics

 SPIE Corporate Member

7100 Junction Rd, Pavilion, NY, 14525
585/768-2513; fax 585/768-6099
info@syntecoptics.com; www.syntecoptics.com

#417

Hybrid solutions that push the polymer envelope. Syntec Optics is the largest independent custom manufacturer of precision plastic optics in the United States. Capabilities consist of optical and mechanical design, including optics that combine polymer and glass; optical and opaque mold building; including fixture tooling; single-point diamond turning, including HRDTm for high refraction, high thermal optics and also plano polishing. Fully integrated custom metrology and assembly services. Contact: Paul Tolley, Vice President/General Manager, ptolley@syntecoptics.com.

tec5USA, Inc.

 SPIE Corporate Member

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

#1313

New Product: HandySpec Field - Hand-held dual-channel spectrometer for irradiance and reflection measurements.

High-quality products for spectroscopy, light sources, light guides, immersion probes, spectrometer modules and 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 supports. Custom designed components and systems, detector array electronics, CCD electronics, spectrometer, light guides and spectrometer systems. Contact: Gert Noll, General Manager, gert.noll@tec5usa.com; Arek Betlej, Technical Sales Manager, arek.betlej@tec5usa.com.

Left image: Courtesy of Georgia Tech. Photo, Gary Meek. Center image: Courtesy of National Institute of Standards and Technology.



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Univ. of Wales Institute, Cardiff
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Exhibitor Listing

Technodiamant USA Inc.

#227

200 Valley Rd Ste 305, Mt. Arlington, NJ, 07856
973/770-7220; fax 973/770-7225
info@technodiamant.com; www.technodiamant.com

New Product: Nanowaviness diamond turning tools.

Technodiamant produces quality diamond tools for machining plastics, aluminum, brass and crystal materials. All of our equipment for producing these tools is housed in a new vibration-free facility in The Netherlands. We routinely provide diamond tools with waviness <0.1 microns and can achieve much better on smaller radii. Custom diffractive tools are also offered. Diamond ATR lenses and optical windows can also be produced. Ask about a no obligation trial tool! Contact: David Slaperud, Sales Manager, dave@technodiamant.com; Ronald deVries, International Sales Manager, ronald@technodiamant.nl.

Tecomet/Precision Technologies

#1301

115 Eames St, Wilmington, MA, 01887
978/642-2400; fax 978/658-4334
sales.tecomet@viasyshc.com; www.tecomet.com/pt

Tecomet Precision Technologies has unparalleled expertise in metals processing and the ability to solve challenging manufacturing problems. Precision Machining, Vacuum Brazing, Laser Weld 4 Axis, E Beam Weld 3, Axis, EDM 4 Axis, Net shape forging, Lathe-up to 8 Axis, Milling-up to 5 Axis, Cellular Machining, Photo Chemical Machining 3D. Critical applications: Propulsion, Traveling wave tubes, Pneumatic Controls, High precision assemblies. Contact: David Joaquin, Engineering Manager, david.joaquin@viasyshc.com; Gary Gallup, Director of Manufacturing, gary.gallup@viasyshc.com.

Tecport Optics, Inc.

#1009

6901 TPC Dr Ste 450, Orlando, FL, 32822
407/855-1212; fax 407/855-1213
sales@tecportoptics.com; www.tecportoptics.com

Tectivity, Inc.

#104

3099 Tall Timbers, Milford, MI, 48380
248/676-9797; fax 248/676-9796
info@tectivity.com; www.tectivity.com

Teledyne Imaging Sensors

#317

5212 Verdugo Way, Camarillo, CA, 91362
805/373-4545; fax 805/373-4775
www.teledyne-si.com

Teledyne Imaging Sensors (TIS) provides high performance infrared and visible sensors, visible CMOS detectors and sensor subsystems for; civil space, ground based astronomy, persistent surveillance and tactical applications. TIS' key customers include; NASA programs such as JWST, HST, MRO and OCO and United States Army "third generation" 2-Color IR tactical imaging systems (to be fielded later this decade). TIS also has developed and is manufacturing laser eye protection spectacles for military pilots. Contact: Bob Koegle, rkoegle@teledyne.com; Bill Weissbard, weissbard@teledyne.com.

Teledyne Judson Technologies

#733

Formerly Judson Technologies LLC

SPIE Corporate Member

221 Commerce Dr, Montgomeryville, PA, 18936-9641
215/368-6900; fax 215/362-6107
1information@judtech.com; www.judsontechnologies.com

New Product: Judson introduces its IRInsight SW320 camera core.

Judson Technologies is a world leading manufacturer of infrared sensors from 1 to 26 micron spectrum for military, space and commercial markets. InGaAs, InSb and HgCdTe focal plane arrays are available in addition to the InGaAs camera core. Judson's IR products are used in surveillance, law enforcement and security, search and rescue, laser range finding & position sensing and chemical and biological detection. We offer supplementary electronics, optics, Peltier cooling and cryo-cooled packages. Contact: George Gasparian, Sales/Applications /Engineer, ggasparian@judsontechnologies.com; Mark Sediva, Sales Engineer, msediva@judsontechnologies.com.

Teledyne Microelectronic Technologies

 #24

12964 Panama St, Los Angeles, CA, 90066
310/577-3882; fax 310/574-2045
microelectronics@teledyne.com; www.teledynemicro.com

Engineering light for better products. Teledyne Microelectronics specializes in optical coupling of high efficiency devices for the Mil/Aero markets. Teledyne's Lighting Group is an industry leader in designing and manufacturing high efficiency/high reliability LED illumination devices. Teledyne's Optoelectronics group has over 20 years experience in optical receivers/transmitters and transceivers, featuring unique fiber optic coupling and lensing techniques for high data rate applications. Contact: Shannon Giddens, Business Development Manager, sgiddens@teledyne.com; Harry Kellzi, Director, Business Development, hkellzi@teledyne.com.

Teledyne Scientific Company

#2502

1049 Camino Dos Dios, Thousand Oaks, CA, 91360
805/373-4545
www.teledyne-si.com

Teledyne Scientific & Imaging (TS&I) showcases a novel polarization imaging device, based on its proprietary liquid crystal technologies, which can operate at video rates and low power for the first time. TS&I, formerly known as Rockwell Scientific Company, has been innovating solutions for defense and aerospace industry for the past 45 years. Presently, TS&I has world-class capabilities in high speed electronics, imaging sensors, information sciences, materials technologies and optics. Contact: Tallis Chang, tchang@teledyne.com; Bruce Winker, bwinker@teledyne.com.

Telops Inc.

#928

SPIE Corporate Member

100 - 2600 ave St-Jean-Baptiste, Quebec, QC, Canada, G2E 6J5
418/864-7808; fax 418/864-7843
contact@telops.com; www.telops.com

Telops specializes in the design and production of sophisticated optoelectronic systems for the defense, aerospace and telecommunications industries. It markets a complete line of advanced burn-in, lifetest and characterization stations for manufacturers of optronic devices. Contact: Vincent Farley, Business Development Manager, vincent.farley@telops.com; Philippe Lagueux, Business Development Manager, philippe.lagueux@telops.com.

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Teraxion Inc.

2716 Einstein, Quebec, QC, Canada, G1P 4S8
418/658-9500; fax 418/658-9595
info@teraxion.com; www.teraxion.com

TeraXion designs and manufactures high performance OEM photonics components and modules for applications in the Defense market. PureSpectrum™ specialized semiconductor laser modules enable state-of-the-art, high precision remote sensing applications. ClearSpectrum™ dispersion compensation devices are perfectly suited for high reliability and reconfigurable optical communication systems. PowerSpectrum™ fiber laser components offer designers a complete line of standard and customized devices. Contact: Ghislain Lafrance, Vice president Defense and Aerospace, glafrence@teraxion.com; Christine Simard, Manager, csimard@teraxion.com.

#1323

The University of Florida

300 MAE B, Gainesville, FL, 32611
352/392-9479
dga@cimar.mae.ufl.edu; www.ufl.edu

The DARPA Grand Challenge was widely recognized as the largest and most cutting-edge robotics event in the world. In 2005, the University of Florida designed and built the NaviGATOR and competed as a finalist in the 132 mile unmanned race across the Mojave desert. The NaviGator's sensor suit consisted of an inertial navigation system from GE Aviation coupled with a NavCom subscription service GPS. For sensing its environment, the NaviGator used 3 SICK lasers and 1 Bluefox video camera. The 2007 DARPA Urban Challenge was a much harder problem and included roadway navigation with traffic, passing parked and moving vehicles, negotiating various types of intersections, and parking in an unstructured area. For this challenge the team built a completely new robotic vehicle based on a Toyota Highlander Hybrid. The new Urban NaviGator boast 8 laser scanners, 4 of which are actuated, and 5 video cameras as well as 3 GPS units and an inertial navigation system. Processing of the sensed data was achieved via 12 dual core computers.

 **#12**

Tessera North America

SPIE Corporate Member

9815 David Taylor Dr, Charlotte, NC, 28262
704/887-3100; fax 704/887-3101
charlotte@tessera.com; www.tessera.com

#517

Tessera, Inc.

SPIE Corporate Member

3099 Orchard Dr, San Jose, CA, 95134
408/952-4359; fax 408/894-0710
www.tessera.com

Tessera develops technology that meets the demand for smaller, faster, feature-rich electronic products. The company offers industry-leading optics capabilities including diffractive, refractive and wafer-level solutions; its innovative micro-optic products are used in a variety of highly-specialized applications including photonics, photolithography, telecommunications, aerospace/defense, vision and data storage. Contact: Daryl Larsen, Director, Marketing Communications, dlarsen@tessera.com; Maya Rao, Marketing Assistant.

#517

Thermoteknix Systems Ltd.

Teknix House, 2 Pembroke Ave, Waterbeach Cambridge, United Kingdom, CB5 9QR
44 1223 204 000; fax 44 1223 204 010
sales@thermoteknix.com; www.thermoteknix.com

#1111

New Product: Thermoteknix MIRICLE 110K-25 Micron Thermal Camera and Ultra-Fast 240Hz MIRICLE 640FF Thermal Camera.

Thermoteknix MIRICLE thermal imaging cameras, cores and engines are available in 384x288 or 640x480 resolution versions and range from hermetically sealed space qualified units, lightweight UAV, shutterless models, plus new 384x288 25 Micron and ultra-fast 240Hz cameras. Supported by Thermoteknix integral signal processing and image enhancement with flexible configurations, MIRICLE cameras provide a self-contained solution in a miniature package. Contact: Alistair Brown, Product Manager - Imaging, a.brown@thermoteknix.com; Dick Ludwig, Sales Manager - United States of America, d.ludwig@thermoteknix.com.

Texas Infrared

2105 W Cardinal Dr, Beaumont, TX, 77705
409/861-0788; fax 409/866-7229
texasinfrared@aol.com; www.infraredcamerasinc.com

#1105

New Product: ToughCam thermal imager offers outstanding image quality and radiometric temperature measurement.

Texas Infrared (Infrared Cameras Inc.) is a leading manufacturer of thermal imaging and infrared camera systems. Our mission is to provide customers with high quality thermal imaging solutions that meet and exceed the needs of their particular application. Through consistent and ongoing research ICI is achieving increasing recognition for their ingenuity and creative solutions to the challenges of non-contact temperature measurement. Contact: Michael Strahan, Vice President of Sales and Marketing, michael@infraredcamerasinc.com; Gary Strahan, President, garys@infraredcamerasinc.com.

Thin Film Technology

153 Industrial Way, Buellton, CA, 93427
805/688-4949; fax 805/688-8487
thomas_ives@beminc.com; www.thinfilmttechnology.com

#642

New Product: Long Wave Infrared coatings and assemblies for Night Vision Applications.

A provider of custom thin film coatings, precision optical coatings and thin film hybrid circuits & interconnects. Industry leading provider of long and mid-wave coatings for night vision optics, including Anti-reflective, long wave pass and complex filter coatings. Fully integrated facilities for manufacturing optical sub-assemblies and focal array package windows. Long known for innovation, quality and customer service, we strive for excellence in providing value to our customers. Contact: Michael Zasowski, Product Manager, Michael_Zasowski@beminc.com; Tom Ives, Director of Sales and Marketing.

Thales

SPIE Corporate Member

40 G Commerce Way, Totowa, NJ, 07511
973/812-9000; fax 973/812-9049
www.thalesgroup.com

#1303

Thales is represented by 3 divisions. Thales Angenieux is a supplier of compact and lightweight NV devices such as hand-held uncooled IR cameras, NV binocular goggles and monocular devices. Thales Cryogenics expertise lies in the field of miniature cryocoolers, offering a complete range of cooling solutions. Thales Optronics provides a complete optronics product and services portfolio for air, land and sea-based applications.



= Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

Exhibitor Listing

Thorlabs, Inc.

#228

SPIE Corporate Member

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

New Product: The family of user-friendly T-Cube apt™ electronic controllers can be operated in various ways.

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

TNO Defense, Security and Safety

#1306

Oude Waalsdorperweg 63, Den Haag, The Netherlands, 2597 AK
31 70 374 00 00
www.tno.nl

Toptica Photonics, Inc.

#127

SPIE Corporate Member

1286 Blossom Dr, Victor, NY, 14564
413/562-5406; fax 413/562-5408
todd.hamann@toptica-usa.com; www.toptica-usa.com

New Product: Highest power and performance for industrial and scientific lasers.

TOPTICA is the world leader in diode laser and femto-fiber technology for industrial and scientific markets. The capability also extends into optical data storage test and reference technology. TOPTICA offers the widest range of single mode tunable light in the 205 to 3000 nm spectral region with various accessories to measure, characterize, stabilize and analyze light. Contact: Mark Tolbert, President and Chief Executive Officer; Michael Holmes, Director Scientific Laser Sales, sales@toptica-usa.com.

Tower Optical Corp.

#2800

3600 S Congress Ave Unit J, Boynton Beach, FL, 33498
561/740-2525; fax 561/740-2518
sales@toweroptical.com; www.toweroptical.com

New Product: Optical Flats to 200mm in BK7 or Fused Silica, 4" Transmission Flat, Large right angle prisms.

Tower Optical manufactures zero order, multi order, true zero and Achromatic waveplates. In addition, lenses, interference filters, mirrors, prisms, Beamsplitters, Windows, Optical flats and 473nm, 532nm and 1064 DPSS Lasers in various powers. Contact: Mel Kantor, President, mkantor@toweroptical.com; Ken Weinberger, Sales Engineer, kweinberger@toweroptical.com.

ULIS

#610

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: The new detector, 384x288 / 25µm is well adapted for civilian low cost applications.

Created in June 202, ULIS is a subsidiary of SOFRADIR and CEA (French Atomic Energy Agency). Its mission is to develop and produce uncooled infrared detectors intended for use in the market for low cost infrared equipments. The technology 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 and driver vision enhancement. Contact: Dominique Bonnisseau, Sales Director, d.bonnisseau@ulis-ir.com; Jean-Luc Tissot, Technical Director, jl.tissot@ulis-ir.com.



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Umicore Optical Materials

#711

PO Box 737, Quapaw, OK, 74363
918/376-1650; fax 918/673-2121
optics@umicore.com; www.umicore.com

Umicore offers infrared materials, thin-film optical coatings and components for thermal imaging and sensing applications. Umicore supplies high quality germanium blanks and optics. Umicore's innovation is GASIR®, a range of infrared chalcogenide glasses that are molded into finished optics with complex geometry, including asphero-diffractive surfaces. GASIR® 1 and GASIR® 3 molded optics are developed for high-volume, low-cost applications. Umicore's optical-mechanical design competencies enable the manufacture of custom and standard infrared lens assemblies. World-wide locations.

Univ. of Central Florida

#1011

PO Box 162700, Orlando, FL, 32816
407/823-6986; fax 407/823-6810
info@creol.ucf.edu; www.creol.ucf.edu

Univ. of Massachusetts/Lowell - Submillimeter-Wave Technology Lab

#300

175 Cabot St, Lowell, MA, 01854
978/934-1300; fax 978/452-3333
robert_giles@uml.edu;

Universal Photonics, Inc.

#1312

SPIE Corporate Member

495 W John St, Hicksville, NY, 11801-1014
516/935-4000; fax 516/935-4144
info@universalphotonics.com; www.universalphotonics.com

New Product: LP Unalon - microcellular foam elastomer designed for high precision polishing.

Source for advanced surfacing products and technology. Lapping/polishing consumables for glass, infrared materials, plastics, semiconductors, electro, laser and fiber optics. Including polish pads, diamond slurries, sub-angstrom polishes, ultra pure alumina, colloidal silica, thermoplastic adhesives, cleaners, compounds, lapping film, precision pitch, lens bonding material, Advantage & DAMA machinery, HKS centrifuges, MegaVap Liquid Elimination System, double-sided, polishing/lapping machines. Contact: Jerry Hammock, Technical Sales, jerryh@universalphotonics.com; Justin Mahanna, Technical Sales, justinm@universalphotonics.com.

Ural Optical and Mechanical Plant

#110

SPIE Corporate Member

33 B Vostochnaya St, Ekaterinburg, Russia, 620100
7 343 229 85 54; fax 7 343 254 81 22
vts@uomz.com; http://www.uomz.ru

New Product: Small size gyro stabilized optical observation systems.

FSUE PA "UOMZ" is one of the leading Russian enterprises engaged in development and manufacturing of opto-mechanical and optronic equipment for both military and civil applications. The production lines of PA "UOMZ" are development and manufacturing of: day-and-night gyro stabilized optronic sight systems to be used in aircraft and helicopters; systems providing day-and-night environment control; high precision surveying instrument.



= Robotics+Unmanned Systems Pavilion Exhibitor in the Sabal/Sago Ballrooms

Vacuum Process Technology, Inc.

#837

70 Industrial Park Rd, Plymouth, MA, 02360
508/732-7200; fax 508/732-0317
sales@vptec.com; www.vptec.com

Vectronix Inc.

#541

801 Sycolin Rd SE Ste 206, Leesburg, VA, 20175
703/777-3900; fax 703/777-3940
www.vectronix.com

Vectronix combines high performance visible, IR and I2 optical assemblies with its core technology of range finding, angle measurement and north finding to produce a variety of target location and observation systems. The core technology in these systems can also provide capability to the system integrator through the OEM module product line. OEM modules add functionality to a variety of fielded target location, fire control and robotic systems. Contact: Sharon Gibson, Office Manager, sharon.gibson@vectronix.us; Phil Hassell, Application Engineer, phil.hassell@vectronix.us.

Vincent Associates

#427

803 Linden Ave, Rochester, NY, 14625
585/385-5930; fax 585/385-6004
vincentassociates@uniblitz.com; www.uniblitz.com

New Product: The NS Series are compact, durable, reliable and offered in 15, 25 and 45mm apertures. Patent Pending.

Vincent Associates is the manufacturer of UNIBLITZ & UNIBLITZ II electronically programmed shutters and shutter drive systems, with standard devices (including the LS, VS and the CS series of high reliability shutter systems), the XRS(for X-ray use) series and the new N-CAS series. Standard aperture sizes ranging from 1mm - 90mm with many types of microscope and video mounting systems offered for specific shutter mounting applications. Custom configurations and OEM systems are also available. Contact: Stephen Pasquarella, Senior Vice President, spsq@uniblitz.com; Adam Lamb, Vice President Manufacturing, alamb@uniblitz.com.

Vision Systems Design

#1300

98 Spit Brook Rd, Nashua, NH, 03062-5737
603/891-0123; fax 603/891-0587
www.vision-systems.com

VISION SYSTEMS DESIGN is a global media source serving engineers and engineering managers at OEMs, system integrators and end-user organizations that design, develop, manufacture and integrate components and subsystems for vision and imaging-based systems. VSD provides global coverage of vision and imaging components, subsystems and technologies and how they are integrated into leading-edge machine vision/industrial, medical, scientific and military/aerospace applications.

Vision4ce LLC

#1535

550 M Ritchie Hwy Ste 135, Severna Park, MD, 21146
410/336-4272; fax 410/510-1170
brad.zell@vision4ce.com;

VLOC, Subsidiary of II-VI, Inc. #21

7826 Photonics Dr, New Port Richey, FL, 34655
727/375-8562; fax 727/375-5300
info@vloc.com; http://www.vloc.com

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. Need waveplates shipped within 24 hours? Check out our online store front at www.thewaveplatestore.com.

Voltage Multipliers Inc.

#1433

8711 W Roosevelt, Visalia, CA, 93291
559/651-1402; fax 559/651-0740
mfulley@voltagemultipliers.com; www.voltagemultipliers.com

Wafer Technology Ltd.

#742

34 Maryland Rd, Tongwell Milton Keynes,
United Kingdom, MK15 8HJ
44 1908 210444; fax 44 1908 210443
sales@wafertech.co.uk; www.wafertech.co.uk

New Product: New Larger Diameter Antimonides: 4" InSb and 4" GaSb for focal plane applications.

Wafer Technology is the leading supplier of single crystal InSb and GaSb wafers and a wide range of other materials including InP, InAs and GaAs. The company's United Kingdom manufacturing facility (ISO 9001/14001 certified) delivers product to a world-wide base of customers active in advanced infrared markets. Local sales and technical support is offered from offices in Europe, USA and Asia. Please contact us to discuss your requirements for advanced infrared materials. Contact: Mark Furlong, Sales and Marketing Director, mfurlong@wafertech.co.uk.

Wamco, Inc.

#1422

11555 Coley River Cir, Fountain Valley, CA, 92708
714/545-5560; fax 714/545-6093
info@wamcoinc.com; www.wamcoinc.com

New Product: NVIS LCD display filters used for laptops and handheld devices - compatible w/ resistive touch screens.

Wamco designs, develops and produces glass and polymeric optical filter solutions for Night Vision Compatibility, contrast enhancement, EMI shielding and filtering in the visible and near IR (380 to 1100nm). We offer customized solutions to overcome the most challenging applications as well as standard in-stock products to meet urgent delivery demands. Stop by our booth to discuss your visible, near IR and NVG optical filter applications and to see our latest advances in polymeric filters. Contact: Pete Frazier, Technical Sales, pfrazier@wamcoinc.com; Claude Gaudette, Vice President of Engineering, cgwamco@wamcoinc.com.

WaveFront Sciences, Inc.

#942

14820 Central Ave SE, Albuquerque, NM, 87123
505/275-4747; fax 505/275-4749
info@wavefrontsciences.com; www.wavefrontsciences.com

New Product: WaveFront Sciences introduces the tiny, new microCLAS wavefront sensor ideal for laptop set-up.

WaveFront Sciences provides full-service design and manufacturing capabilities for micro-optics and wavefront sensor based instrumentation for lasers, optics, optometry, ophthalmology and semiconductor metrology. The CLAS-2D system offers a complete line of products for the analysis of visible, infra-red, continuous and pulsed lasers. CLAS-2D also presents advantages to most optical test requirements traditionally addressed by interferometry. Contact: Harry Skolnik, Sales Representative, hskolnik@hotmail.com; Craig Armstead, Product Manager, craig.armstead@amo-inc.com.

SHOWCASE LITERATURE DISPLAY**Webcom Communications**

#S-9

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780/528-3770; fax 780/528-3771
softpub@infowebcom.com; www.infowebcom.com

Webcom Communications Corp. is an integrated media company serving advanced technology industries worldwide through its magazines, events, eNewsletters, online media, directories, buyers guides, data products and marketing services. To learn more visit: http://www.infowebcom.com/. Contact: Jessi Carter, jessic@infowebcom.com.

Exhibitor Listing

Westchester Technologies, Inc.

#2002

SPIE Corporate Member

8 John Walsh Blvd, Peekskill, NY, 10566
914/736-1034; fax 914/736-1217
www.microoptics.com

New Product: Micro Optical Components and Systems.

Manufacture of Micro Optical Components for: Medical, Analytical, Fiber Optics, Tele-Communications, Graphic Arts, Microscopes, Bar Code Readers and a wide range of applications. We supply some of the world's leading technology companies. Contact: Roger Prah, President, rprahlwti@optonline.net; Jim Greenwood, Chief Operating Officer, jgreenwoodwti@optonline.net.

Western Photonics Technology

#105

SPIE Corporate Member

626 S Sierra Vista Ave Ste 101, Alhambra, CA, 91801
626/289-1686; fax 626/289-1048
info@wpptec.com; www.wpptec.com

New Product: Mini optics, lens, cylindrical lens, Borescope, IR borescope.

Western Photonics Technology develops and manufactures industrial borescopes, mini optics and lens, optics (spherical and aspherical lenses, mirrors, windows, cylindrical lenses, prisms, filters, polarizers, nonlinear crystals and fiber pigtails etc.), micro-lenses, light fibers and image fibers, CCD and CMOS cameras and adaptors, holographic systems and products, and laser(CTH:YAG etc.) and optical systems. Contact: Roger, North American Manager; Alison, alison@wpptec.com.

Wideband Systems, Inc.

#919

2409 Linden Ln, Silver Spring, MD, 20910-1230
949/420-0474; fax 949/420-0476
mike@wideband-sys.com; www.wideband-sys.com

Wideband Systems designs and manufactures sophisticated Wideband recording instruments for the aerospace, communications and intelligence marketplace. Our versatile disk and solid-state recording systems are designed with analog and digital instrumentation interfaces and flexible control features. Each recorder employs its own internal mux, eliminating the need for an external mux. Typical applications include telemetry, RADAR, video, voice and data comm, imagery, COMINT, SIGINT and ELINT. Contact: Mike Fitter, Vice President Sales and Marketing.

Wordingham Technologies

#125

SPIE Corporate Member

580 Fisher Station Dr, Victor, NY, 14564
585/924-2294; fax 585/924-7660
sales@wordingham.com; www.wordingham.com

wzw-optics AG

#2500

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



Free Popcorn

Popcorn carts will be located in Exhibition Hall, back of 1500 Aisle and will be open Tuesday and Wednesday from 11:00 am to 3:00 pm; Thursday from 11:00 am to 2:00 pm.

XeniCs

#1127

SPIE Corporate Member

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

Z&Z Optoelectronic Tech. Co., Ltd.

#1325

SPIE Corporate Member

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

New Product: High precision infrared optical components, Germanium blanks, laser application components.

Z & Z Optoelectronic Tech Co., Ltd is a professional manufacturer focusing on high precision optical components, established in Chengdu Hi-Tech Zone, Sichuan Province, P. R. China in 1998. Z & Z has 3 facilities with 125 employees. Contact: Kevin Zhang, President, zz_optic@vip.163.com.

ZEMAX Development Corp.

#117

3001 112th Ave NE Ste 202, Bellevue, WA, 98004-8017
425/822-3406; fax 425/889-4687
sales@zemax.com; www.zemax.com

ZEMAX Development Corporation publishes the ZEMAX® Optical Design Program which can be used for both sequential and non-sequential ray tracing. Our software can be used to conceptualize, design, optimize, analyze, tolerance and document virtually any optical system. ZEMAX® also goes beyond the traditional limits of ray tracing software by allowing users to use diffraction calculations to propagate any arbitrary beam through an optical system. Contact: Sales Department; Technical Support, support@zemax.com.

Zhejiang Dali Technology Co., Ltd.

#2010

SPIE Corporate Member

639 Binkang Rd, Hangzhou, China, 310053
86 571 866 95003; fax 86 571 866 95600
sales@dali-tech.com; www.dali-tech.com

New Product: DL-700E with all temperature measurements in real time.

Zhejiang DALI technology Co., Ltd, one of the most important IR and DVR research and manufacture institute in security industry, is consisted of 2 R&D centers and over 30,000 square meters produce basement. More than 360 of DALI people are working on the technical issues. Its products are sold to more than 30 countries all over the world. DALI enhances the competitiveness through constantly produce innovation to provide service perfection. Contact: Wei Xiangjun, International Trade Department Manager, weixiangjun@dali-tech.com; Wu Yingkai, International Trade Department Sales and Planning, wuyingkai@dali-tech.com.

Zygo Corp.

#508

SPIE Corporate Member

Laurel Brook Rd, Middlefield, CT, 06455-0448
860/347-8506; fax 860/347-3968
inquire@zygo.com; www.zygo.com

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**Early Bird Registration is now available online.
Save up to \$140 when you register by March 17.**

For more information about the conference program, including paper listings, tutorial descriptions, hotel information, and more, visit the SAMPE '08 webpage at www.sampe.org, or contact Priscilla at Priscilla@sampe.org or +1.626.331.0616, ext. 610.



Exhibition Opportunity at SAMPE '08!

Expand your business and make new contacts at the SAMPE '08 Exhibition, taking place May 20-22 at the Long Beach Convention Center in Long Beach, CA.

SAMPE '08 offers exhibitors a low cost opportunity to reach thousands of qualified buyers. In fact, 75% of SAMPE Exhibition attendees play a direct role in purchasing decisions within their organization. With qualified customers awaiting you at SAMPE '08, you cannot afford to miss this opportunity.

Exhibit space is selling out quickly. There is still time to get a prime space before the exhibit hall sells out.

Reserve Your Space Today!

Call Karen Chapman at +1.626.331.0616 ext. 616 or Karen@sampe.org now!

For more information about exhibiting at SAMPE '08, including our brochure, floor plan and a list of other exhibiting companies, visit www.sampe.org today!

Exhibit Hall Fees

100-300 Sq. Ft.	\$23.00 per Sq. Ft.
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700-900 Sq. Ft.	\$21.00 per Sq. Ft.
1,000+ Sq. Ft.	\$20.00 per Sq. Ft.
<i>Corner Premium \$230.00 per corner (corner premium applies to in-line or island)</i>	

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SPIE Defense+Security

Abrasives, Chemicals & Process Materials

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Technodiamant USA Inc.
Universal Photonics, Inc.

Astronomy

4D Technology Corp
Acktar Ltd.
Andover Corp.
Axsys Motion Control Products
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Corning Inc.
Deposition Sciences, Inc
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Lumenera Corp.
Model Optics Inc.
Ontar Corp.
Photonic Cleaning Technologies
Princeton Instruments
Scientific Solutions, Inc. (SSI)
SESO
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Teledyne Imaging Sensors
Universal Photonics, Inc.
Vincent Associates

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Adimec
APHOTIK
Axsys Technologies IR Systems
BAE Systems
Bodkin Design & Engineering, LLC
Boulder Imaging Inc.
Brownell Ltd.
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CBC (AMERICA) Corp.
Cedip Infrared Systems
Coastal Optical Systems, Inc.
Cohu, Inc.
Components Express, Inc.

Devitech ApS
e2v
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Electro-Optical Imaging, Inc.
Electrophysics Corp.
Epix, Inc.
Fast-Vision, LLC
Firebird Technologies Inc.
FLIR Systems, Inc. - Commercial Vision Systems
FLIR Systems, Inc. - Americas Thermography Division
Fotofab
Hamamatsu Corp.
Hitachi Kokusai Electric America, Ltd.
illunis LLC
Imperx, Inc.
Intevac, Inc.
JAI, Inc.
Janos Technology, Inc.
Jazz Semiconductor
Judson Technologies, LLC
L-3 Communications Cincinnati Electronics
Lockheed Martin - Santa Barbara Focalplane
Lumenera Corp.
NEC Corp.
NEC San'ei Instruments, Ltd.
Night Vision Systems
NoblePeak Vision Corp.
North Dakota Department of Commerce
Obzerv Technologies Inc.
Ophir-Spiricon Inc.
Panavision Federal Systems, LLC
PerkinElmer Optoelectronics
Photon Inc.
Photonic Cleaning Technologies
Photon USA, Inc.
Physical Optics Corp.
Physimetrics, Inc.
Pleora Technologies
Princeton Instruments
Process Sensors Corp.
Proxitronic Industries AG
QmagiQ, LLC
RedShift Systems
RICOR - Cryogenic & Vacuum Systems
Salvador Imaging
Sarnoff Corp.

SELEX Sensors and Airborne Systems
Sensors Unlimited, Inc., part of Goodrich Corporation
Solid State Cooling Systems
Teledyne Imaging Sensors
Tessera, Inc.
Texas Infrared
Thales
Thermoteknix Systems Ltd.
Vincent Associates
WaveFront Sciences, Inc.
Western Photonics Technology

Chemical & Biological Sensing

Andover Corp.
Applied Signal Technology, Inc.
Avo Photonics, Inc.
Bookham
ChemImage Corp.
D&P Instruments
EMCORE Corp.
Fibertek Inc.
Georgia Tech Research Institute
Headwall Photonics, Inc.
High Tech Photonics
ITT Visual Information Solutions
JMAR Technologies, Inc.
Pollution Equipment News
Scientific Solutions, Inc. (SSI)
Telops Inc.
Wafer Technology Ltd.

Clinical, Chemical and Biological Instrumentation

ChemImage Corp.
EMCORE Corp.
IMT Masken und Teilungen AG
Michigan Aerospace Corp.
Power Technology, Inc.
Western Photonics Technology

Communications

AB WIBE
Atlantic Positioning Systems
Bookham
CALCULEX, Inc.
Directed Perception, Inc.
EM4 Defense
EMCORE Corp.
Fiberguide Industries, Inc.
GE Fanuc Intelligent Platforms
Harris Corp.
Jazz Semiconductor
L-3 Communications Nova Engineering
Rockwell Collins
RSoft Design Group

SELEX Sensors and Airborne Systems
Tecomet/Precision Technologies
Teledyne Scientific Company
Tessera, Inc.

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Brownell Ltd.
Cantronic Sytems, Inc.
CMC Electronics Inc.
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Corning Inc.
Dontech Inc.
ELCAN Optical Technologies
Fosta-Tek Optics
GE Fanuc Intelligent Platforms
HOLOEYE Systems, Inc.
Intense Ltd.
Intevac, Inc.
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JDSU
Kopin Corp.
Kopp Glass, Inc.
Lumus Ltd.
MEMS Optical Inc.
OASYS Technology, LLC
Opto Diode Corp.
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Axsys Motion Control Products
BAE Systems
Bodkin Design & Engineering, LLC



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 ChemImage Corp.
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 Devitech ApS
 DRS Technologies, Inc.,
 Reconnaissance, Surveillance
 & Target Acquisition (RSTA)
 Segment
 Electro-Optical Imaging, Inc.
 Electrophysics Corp.
 Eltek USA Inc.
 Epix, Inc.
 ET Precision Optics Inc.
 Fast-Vision, LLC
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 GE Fanuc Intelligent Platforms
 Goodrich Corporation
 Harris Corp.
 Hitachi Kokusai Electric America,
 Ltd.
 HOLOEYE Systems, Inc.
 illunis LLC
 Imperx, Inc.
 Infotonics Technology Center
 Infrared Systems Development
 Corp
 IRnova AB
 ITT Visual Information Solutions
 L-3 Communications
 L-3 Communications Cincinnati
 Electronics
 L-3 Communications InfraredVision
 Technology Corp.
 L-3 Communications Nova
 Engineering
 Labsphere, Inc.
 Laser Optics, a PPGI company
 Micromechatronics, Inc.
 MicroSecurity Lab Inc.
 NAVAIR IBST
 NEC San'ei Instruments, Ltd.
 New Scale Technologies, Inc.
 Night Vision Systems
 NoblePeak Vision Corp.
 OPTICS 1, Inc.
 Panavision Federal Systems, LLC
 Phoenix Diamond Turning Ltd.
 Physimetrix, Inc.
 PixonImaging LLC
 Power Technology, Inc.
 Proxitron Industries AG
 QmagiQ, LLC
 RedShift Systems
 RICOR - Cryogenic & Vacuum
 Systems
 Salvador Imaging
 Schneider Optics, Inc.
 SEO Precision, Inc.

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 Space Electronics LLC
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 Thales
 Ural Optical and Mechanical Plant
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 Fast-Vision, LLC
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 Corp
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 PixonImaging LLC
 Pulse Instruments
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 Clear Align
 CMC Electronics Inc.
 Corning Inc.
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 Deposition Sciences, Inc
 Drytech Inc.
 Dyna Technologies, Inc.
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 Evaporated Coatings, Inc.
 Fiberguide Industries, Inc.
 Fibertek Inc.
 Fotofab
 High Energy Laser Joint Technology
 Office
 Intense Ltd.
 IRphotonics
 Isorad Ltd.
 Jazz Semiconductor
 JDSU

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 Lattice Electro Optics, Inc.
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 MEMS Optical Inc.
 Micro Laser Systems, Inc.
 MRC a PPGI company
 Nufern
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 Pleora Technologies
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 PolarOnyx, Inc.
 Polymicro Technologies, A
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 Precitech, Inc.
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 - Defense
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 tec5USA, Inc.
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 Teraxion Inc.
 Thorlabs, Inc.
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 CBC (AMERICA) Corp.
 Computer Optics Inc.
 CVI Melles Griot - Albuquerque
 Denton Vacuum, LLC
 Deposition Sciences, Inc
 Dontech Inc.
 Edmund Optics
 Epner Technology, Inc.
 Exotic Electro-Optics
 Fairfield Crystal Technology, LLC
 Fosta-Tek Optics
 Fresnel Technologies Inc.
 General Optics, Inc.
 Glass Fab Inc.
 Goodrich Corporation
 High Energy Laser Joint Technology
 Office
 II-VI Infrared
 IMT Masken und Teilungen AG
 Infinite Optics Inc.
 Isuzu Glass Inc.
 Janos Technology, Inc.
 JENOPTIK Laser, Optik, Systeme
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 Kigre, Inc.

Kopp Glass, Inc.
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 Laser Optics, a PPGI company
 Laser Research Optics
 Lattice Electro Optics, Inc.
 Liebmann Optical Company, Inc.
 LightPath Technologies, Inc.
 Max Levy Autograph, Inc.
 Meller Optics, Inc.
 Metavac
 Michigan Aerospace Corp.
 Model Optics Inc.
 Naked Optics Corp.
 Newport Corp.
 OASYS Technology, LLC
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 Phoenix Diamond Turning Ltd.
 Photonic Cleaning Technologies
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 Princeton Instruments
 Qioptiq
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 Reynard Corp.
 Rochester Precision Optics LLC
 Rocky Mountain Instrument Co.
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 Schneider Optics, Inc.
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 Sydor Optics, Inc.
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 Thin Film Technology
 Thorlabs, Inc.
 Umicore Optical Materials
 Wamco, Inc.

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 Adimec
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 Applied Signal Technology, Inc.
 Arete Associates - Optical Systems
 Research
 Autonosys Inc.
 Axsys Technologies Imaging
 Systems
 Boulder Imaging Inc.
 Brownell Ltd.
 Cedip Infrared Systems
 ChemImage Corp.
 CI Systems, Inc.
 Clear Align
 Components Express, Inc.
 Directed Perception, Inc.
 Edmund Optics
 Electro-Optical Imaging, Inc.



Product Index



Electrophysics Corp.
Eltek USA Inc.
Epix, Inc.
Fast-Vision, LLC
FLIR Systems, Inc. - Commercial Vision Systems
FLIR Systems, Inc. - Americas Thermography Division
GE Fanuc Intelligent Platforms
General Optics, Inc.
Georgia Tech Research Institute
Hamamatsu Corp.
Harris Corp.
Hitachi Kokusai Electric America, Ltd.
IRnova AB
Irvine Sensors Corporation
ITT Visual Information Solutions
JAI, Inc.
Jazz Semiconductor
L-3 Communications
L-3 Communications Cincinnati Electronics
Lumenera Corp.
Michigan Aerospace Corp.
NAVAIR IBST
NorPix, Inc.
Optronic Laboratories, Inc.
PhaseSpace, Inc.
Photron USA, Inc.
Physical Optics Corp.
Physimetrics, Inc.
PI (Physik Instrumente) LP
Pleora Technologies
Polaris Sensor Technologies, Inc.
Precision Optical
Process Sensors Corp.
Salvador Imaging
Scientific Solutions, Inc. (SSI)
Sensors Unlimited, Inc., part of Goodrich Corporation
SEO Precision, Inc.
Texas Infrared
Thermoteknix Systems Ltd.
Wideband Systems, Inc.

Illumination Engineering

ASML Optics
Cantronic Systems, Inc.
Opto Diode Corp.
Paradigm Lasers, Inc.
Photon Engineering, LLC
RPC Photonics, Inc.
Teledyne Microelectronic Technologies
Wamco, Inc.

Infrared Sources, Detectors, Systems

Acktar Ltd.
Acualight Corp.

AIM Infrarot-Module GmbH
ALIO Industries
Ametek HCC Industries
Analog Modules, Inc.
APHOTIK
ASD Inc. (formerly Analytical Spectral Devices)
Atlantic Positioning Systems
Autonosys Inc.
Axsys Technologies Imaging Systems
B&W Tek, Inc.
BAE Systems
Bodkin Design & Engineering, LLC
Bookham
Boston Electronics Corp.
Boulder Imaging Inc.
Cantronic Sytems, Inc.
Carl Zeiss Optronics GmbH
Carleton Life Support Systems Inc.
CBC (AMERICA) Corp.
Cedip Infrared Systems
CI Systems, Inc.
Clear Align
Coastal Optical Systems, Inc.
Computer Optics Inc.
Contour Fine Tooling
Devitech ApS
DRS Technologies, Inc., Reconnaissance, Surveillance & Target Acquisition (RSTA) Segment
Drytech Inc.
EGIDE USA
Electro Optical Industries, Inc.
Electrophysics Corp.
Epitaxial Technologies, LLC
Epner Technology, Inc.
ET Precision Optics Inc.
Firebird Technologies Inc.
FLIR Systems, Inc. - Commercial Vision Systems
FLIR Systems, Inc. - Americas Thermography Division
Fresnel Technologies Inc.
Georgia Tech Research Institute
Hamamatsu Corp.
High Tech Photonics
Infrared Associates, Inc.
InfraRed Integrated Systems Ltd.
Infrared Systems Development Corp
InterSense, Inc.
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Irvine Sensors Corporation
Isorad Ltd.
Janos Technology, Inc.
JASCO Inc.
Judson Technologies, LLC
Kopp Glass, Inc.
L-3 Communications

L-3 Communications - Infrared Products
L-3 Communications Cincinnati Electronics
L-3 Communications InfraredVision Technology Corp.
Laser Components IG, Inc.
Laser Diode, Inc.
LightPath Technologies, Inc.
Lockheed Martin - Santa Barbara Focalplane
NAVAIR IBST
NEC Corp.
Night Vision Systems
Nippon Avionics Co., Ltd.
NoblePeak Vision Corp.
Novotech, Inc.
OASYS Technology, LLC
Ontar Corp.
Opgal Optronics Industries Ltd.



OPTICS 1, Inc.
OSRAM Opto Semiconductors
Panavision Federal Systems, LLC
Paradigm Lasers, Inc.
PerkinElmer Optoelectronics
Phoenix Diamond Turning Ltd.
Photonic Sense GmbH
Physical Optics Corp.
PixonImaging LLC
Polaris Sensor Technologies, Inc.
PolarOnyx, Inc.
Precision Solutions (MBDA UK Ltd.)
Process Sensors Corp.
QmagiQ, LLC
QPC Lasers, Inc.
RedShift Systems
RICOR - Cryogenic & Vacuum Systems
Santa Barbara Infrared, Inc.
SCD-SemiConductor Devices
SELEX Sensors and Airborne Systems
Sensors Unlimited, Inc., part of Goodrich Corporation
Shanghai Optics
SOFRADIR
Spectrum Detector Inc.
StingRay Optics, LLC
Tecomet/Precision Technologies
Teledyne Imaging Sensors
Telops Inc.
Texas Infrared
Thales
Thermoteknix Systems Ltd.
Thin Film Technology
ULIS
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Wafer Technology Ltd.
WaveFront Sciences, Inc.
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Coherent Inc.
CVI Melles Griot - Albuquerque
Dilas Diode Laser
EM4 Defense
Fiberguide Industries, Inc.
Fibertek Inc.
Gamma Scientific, Inc.
Intense Ltd.
Isorad Ltd.
JMAR Technologies, Inc.
Kigre, Inc.
Kugler of America LTD
L-3 Communications Advanced Laser Systems Technology, Inc.
Laser Components IG, Inc.
Laser Diode, Inc.
Laser Research Optics
Lasertel, Inc.
Micro Laser Systems, Inc.
Modulight, Inc.
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nLight Corp.
North Dakota Department of Commerce
Northrop Grumman Cutting Edge Optronics
Nuferrn
Ontar Corp.
OSRAM Opto Semiconductors
Paradigm Lasers, Inc.
Photon Engineering, LLC
PolarOnyx, Inc.
Polymicro Technologies, A Subsidiary of Molex Inc.
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Precision Photonics Corp.
QPC Lasers, Inc.
Research Electro-Optics, Inc.
Riegl USA, Inc.
Rocky Mountain Instrument Co.
RPMC Lasers, Inc.
Santa Barbara Infrared, Inc.
SCD-SemiConductor Devices
SEO Precision, Inc.
Sheaumann Laser Inc.
Snake Creek Lasers, LLC
Solid State Cooling Systems
Teraxion Inc.





MicroSecurity Lab Inc.
 Optronic Laboratories, Inc.
 Power Technology, Inc.
 Precitech, Inc.
 Process Sensors Corp.
 Spectrum Detector Inc.
 StellarNet, Inc.
 Technodiamant USA Inc.
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 WaveFront Sciences, Inc.

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 Toptica Photonics, Inc.
 Ural Optical and Mechanical Plant
 Vectronix Inc.
 Vincent Associates

Law Enforcement Technologies

APHOTIK
 BAE Systems
 Biometrics Task Force
 Brijot Imaging Systems, Inc.
 Directed Perception, Inc.
 Dynetics, Inc.
 ELCAN Optical Technologies
 Epix, Inc.
 Irvine Sensors Corporation
 Kopp Glass, Inc.
 L-3 Communications - Infrared Products
 Night Vision Systems
 OASYS Technology, LLC
 Photonic Cleaning Technologies
 Physical Optics Corp.
 PixonImaging LLC
 Qioptiq
 SOFRADIR
 Space Electronics LLC
 Teledyne Scientific Company
 Vectronix Inc.

Life Sciences

ELCAN Optical Technologies
 EM4 Defense
 Epix, Inc.
 Fresnel Technologies Inc.
 Headwall Photonics, Inc.
 JASCO Inc.
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 Lumenera Corp.
 National Aperture, Inc.
 New Scale Technologies, Inc.
 Optronic Laboratories, Inc.
 Photron USA, Inc.

Metrology, Inspection and Process Control

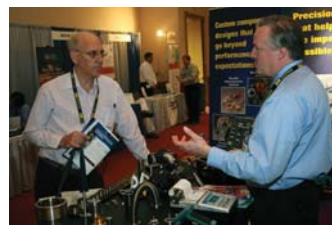
4D Technology Corp
 Adimec
 Aerotech, Inc.
 ALIO Industries
 Ametek Precitech, Inc. - see Precitech, Inc.
 Corning Inc.
 Electro Optical Industries, Inc.
 Headwall Photonics, Inc.
 illunis LLC
 Imperx, Inc.
 Lumenera Corp.
 Max Levy Autograph, Inc.

Nanotechnology

ALIO Industries
 Applied Image Group
 Denton Vacuum, LLC
 Dyna Technologies, Inc.
 Georgia Tech Research Institute
 Infotonics Technology Center
 JASCO Inc.
 Jazz Semiconductor
 Max Levy Autograph, Inc.
 Micromechatronics, Inc.
 National Aperture, Inc.
 North Dakota Department of Commerce
 Photron USA, Inc.
 PI (Physik Instrumente) LP
 RSoft Design Group
 Technodiamant USA Inc.
 Tecomet/Precision Technologies

Optical Components

AccuCoat, Inc.
 Ametek HCC Industries
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 Axsys Technologies IR Systems
 Barr Associates Inc.
 Carl Zeiss Microlmaging, Inc.
 Carl Zeiss Optronics GmbH
 CBC (AMERICA) Corp.
 CMC Electronics Inc.



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 CVI Melles Griot - Albuquerque
 Deposition Sciences, Inc.
 Dontech Inc.
 DRS Technologies, Inc.,
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 Fotofab
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 Goodrich Corporation
 High Energy Laser Joint Technology Office
 High Tech Photonics
 HOLOEYE Systems, Inc.
 II-VI Infrared
 IMT Masken und Teilungen AG
 Infinite Optics Inc.
 Infotonics Technology Center
 Insaco, Inc.
 Intense Ltd.
 IRphotonics
 ISP Optics Corp.
 Isuzu Glass Inc.
 ITRES Research Ltd.
 Janos Technology, Inc.
 JDSU
 JENOPTIK Laser, Optik, Systeme GmbH - Optics Business Unit

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 Kugler of America LTD
 LaCroix Optical Co.
 Laser Optics, a PPGI company
 Laser Research Optics
 Lattice Electro Optics, Inc.
 Liebmann Optical Company, Inc.
 LightPath Technologies, Inc.
 Max Levy Autograph, Inc.
 Meller Optics, Inc.
 MEMS Optical Inc.
 Metavac
 Michigan Aerospace Corp.
 Model Optics Inc.
 Moore NanoTechnology Systems LLC



Product Index

MOXTEK
MRC a PPGI company
Naked Optics Corp.
NEC Corp.
nLight Corp.
Novotech, Inc.
Onyx Optics Inc.
Optimax Systems, Inc.
Opto Diode Corp.
Panavision Federal Systems, LLC
PerkinElmer Optoelectronics
Phoenix Diamond Turning Ltd.
Phoenix Infrared
Photonic Sense GmbH
Poco Graphite, Inc.
Polaris Electronics Corp.
Polymicro Technologies, A
Subsidiary of Molex Inc.
Power Technology, Inc.
Precision Glass & Optics
Precision Optical
Precision Photonics Corp.
Princeton Instruments
Proxitronic Industries AG
Qioptiq
QPC Lasers, Inc.
Quality Thin Films, Inc.
QuickSet International
Rainbow Research Optics, Inc.
Research Electro-Optics, Inc.
Reynard Corp.
Rochester Precision Optics LLC
Rockwell Collins
Rocky Mountain Instrument Co.
Rohm and Haas Advanced
Materials
RPC Photonics, Inc.
RSoft Design Group
Santa Barbara Infrared, Inc.
Sawyer Technical Materials, LLC
Schneider Optics, Inc.
SCHOTT North America, Inc.
- Defense
Scientific Solutions, Inc. (SSI)
SESO
Shanghai Optics
Spectrum Thin Films Inc.
StingRay Optics, LLC
Sydor Optics, Inc.
Syntec Optics
Teledyne Microelectronic
Technologies
Teledyne Scientific Company
Telops Inc.
Teraxion Inc.



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Thin Film Technology
Umicore Optical Materials
Vincent Associates
Wamco, Inc.
WaveFront Sciences, Inc.
Western Photonics Technology
Z&Z Optoelectronic Tech. Co., Ltd.

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AIM Infrarot-Module GmbH
Analog Modules, Inc.
Autonosys Inc.
Bodkin Design & Engineering, LLC
Boston Electronics Corp.
CMC Electronics Inc.
Epitaxial Technologies, LLC
Gamma Scientific, Inc.
Hamamatsu Corp.
High Tech Photonics
Infrared Associates, Inc.
InterSense, Inc.
Intevac, Inc.
Irvine Sensors Corporation
Judson Technologies, LLC
L-3 Communications InfraredVision
Technology Corp.
Labsphere, Inc.
Laser Diode, Inc.
MRC a PPGI company
NoblePeak Vision Corp.
Ophir-Spiricon Inc.
Opto Diode Corp.
PerkinElmer Optoelectronics
Photon Inc.
Polaris Sensor Technologies, Inc.
Proxitronic Industries AG
RedShift Systems
Salvador Imaging
SELEX Sensors and Airborne
Systems
Sensors Unlimited, Inc., part of
Goodrich Corporation
SEO Precision, Inc.
SOFRADIR
Spectrum Detector Inc.
Teledyne Imaging Sensors
Wafer Technology Ltd.

Optical Fibers

CorActive High-Tech, Inc.
Fiberguide Industries, Inc.
High Energy Laser Joint Technology
Office
High Tech Photonics
IRphotonics
Isorad Ltd.
JDSU
Micro Laser Systems, Inc.
nLight Corp.
Nuferr
PolarOnyx, Inc.
Polymicro Technologies, A

Subsidiary of Molex Inc.
RSoft Design Group
Spectrum Thin Films Inc.
Teraxion Inc.

Optical Materials and Substrates

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Deposition Sciences, Inc.
Dontech Inc.
Etek USA Inc.
Epner Technology, Inc.
Exotic Electro-Optics
Fairfield Crystal Technology, LLC
Firebird Technologies Inc.
General Optics, Inc.
Glass Fab Inc.
Goodrich Corporation
High Energy Laser Joint Technology
Office
II-VI Infrared
Infinite Optics Inc.
Infotonics Technology Center
Insaco, Inc.
ISP Optics Corp.
Isuzu Glass Inc.
Kigre, Inc.
Kopp Glass, Inc.
Labsphere, Inc.
Laser Research Optics
Lattice Electro Optics, Inc.
Meller Optics, Inc.
MOXTEK
Naked Optics Corp.
Novotech, Inc.
Phoenix Infrared



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Poco Graphite, Inc.
Precision Glass & Optics
Precision Optical
Qioptiq
Quality Thin Films, Inc.
Rainbow Research Optics, Inc.
Reynard Corp.
Rochester Precision Optics LLC
Rocky Mountain Instrument Co.
Rohm and Haas Advanced
Materials
Saint-Gobain Crystals
Sawyer Technical Materials, LLC
Spectrum Thin Films Inc.
SphereOptics
Stellar Industries Corp.
Tessera, Inc.
Thin Film Technology
Umicore Optical Materials
Wafer Technology Ltd.
Wamco, Inc.
Z&Z Optoelectronic Tech. Co., Ltd.

Optical Test and Measurement Equipment, Interferometer

4D Technology Corp
ASD Inc. (formerly Analytical
Spectral Devices)
ASML Optics
Avo Photonics, Inc.
B&W Tek, Inc.
Cedip Infrared Systems
CI Systems, Inc.
Cincinnati Sub-Zero Products, Inc.
Corning Inc.
D&P Instruments
Dayton T. Brown, Inc.
Dynerics, Inc.
Electro Optical Industries, Inc.
Epner Technology, Inc.
Gamma Scientific, Inc.
Glass Fab Inc.
Micro Laser Systems, Inc.
NAVAIR IBST
Optikos Corp.
OptiPro Systems
Optronic Laboratories, Inc.
Photon Engineering, LLC
Photon Inc.
PI (Physik Instrumente) LP
Precision Solutions (MBDA UK Ltd.)
Reynard Corp.
Santa Barbara Infrared, Inc.
Scientific Solutions, Inc. (SSI)
Space Electronics LLC
StellarNet, Inc.
tec5USA, Inc.
Telops Inc.
Topica Photonics, Inc.
Wideband Systems, Inc.
Zhejiang Dali Technology Co., Ltd.

Optical/Laser Microlithography

ALIO Industries
ASML Optics
Fairfield Crystal Technology, LLC
IMT Masken und Teilungen AG
Infotonics Technology Center
Max Levy Autograph, Inc.
MEMS Optical Inc.
Newport Corp.
Princeton Instruments
Reynard Corp.
Sawyer Technical Materials, LLC
Tessera, Inc.

Optics Manufacturing

4D Technology Corp
Ametek Precitech, Inc. - see
Precitech, Inc.
ASML Optics
Avo Photonics, Inc.
Axsys Motion Control Products
Axsys Technologies Imaging
Systems
Axsys Technologies IR Systems
Barr Associates Inc.
Brush Wellman Inc.
Carl Zeiss Microlmaging, Inc.
CBC (AMERICA) Corp.
Coastal Optical Systems, Inc.
Computer Optics Inc.
Contour Fine Tooling





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Dontech Inc.
DRS Technologies, Inc.,
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& Target Acquisition (RSTA)
Segment
Dyna Technologies, Inc.
ELCAN Optical Technologies
EM4 Defense
Evaporated Coatings, Inc.
Exotic Electro-Optics
Fairfield Crystal Technology, LLC
Fosta-Tek Optics
Fresnel Technologies Inc.
General Optics, Inc.
Glass Fab Inc.
Goodrich Corporation
HOLOEYE Systems, Inc.
II-VI Infrared
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IRphotonics
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Laser Research Optics
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MEMS Optical Inc.
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Moore NanoTechnology Systems
LLC
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Ametek Precitech, Inc. - see
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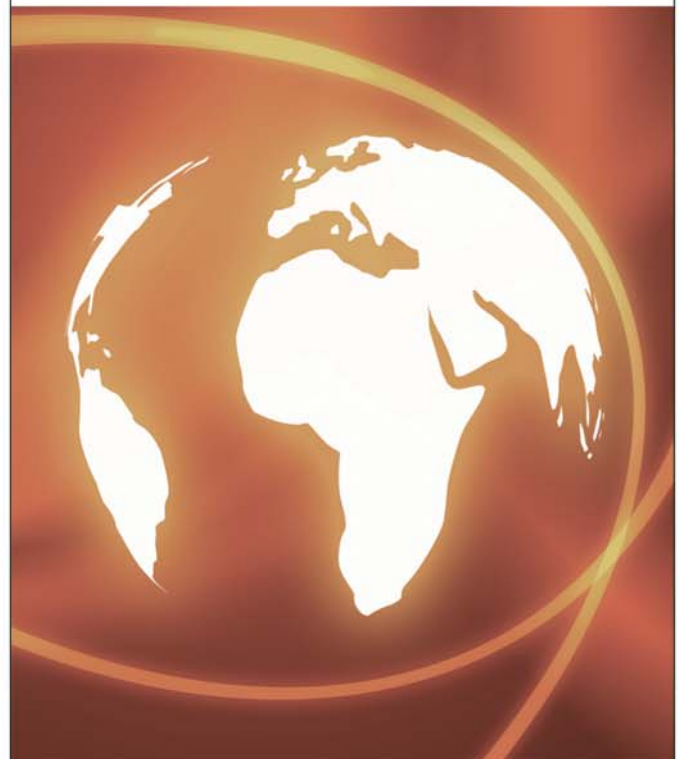
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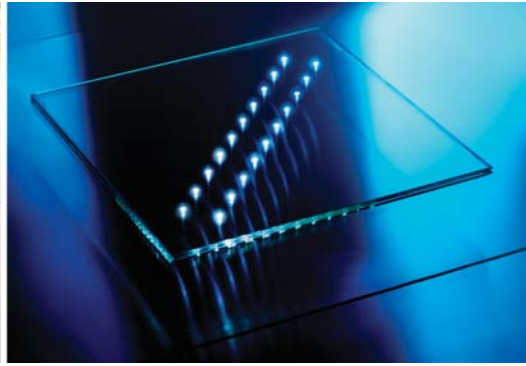
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Left/Middle Cover Photo Courtesy of SCHOTT. (Left photo: Fiber optical light guides. Drawing makes fiber optical light guides wafer-thin; Right photo: LED in flat glass. Light Points are LED's in a PVB flat glass foil laminate can be used in interiors, as glass walkways, as construction components for doors and many other products. Right Cover Photo Courtesy of Stephen Ausmus. Renewable-energy team members prepare experimental wind turbine blades for atmospheric testing. Team members pictured are ARS agricultural engineers Byron Neal (left foreground) and Nolan Clark (right foreground), and, from Sandia National Laboratories, electrical engineer Mark Rumsey and technician Donny Cagle (background).

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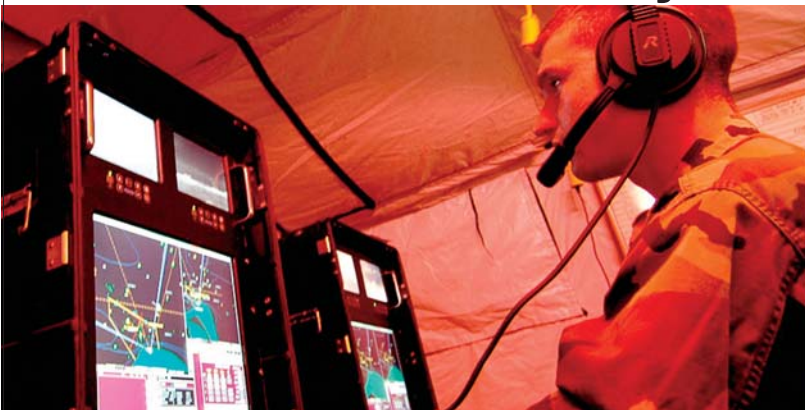


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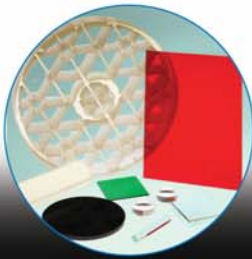
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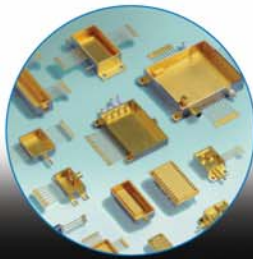
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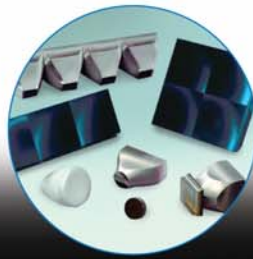
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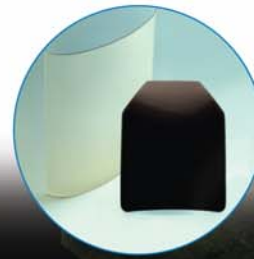
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