

# 2013 Photonics West®

2-7 February 2013

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San Francisco, California, USA

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2-3 February

**The world's largest  
biomedical optics  
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BiOS EXPO is your opportunity to take advantage of the rapid expansion of the biomedical and biophotonics market. See the latest components, devices, and instrumentation for diagnostics and therapeutics.

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Registration**

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If you work in the biomedical industry you can't afford to miss the **BiOS EXPO**

# BiOS EXPO

**2-3 February 2013**

The Moscone Center  
San Francisco, California, USA

## Exhibition Hours

The Moscone Center, South Hall A

Saturday 2 February . . . . . 12:00 to 5:00 pm

Sunday 3 February . . . . . 10:00 am to 5:00 pm

Take advantage of this focused exhibition the weekend before SPIE Photonics West. Don't miss this critical exhibition for the biomedical optics and biophotonics industry.

- Meet suppliers and network with 235 industry-leading companies
- See over 50 companies debut never-seen-before new products
- Your cost-effective opportunity to meet all your suppliers

## See the latest innovations and products in:

Biomedical optics components, products, instrumentation, and applications

Lasers

Molecular imaging

Therapeutic lasers

Nano/biophotonics

Biosensors

Spectroscopic/  
microscopic imaging

## Exhibitor Product Demonstrations

are open to all attendees. Various exhibiting companies will be showcasing products in half-hour demonstration/question-and-answer sessions.

See demonstrations by these companies and more:

- **New 200 kHz All-semiconductor Akinetic OCT Laser Engine**  
Dr. Jason Ensher, Ph.D., Insight Photonic Solutions, Inc.
- **Linear Variable Filters for Applications in Spectroscopy and Fluorescence Diagnostics**  
Poul Svensgaard, DELTA Optical Thin Film



Exhibiting companies plus featured new product launches

## Your free exhibition registration puts you face-to-face with these leading companies

4AD Enterprises, Inc. . . . . .8407

A-P-E . . . . .8324

Acktar Ltd. . . . . .8636



Black coating for complete suppression of EUV additionally to VIS-IR

AdValue Photonics, Inc. . . .8828



2 Micron Tm/Ho Fiber Laser, 10W max. power.

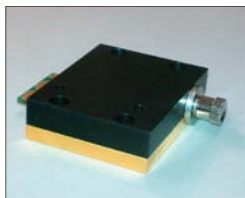
Advanced Laser Diode Systems  
A.L.S. GmbH . . . . .8729

Advantest Corp. . . . . .8816

AdvR, Inc. . . . . .8407

Agilent Technologies, Inc. . .8800

AKELA Laser Corp. . . . . .8830



Biomedical diode module. Up to five wavelengths in single fiber.

Amplitude Laser . . . . .8427

Amplitude Technologies . . .8427

Analog Modules, Inc. . . . .8115



Model 7558 Series, High Performance Laser Rangefinder Receiver with Range Processor

Andor Technology Ltd. . . .8711

Andover Corp. . . . . .8704

ART Photonics. . . . . .8408

ASE Optics, LLC . . . . .8810

ASI/Applied Scientific  
Instrumentation, Inc. . . . .8943



Ultra Stable XY Stages for Super Resolution Microscopy

ASML. . . . .8318

Auxora (Shenzhen), Inc. . . .8024

Avantes, Inc. . . . . .8026

Avo Photonics, Inc. . . . . .8631

AXSUN Technologies Inc. . .8403

B&W Tek, Inc. . . . . .8717

BaySpec Inc. . . . . .8317



Agility Raman Analyzer ruggedized with variety of sample interfaces

Becker & Hickl GmbH . . . .8817

Berliner Glas KGaA Herbert  
Kubatz GmbH & Co. . . . .8308

- **Optical Materials for Microscopy Design**  
Dr. Ralf Jedamzik, SCHOTT  
Advanced Optics
- **Chromatis - The Dispersion Measurement Instrument for Optics and Components**  
Chris Wood, Kapteyn-Murnane  
Laboratories (KM Labs)

Bid-Service LLC . . . . .8020  
 BioOptics World . . . . .8824  
 Biophotonic Solutions, Inc. .8637  
 Boston Electronics Corp. . .8817  
 Boulder Nonlinear Systems.8537  
 BWT Beijing Ltd. . . . . .8930  
 Calmar Laser . . . . .8529  
 Cambridge Technology, Inc. . . . . .8900



**Lightning-IITM All-Digital Scanning Subsystem. The Ultimate in Speed, Precision, Repeatability**

CeramOptec Industries, Inc. . . . . .8533

Changchun New Industries Optoelectronics Technology Co., Ltd. . . . . .8034

Chroma Technology Corp. .8910

Clark-MXR Inc. . . . . .8215

CODIXX AG . . . . .8517



**Advanced nano-particle glass polarizers for telecom, biomedical, display, and inspection applications**

Coherent, Inc. . . . . .8804

Corning Incorporated . . . . .8727

CVI Laser Optics . . . . .8332

DELTA Optical Thin Film . . .8642



**Linear Variable Filters with extended wavelength range (400 to 1100 nm)**

Deposition Sciences, Inc. .8410



**DSI increases patterning capacity with new 200mm (diam.) wafer photolithography capability**

DiCon Fiberoptics, Inc. . . . .8833

Diode Laser Concepts, Inc..8102

Edinburgh Instruments . . . .8106

Edmund Optics Inc. . . . . .8822

Electro Optical Components, Inc. . . . . .8201



**Compact NDIR gas measurement cell for CO<sub>2</sub>, CO & other gases**

Elforlight Ltd. . . . . .8407

Energetiq Technology, Inc. .8330

Exalos AG . . . . .8428



**Versatile High-Speed Swept Source Laser for Biomedical Imaging and Spectroscopy**

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Fianium Inc. . . . . .8523

Fiberguide Industries, Inc. .8426

Fibertech Optica Inc. . . . . .8605

Flexible Optical BV . . . . .8111

Foreal Spectrum, Inc. . . . . .8927

Frankfurt Laser Co. . . . . .8500



**FLC presents custom Superluminescent Diodes in 780nm – 3300nm wavelength range**

Fresnel Technologies Inc. . .8707

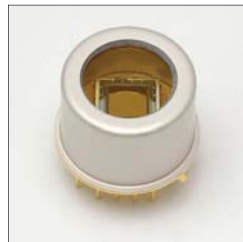
General Photonics Corp. . .8909

Gooch & Housego. . . . .8825

Grintech GmbH . . . . .8807

G-S Plastic Optics. . . . .8606

Hamamatsu Corp. . . . . .8400



**NIR Imaging for Unmanned Vehicle System**

Headwall Photonics Inc. . . .8401

Hellma USA, Inc. . . . .8617, 8922

High Tech Photonics, Inc. . .8408

Honeywell Safety Products .8643

HORIBA Scientific . . . . .8217



**DeltaHub Delta Series fluorescence lifetime systems based on new electronics hub**

HySpex, Norsk Elektro Optikk AS . . . . .8108

Ibsen Photonics A/S . . . . .8942



**FREEDOM spectrometer for OEM integration, ultra compact, high performance**

id Quantique . . . . .8817

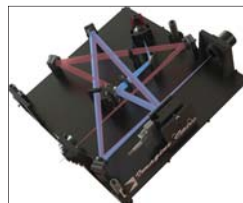


**Id800-TDC 8 channel Time to Digital Converter 81ps**

IDEX Optics & Photonics. .8332

Imagine Eyes. . . . .8731

Imagine Optic Inc. . . . .8731



**MicAO™ 3DSR: Plug and play adaptive optics for 3D super-resolution microscopy**

IMM Photonics GmbH . . . . .8201

IMRA America, Inc. . . . .8504

InfiniLED Ltd. . . . .8929

Innovative Photonic Solutions . . . . .8503



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INO . . . . .8915

InPhenix, Inc. . . . .8412



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Insight Photonic Solutions, Inc. . . . .8938



**High-speed, all-semiconductor, akinetic swept tunable laser for imaging, sensing, spectroscopy**

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Iridian Spectral Technologies Ltd. . . . .8306



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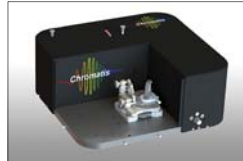
JenLab GmbH . . . . .8309

JENOPTIK . . . . .8628

JT Ingram . . . . .8408

Kigre, Inc. . . . .8116

KM Labs, Inc. (Kapteyn-Murnane Laboratories, Inc.) . . . . .8638



**Chromatis – The Dispersion Measurement Instrument for Optics and Components**

Kohoku Kogyo Co., Ltd. . .8104

Lambert Instruments BV . .8731



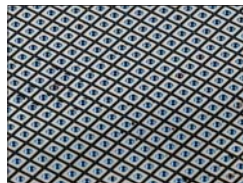
**200,000 fps signal photon time resolved intensified high speed spectrometer**

Laser Components Canada, Inc. . . . .8517



**Superior control and enhanced beam quality with fiber coupled pulsed laser diodes**

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Light Age, Inc. . . . .8801

LightSmyth Technologies, Inc. . . . .8705



**270 grooves/mm high efficiency low cost visible range transmission grating**

LIMO Lissotschenko Mikrooptik GmbH . . . . .8100

Lincoln Laser Co. . . . .8423

Lumen Dynamics (X-Cite®) . . . . .8939

Lumencor, Inc. . . . . .8406



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Mad City Labs., Inc. . . . .8530

Market Tech, Inc. . . . .8831

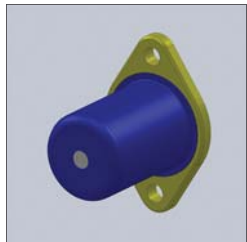
Max Levy Autograph, Inc. .8843



**Max Levy Autograph offers fine feature patterning on curved surfaces**

Meadowlark Optics, Inc. . . .8105

MegaWatt Lasers, Inc. . . . .8028



**ER200 200µJ Eyesafe 1535nm Transmitter**

Melles Griot . . . . .8332

Micro Laser Systems, Inc. .8809



**FR10 Fiber Receiver accepts all wavelengths from 400-700nm efficiently**

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Microtech Instruments, Inc.8305

Mitsubishi Cable Industries, Ltd. . . . .8842

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Nanoscribe GmbH. . . . .8222

National Aperture, Inc. . . . .8422

Navitar Inc. . . . .8607



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New Source Technology, LLC . . . . .8641

Newport Corp. . . . .8541

NKT Photonics A/S. . . . .8411, 8417

NoIR Laser Co., LLC . . . . .8901

Noren Products Inc. . . . .8310

NTT Advanced Technology Corp. . . . .8302

Nufern . . . . .8101

Nutfield Technology, Inc. . .8635



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Ocean Thin Films, Inc. . . . .8632



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OPOTEK, Inc. . . . .8936

Optics Balzers . . . . .8931

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OptoElectronic Components . . . . .8823

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Osela inc. . . . .8328

Oxxius SA . . . . .8723

OZ Optics Ltd. . . . .8038

Pavilion Integration Corp. .8906

PD-LD, Inc. . . . .8311

PHASICS . . . . .8117

Photon etc. Inc. . . . .8329



**Cost-effective hyperspectral SWIR camera for imaging at 346 fps**

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Photonic Cleaning Technologies, LLC. . . . .8937

Photonics Media/Laurin Publishing . . . . .8600

PHOTONIS . . . . .8316

PI (Physik Instrumente) L.P. . . . .8701

PicoQuant . . . . .8611

PIE Photonics . . . . .8116

PolarOnyx, Inc. . . . .8907

Polymicro Technologies, A Subsidiary of Molex Inc. .8323

Power Technology, Inc. . . . .8913

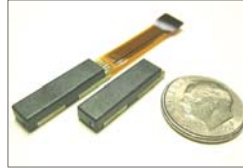
Princeton Instruments . . . .8300



**PI-MAX4 ICCD camera - the ultimate in precision and intelligence**

Prior Scientific Inc. . . . .8325

QD Laser, Inc. . . . .8911



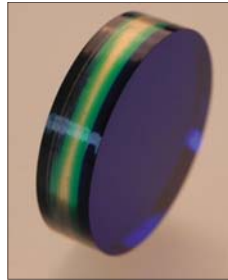
**561nm, single mode, low power consumption, compact laser module.**

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R&D Ultrafast Lasers Ltd. .8109

Raptor Photonics Ltd . . . .8731

Reynard Corp. . . . .8314



**Absorbing filter stacks are durable, cleanable & exhibit no angle shift**

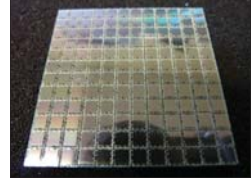
RPMC Lasers, Inc. . . . .8202

Santec U.S.A. Corp. . . . .8526

SCHOTT North America, Inc. . . . .8218

Semrock Inc. . . . .8332

SensL . . . . .8803



**ArrayFM-30035-144; 144 Pixel SPM Array for Time of Flight**

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SPIE Career Center . . . . .8923

SSCP USA. . . . .8103



**PC 404F AP - low index polymer cladding with higher viscosity & modulus, faster curing speed**





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Stanford Computer Optics, Inc. . . . . .8036



4 Picos ICCD camera with a pulse repetition rate of up to 10MHz

Stanford Photonics, Inc. . . . .8604

Superlum . . . . .8322



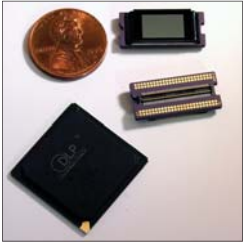
BLM-D-800G. Low coherent, 80nm wide light source, bell-like shape of spectrum at 860 nm

Sutter Instrument Co. . . . .8501

Sydor Optics, Inc. . . . .8740

tec5USA, Inc. . . . .8922

Texas Instruments Inc. . . . .8601



DLP® 0.45 WXGA Chipset: fast, portable, high resolution light steering

The Optical Society . . . . .8022

Thorlabs Inc. . . . .8511



New Time Domain Integration Imaging System: Camera, Stage, and Software

Time-Bandwidth Products, Inc. . . . .8611

TOPTICA Photonics Inc. . . .8623



TopMode: Single-frequency laser with active coherence stabilization

UTC Aerospace Systems . .8811  
(Sensors Unlimited Product)



Sensors Unlimited GL2048L-10 InGaAs Linescan Camera Delivers 2048 Pixels @ 76,000 A-Lines/Second

Vivo-light . . . . .8107



OCT Endoscopic Probe (Diameter: 0.25–2mm)

Vixar Inc. . . . .8119

Vytran LLC . . . . .8411

Wasatch Photonics, Inc. . .8301

World Star Tech . . . . .8200



COMPACT RS-232 laser is designed with integrated laser & electronics in a single box

Xenics NV . . . . .8926

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**WEDNESDAY** | 6 pm Cocktail Reception  
**6 FEBRUARY 2013** | 7 pm Dinner & Awards Ceremony

Join this gala event in which SPIE and Photonics Media recognize the most innovative new photonic products on the market. Network with industry leaders at this VIP event. The evening begins with a reception, followed by an elegant dinner and award ceremony. Please bring tickets to the door. Dress is business and formal attire. Email [innovation@spie.org](mailto:innovation@spie.org) for ticket information.

*Seating Limited. Ticket Required.*

### Powerful tools

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Available for iPhone and Android

#### Join the conversation



(#PhotonicsWest)

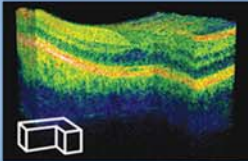
[www.spie.org/connect](http://www.spie.org/connect)

# LIVE TISSUE IMAGING GOES DEEPER WITH SWIR.

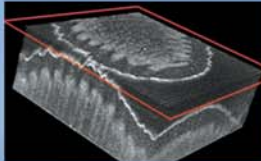
Sensors Unlimited SWIR products by UTC Aerospace Systems provide the deepest non-invasive, live tissue imaging available for SD-OCT systems.

- Scanning rates up to 92,000 lines per second
- High resolution – 1024 pixel arrays
- High sensitivity from 960 nm - 1600 nm
- Highly repeatable results
- Wavelength response 800 nm - 1700 nm
- Room temperature operation

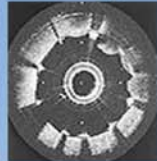
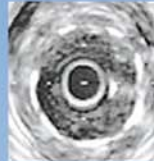
SWIR SD-OCT retinal image



SWIR image of a fingertip section, top portion removed



Heart stent  
IV ultrasound image SWIR image



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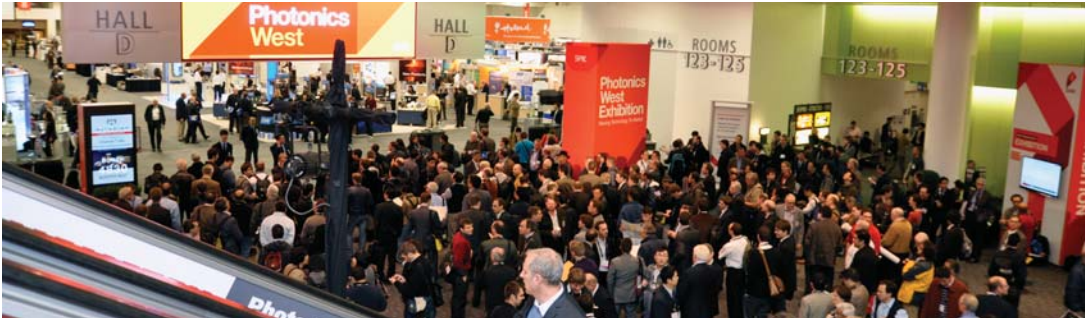


**UTC Aerospace Systems**

# Photonics West

5–7 February 2013

The Moscone Center  
San Francisco, California, USA



## Discover new possibilities at SPIE Photonics West

### Exhibition Hours

The Moscone Center, South Hall ABC and North Hall D

Tuesday 5 February . . . . . 10:00 am to 5:00 pm

Wednesday 6 February . . . . . 10:00 am to 5:00 pm

Thursday 7 February . . . . . 10:00 am to 4:00 pm

There is absolutely no other photonics and laser exhibition in North America with the size and prestige of SPIE Photonics West. Every year more products are launched, more deals are made, and more collaborations occur at Photonics West—be where photonics business gets done.

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—Ömür Sezerman,  
President/CEO, OZ Optics

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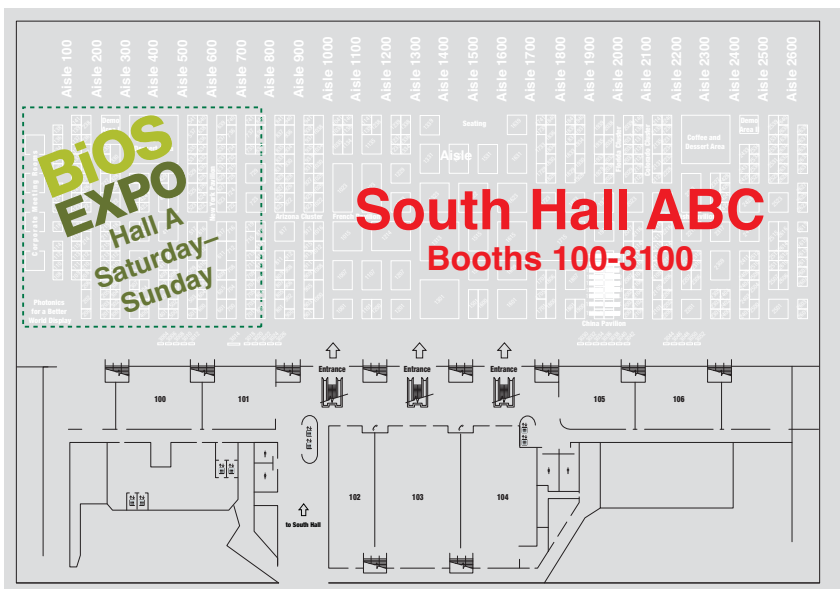
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# Photonics West



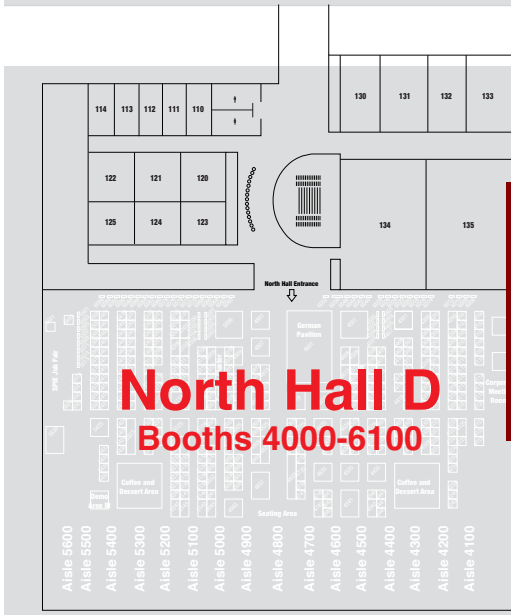
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BK-7  
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Fused Silica  
Soda Lime  
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Zerodur®

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Size	25mm to 300mm diameter
Thickness	≥ 0.175mm
Thickness Tolerance	± 0.003mm
Flatness	< 1µm / 25mm
Transmitted Wavefront Error	< 1 wave
Total Thickness Variance	to < 0.002mm
Warp	< 0.015mm
Bow	< 0.010mm
Surface Roughness	< 7 Angstroms
Surface Quality	to 20 - 10

### Options

#### Locating Features

Flats, notches and laser engraving

#### Bevels

45° Chamfers or C-bevel

#### Edge Finish

Fine ground or polished

#### Metrology

Interferograms, local site flatness, wedge, TTV and surface roughness

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## Exhibiting companies plus featured new product launches

3D-Micromac America Corp. . . . .4109

3SAE Technologies, Inc. . . .5040



**Taper Manufacturing Station**  
– Utilizing the new thermally stabilized plasma technology

3SPGroup . . . . .4513

4AD Enterprises, Inc. . . . .407

4D Technology Corp. . . . .822



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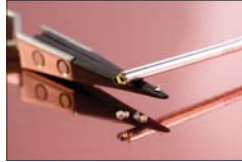
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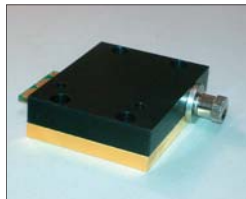


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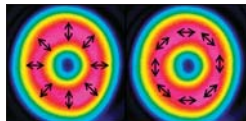
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Andover Corp. . . . .704

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Aperture Optical Sciences Inc. . . . .5426

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Artemis Optical Limited. . . .5601

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ASLD GmbH . . . . .4601

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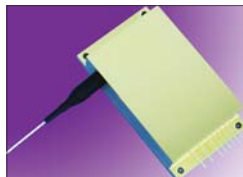
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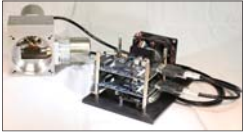
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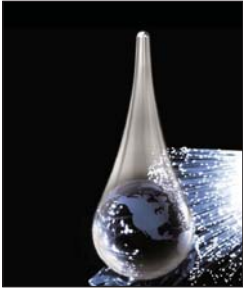
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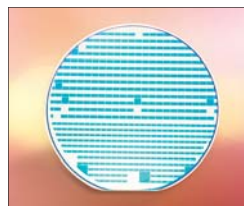
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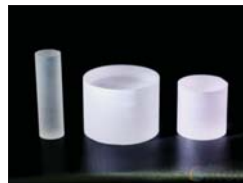
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**Sapphire ingots/wafers/windows ranging from 2" to 8"**

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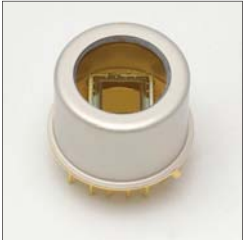
**ESR Fiber Assemblies: Fiber and Terminations Enhanced for Deep UV**

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**Photonic Doppler velocimeter for high speed measurement**

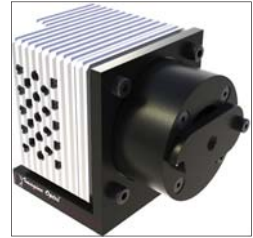
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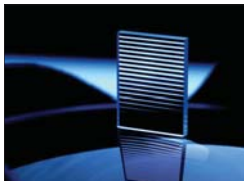
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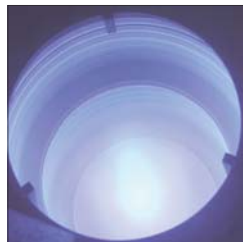
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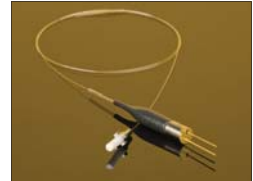
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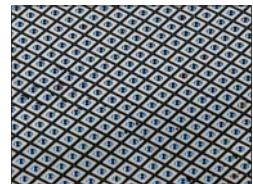
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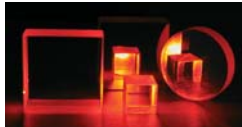
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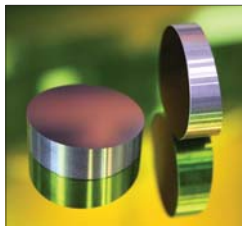
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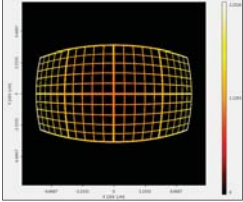
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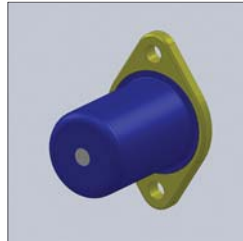
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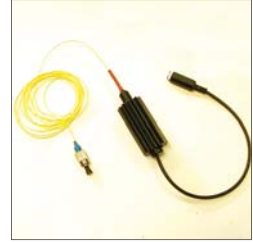
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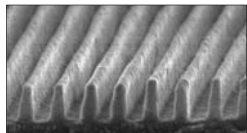
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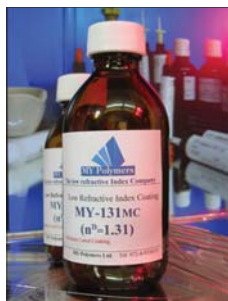


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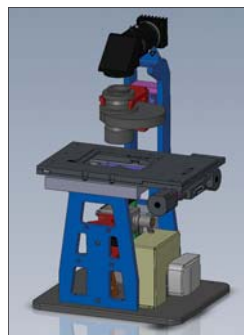
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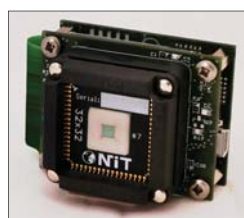
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Power Technology, Inc. . . . .911

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**Mini-QCL: 4.6µm, 2watt, battery operated QCL light weight illuminator**

Preciseley Microtechnology Corp. . . . .6038

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Precision Glass & Optics . .4332



**Turnkey optics solutions include precision cutting/scribing on thin flat substrates up to 24"x24"**

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Precision Optical . . . . .2328

Precision Optics Corp. . . . .2402

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Precision Photonics Corp. . . . .4801, 4809

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Princeton Instruments . . . . .2117

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**1530nm 20W Fiber Coupled Laser for Medical and Pumping Applications**

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Princeton Scientific Corp. . .4213

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**FiBO Fiber Stub Tool for endface measurement of fiber stubs**

ProPhotonix Ltd. . . . .1022

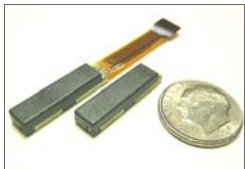
PROTECT Laserschutz GmbH . . . . .4601

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Prysmian Group - Telecom Div. . . . .2638

PYNCO, Inc. . . . .5143

QD Laser, Inc. . . . .4639



**561nm, single mode, low power consumption, compact laser module**

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QGLex Inc. . . . .4506

Qioptiq S.A.S. . . . .1514

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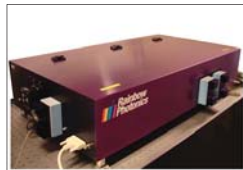
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Radiant Zemax, LLC . . . . .2501

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Rainbow Photonics AG . . .4304



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Rainbow Research Optics, Inc. . . . .4926

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Raysung Photonics Inc. . . .5516

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Ross Optical Industries . . .2508

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Schmidt & Bender GmbH & Co. KG . . . . .4601

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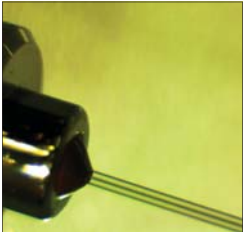


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Scottish Development International. . . . .1023

SDS OPTIC Sp. z o.o. . . . .5043

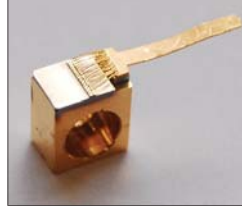


**Double-Fiber Hermetic Connection. Hermetic sealing of photoelectronics, i.e. photoreceiver module. Low Insertion Loss**

SEDi-ATi Fibres Optiques . . . . .1123, 1223

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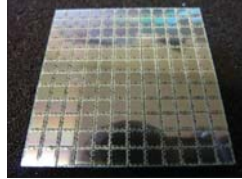
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SPI Lasers' G4 Pulsed Fiber Laser

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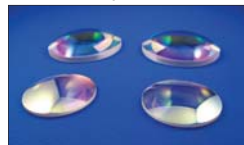
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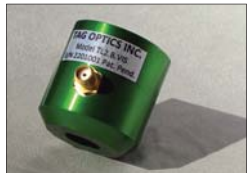
Synopsys, Inc. . . . .2017

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**New Time Domain Integration Imaging System:** Camera, Stage, and Software

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Time-Bandwidth Products, Inc. . . . . .611

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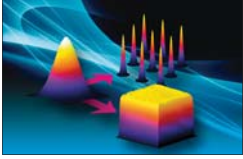
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Toyotec Co., Ltd. . . . .5015

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TruDiode 301, 100  $\mu$ m diameter fiber delivered 300 watt direct diode laser

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U.S. Army Aviation & Missile Research, Development and Engineering Center (AMRDEC) . . . . .5603

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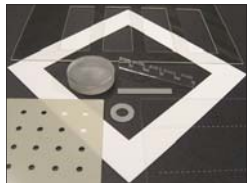
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Pulse characterization system for femtosecond pulses centered at 1030-1060 nm

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New! Higher Current 5KV 30ns High Voltage Diode - SXF50FF3

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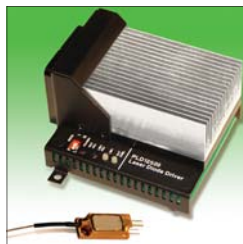
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PLD12500: 12.5 A Precision High Current Laser Diode Driver

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Fiber-coupled gas flow cell for sensing molecular absorption

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Wells Research Inc. . . . .1608

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Yenista Optics . . . . .4538

Yokogawa Corp. of  
America . . . . .2207



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Yole Développement . . . .5140

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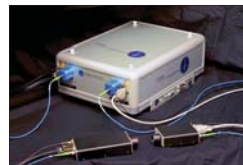
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Zurich Instruments AG . . .5307

Zygo Corp. . . . .1107



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Wednesday 6 February · 3:30 to 6:00 pm

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**PRISM20 AWARDS13**

Wednesday 6 February · 6:00 to 10:30 pm

**Prism Awards Ceremony and Banquet**

See details online: [www.PrismAwards.org](http://www.PrismAwards.org)

## Silicon Photonics and Photonic Integrated Circuits

Tuesday 5 February · 2:00 to 3:00 pm

Panel Moderator:



**SPIE**  
**Peter Hallett**  
Director of Marketing and Industry Relations

Invited Panel Members:



**LUXTERA**  
**Peter De Dobbelaere**  
Vice President of Engineering



**ONE CHIP PHOTONICS**  
**Andy Weirich**  
VP Product Line Management



**INFINERA**  
**Radha Nagarajan**  
Director of Engineering in the Photonic Integrated Circuits Group, Infinera Fellow



**INTEL CORP.**  
**Mario J. Paniccia**  
Intel Fellow, General Manager Silicon Photonics Operation



**ORACLE**  
**Ashok Krishnamoorthy**  
Architect & Chief Technologist, Photonics

Demand for smaller and cheaper optical interconnections inside computers is a main driver for silicon photonics, which will create a new market of miniaturized, low-cost photonic components that can leverage the scale of CMOS manufacturing. Learn what industry leaders have discovered at the frontier of silicon photonics and hear how this will revolutionize industries from computing and communication, to biomedicine, and imaging.

## Emerging Growth Opportunities in Sustainable Technology

Tuesday 5 February · 3:30 to 4:30 pm

Panel Moderator:



PRECOURT INSTITUTE FOR ENERGY, STANFORD UNIV.  
**Stephen J. Eglash**  
Director

Panel Members:



ARSENAL VENTURE PARTNERS  
**Patricia Glaza**  
CEO



STANFORD PHOTONICS RESEARCH CTR.  
**Thomas Baer**  
Executive Director



ANGAZA DESIGN  
**Lesley Silverthorn**  
CEO



PHILIPS LIGHTING LUMILEDS  
**Jyoti Bhardwaj**  
VP R&D



PICARRO INC.  
**Eric Crosson**  
Chief Technology Officer

This panel examines technologies, applications, and markets that are good for the planet as well as robust and resilient. This year's panelists include entrepreneurs providing solar-powered LED lighting to the developing world, sophisticated spectroscopy for environmental monitoring, solid-state lighting, a venture capitalist, and a leading university researcher with particular interest in optics and photonics. These high-growth markets are attracting capital investment, driving product development, and creating new revenue for people who understand the potential.

Topics to be discussed include the following:

- **Solid State Lighting and Displays**
- **Laser-assisted Manufacturing and Micro/Nano Fabrication**
- **Renewable Energy Generation and Photovoltaics**

## Executive Perspectives on the World of Optics and Photonics

Wednesday 6 February · 2:00 to 3:00 pm

Panel Moderator:



SPIE  
**Stephen G. Anderson**  
Industry and Market Strategist

Panel Members:



CERES TECHNOLOGY ADVISORS, INC.  
**Linda Smith**  
President



QIOPTIQ PHOTONICS LTD.  
**David Marks**  
CEO



EDMUND OPTICS INC.  
**Robert Edmund**  
CEO and Chairman of the Board



TRUMPF INC.  
**Christof Lehner**  
General Manager



JENOPTIK OPTICAL SYSTEMS GmbH  
**Dirk Rothweiler**  
Executive Vice President



IDEX OPTICS & PHOTONICS  
**Mike Cumbo**  
President



NEWPORT CORP.  
**Dennis Werth**  
Vice-President

Top executives, representing different aspects of the marketplace, will share their insight and hard-fought lessons regarding trends and opportunities in optics and photonics. Weathering 2011 and 2012 has required extraordinary skills and experience to successfully reset goals and allocate resources. Listening to and questioning these executives will help you understand the current environment better and to set priorities for your business.

## Government Initiatives and Opportunities for Growth in Photonics

Thursday 7 February · 8:45 to 9:30 am

Speaker:



SPIE  
**Eugene Arthurs**  
Executive Director

There are opportunities in a number of sectors, many driven by government initiatives to stimulate economies and create jobs. Learn about national priorities and funding trends that impact the optics and photonics industry.

Eugene Arthurs joined SPIE as CEO in November 1999. Prior to that he was President and CEO of Cleveland Crystals Inc. and President of Oriol Corporation. He is a globally recognized leader in the photonics community and a leading expert on the photonics industry. Dr. Arthurs is member of the Photonics21 Board of Stakeholders and the Council of Engineering and Scientific Society Executives Board in addition to serving on a number of advisory boards.

# Product Demos

Product Demonstrations are open to all attendees. Exhibiting companies will be showcasing their products in half-hour demonstrations.

**Don't miss these FREE Demonstrations**

## Tuesday, 5 February

	Demo Area 1 South Hall A	Demo Area 2 North Hall D
10:30 am	<b>New High-speed, All-semiconductor, Akinetic Swept Laser for Sensing, Spectroscopy and Imaging</b> <b>Dr. Jason Ensher, Ph.D.</b> , Insight Photonic Solutions, Inc.	<b>Putting the World in a Spin - Spun Fibers for Faraday Effect Current Sensors</b> <b>Dr. Andy Gillooly</b> , Fibercore Ltd
11:30 am	<b>Chromatis - The Dispersion Measurement Instrument for Optics and Components</b> <b>Chris Wood</b> , Kapteyn-Murnane Laboratories (KM Labs)	
12:30 pm	<b>2 Micron Broadband Fiber Light Source</b> <b>Shibin Jiang</b> , AdValue Photonics	<b>M3 modules - small, precise and smart motion for OEM systems</b> <b>David Henderson</b> , New Scale Technologies
1:30 pm	<b>OG 1100/1200- Software Update</b> <b>Roy Youman</b> , Optikos	<b>Advancements in Low Light Scientific Cameras</b> <b>Marc Neglia</b> , PHOTONIS USA
2:30 pm	<b>Got ideas? How the OPI Photonics Horizons program is transforming Photonics R&amp;D and the product development process</b> <b>Jason M. Eichenholz</b> , Open Photonics Inc.	
3:30 pm	<b>Getting Hired in 2013 and Beyond</b> <b>SPIE Career Center</b>	

## Wednesday, 6 February

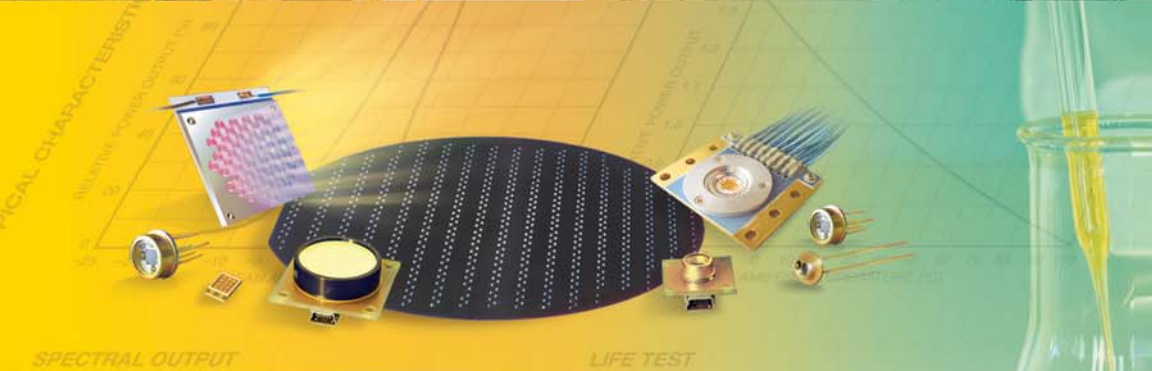
10:30 am	<b>What's New in BRO's ASAP Optical Software?</b> <b>Dr. Jon Herlocker</b> , Breault Research Organization, Inc.	<b>Liquid lenses and Auto Focus lens modules for industrial and medical applications</b> <b>Olivier Jacques-Sermet</b> , Varioptic, a BU of Parrot SA
11:30 am	<b>What's New in BRO's APEX Optical Software?</b> <b>Dr. Mary Turner</b> , Breault Research Organization, Inc.	<b>Circular Variable Filters</b> <b>Fred Tzafrir</b> , CI Systems, Inc.
12:30 pm	<b>Linear Variable Filters for Applications in Spectroscopy and Fluorescence Diagnostics</b> <b>Poul Svensgaard</b> , DELTA Optical Thin Film	
1:30 pm	<b>LensCheck VIS/LWIR</b> <b>Roy Youman</b> , Optikos	<b>DLP Non-Display Application</b> <b>Dylan Thomas</b> , Texas Instruments DLP
2:30 pm	<b>Scalable High Power and Highly Homogeneous Line Lasers</b> <b>Maja Thies</b> , LIMO Lissotschenko Mikrooptik GmbH	<b>Features of DSI's new <math>\phi</math> 200 mm photolithography line include increased capacity for complex optical filters &amp; enhanced precision</b> <b>Michael Newell</b> , Deposition Sciences, Inc. (DSI)
3:30 pm	<b>ZERODUR<sup>®</sup> goes Extreme</b> <b>Dr. Ralf Jedamzik</b> , SCHOTT Advanced Optics	<b>Meet the Micro &amp; the Mini!</b> <b>Damon Lenski</b> , Avantes
4:30 pm	<b>Structural &amp; Chemical Nanocharacterization: Integrated AFM &amp; Raman</b> <b>Aaron Lewis</b> , Nanonics Imaging Ltd.	<b>Rigorous and approximate analysis and optimization of diffractive and microoptical components with LightTrans VirtualLab<sup>™</sup> 5</b> <b>Dr. Michael Kuhn</b> , LightTrans GmbH, JENOPTIK Optical Systems, Inc.

## Thursday, 7 February

10:30 am	<b>Micro-optics in beam shaping: State of the art and vision for optimized laser processes</b> <b>Dr. Oliver Homburg</b> , LIMO Lissotschenko Mikrooptik GmbH	
11:30 am	<b>Laser Damage Threshold of Optical components</b> <b>Dr. Ralf Jedamzik</b> , SCHOTT North America Inc.	
12:30 pm	<b>Measuring Sharp Spectral Edges to High Optical Density</b> <b>Gary Carver, PhD.</b> , Omega Optical, Inc.	
2:30 pm	<b>New filter sets with complex filter designs for demanding customized applications</b> <b>Dr. Ralf Biertuempfel</b> , SCHOTT North America Inc.	



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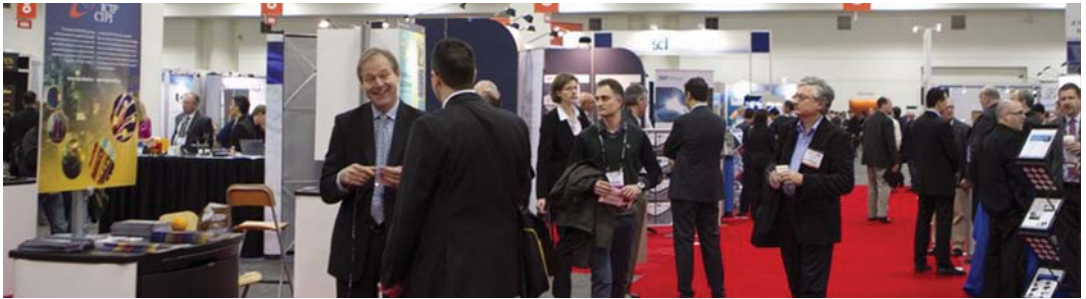
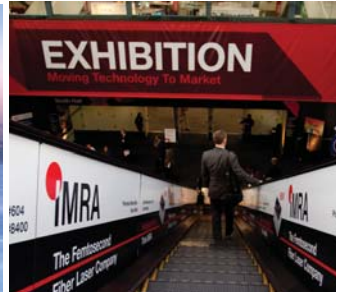
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Tuesday 5 February . . . 10:00 am to 5:00 pm

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