



# Light is **Evolution**



**LASER+PHOTONIK** provides in 5 issues per year up-to-date information on optical, optoelectronic and laser systems as well as proven solutions from research and industry. **Laser+Photonik** ist published in German.

IN THE ONLINE PORTAL LASER-PHOTONIK.DE you can find not only the archived technical contributions to the magazine since 2002, but also further news, tips and trends. Find selected English articles at www.laser-photonics.eu.

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# Welcome to the Exhibition



Exhibition: 13–15 April 2010 Conference: 12–16 April 2010

The Square Conference Centre, Brussels, Belgium

### MOVING TECHNOLOGY TO MARKET™

### **Exhibition Hours**

Grand Hall 1 & 2, Level -2

Tuesday13 April	10.00 to 17.00
Wednesday 14 April	10.00 to 17.00
Thursday 15 April	10.00 to 14.00

SPIE Europe would like to express its deepest appreciation to the symposium chairs, conference chairs, programme committees, session chairs, and authors who have so generously given of their time and advice to make this symposium possible.

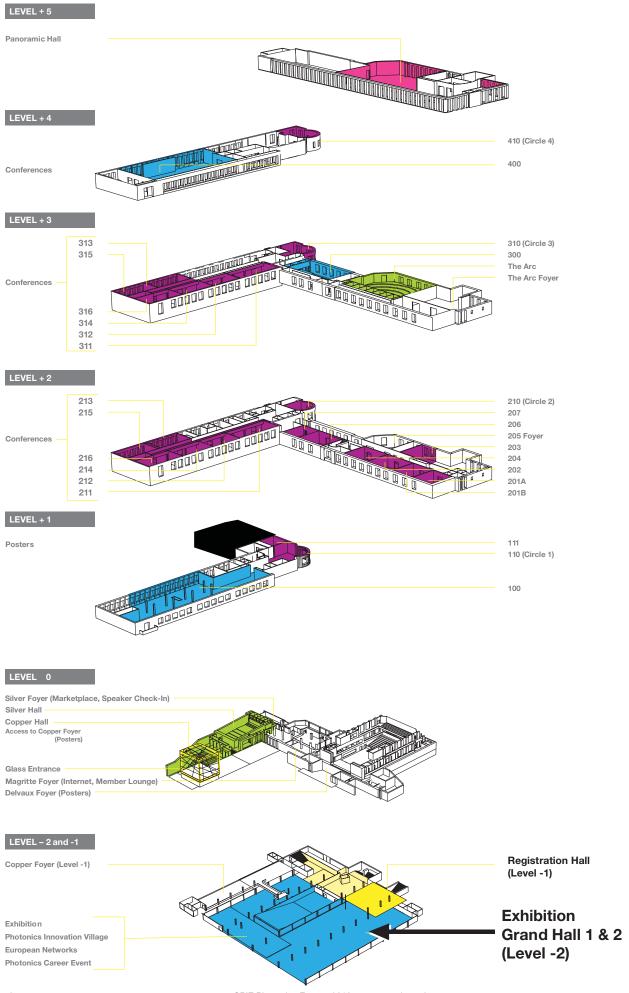
The symposium, like our other conferences and activities, would not be possible without the dedicated contribution of our participants and members. This programme is based on commitments received up to the time of publication and is subject to change without notice.

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The Square Conference Centre

# The Square Brussels Meeting Centre Floor Plan





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Exhibition: 13-15 April 2010 Conferences: 12-16 April 2010

The Square Conference Centre

Brussels, Belgium

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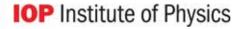


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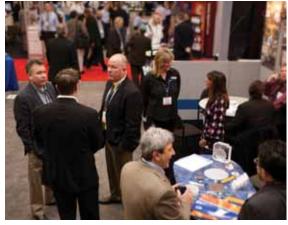




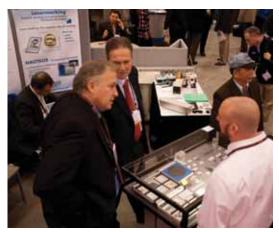




### General Information









Exhibition: 13-15 April 2010 Conference: 12-16 April 2010

The Square Conference Centre, Brussels Belgium

### **Exhibition Hours**

Square Conference Centre, Level -2, Grand Halls 1 and 2

Tuesday 13 April	10.00 to 17.00
Wednesday 14 April	10.00 to 17.00
Thursday 15 April	10.00 to 14.00

### **Exhibition Opening Ceremony**

### **Registration Hours**

Square Conference Centre, Registration Hall

Sunday 11 April
Monday 12 April
Tuesday 13 April
Wednesday 14 April
Thursday 15 April
Friday 16 April

### **Job Fair**

Exhibition Hall, Product Presentation Area

Talk to recruiters and company representatives from throughout Europe as they describe their science and work environment.

The event will conclude with time to socialize, ask questions, and eat tasty Belgian waffles.

13.00 to 13.40: Rik Moons - "The Job Interview"

13.40 to 15.30: Presentations from company representatives

15.30 to 17.00: Question session and social event

### Photonics Innovation Village Awards Ceremony

Exhibition Hall, Product Presentation Area

Plan to join us for this year's Photonics Innovation Village Awards Ceremony. This is a great opportunity to see see some of the great young innovators in Europe.

Entrants from across Europe will compete to win in the categories "Best Innovation by an Individual Researcher" and "Best Innovation by a Multilateral Project, Organisation or Company", the Innovation Village Selection Committee will grant awards for the best technological innovation among the participants in the Innovation Village.

### Food and Beverage Services

### **Coffee Breaks**

Exhibition Hall

Coffee will be served during the morning and afternoon breaks in the exhibition hall.

Tuesday, Wednesday	10.00 and 15.00
Thursday	10.00

### **Desserts**

Exhibition Hall

Tuesday and Wednesday

Dessert will be served during the afternoon coffee break. Complimentary tickets for the dessert will be included in attendee registration packets.

### **Cash Lunches**

An attendee ticketed lunch will be held in the Exhibition Hall on Wednesday starting at 11.30. Lunch tickets can be purchased for €18 each from the Cashier at Registration. Lunch can also be purchased at the surrounding hotels and restaurants.













# The most powerful source of photonics information

Photonics Spectra is today's leading source of technological solutions and of news and information about photonics. It is the magazine referred to worldwide by the largest audience of photonics engineers, scientists and end users. Integrating all segments of photonics, Photonics Spectra is unique in that it provides both technical and practical information for every aspect of the global industry. For a free subscription, please go to www.PhotonicsSpectra.com. Circulation: 96,000 qualified recipients as of December 2009

BioPhotonics is designed to present the latest global developments and techniques from the photonics industry to those involved in the medical and biotechnological disciplines. BioPhotonics' buying audience is made up of people who use photonics technology in biotechnological or medical products and procedures, plus key researchers looking for new photonics techniques and products to improve methodology and solve problems. Circulation: 32,500 gualified recipients as of December 2009

EuroPhotonics covers news and technology updates on the growing market for photonics in Europe. This bimonthly supplement to Photonics Spectra is distributed to important buyers and users of photonics products and services in Europe. Featured sections include Euro News, Product Previews and EcoPhotonics.

Circulation: 19,042 qualified recipients as of December 2009

AsiaPhotonics is a new biannual supplement to Photonics Spectra offering specialized features and news items of interest to the Asian market. Coverage includes a broad spectrum of photonics technologies, applications and components.

The Photonics Buyers' Guide is now two books in one: the corporate guide, profiling more than 4000 companies worldwide (who they are, what they make, how to contact them), and the buyers' guide, grouping companies in more than 1600 buying categories. With the Photonics Buyers' Guide, your search is complete.

Circulation: 25,000

PhotonicsBuyersGuide.com includes enhanced listings, intuitive searching, filtering features, and digital editions of the Photonics Handbook and Photonics Dictionary.

Photonics.com is the premier photonics Web site, with daily news and analysis, innovative products, Web-exclusive content, and online versions of trusted Photonics Media print publications. Redesigned in 2010, the new site allows users to access content by technology and region, watch industry videos and read technical white papers.

3.5 million page views



For more information or a free subscription, visit us at www.photonics.com

Visit us at booth #125

### **Policies**

### **Underage Persons on the Exhibition Floor**

For safety and insurance reasons, only children over 12 years old accompanied by an adult will be allowed in the exhibition area during open exhibition hours.

# Photography/Video /Digital Recording Policy

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

### **No Suitcasing Policy**

Suitcasing is the act of soliciting business in the aisles during the exhibition or in other public spaces associated with the exhibition. Please note that while all meeting attendees are invited to the exhibition, any attendee who is observed to be soliciting business in violation of any portion of SPIE Exhibition Policy will be asked to leave immediately. Additional penalties may be applied. Please report any violations you observe to show management.

### **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. If you feel you may have misplaced an item please speak with cashier located in the Registration Hall.

### Onsite Services

### **Luggage Storage and Coat Check**

Registration Hall

Monday
Tuesday
Wednesday
Thursday
Friday

There will be a minimal cost (€1) for coat and luggage storage.

### **Messages for Attendees**

SPIE has an urgent message line available during registration hours Monday through Friday: Tel +32 (0)2 515 9520

### **Internet Access/WiFi**

### Internet Pavilion

SPIE will have a complimentary Internet Pavilion at The Square on Sunday through Friday during registration hours. Attendees can use provided workstations or hook up their laptop to an Ethernet connection to access the Internet.

### **Complimentary Internet Wireless Access**

SPIE and the Brussels Region are pleased to provide complimentary wireless access to the Internet for all conference attendees bringing 802.11b wireless-enabled laptops or PDAs. Coverage will be available Sunday through Friday.

Properly secure your computer before accessing the public wireless network. Failure to do so may allow unauthorized access to your laptop as well as potentially introduce viruses to your computer and/or presentation.

### **SPIE Marketplace**

Silver Foyer

Open during registration hours.

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

### **SPIE Membership Lounge**

Magritte Foyer

Open Monday-Friday during registration hours

All SPIE Members are invited to relax, socialize with colleagues, and recharge your laptop in the comfort of the SPIE member lounge.

### **Membership**

Explore the benefits of SPIE Membership: Get discounts on SPIE publications and conference registration while staying up to date on the latest trends in optics and photonics. Develop additional skills for your new career. Build your professional network and establish yourself as an essential member of the scientific community. Further your education, expand your professional network, and develop new skills for your career. Build your company image and name recognition while enjoying significant discounts.

### Travel

# Wellkom in Brussels! Bienvenue à Bruxelles!

Brussels is the thriving centre of Europe, and as the new venue of SPIE Photonics Europe, THE SQUARE Conference Centre is right in the heart of it. It is just a short stroll from all of the historic city's major attractions with over 13,000 hotel rooms just around the corner, plus the pick of the city's restaurants, bars, and shops. Brussels is home to the European Commission, Parliament and NATO, a buzzing, influential city where history is made. The city is a key European commercial hub, too, and a base for many progressive international companies. But more than that, Brussels is a diverse and rich cultural centre, steeped in history, yet always ready to embrace the new, as its eclectic architecture demonstrates. Galleries and museums of all sorts abound, and there's a thriving comic-book scene built on the legacy of Hergé, the creator of Tintin

THE SQUARE is located in Mont des Arts, the lively cultural quarter. For further information on things to do and events, please contact the Belgian Tourist Office at:

Belgian Tourist Office 30,

Rue Saint-Bernard B - 1060 Brussels

Phone: +32 (0) 70 221 021 Fax: +32 (0) 2 513 04 75 www.belgiumtheplaceto.be

### **Car Rentals**

Visit www.hertz.com to make an online booking.

### **Parking**

There are 600 parking spaces underneath The Square. It can be accessed via Place del a Justice-Gerechtsplein, and Stuiversstaat – rue des Sols and then walk straight into the building.

### **City Transport**

There are numerous metro links, bus and tram stops close by: www. mivb.be



# SENSOR+TEST 2010 DIE MESSTECHNIK-MESSE

# DIE MESSTECHNIK-MESSE The Measurement Fair

Nürnberg, Germany

18 - 20 May 2010



















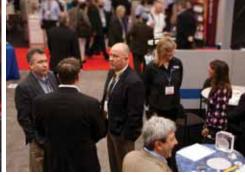




17th International Trade Fair for Sensorics, Measuring and Testing Technologies with concurrent conferences







### **New Product Presentations**

### **Exhibition Hall**

### Wednesday

11.30

# **Advantages of Photon Counting with**

Leonard Widmer, id Quantique SA

Manufacturing the Silicon APD in a CMOS process, and thus integrating the active quenching electronics with the diode on the same chip can improve timing resolution and counting rate significantly.

13.30

### **Spectral Imaging**

Marco Snikkers, Ocean Optics

We present two new multi spectral imaging systems where we are able to acquire spectral imaging data stacks quickly and cost-effectively.

14.30

### **Lumerical Designed Software**

Brahim Dahmani, Lovalite Lumerical Designed Software.

### **Thursday**

10.30

### CMV2000/4000 High Speed Machine **Vision Image Sensors**

Pieter Willems, CMOSIS

The CMV2000/4000 image sensors are designed for machine vision. The 2.2 or 4.2 Mpix global shutter sensors are equipped with a low-noise 5.5um pixel. The sensors are designed to run at 340/180 fps.



### Managed by **SPIE Europe**

SPIE Events Europe Ltd., a subsidiary of SPIE, is a UK-registered company focused on providing exhibition opportunities for organizations interested in participating in conferences, education programmes, and technical exhibitions on emerging technologies.

SPIE Europe

2 Alexandra Gate, Ffordd Pengam, Cardiff, CF24 2SA Tel: +44 29 2089 4747

Fax: +44 29 2089 4750 info@spieeurope.org



### Advancing the Laser: 50 Years and into the Future

Wednesday 14 April · 16:50 to 18:30

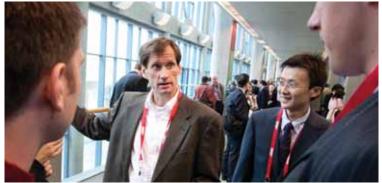
Celebrate the golden anniversary of the laser at SPIE Photonics Europe and join us for the Laser 50th Anniversary Plenary Session featuring lectures by:

Wolfgang Sandner, Director, Max Born Institute Berlin, FR Germany

Ursula Keller, ETH Zurich, Switzerland

Mike Dunne, Science & Technology Facilities Council, UK

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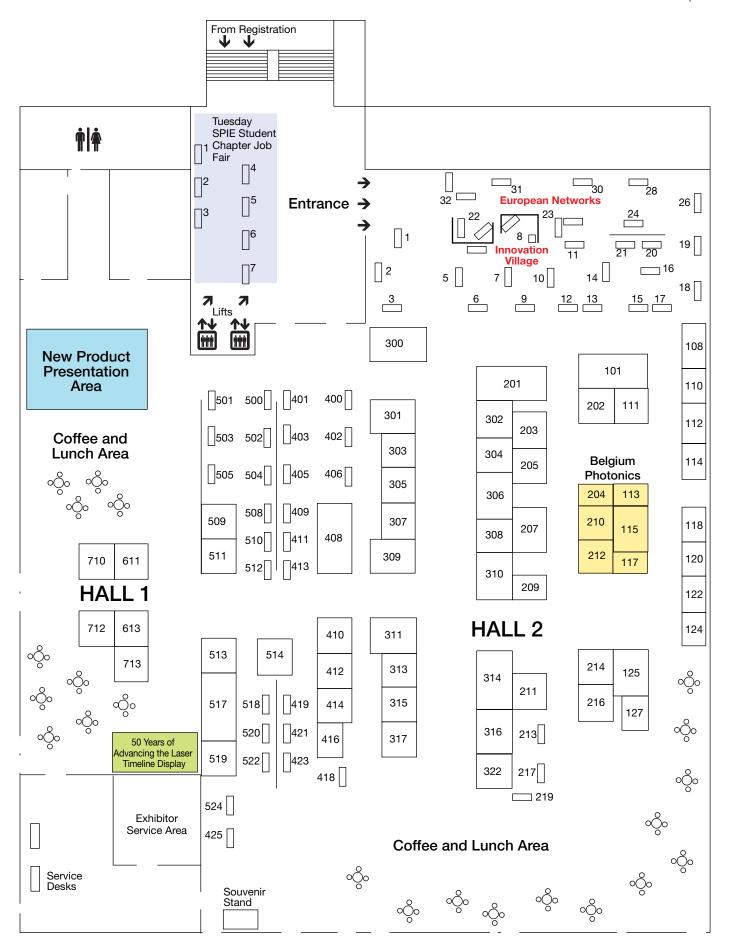
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The Square Conference Centre, Level -2, Grand Hall 1 and 2 Exhibition Floorplan





### **Effective Technical Presentations**

WS897

Course level: Introductory CEU .35 €90 Member / €127 Non-member Tuesday 9.00 to12.30

Oral presentation skills are a key to success for researchers. This course proposes a five-step methodology that will take you from scratch to an effective technical presentation. It also offers tips on how to manage the nervousness associated with speaking in public.

### LEARNING OUTCOMES

This course will enable you to:

- plan your presentation efficiently
- organize your material into an effective structure
- create slides that get the message across
- deliver your presentation effectively, both verbally and nonverbally
- handle even the most difficult questions

### INTENDED AUDIENCE

This material is intended for anyone who must prepare and deliver oral presentations. Both novice and experienced speakers can expect to learn much from it.

### INSTRUCTOR

Jean-luc Doumont runs lectures, workshops, and training programs in oral, written, and graphical communication for engineers, scientists, and managers worldwide. He is an engineer from the University of Louvain and a doctor in applied physics from Stanford University. This course is based on his popular lecture on oral presentations at over 15 top-ranked engineering schools (MIT, Stanford U, UC Berkeley, Caltech, Harvard, etc.).

This course is free to SPIE Student Members, but you must register to attend.

### **Hit-the-Target Laser Activity Workshop**

WS985

Course level: Introductory CEU .00 €11 Member / €26 Non-member Monday 14.00 to 16.00

This workshop will train attendees on the use of a Hit-the-Target Laser activity, a hands-on education outreach kit using lasers and mirrors. The activity is intended to engage and enrich the math/science learning experience for students in the middle grades. It was developed as part of Hands-On Optics (HOO), a \$1.7 million dollar grant from the U.S. National Science Foundation (NSF) to design and implement a science enrichment program for children aged 11 to 14 years old.

### INTENDED AUDIENCE

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

### INSTRUCTOR

Dirk Fabian studied astronomy and philosophy of science, receiving an MS in astronomy from the University of Wisconsin - Madison. He is the Student Services Lead for SPIE, building professional development programs and networking tools for scientists.

See Cashier to register.

### 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 has been approved as an authorized provider of CEUs by IACET, The International Association for Continuing Education and Training (Provider #1002091). In obtaining this approval, SPIE has demonstrated that it complies with the ANSI/IACET Standards which are widely recognized as standards of good practice.

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# **Photonics Innovation Village**

Showcasing developments from universities, nonprofits, and research centres

The Photonics Innovation village is a competition that showcases Europe's (and the World's) finest research programmes and encourages the transfer of optics/photonics research and technology into new and useful products. Held in cooperation with the European Commission and co-organised by the Brussels Photonics Team, the village competition intends to support and publicise research teams who are working on research, new applications and product development. Visitors to the exhibition will find the village on entrance into the hall where 21 contestants from 11 countries will display a wide range of innovative products. Winners will be announced during the Awards Ceremony, Thursday 13.00 to 14.00 in the Exhibition Hall, Level -2, Product Presentation Area.

### Contestants

**VUB** - ISIS3D: Image Steering Integrated Screen for 3D viewing

**VUB** - New software for the characterisation of historical glass

**VUB** - Transverse Laser Mode Switching Devices and Subsystems for Q-switching lasers with enhanced figures-of-merit

Optrima - 3D camera

KIT - Tunable visible lasers for spectroscopy

**Multitel** - Optical instrument for interrogating high-sensitivity and multiparametric photonic biochips for future point-of-care diagnostic

**SMARTHIES** - Test station for MEMS based on exchangable micro-optical probing wafers

**OSIRIS** - 3D Rear Projector without glasses + LCOS Laser Front Projector

P4L - Electro-photonic biochip

Photonics Technology Laboratory

**Thailand** - Data-Non-Intrusive Photonics-based Credit Card Verifier

**Galway University** - Low Cost kHz Wavefront Sensor Prototype

**Tampere University** - Yellow-orange high brightness semiconductor disk laser (VECSEL)

**HEOS Photonics** - SpectroRef: Spectrometer that measures refractive index of fluids

**Trinity College** - OSNR Monitoring using Two Fiber Interferometers

**Belarusian State University** - Compact, mobile fiber optical and thermal sensor for non invasive measurement of blood biochemistry

Photonics Research Center -

A High Speed Passive Wavelength Measurement System

**KIT** - MicroMops© The Active Modular Micro-Optical System

**CMST University of Gent** - Photonics in Motion: strechable optical waveguide

Nanyang University - Compact Digital Holography (CDH) System

**3D Metrics** - "3D Metric" software tool: image analysis to measure on-screen

**IESL/FORTH** - Photosensitive materials for two-photon polymerization



Exhibitors are listed in alphabetical order with details about products or services each is exhibiting. Companies are additionally crossindexed by technology areas. The address of each exhibitor is also listed, making this Exhibition Guide an excellent reference tool to take back to your office and share with your colleagues.

Exhibitor List as of 15 March 2010

### 3D Metrics - Innovation Village

Buschower Dorfstr 16, Märkisch Luch - Brandenburg, Germany, 14715

+49 33876 90166

www.3d-metrics.com

New Product: "Software lenses" as a new approach to pattern recognition and imaging as a measurement tool.

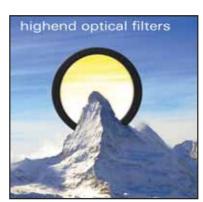
"3D Metrics" was set up to commercialize IP developed by Sabine McNeill, mathematician and former system analyst at CERN. Web services are provided to demonstrate generic software methods: visualizing multi-dimensional data in vertical layers, forecasting time series of any time interval and analyzing images, independent of technology. To become market ready, they need to be tailored to specific applications and customized to address challenges of precision, especially at nano level and below. Contact: Sabine K McNeill, Director, sabine@3d-metrics.com.

### AHF analysentechnik AG

#513

#14

Kohlplattenweg 18, Tuebingen, Germany, 72074 +49 7071 970901-0; fax +49 7071 970901-10 info@ahf.de; www.ahf.de



Laser filters with extreme performance, hardcoated multiphoton filters, metalhalide light source.

New Product: Multiband laser filtersets, Novel polarizing filters, Ultrasteep RazorEdge filters for RAMAN.

AHF analysentechnik
AG was initially founded
in 1981 by Helmut
Feuerbacher as an
engineering company.
In cooperation with
renowned companies,
universities and research
groups the team of AHF
develops user-specific
solutions for microscopic
and spectroscopic
analysis. These optical
filters are especially

appropriate for fluorescence microscopy, laser and Raman spectroscopy. The filter components can be mounted and adjusted by AHF in equipment-specific mountings. Contact: Dr. Michael Sommerauer, Sales Director, ms@ahf.de; Dr. Andreas Braunwarth, Product Manager, ab@ahf.de.

### ALTECHNA Co., Ltd.

#110

Konstitucijos Ave 23C-604, Vilnius, Lithuania, LT-08105 +370 52725738; fax +370 52723704 info@altechna.com; www.altechna.com

New Product: IBS advanced dielectric coatings, DPSS YB:YAG Q-switched laser, LD driver (pulsed and CW), Axicons.

ALTECHNA is a Lithuanian company with more than 13 years of experience in photonics. ALTECHNA is a supplier of laser optics, crystals, equipment, lasers and microfabrication systems. Our products are designed to meet the challenges of both: research and industrial production as well as actual or future requirements. Close cooperation with international and local business partners helps us to provide high quality and custom-oriented Hi-Tech solutions. Contact: Vaidotas Stalilionis, Sales Engineer, info@altechna.com; Tomas Jankauskas, Sales Engineer, tomas@altechna.com.

### **AMPLITUDE SYSTEMES**

#113

6 Allee Du Doyen G. Brus, Pessac, France, F33600 +33 5 56 46 40 60; fax +33 5 56 46 06 94 info@amplitude-systemes.com; www.amplitude-systemes.com

Within 10 years, Amplitude Systemes has become the specialist in the field of femtosecond lasers. Our lasers range from oscillators to amplifiers including fiber lasers.

Amplitude Systemes is the only company offering both crystal based lasers and fiber based lasers. With an extensive research and development policy, Amplitude Systemes has launched high energy lasers with more than 2mJ energy per pulse, ulrashort pulses down to 50fs and more than 20W average power lasers. Contact: Vincent Rouffiange, Sales and Marketing Manager, info@amplitude-systemes.com.

### Andor Technology Ltd.

#205

SPIE Corporate Member

Springvale Business Park, 9 Millenium Way, Belfast, Ireland, BT12 7AL

+44 28 9023 7126; fax +44 28 9031 0792 marketing@andor.com; www.andor.com



Andor Technology releases the iXonEM Blue EMCCD, single photon sensitivity, 20% extra response in the Blue.

Andor Technology is a world leader in scientific imaging, spectroscopy solutions and microscopy systems. We develop and manufacture a range of high performance digital cameras and associated products for Research and OEM markets. Over the last 20 years our innovations have enabled scientists worldwide to measure light down to a single photon and capture events occurring within 1 billionth of a second.

### AT-Fachverlag GmbH

#419

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

Avantes #511

Soerensezand 4A, Eerbeek, The Netherlands, 6961 LL +31 313 670170; fax +31 313 370179 info@avantes.com; www.avantes.com

New Product: The CC-UV/VIS/NIR-5.0 is a cosine corrector which can measure sun radiation.



Avantes is a leading company in the field of fiber optic spectroscopy and fiber optic measurement applications. We manufacture miniature spectrometer systems designed to enable research and industrial measurements and analysis involving the metrology of light. Avantes spectroscopy solutions facilitate measurements in the ultra-violet, visible and near-infrared wavelengths ranging from chemical composition and quantification to color measurement and radiometry. Contact: Caroline Bach, Marketing Coordinator, info@avantes.com; Peter Hiddinga, Klaas Otten.

### Becker & Hickl GmbH

#500

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

Becker & Hickl GmbH is technology leader in time-correlated single photon counting (TCSPC). The product range includes TCSPC modules for a wide range of applications, compact TCSPC standalone systems, picosecond correlators, multichannel scalers, photon counting detectors, detector assemblies, experiment control modules, picosecond diode lasers, confocal FLIM microscope systems, and FLIM systems for laser scanning microscopes of various manufacturers. Contact: info@becker-hickl.com

# Belarusian State Univ. - Innovation Village

#17

#712

4 Skorina Ave, Minsk, Belarus, 220050 +375 209 54 47 www.bsu.by

### Bernhard Halle Nachfl. GmbH

Hubertusstraße 10, D - 12163 Berlin, Germany +49 30 79747960; fax +49 30 7918527 office@b-halle.de; www.b-halle.de

Since 1873, Bernhard Halle Nachfl. GmbH stands for elements of highest quality, accompanying modern optics from their origin to the latest breakthroughs. We manufacture precision optical components of optical glass, quartz, calcite, fluorides with properties satisfying even the highest demands. Our range of products varies from prisms and flats up to lens systems, polarizers and retarders. Our long-term experience, as well as the readiness to adjust for new requirements is our motto. Contact: Dr. Götz Zinner, goetz.zinner@b-halle.de.

### Carl Hanser Verlag GmbH & Co. KG#504

Kolbergerstr 22, Munich, Germany, 81679 +49 89 99830 0; fax +49 89 984809 info@hanser.de; www.hanser.de

New Product: The journal LASER+PHOTONICS targets developers of optical, optoelectronic and laser systems.

Contact: Gregory Flinn, Editor, flinn@hanser.de; Regine Schmidt, Advertising Manager, regine.schmidt@hanser.de.

### Casix, Inc. #403

PO Box 1103, 20 Fuxing St , Fuzhou Fujian, China, 350014 +86 591 8362 0115; fax +86 591 8362 1248 sales@casix.com: www.casix.com

New Product: RGB Combiner, Bonded Laser Crystal, IBS coating (Veeco), Fiber Light Guide, Fiber Isolator/Combiner.



New quality Nd:YVO4 with highest power density coatings (IBS).

Casix is a 100% subsidiary of Fabrinet Inc. (a contract manufacturer for electro-optical products). Casix supplies Optics, Crystals and Fiber Components to the international photonics market since 1992 already and ensures best quality with more than 800 skilled employees. Please

test us! Contact: Jens Meyer, Sales Development Manager Europe, jens.meyer@casix.eu; Hongbai Lao, VP Sales and Marketing, hongbai.lao@casix.ca.

### **CASTECH Inc.**

#300

No 155 Yang Qiao West Rd, Fuzhou Fujian, China, 35002 +86 5918 3792 817; fax +86 5918 3711 593 castech@public.fz.fj.cn; www.castech.com

### **Exhibitor Directory**

### Conference Bag Pen Sponsor

### CE Optics Kft.

#409

Dom ter 9., Szeged, Hungary, H-6720 +36307163024; fax +3662343749 info@ceoptics.hu; www.ceoptics.hu

New Product: http://www.ceoptics.hu.

Our products are related to ultrafast laser technology, dispersion measurement and control, including frequency comb and carrier envelope phase. We are located in the city of Szeged, which is the leader of optical and laser sciences in higher education and academic applications, including several institutions and departments of the University of Szeged as well as the Biological Research Centre. Szeged is also the site of the Hungarian candidacy for hosting the Extreme Light Infrastructure. Contact: László H. Nagy, Sales Manager, sales@ceoptics.hu.

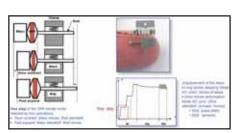
### **CEDRAT Technologies**

#501

15 chemin de Malacher Inovallée, Meylan, France, 38240 +33 4 7690 5045; fax +33 4 5638 0830 actuator@cedrat.com: www.cedrat.com

New Product: SPAs are new linear Stepping Piezo Motors for stroke up to 20mm with blocking at rest.

CEDRAT TECHNOLOGIES has developed a range of reliable piezoelectric products for high bandwidth and precise motion: APATM and PPA actuators as well as various precision mechanisms with driving and control electronics. Applications include micro nano positioning, micro scanning, laser cavity tuning, optic fiber stretching, vibration generation, vibration control (active damping, isolation), fast machining, mirror tilting, flap control, fluid control



Stepping Piezo Actuator SPAµ30XS.

(metering valve, injection).
Contact: Mathieu Bagot, Technical Sales Engineer, actuator@ cedrat.com; Thomas Maillard, Mechatronic Sales Manager, actuator@cedrat.com

### CeramOptec GmbH

#509

SPIE Corporate Member

Siemensstr 44, Bonn, Germany, 53121 +49 228 979670; fax +49 228 9796799 info@ceramoptec.de; www.ceramoptec.de

We offer a broad range of fibers and cables for industrial application as well as fiber bundles for spectroscopy, laser application, sensor technology etc. Contact: Franz Schuberts, Head of Industrial Sales, schuberts@ceramoptec.de.

# China International Optoelectronics Exposition #411

Rm 607 E Block Coastal City, Haide 3rd Rd Nanshan District, Shenzhen Guangdong, China, 518059 +86 755 8629 0901; fax +86 755 8629 0951 cioe@cioe.cn; www.cioe.cn

Get the training you need to stay ahead of the technology curve.

See Workshops, p. 12.

### **Cluster Photonique**

#115

c/o Centre Spatial De Liege, Angleur - Liege, Belgium, 4031 +32 479395158 www.clusterphotonique.be

### **CMOSIS**

#117

Coveliersstraat 15, Antwerpen, Belgium, 2600 +32 3 260 17 30

info@cmosis.com; www.cmosis.com

New Product: CMV2000 and CMV4000 CMOS image sensors for machine vision applications.

CMOSIS is a supplier of advanced off-the-shelf, customized and full custom CMOS image sensors, developed by a seasoned, multi-disciplinary team of image sensor experts, totaling more than 100 man-years of experience. Our team members have contributed to image sensor technology over the last 15 years with many scientific publications and patent applications. The team covers all skills required to design, manufacture, test and supply image sensors. Contact: Tim Baeyens, Director Business Development, Tim. Baeyens@cmosis.com.

# CMST University of Gent - Innovation Village #3

Sint-Pietersnieuwstraat 25, Gent, Belgium, 9000 www.ugent.be

### Cobolt AB

#118

Vretenvägen 13, Solna, Sweden, SE-171 54 +46 8 545 912 30; fax +46 8 545 912 31 info@cobolt.se; www.cobolt.se

### Coherent

#202

Domaine Technologique de, Saclay Bâtiment Azur, 4 Rue René Razel, Orsay Cedex, France, 91892 +33 169855145; fax +33 169855146 coherent.france@coherent.com; www.coherent.fr

New Product: Complete CEP-stabilized ultrafast amplifier system designed, built and supported by Coherent.



New complete CEP stabilized ultrafast amplifier system.

We are one of the world's leading suppliers of photonics-based solutions to a broad range of commercial and scientific research customers. We design, manufacture and market lasers, laser-based systems, precision optics and related accessories for a diverse group of customers. Since

our beginning in 1966, we have expanded our business through a combination of internal growth and the strategic acquisition of companies with related technologies. Contact: Jean-Luc Tapie, Sales Manager France, jean-luc.tapie@coherent.com; Joris Van Nunen, Sales Manager Benelux, joris.vannunen@coherent.com.

### Cristal Laser SA

Corporate

SPIE Corporate Member

32 Rue Robert Schumann, Messein, France, F-54850 +33 3 83 47 47 01; fax +33 3 83 44 22 72 mail@cristal-laser.fr: www.cristal-laser.fr

Cristal Laser is a privately owned, independent business, located near Nancy, France. Our company is specialized in crystal growth and processing for applications in non linear and laser optics: frequency-doubling, OPO's, frequency-mixing and electro-optics (Pockels cells). Cristal Laser' production range includes KTP (Potassium Titanyle Phosphate) and other crystals of the same family, such as LBO, RTP, KTP.fr, KTA and BBO. These crystals are widely used in many applications covering areas from laser surgery, to life sciences, security and defense, as well as material processing.

### **CVI Melles Griot**

#514

#414

SPIE Corporate Member

Aalsbergen 2, Didam, The Netherlands, 6942 SE +31 316333041; fax +31 316528187

info.holland@cvimellesgriot.com; www.cvimellesgriot.com

New Product: 85-RDF diode laser, http://www.cvimellesgriot.com/products/documents/downloads/660nm-diodelaser.pdf.

Serving semiconductor, biotech, industrial, commercial, aerospace and research industries, CVI Melles Griot is a leading global supplier of photonics products including optical components and systems, lasers, motion-control systems, laser measurement instrumentation and opto-mechanical hardware. CVI Melles Griot operates manufacturing facilities in USA: New Mexico, California, New York, the British Isles, Japan, and South Korea with sales representatives and distributors located worldwide. Contact: Klaas Hop, Sales Manager, khop@cvimellesgriot.com; Sylvain Misat, RSM, smisat@cvimellesgriot.com.

### **EDP Sciences**

#522

17 Ave du Hoggar, Courtaboeu Les Ulis Cedex, France, 91944 +33 1 6 918 75 75; fax +33 1 6 986 06 78 contact@edpsciences.org; www.edpsciences.org

### **EKSMA Optics**

#309

Mokslininku str 11, Vilnius, Lithuania, 08412 +370 5 2729900; fax +370 5 2729299 info@eksmaoptics.com; www.eksmaoptics.com



Variable attenuator to divide laser beam into two parallel beams of adjustable intensity ratio.

New Product: Variable attenuator to divide laser beam into two parallel beams of adjustable intensity ratio.

EKSMA OPTICS is a global supplier of precision optical components, laser and nonlinear crystals used in lasers and other optical instruments. Also company supplies opto-mechanical mounts, motorized positioning stages and optical tables

with vibration isolation equipment. EKSMA Optics offers wide range of primary products in catalogue that are available for fast off-the-shelf deliveries and owns polishing facilities for processing BK7/FS flat optics and nonlinear LBO, K\*DP, ZnGeP2 crystals. Contact: Daugirdas Kuzma, Director, Marketing and Business Development, d.kuzma@eksmaoptics.com; Ramunas Valauskas, Commercial Director, r.valauskas@eksmaoptics.com.

### **EKSPLA**

#308

Savanoriu Av 231, Vilnius, Lithuania, 02300 +370 5 264 96 29; fax +370 5 264 18 09 sales@ekspla.com; www.ekspla.com

New Product: NT 200 series tunable lasers offers wavelength tuning from 210 to 12 000 nm at kHz repetition rates.



Nanosecond tunable wavelength laser features 2500 kHz repetition rate.

EKSPLA is designer and manufacturer of solid state lasers, laser systems and laser components. Since its beginning, the company has aimed at production of high performance advanced solutions. Main products include: Solid-state lasers, laser systems and accessories for R&D applications, Optical parametric oscillators/ generators, Complete spectroscopy systems, Laser

power supply and cooling units, Laser optoelectronics, Industrial DPSS lasers, Custom designed laser systems. Contact: Mr. Rokas Sulcas, Area Sales Manager, r.sulcas@ekspla.com; Dr. Zenonas Kuprionis, Commercial Director, sales@ekspla.com.

### Exhibitor Lounge Sponsor

### Electro Optics Magazine

#316

The Spectrum Building, The Michael Young Centre, Purbeck Rd, Cambridge, United Kingdom, CB2 8PD +44 1223 211170; fax +44 1223 211107 sales@europascience.com; www.electrooptics.com

New Product: Electro Optics is now available as a digital edition, delivered direct to your inbox.



Electro Optics Magazine is now available in digital format.

Electro Optics magazine is the leading title for photonics business, technology and application. Also available as a digital edition, and supported by a website and regular email newsletters, it is essential reading for photonics professionals seeking to turn their technology expertise into profitable business. Keep up to date with the latest technology developments, business opportunities and expert opinion. Subscribe for free at our booth or online at www.electrooptics.com/ subscribe. Contact: Jon Hunt, Advertising Sales Manager, jon.hunt@europascience. com; Warren Clark, Publishing

Director, warren.clark@europascience.com.

### **Exhibitor Directory**

### Epner Technology, Inc.

#213

SPIE Corporate Member

78 Kingsland Ave, Brooklyn, NY, 11222-5603 718/782-5948; fax 718/963-2930 epner78@aol.com; www.epner.com

A comprehensive array of electroplating, coating and optical fabrication technologies - NIST Infrared standard, proprietary Laser Gold® and "light swallowing" Laser Black® processes; electroformed cold shields, custom-designed light waveguides, laser pump cavity reflectors and thermal barrier foil - serving laser, optics and photonics, semi-conductor, automobile, medical, aerospace and military markets. Contact: David Epner, President, david@epner.com; Paul Brancato, Vice President and General Manager, paul@epner.com.

### **ET Enterprises Ltd**

#314

45 Riverside Way, Uxbridge, United Kingdom, UB8 2YF +44 1895 200 880; fax +44 1895 270 873 sales@et-enterprises.com; www.et-enterprises.com

New Product: ETel manufactures photomultipliers and signal processing electronics for low level light detection.

ETel, which started in 2007, took over the photomultipliers and accessories business of Electron Tubes Ltd. and continues to manufacture, supply and develop the Electron Tubes brand product range. A subsidiary of Ludlum Measurements Inc., ETel has the benefit of the additional production facilities of ADIT, a US based producer of photomultipliers. Similarly, ADIT has access to ET Enterprises' development resources and experience in many different photomultiplier applications worldwide. Contact: sales@ et-enterprises.com.

### **European Optical Society**

#520

Hollerithallee 8, Hannover, Germany, 30419 +49 511 2788115; fax +49 511 2788119 www.myeos.org

The purpose of the EOS is to foster optics and related sciences, and to promote their applications by bringing together individuals and legal entities. The European Optical Society (EOS) serves as the joint forum for all individuals, companies, organizations, educational institutions, and learned and professional societies, who recognize the opportunity and challenge that a common European base provides for the development of optics in its broadest sense. Contact: Silke Kramprich, Event & Account Manager, kramprich@ myeos.org.

### Fianium Ltd.

#111

20 Compass Point, Southampton Hampshire, United Kingdom, SO31 4RA

+44 2380 458776; fax +44 2380 458734 info@fianium.com; www.fianium.com

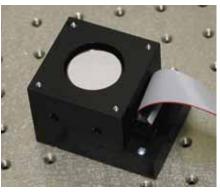
### Flexible Optical BV

#502

SPIE Corporate Member

Polakweg 10-11, Rijwijk, The Netherlands, 2288 GG +31 70 2629120; fax +31 70 7101400 oko@okotech.com; www.okotech.com

New Product: 19-channel piezoelectric deformable mirror optimized for correction of low-order Zernike terms.



19-channel piezoelectric deformable mirror optimized for low-order Zernike terms.

Flexible Optical B.V. (aka OKO Technologies) develops, manufactures and delivers integral solutions based on smart and adaptive optics for scientific, industrial, laser, astronomical, medical and other applications. From its foundation in 1997, OKO manufactures high-quality deformable mirrors

at affordable prices. The company also operates in the field of research and development of high-performance optical systems based on wavefront sensing and correction of aberrations. Contact: Gleb Vdovin, CEO, oko@okotech.com.

### Frank Optic Products GmbH

#410

Heidelberger Str 63-64, Berlin, Germany, 12435 +49 30 530249 0; fax +49 30 530249 21 info@gms-fop.de; www.frank-optic-products.de



Fibre tipps for dental medical applications, also autoclavable.

New Product: medical fibre tipps & cables for diff. med. & dental applic., autoclavable & CE-cert. acc. DIN 13485.

We make optical, fibre optic, optomech. and optoelectr. components, elements, systems and devices for medicine, laser industry,

lighting technology, sensors, biotechnology, automotive, signaling, optoelectronics as well as R&D. Our many years of experience, our qualified interdisciplinary team of opticians, physicists and electronic experts as well as our modern production and measuring technology, guarantee that we can implement all types of requirements, from prototyping to large series. Contact: Dieter W. Frank, General Manager, CEO, d.frank@fop-berlin.de.

Get the training you need to stay ahead of the technology curve.

See Workshops, p. 12.

### Fraunhofer IPMS

#611

Maria-Reiche-Str 2, Dresden, Germany, 01109 +49 351 8823 0; fax +49 351 8823 266

info@ipms.fraunhofer.de; www.ipms.fraunhofer.de

Fraunhofer IPMS, Dresden carries out customer specific developments in fields of microelectronic and micro systems technology serving as a business partner that supports the transition of innovative ideas into new products. Fraunhofer IPMS develops and fabricates modern MEMS and OLED devices in its own clean room facilities. In addition to R&D services it offers ramp-up within a pilot production. With modern equipment and about 200 scientists and engineers, the range of projects and expertise covers sensor and actuator systems, microscanner, spatial light modulators, lifetronics as well as organic materials and systems.

### Galway University - Innovation Village #6

University Rd, Galway, Ireland +353 91 524411 www.nuig.ie

New Product: Low Cost kHz Wavefront Sensor: An Enabling Technology in Adaptive Optics.

The Applied Optics Group (NUI Galway, Ireland) has research activities across optics and applied imaging science, including smart optics, adaptive optics, optical scattering and propagation. Building on this we have an active program of commercialization of in-house systems technologies. Our stand gives an insight into one of these technologies applied to high speed wavefront sensing. The underlying platform technology employed has broader reach across adaptive optics systems solutions. Contact: Derek Coburn, Research Fellow, derek.coburn@nuigalway.ie; Prof J.C Dainty, Professor Applied Physics, c.dainty@nuigalway.ie.

### **GTI Technologies**

#413

6 Armstrong Rd, Shelton, CT, 06484 203/929-2200; fax 203/926-0074 bob@gti-usa.com; www.gti-usa.com

New Product: Takatori MWS 610-SD: For slicing of glass with low kerf loss.

GTI Technologies is a worldwide supplier providing sales, applications and services of multi-wire saws, wafer lamination, delaminating, and mounting and temporary bonding tools from Takatori for the back grinding process, Taiko wafer systems for Lamination, Delamination and Mounting, MEMS photo resist lamination in atmospheric on vacuum from Takatori, wafer metrology measurement tools from Fogale, carbon fiber and effectors from Astel, Harmotec non contact end effectors. Contact: Robert Thron, VP, Semiconductor Sales, bob@gti-usa.com.

### GWU-Lasertechnik GmbH #300

Talstr 3, Erftstadt, Germany, 50374 +49 2235 955220; fax +49 2235 75632 info@gwu-group.de; www.gwu-group.de

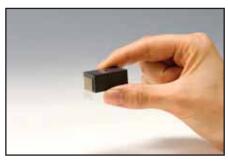
GWU-Lasertechnik specializes on OPOs and tunable laser systems including integrated systems with pump laser, OPO, and frequency converter. Further products: Fiber lasers (NP Photonics), DPSS lasers (Xiton-Photonics), Spectrelle: high resolution, low f-number Echelle spectrographs, laser crystals, non-linear crystals (Castech), periodically poled crystals and waveguides (HCP), optical components including waveplates and prisms.

### **Hamamatsu Photonics**

#201

Parc du Moulin de Massy, Massy Cedex, France, 91300 +33 1 69 53 7100; fax +33 1 69 53 7110 infos@hamamatsu.fr; www.hamamatsu.fr

New Product: New applications need new sensors; we at Hamamatsu develop them for you.



C10988MA: Mini or Macro spectrometer? Up to you to judge.

Hamamatsu develops and manufactures the most upto-date light related sensors and instruments: Photomultipliers; Photodiodes: CMOS and CCD sensors; Infrared detectors; Microchannel plates and image Intensifiers; Mini spectrometers; Detectors and

sources for X-rays; Xenon - Xenon-mercury and Deuterium lamps; Laser diodes; Equipments for semi-conductor and pharmaceutical industries; Microscope slides digitalization machines; Digital CCD board cameras and High grade digital cameras. Contact: Anne Llorens. Communication Coordinator, allorens@hamamatsu.fr.

### **HC Photonics Corp**

#300

SPIE Corporate Member

F4 No 2 Technology Rd V, Hsinchu Science Park, Hsinchu, Taiwan, 300

+886 3 666 2123; fax +886 3 666 2124 service@hcphotonics.com; www.hcphotonics.com

New Product: PPXX Mixer – Wavelength Conversion Module to cover wavelength from UV to IR with fiber delivery.

HCP develops and manufactures optical wavelength converters based on Periodically Poled Nonlinear Materials-MgO:PPLN and MgO:PPSLT Bulk and Waveguide. With SHG/SFG/DFG/OPG/OPA/OPO configurations to cover wavelength from UV to IR (350nm~5500nm) for full spectrum applications - RGB Display, Biophotonics, Scientific and other applications. HCP PPXX Mixer (Bulk and WG) – a compact and high efficiency (up to 50%) wavelength conversion module with fiber delivery to generate desired wavelength and power. Contact: Karin Wu, Sales Director, karin@ hcphotonics.com; Jean Cheng, Sales Specialist, jean\_cheng@ hcphotonics.com.

### **HEOS Photonics - Innovation Village #4**

Via Brecce Bianche, Ancona, Italy, 60131 +49 071 220 4789; fax +49 071 220 4801 www.univpm.it

New Product: SpectroRef is a new refractometer for fluids (international patent) for use with spectrometers.

HEOS Photonics is a newborn spin-off of the Polytechnic University of Marche, established in Ancona, Italy. Started by a group of highly motivated young scientists with a common background in applied optics, HEOS Photonics exploits their academic know-how to find innovative optical solutions to technological problems. Its activity encompasses the development of new optical systems for a wide range of applications (biomedicine, process control, metrology) as well as custom services and consulting. Contact: Dr. Francesco Vita, f.vita@univpm.it; Dr. Luigino Criante, I.criante@univpm.it.

### **Exhibitor Directory**

### **HOLOEYE Photonics AG**

#613

SPIE Corporate Member

Albert-Einstein-Str 14, Berlin, Germany, 12489 +49 30 6392 3660; fax +49 30 6392 3662 contact@holoeye.de; www.holoeye.de



New PLUTO Phase Only Spatial Light Modulator Version optimized for 700-900nm.

**HOLOEYE** Photonics AG is providing services and products in the fields of diffractive optics (DOE), spatial light modulation (SLM) and LCOS microdisplay components. HOLOEYE offers design and production services of diffractive microoptical elements, Spatial Light Modulators

(SLM) which are based on high-resolution translucent or reflective microdisplays and a great variety of LCOS microdisplay types and products. Contact: Klaus von Guenner, contact@holoeye.com.

### **HORIBA Scientific**

#211

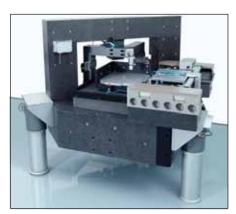
16-18 rue du Canal, Longjumeau cedex, France, 91165 +33 1 64 54 13 00; fax +33 1 69 09 07 21 info-sci.fr@horiba.com; www.horiba.com/scientific

### **IBS Precision Engineering**

#416

ESP 201, Eindhoven, The Netherlands, 5633 AD +31 40 2901270; fax +31 40 2901279 info@ibspe.com; www.ibspe.com

New Product: Introduction of the ISARA 400 3D coordinate measuring machine (45 nanometre measuring uncertainty).



ISARA 400 Ultra precision 3D coordinate measuring machine.

IBS Precision Engineering is a leading innovator in the field of high precision engineering. We specialize in the development of customengineered measurement and positioning solutions, machine tool calibration/ inspection systems, noncontact precision sensors, multi axis interferometers and air bearings. Through our

extensive commitment to research and development, both at a national and international level, we have established close relations with many leading knowledge centers. Contact: Dirk Smits, Sales Engineer Benelux, smits@ibspe.com.

# ICT- APACHE & ICT BOOM Projects - European Networks #32

9 Iroon Polytechniou Str., Zografou, Athens, Greece, 15773 +30 2107722057; fax +30 2107722077 ckou@mail.nlva.gr; www.telecom.ntua.gr/photonics/

### ICU/FNIR - European Networks #28

Pleinlaan 2, Brussels, Belgium, 1050 +32 2 623 34 53; fax +32 2 623 34 50

New Product: Infrared Imaging Components for Use in Automotive Safety Applications.

The ICU project is a strategic research project, supported by the European Commission - FP7, in which six of Europe's leading companies and institutes have joined forces. ICU aims at prototyping a low-cost infrared night vision system that can resolve a pedestrian or animal on the road. The infrared imaging system will be developed to provide high contrast images of warm objects completely independent of ambient light conditions and is expected to considerably increase safety on the roads. Contact: Frank Niklaus, Project Coordinator ICU, frank.niklaus@ee.kth.se; Leif Bergstrom, Project Coordinator FNIR, leif.hugo@telia.com.

### id Quantique SA

#500

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

New Product: Single photon detection module, 900-1150 nm InGaAsP APD, id400, with up to 30% Quantum Efficiency.



The id400 is a photon counter optimized at 1064nm.

id Quantique will be showing a range of photon counters. The id100, a photon counter based on a Si diode for VIS wavelength. It has the world shortest jitter of 40 ps and noise down to less than 2Hz. The id201 photon counter is optimized for telecom wavelength

with adjustable quantum efficiency up to 25%. The id400, a photon counter optimized for photon detection at 1064nm with adjustable quantum efficiency up to 30%. The id300 is a short pulse laser source at 1310nm or 1550nm. Contact: Leonard Widmer, Sales, leonard. widmer@idquantique.com.

### IESL/FORTH - Innovation Village #1

Vassilika Vouton, PO Box 1527, Heraklion Crete, Greece, 711 10 +30 2810 391500; fax +30 2810 391555 www.forth.gr

New Product: Photosensitive materials for one and two photon lithographic applications.

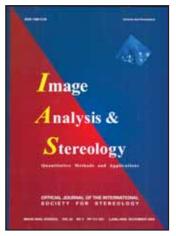
BMM is a research group at IESL-FORTH. BMM develops photosensitive materials with superior mechanical and optical properties for one and two photon lithographic applications. Contact: Dr. Maria Farsari, Researcher, mfarsari@iesl.forth.gr; Dr. Maria Vamvakaki, Professor, vamvakak@iesl.forth.gr.

### Image Analysis & Stereology

#421

Medical Faculty Institute of Astronomy, Korytkova 2, Ljubljana, Slovenia, SI-1000

+386 1 5437 300; fax +386 1 5437 301 IAS@mf.uni-lj.si; www.wise-t.com/ias



The official journal of the International Society for Stereology.

New Product: Image Analysis & Stereology is the official journal of the International Society for Stereology.

International Society for Stereology (ISS) is a well established nonprofit international scientific society aiming to promote stereology and image analysis in a wide range of disciplines such as mathematics; biomedicine; computer science; material science; statistics; geology; stochastic geometry; etc. The official journal of the Society is Image Analysis & Stereology that will be exposed at this meeting. Contact: Ida Erzen, Editor-in-Chief, ida.erzen@

mf.uni-lj.si; Tatjana Praprotnik, Secretary, tatjana.praprotnik@mf.uni-lj.si.

### InTopSens - European Networks

Ny Munkegade 120, Aarhus University, Aarhus C, Denmark, DK-8000

+45 8942 1111; fax +45 8612 0740 aa@au.dk; http://inano.au.dk

InTopSens is an EU framework 7 project with five research and two industry partners. We are developing a highly integrated optical sensor for point of care label free identification of sepsis bacteria strains in whole blood and their antibiotic resistance profile. Contact: Daniel Hill, Project Coordinator, danhill@kth.se; Asger Christian Krüger, Post Doc., asgerk@phys.au.dk.

# In-Vision Digital Imaging Optics GmbH

#611

#24

Industriestrasse 9, Guntramsdorf, Austria, A-2353 +43 2236 3043440; fax +43 2236 30434433 office@in-vision.at; www.in-vision.at

New Product: Microscope accessory system with MMAdisplay for spatial and angular control of light exposure.

In-Vision realizes your optical visions! Our strengths and core competences: Optics know-how from light source to image output; Optics, coating and mechanics development; Understanding our customers challenges and translate your visions into viable solutions; High class optics and mechanics production for fast realization of projects and products; Fast reaction, short delivery times, all critical manufacturing technologies in house; Experienced and dedicated staff. Contact: Wolfgang Pferscher, Director Sales, pferscher@in-vision.at; Dieter Luetze, Director Marketing, luetze@in-vision.at.

### IOP Publishing Ltd.

#406

Dirac House, Temple Back, Bristol, United Kingdom, BS1 6BE +44 1179 297481; fax +44 1179 301178

reception@iop.org; www.iop.org

IOP Publishing, a not for profit company wholly owned by the Institute of Physics, is one of the largest and most dynamic publishers of physics information in the world. Our publishing activity, which dates back to 1874, includes a wide range of journals, magazines and community websites. We partner more than a dozen international organizations and have a global network of offices located in Bristol, Philadelphia, Washington DC, Munich, St Petersburg, Moscow, Beijing and Tokyo. Contact: Edward Jost, Group Ad Manager, edward.jost@iop.org; Claire Bedrock, Senior Publisher, claire.bedrock@iop.org.

### **iXFiber SAS**

#315

Rue Paul Sabatier, Lannion, France, 22300 +33 2 96 04 10 50; fax +33 2 96 04 10 60 info@ixfiber.com; www.ixfiber.com

New Product: Polarisation Maintaining™ doped Double Clad Fiber.

iXFiber is a French leading independent manufacturer of active and passive specialty optical fibers, components based on Fiber Bragg gratings technology, and subassemblies modules for a diverse range of industries. Contact: Patrice Crochet, Sales Director, patrice. crochet@ixfiber.com; info@ixfiber.com.

### JTA Equipment Technology

**#**/13

34 St Peters Wharf, Newcastle Upon Tyne, United Kingdom, NE6 1TN

+44 191 276 6907

peterthompson28@btinternet.com; www.gti-usa.com

New Product: Takatori wire saws for cutting Optical substrates with high quality surface finish.



Takatori MWS-610SD Multi-Wire Saw.

We supply Equipment to the Photonics industry, primarily Takatori wire saws for slicing optical substrates. Taktori wire saws are used in production to cut materials from soft ceramics to Cadmium Telluride and Lithium Niobate through to the hardest materials such as Sapphire and Silicon Carbide. We are experienced in sawing lens blanks, wafers for final product preparation, and rectangular blocks for optical devices. Contact: Dr Peter Thompson, Technical Director, peterthompson28@ btinternet.com.

### Karlsruhe Institute of Technology (KIT) - Innovation Village #20, #21

Institute for Microstructure Technology (IMT), Hermann-von-Helmholtz-Platz 1, Eggenstein-leopoldshafen, Karlsruhe, Germany, 76344

+49 721 608 0; fax +49 721 608 4290 www.uni-karlsruhe.de

LASEA #204

rue des Chasseurs Ardennais 4, Angleur, Belgium, 4032 +32 4 365 0243; fax +32 4 384 37 55 info@lasea.be: www.lasea.be

New Product: Our new WS can integrate FL, CO<sup>2</sup> and diode laser systems for plastic welding and marking applications.

Lasea aims at producing innovative laser solutions for the industry. We provide expertise, engineering, systems (standard and workstation) and customized solutions in our main fields of application: plastic welding, marking and traceability and surface treatment. We represent also SPERIAN laser safety products, GENTEC measurement equipment, Global Laser alignment laser and Lumics and Quantel laser diodes. Reference: Pilkington, Saint Gobain, Inbev, AGC, Baxter, Daikin, Glaverbel, GSK, Guardian. Contact: Jörg Plumanns, Sales Manager, jplumanns@laser-ea.com; Paul-Etienne Martin, Project Leader, info@lasea.be.

### Laser Quantum Ltd.

Emery Court Vale Rd, Stockport Chesire, United Kingdom, SK4 3 GL

#508

+44 161 975 5300; fax +44 161 975 5309 sales@laserquantum.com; www.laserquantum.com

New Product: Introducing the finesse 10, 532nm highly-stable, ultra-quiet CW 10W rugged and compact laser.

Laser Quantum is a world-class manufacturer of high quality solid-state lasers. Our products are known for reliability, performance-excellence and a long operational life. You'll find our products in laboratories and integrated in systems world-wide. Our expertise meets the needs of industry, aerospace, biomedicine and research. By working with our customers, our lasers are found in applications including femtosecond Ti:Sapphire pumping, microscopy, fluorescence imaging and Raman spectroscopy. Contact: Debbie Oldale, Sales Coordinator, doldale@laserquantum.com; Helen Farmer, Marketing Assistant, hfarmer@laserquantum.com.

### LINOS Photonics France #112

90 Avenue de Lanessan, Champagne Au Mont d'Or, France, F-69410

+33 4 37 49 13 53; fax +33 4 37 49 13 36 info-fr@linos.com; www.linos.com

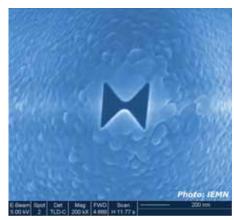
New Product: NIR objectives, Line scan lens: inspec.x, Optical design software, UV/telecentric f-theta lens.

Qioptiq Group's 2300 people worldwide will be working under one brand - Qioptiq. In 2010, LINOS will change its name to Qioptiq. Of course, some things won't change: products will continue to be premium quality. LINOS is a reliable partner and supplier across the complete value added chain for customized photonics solutions (expertise, design, prototype, series). In addition, you can rely on one of the largest off-the-shelf product range (catalogue) in the field of photonics. Contact: Michael Desert, Account Manager R&L, michael.desert@linos.com.

### Lovalite #101

18 rue Alain Savary, Besançon, France, 25000 +33 38153625; fax +33 381255351 info@lovalite.com; www.lovalite.com

New Product: LovaLite now provides custom shape aperture probes for scanning near-field optical microscopy.



New LovaLite's custom aperture shape SNOM probe.

I oval ite - the **Next Generation** of Micro-Optical Components. LovaLite provides you expert supporting services and best micro-optical components, for your advanced applications in micro-optics and nanotechnology. Our products include micro-optical components, Lumerical's simulation and design softwares,

APE Research's scanning probe microscopes and SmartQuantum's photonics components. LovaLite is based in France and delivers worldwide directly and through a network of qualified distributors. Contact: Brahim Dahmani, CEO, dahmanib@lovalite.com; Gregory Baethge, Sales Representative, baethgeg@lovalite.com.

### Lumera Laser GmbH

#122

Opelstr 10, Kaiserslautern, Germany, 67661 +49 6301 703 180; fax +49 6301 703 189 info@lumera-laser.com; www.lumera-laser.com

New Product: Our new BLAZE ns-laser system is the most sophisticated high power laser system available to date.

LUMERA LASER is a leading picosecond and nanosecond laser manufacturer specializing in high-performance laser systems for industrial 24/7 use. LUMERA LASER systems are in use in photovoltaics, medical tools and devices, semiconductor processing, micro-mold manufacturing as well as a host of other high precision applications. In addition to lasers LUMERA offers a process development lab as well as a job shop for small piece micro-manufacturing. Contact: Dirk Müller, Director of Business Development, mueller@lumera-laser.com; Bernhard Klimt, Director of Sales and Marketing, klimt@lumera-laser.com.

### **MANLIGHT**

#108

4 rue Louis de Broglie, Lannion, France, 22300 +33 296 04 20 00; fax +33 296 04 27 05 sales@manlight.com; www.manlight.com

New Product: 1µm Pulse on demand CW fiber laser up to 40W fast modulation 250MHz.

Manlight designs and manufactures high power fiber lasers and amplifiers at  $1.0\mu m$  and  $1.5\mu m$ , pulsed or CW, with a lot of options such as polarization maintaining, SLM, OEM format or plug and play turnkey systems to cover telecom, industrial, scientific, medical and LIDAR applications. Manlight produces in volume and with quality at competitive prices. Manlight is part of the ALCEN Group. Contact: Bruno Lefevre, Sales & Marketing Director, blefevre@manlight-alcen. com; Sebastien Grot, Product Line Manager, sgrot@manlight-alcen. com.

### Materials Today

#518

The Blvd, Langford Ln, Oxford, United Kingdom, OX5 1GB +44 1865 843000; fax +44 1865 843010 f.webb@elsevier.com; www.elsevier.com

### Menlo Systems GmbH

#301

Am Klopferspitz 19, Martinsried, Germany, 82152 +49 89 189 166 0; fax +49 89 189 166 111 sales@menlosystems.com; www.menlosystems.com

Menlo Systems is a leading developer and global supplier of instrumentation for high-precision metrology. Known for its Nobel Prize winning optical frequency comb technology, the Munich-based company and its US subsidiary also supply femtosecond phase stabilization units, femtosecond lasers, THz systems and a broad spectrum of high-sensitivity ultrafast photodetectors. Contact: Sales Team, sales@menlosystems.com.

### **Messe Stuttgart**

#425

Messepiazza 1 , Stuttgart, Germany, 70629 +49 711 2589 0; fax +49 711 2589 440 info@messe-stuttgart.de; www.messe-stuttgart.de

New Product: Lasys June 8 - 10, 2010 www.lasys-messe.de; Vision Nov. 9 - 11, 2010 www.vision-messe.de.

Messe Stuttgart - a German trade show organizer - is the hub of a strongly export oriented economy. Each year we organize more than 55 trade fairs and exhibitions, which are the kick start, catalyst and scout for new developments. We own Europe's most modern trade fair venue directly next to the airport. Come and see for yourself! Contact: Sophie Pieck, Project Assistant, sophie.pieck@messestuttgart.de.

### MolTech GmbH

#510

Rudower Chaussee 29-31, Berlin, Germany, 12489 +49 30 6392 6620; fax +49 30 6392 6622 mtberlin@aol.com; www.mt-berlin.com

New Product: F-piShaper – refractive laser beam shaper for photovoltaics, other micromachining tasks.



F-piShaper\_9 - efficient refractive beam shaping optics for laser micromachining.

MolTech GmbH is a versatile company working for various fields of science and industry: High efficient Beam Shaping optics; Acousto-optics -AOTF, Deflectors, Modulators, Imaging-Monochromators; Faraday devices - Optical Isolators, Rotators; IR materials, EO-, AO-, organic, Terahertz and nonlinear crystals: Laser and Optical Components:

Scintillating crystals, Phosphors; IR-, PR-, MO-, magnetic, PE-materials, wafers and substrates. Contact: Alexander Laskin, Project Manager, alex@mt-berlin.com; Elmar Schmeisser, Project Manager, mtberlin@aol.com.

### **Moore Nanotech**

#401

Dorpstraat 30, Veldhoven, The Netherlands, 5504 HJ +31 408454746; fax +31 897139866 frank@nanoptic-solutions.com; www.nanotechsys.com

New Product: Micro-Milling machine for generating Waferbased lens arrays (>2000 cavities) to highest accuracies.



Micro Milling machine for generating waferbased lens arrays (>2000 cavities) to the highest accuracies.

Nanotechnology Systems develops and manufactures state-of-the-art range of ultraprecision diamond turning, micro milling and micro grinding machines for the production of advanced optics; primarily for the consumer electronics. defense, aerospace, lighting, medical, and automotive

sectors. Nanotech® ultra-precision machining systems are installed in many countries around the globe. Contact: Frank van Hulst, European Agent, frank@nanoptic-solutions.com; Bob Cassin, cassin@nanotechsys.com.

### Multitel #212

Rue Pierre et Marie Curie 2, Mons, Belgium, 7000 +32 65 34 27 32; fax +32 65 34 27 29 info@multitel.be; www.multitel.be

New Product: Fibre lasers and amplifiers, Optical fibre and integrated sensors, Laser micromachining, Optical metrology.

The Photonics Dept of Multitel, R&D Centre, is contracting with international companies and SME's in the frame of promising innovative projects related to photonic sensors, fiber lasers and amplifier technologies. Thanks to these collaborations and its strong participation to the European Framework Programs (FP6-7), the Photonics Dept has become a reliable technology provider for a wide range of industries: medical, aerospatial, telecom, manufacturing, defense. Contact: Edwige Jessel, Sales Rep, jessel@multitel.be; Mr. Urbain, Sales Rep, urbain@multitel.be.

### Multitel - Innovation Village

#7

Rue Pierre et Marie Curie 2, Mons, Belgium, 7000 +32 65 34 27 32; fax +32 65 34 27 29 info@multitel.be: www.multitel.be

New Product: A versatile optical instrument for interrogating high-sensitivity and multiparametric photonic biochips for future point-of-care diagnostic.

On the innovation village, we will present a prototype of compact optical biosensing system comprising a disposable biophotonic chip and an optical interrogation instrument for label-free in-vitro diagnostic (IVD) at point of care (PoC). The instrument allows for the replacement of the biophotonic chip using a combination of automatic passive and active alignment, and is able to readout eight measurement channels simultaneously for real-time label-free bioassays.

### **Exhibitor Directory**

### **Multiwave Photonics**

#505

SPIE Corporate Member

Rua Eng Frederico Ulrich 2650, Moreira da Maia, Portugal, 4470-605

+351 22 9408260; fax +351 22 9408261

sales@multiwavephotonics.com; www.multiwavephotonics.com

Multiwave develops and manufactures innovative pulsed fiber lasers that operate at 1064 nm and 1550 nm. These lasers offer wide operating ranges from single-shot to 500 kHz, high pulse stability with zero laser leakage between pulses and uniquely flexible customization capabilities, for applications such as advanced materials processing, ranging and imaging. Multiwave also manufactures other types of all-fiber optical sources and amplifiers for scientific, industrial and medical applications.

# Nanophotonics Europe - *European Networks*

C/o ICFO - The Institute of Photonic Sciences, Barcelona, Spaiin, 08860

+34 93 553 4001; fax +34 93 553 4000 contact@nanophonicseurope.org; www.nanophotonicseurope.org

### Nanyang Technological Univ. - Innovation Village

50 Nanyang Ave, Singapore, Singapore, 639798 +65 6791 1744; fax +65 6791 1604 www.ntu.edu.sg

Conference Bag Sponsor

### **Nature Publishing Group**

#307

#26

#13

The Macmillan Bldg, 4 Crinan St, London, United Kingdom, N1 9XW

+44 20 7833 4000; fax +44 20 7843 4998 www.nature.com

The NPG portfolio combines the continued excellence of Nature, its associated research and review journals, and over 50 leading academic and society journals in the life, physical and clinical sciences. Open access options are offered through both the academic and society journals as well as through a new multidisciplinary journal: Nature Communications. Visit Stand #307 to register to receive the newly launched Nature Photonics Technology Focus Digital Edition, pick up free copies of Nature Photonics and other journals.



### Newport Spectra-Physics GmbH #710

SPIE Corporate Member

Guerickeweg 7, Darmstadt, Germany, 64291 +49 6151 708 0; fax +49 6151 708 952 germany@newport.com; www.newport.com

New Product: New! 500 Watt Thermopile Detector, Model 818P-500-55!



Picomotor actuators are ideal devices for motorizing optical set-ups.

Newport Corp.
is a leading
global supplier
of advancedtechnology products
and systems to
customers in the
scientific research,
microelectronics
manufacturing,
aerospace and
defense/security,
life and health
sciences and
precision industrial

manufacturing markets. Newport's innovative solutions leverage its expertise in high-power semiconductor, ultrafast lasers, photonics instrumentation, sub-micron positioning systems, vibration isolation, optical subsystems and precision automation. Contact: Sander Slagter, Sales Engineer, sander.slagter@newport.com; Davey Loos, Sales Engineer, davey.loos@newport.com.

### **NP Photonics**

#300

SPIE Corporate Member

> 9030 S Rita Rd, Tucson, AZ, 85747 520/799 7400; fax 520/799 7403 spiegelberg@npphotonics.com; www.npphotonics.com

NT-MDT #216

High Tech Campus 83, Eindhoven, Netherlands, 5656 AG +31 88 338 9999; fax +31 88 338 9998 info@ntmdt.eu: www.nt-mdt.com

New Product: Solver Next with novel dual head system offers atomic force + scanning tunneling microscopy.

NT-MDT enjoys a 20-year history in instrumentation created specifically for nanotechnology research, leading the field in originality, quality, and high tech development. Our next-generation SPM technology allows a university or industrial lab to start with a cost-effective core product and build to a grand, multi-user research center of SPM with related technologies. We believe in pushing the envelope in rapid innovation combined with superb customer service. Contact: Anke Peters, Business Development & Marketing, info@ntmdt.eu; Julia Alekseeva, CEO, info@ntmdt.eu.

Nufern #402

SPIE Corporate Member

7 Airport Park Rd, East Granby, CT, 06026 866/466-0214; fax 866/844-0210 info@nufern.com; www.nufern.com

Nufern® is a leading U.S. 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, Conn., USA, Nufern's integrated fiber and fiber laser teams also provide rapid and cost-effective OEM fiber laser design, assembly and contract manufacturing services. Contact: Kristoff Feliksik, Director of Sales & Applications - Europe, kfeliksik@nufern. eu; Andrzej Szkotnicki, Sales & Applications Engineer - Europe, aszkotnicki@nufern.eu.

### Ocean Optics (Netherlands)

#408

Nieuwgraaf 108G, Duiven, The Netherlands, 6921 RK +31 26 319 0500; fax +31 26 319 0505 info@oceanoptics.eu; www.oceanoptics.eu



The Jaz in all its glory with 8 modules all integrated into one stack.

New Product: New options for Jaz: UV-VIS-NIR spectrometer modules, oxygen and pH modules, light sources and more.

Ocean Optics is the leading supplier of solutions for optical sensing. Our extensive line of products includes spectrometers, optical sensors, sampling accessories, light sources, fibres and probes. Recognized as the inventor of miniature fibre optic spectroscopy, Ocean Optics has sold more than 130,000 spectrometers worldwide since 1989. New are the extended options for Jaz, a new nearinfrared spectrometer and oxygen and pH sensors. Contact: Henri Tellegen, Sales Engineer, henri.tellegen@

oceanoptics.eu; Romero Kicken, Sales Engineer, romero.kicken@oceanoptics.eu.

### **Ohara GmbH**

#209

Nordring 30 A, Hofheim, Germany, 65719 +49 (0) 6192 9650 50; fax +49 (0) 6192 9650 51 www.ohara-gmbh.com

OHARA is leading supplier for optical raw glass. There are over hundred optical glasses, low-Tg-glasses, i-Line glasses in different shapes like strips, pressings and processed parts available. In addition, OHARA supplies worldwide glass-ceramic with nearly zero-expansion. Contact: Christel Hüttl, christel.huettl@ohara-gmbh.com.

### Omega Optical, Inc.

#400

SPIE Corporate Member

Delta Campus, 21 Omega Dr, Brattleboro, VT, 05301 802/254 2690; fax 802/254 3937

sales@omegafilters.com; www.omegafilters.com

Stock or custom, single or multiple substrate, small or large quantities; interference filters at competitive prices off the shelf in 24 hours, custom manufactured in 5 days. Omega Optical offers: bandpass, short and longpass, rejection bands, dichroic filters, mirrors, neutral density, laser, UV, laser diode clean up filters and more for machine vision, clinical chemistry, biomedical instrumentation, astronomy, microscopy, flow CYTO, Raman spectroscopy, aerospace and many more applications. Contact: Ruth Gorham Houle, VP of Business Development, rgorham@omegafilters.com.

### Optima Research

#310

SPIE Corporate Member

8 Riverside Business Park, Stoney Common Rd, Stansted, United Kingdom, CM24 8PL

+44 1279 810911; fax +44 1279 810912

info@optima-research.com; www.optima-research.com

Optima Research is the European distributor of ZEMAX, the world leading optical design software. We provide sales, training and support on ZEMAX. Contact: Etienne Labaume, Optical Engineer, etienne.labaume@optima-research.com; Leo Chen, Optical Engineer, leo.chen@optima-research.com.

### **OptoIndex**

#524

Papier Muehlenweg 74, Ratingen, Germany, 40882 +49 2102 1678 0; fax +49 2102 1678 28 info@opto-index.de; www.opto-index.de

New Product: This work of reference offers a comprehensive data source for companies and products in photonics.

The OptoIndex is a worldwide distributed work of reference, updated annually and published in English. This catalogue and website www.opto-index.de/ot will help you to find the answers. Contact: Constanze Classen, Media Consultant, constanze. classen@opto-index.de.

### **Optophase**

#311

149, rue Bataille, Lyon, France, 69008 +33 (0) 4 78 74 24 56; fax +33 (0) 4 26 76 30 74 info@optophase.com; www.optophase.com

New Product: The Nano-LPQ piezo nanopositioning system features equal speed in XYZ, low profile (21mm).



Nano-F25HS: Very high speed lens positioner with nm repeatability and 25 microns travel.

OPTOPHASE is the European distributor of Mad City Labs which provides the highest resolution nanopositioners available on the market today. Our nanopositioners have the lowest position noise and exceptional accuracy, which make them ideal for applications that require precision and sub-nanometer resolution. Mad City Labs' nanopositioners incorporate proprietary

piezoresistive-based sensors, PicoQ technology, to eliminate creep and hysteresis caused by PZT actuators. Contact: Samuel Choblet, Salesman, samuel.choblet@optophase.com.

### Optrima NV - Innovation Village

#12

Witherenstraat 4 rue des Pères Blancs, Brussles, Belgium, 1040 +32 2 737 67 24; fax +32 2 737 67 85 www.optrima.com

New Product: Optrima's 3D Time-of-flight CMOS imager provides a direct way for acquiring real-time 3D information.



Optrima's 3D real-time time-of-flight camera with DepthSense™ imager.

Optrima NV is a Brussels, Belgiumbased fab-less semiconductor company with the single mission to provide 3D timeof-flight Sensor Solutions and Cameras for building 3D gesture-based interfaces. Our hardware transforms the way people interact with the digital world, whether

they are playing video games, browsing through TV channels, or in industrial applications. We enable fully immersive, transparent and intuitive user experiences by providing 3D real-time hardware to those markets. Contact: Johannes Peeters, Sales Manager, jp@ optrima.com.

### **Optronis GmbH**

#124

Honsellstr 8, Kehl, Germany, 77694 +49 7851 91260; fax +49 7851 91260 10 info@optronis.com; www.optronis.com

Optronis develops, manufactures and distributes streak cameras and high-speed video cameras for scientific and industrial applications. Our high-end cameras can be used to capture ultrafast phenomena. Our primary goal: to provide our customers with innovative solutions for fast optical measurements. Contact: Dr. Patrick Summ, summ@optronis.com.

# OSIRIS - Innovation Village & European Networks #8, 22

1 ave de Belle Fontaine, Cesson-Sévigné cedex, France, 35576 +33 2 99 27 36 42; fax +33 2 99 27 30 73 www.thomson.net

New Product: Rear Projection glassless 3D Display (HoloVizio) and LCOS Laser Front Projector (Barco).



Glassless Light Field Projection 3D Display.

OSIRIS (Original System for Image Rendition via Innovative Screens) is a European funded Integrated Project under IST-FP6 (IST-33799 IP). The objectives are to carry out new generations of 2D and 3D projection systems, with the help of innovative component technologies (LED, Laser, holographic

and IL screens). The OSIRIS consortium is made up of 9 partners from 4 European countries: Technicolor (Thomson), Osram OS, Sax3D, Sypro Optics, Barco, Oxxius, Fraunhofer ISE, Holotools and Holografika. Contact: Arno Schubert, OSIRIS Project Leader, arno.schubert@technicolor.com; Zsuzsa Dobrányi, Sales Manager - Holografika, zs.dobranyi@holografika.com.

### **OXXIUS**

#317

SPIE Corporate Member

4 Rue de Broglie, Lannion, France, F-22300 +33 2 96 48 53 71; fax +33 2 96 48 21 90 sales@oxxius.com; www.oxxius.com

New Product: 550, 660 nm SLM lasers; 488 nm, 50 mW circular and elliptical beam Laser Diode Modules.

Oxxius manufactures innovative solid-state lasers for industrial and scientific applications. Its compact laser modules, featuring wavelengths in the visible and near-UV spectrum, have outstanding performance with market-leading power levels. The SLIM line features a monolithic resonator technology that ensures excellent power, wavelength and pointing stability along with true single-frequency emission. Available wavelengths are 375, 405, 445, 473, 488, 532, 550, 561 and 660 nm. Contact: Willy Brochard, Sales Manager, wbrochard@oxxius.com; Pascal Voluer, Director of Sales, pvoluer@oxxius.com.

### PHASORS - European Networks #30

Optoelectronics Research Centre, University of Southampton +44 2084054339; fax +44 2087639820 ipg@orc.soton.ac.uk; www.eu-phasors.eu

PHASORS (Phase Sensitive Amplifier Systems and Optical Regenerators and their Applications) is a European Commission FP7 supported project targeted at the development and application of Phase Sensitive Amplifier (PSA) technology in 40Gbit/s broadband core networks. The project is a collaborative research activity between, University of Southampton – ORC (UK), University College Cork – Tyndall Institute (IE), Chalmers University (SE), University of Athens (GR), OneFive (CH), Eblana Photonics (IE), OFS(DK) and EXFO (SE).

### **Phoenix Photonics Ltd**

#405

PO Box 389, Purley, United Kingdom, CR8 1XY +44 208405 4339; fax +44 208763 9820 general@phoenixphotonics.com; www.photonixphotonics.com

New Product: Differential Group Delay Line (DGD).

Phoenix Photonics is a designer and manufacturer of optical fibre components, modules and instrumentation used in optical communications networks, test and measurement equipment, fibre sensing applications and research and development laboratories. Phoenix also works closely with the customer to provide bespoke solutions based on its optical fibre evanescent field technology, which enables a large range of fibre components and modules to be realized. Contact: Dean Giles, dean.giles@phoenixphotonics.com; lan Giles, ian.giles@phoenixphotonics.com.

### **PhoeniX Software**

#313

#31

PO Box 545, Enschede, The Netherlands, 7500 AM +31 53 4836460; fax +31 53 4337415 info@phonexbv.com; www.phoenixbv.com

The PhoeniX objective is to provide its customers with integrated software solutions for Micro and Nano technologies, from concept to manufacturing, from cleanroom operators to executives. Our software has been designed to minimize errors and reduce design time. Contact: Salar Ahmed, Marketing & Sales, salar.ahmed@phoenixbv.com.

### PHOSFOS - European Networks

Pleinlaan 2, Brussels, Belgium, 1050 +32 26293453; fax +32 26293450 Lanyard Sponsor

### **Photon Design**

#322

SPIE Corporate Member

34 Leopold St, Oxford, United Kingdom, OX4 1TW +44 1865 324990; fax +44 1865 324 991 info@photond.com; www.photond.com

Established in 1992, Photon Design now provides a wide range of innovative photonics CAD tools to 25 countries around the world, supplying the World's leading photonics companies, universities and government labs. CAD products include tools for passive and active component and optical circuit modelling. The company has a team of the brightest people in photonics modelling, developing original, innovative solutions for tomorrow's photonics design projects, saving designers time and money. Contact: Dr. Dominic Gallagher, CEO, info@photond.com.

### Photonex 2010

#127

Old Village Hall, The Street, Effingham Surrey, United Kingdom, KT24 5JS

+44 1372 750555; fax +44 1372 450666 info@photonex.org; www.photonex.org

PHOTONEX is a leading European photonics event and takes place in the 'Heart of England', at the International Centre in Telford. It will be the most important opportunity in 2010 to meet UK buyers of photonics equipment and components. Exhibiting at PHOTONEX will be vital if you wish to 'get down to business', meet all the UK's major suppliers and network with Europe's industry. Contact: Laurence Devereux, Exhibition Director, info@photonex.org.

### Photonics<sup>21</sup>

#207

VDI-Platz 1, Duesseldorf, Germany, 40468 +49 (0) 211 6214-668 www.photonics21.org

New Product: The new Strategic Research Agenda defines a joint European strategy for photonics.

Photonics21 is an industry-led European Technology Platform for photonics in Europe. It unites the majority of the leading photonics industries and research institutes throughout Europe. Presently, more than 1,400 stakeholders are members of Photonics21. Photonics is a key driver for technological innovation and one of the most important technologies in the 21st century. In September 2009 the European Commission defined photonics as one of five key enabling technologies. Contact: Katharina Flaig, Consultant Laser & Optics Research/Junior Project Manager, flaig@vdi.de; Markus Wilkens, Consultant Laser & Optics Research/Project Manager Photonics21, wilkens@vdi.de.

### Photonics 4 Life - European Network #23

C/o Institute of Photonic Technology, Jena, Germany, 07745 +49 3641 206 301; fax +49 3641 206 399 juergen.popp@ipht-jena.de;

Photonics4Life is the European Network of Excellence for Biophotonics. 13 top-of-the-line research institutes, all active in the broad domain of Biophotonics, have joined forces to establish a European platform on Biophotonics for both academia and industry.

They aim to provide a coherent and interdisciplinary framework for research in the strongly fragmented field of Biophotonics in Europe. Another major goal is to initiate a paradigm shift in research by putting emphasis on the needs of physicians and patients and to strengthen local, national, and European research and communication activities between technical developers and medical users. Photonics4Life is funded by the European Commission within the 7th Framework Programme. Contact: Prof. Juergen Popp, Coordinator of Photonics4Life, Juergen.popp@ipht-jena.de; Dr. Robert Moeller, Head of Research Group "Jena Biochip Initiative", Robert.moeller@ipht-jena.de.

### Photonics 4 Life - Innovation Village #11

Institut für Photonische Technologien e.V., PO Box 100239, Jena, Germany, 07745

+49 3641 206 064

www.ipht-jena.de; www.photonics4life.eu

One of the various scientific projects conducted within the network is the Electro-Photonic Biochip, which visitors can lay hands on at the P4L booth. It is a disposable unit the size of a 1-cent coin that integrated into a small microfluidic system allows the detection of biomolecules, like DNA or proteins, within a few minutes. The chip is ideally suited for the quick and robust analysis of biomolecules in on-site or point-of-care testing, as about 40 molecules can be detected at the same time. The chip is being adapted for the identification of plant pathogens and epizootic diseases, but many other applications are possible, e.g. the application in emergency medicine to test for antibiotics.

To detect low molecular substances or to obtain detailed spectroscopic information the same chips can be used for an analysis by surface enhanced Raman spectroscopy (SERS). This technology can be applied for a biosensing with a multiplexing capability that cannot be achieved by the established methods today. Contact: Prof. Juergen Popp, Coordinator of Photonics4Life, Juergen.popp@ipht-jena.de; Dr. Robert Moeller, Head of Research Group "Jena Biochip Initiative", Robert.moeller@ipht-jena.de.

### **Photonics Media**

#125

SPIE Corporate

Laurin Publishing, Berkshire Common, 2 South St, Pittsfield, MA, 01201-6109

413/499 0514; fax 413/442 3180

photonics@laurin.com; www.photonics.com

Photonics Media – the Pulse of the Industry - is Laurin Publishing Company's international suite of media with more than 50 years as the industry's leading publications. In print with Photonics Spectra and Biophotonics International magazines, EuroPhotonics and Photonics Showcase supplements, the Photonics Buyers' Guide and online at Photonics.com. Contact: Penny Pretty, European Sales Manager, penny.pretty@photonics.com; Dr. Joerg Schwartz, Contributing Editor, j.schawrtz@wsap.net.

# Photonics Technology Laboratory Thailand - *Innovation Village* #18

112 Thailand Science Park, Phahon Yothin Rd Klong 1, Klong Luang Pathumthari, Thailand, 12120 +66 2 564 6900; fax +66 2 564 6771 info@nectec.or.th; www.nectec.or.th

New Product: 3Cs: Data-Nonintrusive Credit Card Verifier.

Photonics Technology Laboratory (PTL) is one of the NECTEC key technology platforms where a national RD&E facility dedicated to applications of optics and photonics is formed. At the NECTEC PTL, we primarily bring in our knowledge and experiences in optical science and engineering, electronics, and computer programming skill to improve national competitiveness in order to play an active role in Thailand's effort to advance the science and technology of light. Contact: Sarun Sumriddetchkajorn, Principal Researcher and Lab Director, sarun.sumriddetchkajorn@nectec.or.th; Kosom Chaitavon, Assistant Researcher, kosom.chaitavon@nectec.or.th.

### PhotonikBB e.V.

#410

Potsdamer Strasse 18a, Teltow, Germany, 14513 +49 (0) 3328 430 330; fax +49 (0) 3328 430 230 info@photonik-bb.de; www.photonik-bb.de

PhotonikBB is a network of partners from science and industry to transfer scientific results in the field of photonics and optics into commercial applications. In order to achieve this goal the network promotes and coordinates projects to integrate know-how from science and business. The following innovation fields form the emphasis of the network: Applied laser technology; Photovoltaics; Optical sensor and measurement technology; Photonic components. Contact: Andreas Feldo, Network Manager, a.feldo@photonik-bb.de.

Photonis #214

Avenue Roger Roncier, Brive-La-Gaillerde, France, 19100 +33 555 863 700; fax +33 555 863 774 sales@photonis.com; www.photonis.com

PHOTONIS develops, produces and markets innovative sensors for detecting and amplifying very low levels of light and radiation Industry and Science, Medical and Night Vision: Image Intensifiers, ICCDs and HPDs, Long-Life™ Microchannel Plates, Channeltron® Electron Multipliers, TOF and Advanced Performance detectors. We also offer Neutron and Gamma Detectors, Streak Tubes, Power Tubes, Ion Drift Tubes. To see our complete line of products, visit www.photonis. com. Contact: David Dupuy, International Sales Manager, d.dupuy@ photonis.com; Dr Emile Schyns, Product Manager, e.schyns@ photonis.com.

### Physik Instrumente (PI) GmbH & Co.#306

Auf der Römerstrasse 1, Karlsruhe, Germany, 76228 +49 721 4846 0; fax +49 721 4846 100 info@pi.ws; www.pi.ws



Miniature hexapod with great freedom of movement.

New Product: PI's parallel kinematics hexapod systems provide positioning in 6 axes with precisions below 1 µm.

PI is a world leading, ISO 9001 certified OEM and Research supplier of piezoelectric NanoPositioning Systems and motorized MicroPositioning systems (mechanics, controllers and software). Contact: Rolf Ellerbrock,

Key Account Manager, r.ellerbrock@pi.ws; Frank Gehbauer, Sales Manager Europe, f.gehbauer@pi.ws.

### PicoQuant GmbH

#203

Rudower Chaussee 29, Berlin, Germany, 12489 +49 30 6392 6560; fax +49 30 6392 6561 info@picoquant.com; www.picoquant.com

Our product line includes pulsed diode lasers, Time-Correlated Single Photon Counting (TCSPC) electronics and detectors (PMT, SPAD), fluorescence lifetime spectrometers, time-resolved fluorescence microscopes, upgrade kits for Laser Scanning Microscopes. Applications include Single Molecule Spectroscopy, Fluorescence Lifetime Imaging (FLIM), Fluorescence Resonance Energy Transfer (FRET), Fluorescence Correlation Spectroscopy (FCS), Anisotropy, Optical tomography and Quantum Key Distribution. Contact: info@ picoquant.com.

### Raicol Crystals Ltd.

#302

SPIE Corporate Member

15 Giron St Industrial Zone, Yehud, Israel, 56217 +972 3 936 7412; fax +972 3 906 8969 info@raicol.com; www.raicol.com

Raicol manufactures nonlinear optical elements, including KTP, HGTR KTP, RTP, PPKTP and PPSLT. Raicol's newest products are the RTP electro-optic Q-switch for high-repetition rate applications, a monolithic KTP OPO and an Enhanced LBO for High Power Applications. Raicol also supplies Cr:YAG, and BBO elements. Contact: Tamar Naveh, Customer Relations & Marketing, tamar@raicol.com; Alex Skliar, CTO, alexs@raicol.com.

### **RSoft Design Group**

#120

11 Swinborne Drive, Braintree, Essex, United Kingdom, CM7 2YP +44 1376 528536; fax +44 1376 528651

info@rsoftdesign.co.uk; www.rsoftdesign.com

RSoft Design Group offers a full spectrum of photonic and network design and simulation software. The breadth and depth of our family of tools is unsurpassed. This range of products not only allows us to offer a more complete solution to those customers whose interest spans the hierarchy of strategic business through physical device analysis, but gives us a unique insight into the complex inputs and impacts of product and network design. Contact: John Horgan, Director of European Operations, john@rsoftdesign.co.uk.

### RSP Technology BV

#418

Metaalpark 2, Farmsun, The Netherlands, 9936 BV +31 596 632 300; fax +31 596 632 678 info@rsp-technology.com; www.rsp-technology.com

New Product: RSP Aluminium reduces surface roughness for optical components under 2 nm for mirrors and moulds.

RSP Technology produces aluminium alloys for optical applications, like mirrors, moulds, housings, mounting and Gimbal-systems, with advantages for surface roughness, shape stability, strength and low thermal expansion. The meltspinning technology enables RSP to cool down materials at a speed of 10,000,000 °C per second, "freezing" the liquid alloy, with superior specifications and ultra-fine microstructure. RSA Aluminium has a surface roughness less then 2 nanometer. Contact: Roger Senden, Sales Director, rsenden@rsptechnology.com.

### **SCTB NORD**

#412

Peschany Carier 3, Moscow, Russia, 109383 +7 495 357 6771; fax +7 495 348 0700 info@sctbnord.com; www.sctbnord.com

New Product: Standard thermoelectric modules.
Micromodules. Cycling modules. Power generating modules.

SCTB NORD, Specialized Constructive Technological Bureau NORD, was formed by a group of thermoelectricians in Moscow in 1991. Since its beginning NORD has always been able to focus on the manufacture of hi-tech products thanks to its high scientific potential. SCTB NORD's specialists designed and implemented in large-scale production a number of innovative technologies that made the company the world's leading manufacturer of thermoelectric cooling and generator modules. Contact: Konstantin Senin, Commercial Director, info@sctbnord.com; Igor Rakitin, Commercial Department Manager, info@sctbnord.com.

28

### **SEDI Fibres Optiques**

#304

ZA de Saint Guénault, 6 Rue Jean Mermoz, Courcouronnes, France, 91080

+33 1 69 36 64 22; fax +33 1 69 36 64 19 info@sedi-fibres.com; www.sedi-fibres.com

New Product: Power Copper SMA: "SuperNova" Connector, large open space around the fiber end, heat dissipater!



Power Copper SMA: "SuperNova" Connector, large open space around the fiber end, heat dissipater!

Serving the special applications fiber optic market for more than 20 years SEDI Fibres Optiques offers a unique range of optical fibers and cables and manufactures components (Hermetic Feedthrough, High Power Patchcords, Coupler, WDM, Filters). SEDI Fibres Optiques is a specialist of custom designed assemblies for applications including high temperature, high

pressure, biocompatibility, radiation resistance, vacuum chambers, severe chemical environment, power lasers, UV, IR, PM devices, etc. Contact: Martine Debouige, General Manager, debouige.m@sedifibres.com; Valérie Stachow, Sales Engineer.

### Simuloptics GmbH

#101

O'Brien Strasse 2, Schwabach, Germany, D-91126 +499122 830300; fax +499122830303 info@simuloptics.de; www.simuloptics.de

Simuloptics GmbH is an optical solution provider located in Schwabach near Nuremberg, Germany. It offers optical design, simulation and analysis services with a special focus on non-imaging optics and light scattering. Simuloptics is a world-leading expert in the analysis of volume light scattering and has gained an excellent reputation in straylight analysis. Simuloptics distributes the optical software FDTD Solutions and MODE Solutions of Lumerical Solutions (Canada). Contact: Bernhard Michel, CEO, bm@simuloptics.de; Eberhard Lange, CEO, el@simuloptics.de.

### SMARTHIES - Innovation Village #2

Forskningsveien 1, Oslo, Norway, 0314 +47 22 06 73 00; fax +47 22 06 73 50 www.sintef.no

New Product: High speed inspection system for dynamic MEMS testing based on a micro-optical probing wafer.

The SMARTHIES consortium has RTD partners and industrial users. SINTEF is the coordinator and contributes within low-coherence interferometry and micro optics design. The other partners are: Warsaw University of Technology (laser interferometry, micro optics design), Fraunhofer IOF (micro optics processing), CNRS FEMTO (micro optics processing), CSEM (design and production of smart pixel imager), Heliotis (exploitation), IMMS (mechanical design/camera board development), and Techfab (end user). Contact: Kay Gastinger, Senior Scientist PhD, kay.gastinger@sintef.no; Odd Løvhaugen, Senior Scientist, odd.lovhaugen@sintef.no.

### Spectroscopy Magazine

#423

485F US Highway 1S Ste 100, Iselin, NJ, 08830-3009 732/596 0276; fax 732/596 0003

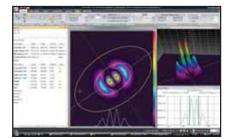
spectroscopyedit@advanstar.com; www.spectroscopyonline.com For 25 years, *Spectroscopy* has been the only publication dedicated to the spectroscopic sciences. The in-depth coverage continues to connect industry professionals with the critical information, research, and instrumentation they require. Every issue reaches 24,300, with peer-reviewed research articles and technical reports on innovative applications and instruments, tutorials on key techniques, productivity-boosting columns, and comprehensive news coverage of products and industry events. Contact: Ed Fantuzzi, Publisher, efantuzzi@advanstar.com; Stephanie Shaffer, Sales Representative, sshaffer@advanstar.com.

### Spiricon GmbH

#512

Up de Worth 40, Grosshansdorf, Germany, D-22927 +49 4102 6671802; fax +49 4102 6671803 sales@spiricon.com; www.spiricon.de

New Product: BeamGage - the all new Laser Beam Analysis software truly based on ISO 11145/6.



All-new Laser Beam Analyser based on 30 years of experience.

Spiricon - a member of the Ophir group - makes laser beam analysers and automated M2 systems which are considered the industry standard. All systems function in real time and are truly based on the applicable ISO standards: the latest technology in beam

diagnostics based on 30+ years of experience. Contact: Juergen Reingruber, General Manager, reingruberj@spiricon.de.

### **Springer**

#517

Tiergartenstr 17, Heidelberg, Germany, 69121 +49 (0) 62214878993; fax +49 (0) 6221487-8366 www.springer.com

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Get the training you need to stay ahead of the technology curve.

See Workshops, p. 12.

### **Exhibitor Directory**

### Tampere Univ. of Technology - Innovation Village

#15

Korkeakoulunkatu 10, Tampere, Finland, 33720 +358 3 3115 11 www.tut.fi

# Taylor & Francis - Informa UK Ltd.

#219, 217

2 parc Square, Milton Park, Abingdon, Oxfordshire, United Kingdom, OX14 4RN +44 207 017 6419; fax +44 207 017 6715 www.taylorfrancisgroup.com

tec5 AG #303

In der Au 27, Oberursel , Germany, 61440 +49 6171 9758 0; fax +49 6171 9758 50 sales@tec5.com; www.tec5.com



New high-dynamic range OEM technology for photodiode array based spectroscopy.

New Product: New highdynamic range OEM technology for photodiode array based spectroscopy.

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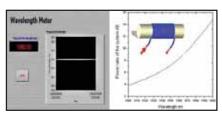
components up to complete customer specific solutions tec5 offers innovative and high quality products for multiple applications. Contact: Peter Huber, Product Manager, sales@tec5.com; Eugen Wentzel, Sales Manager, sales@tec5.com.

# The DIT Photonics Research Centre, Ireland - Innovation Village #16

Dublin Institute of Technology, Kevin Street, Dublin 8, Ireland +353 1 4024577

www.prc.dit.ie

New Product: Low Cost High Speed Wavelength Measurement System. Wavelength Range: 1500-1600 nm.



A high speed and low cost wavelength measurement system.

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Research Centre is
an industry focused
research centre at
the Dublin Institute
of Technology
specializing in
Optical Fiber
Sensing for
a variety of
measurands.
PRC conducts
research and

technology development in the areas of Fiber Optic Sensors and its Applications, Fiber Optic Systems for Sensing Applications, Smart Fiber Structures, Liquid crystal filters for sensing applications, Modelling of Optical Waveguides, Photonic Integrated Circuits etc. Contact: Dr. Ginu Rajan, Research Associate, ginu.rajan@dit.ie; Prof. Gerald Farrell, Director of PRC, gerald.farrell@dit.ie.

# The Institution of Engineering and Technology (IET)

Michale Faraday House, Six Hills Way, Stevenage, Hertfordshire, United Kingdom, SG1 2AY

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hdyball@theiet.org; www.theiet.org

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### **Thorlabs GmbH**

#301

#519

Hans-Boeckler-Str. 6, Dachau/Munich, Germany, 85221 +49 8131 59 56 0; fax +49 8131 59 56 99 europe@thorlabs.com; www.thorlabs.com



New Current and TEC Controllers for High-Power Laser Diodes and LEDs.

Thorlabs is a leading designer and manufacturer of photonics equipment for research, manufacturing, and biomedical applications. Founded in 1989, Thorlabs is headquartered in Newton, New

Jersey with over 600 employees at manufacturing and sales offices throughout the United States, United Kingdom, Germany, France, Sweden, Japan and China. Contact: Sales Europe, europe@thorlabs.com.

### **Trackinside**

#113

Rue Des Chasseurs Ardennais , Angleur, Belgium, B-4031 +32 4 3650253; fax +32 4 3342755 info@trackinside.com; www.trackinside.com

New Product: Laser marking on syringes: up to 600 DMx per min. SFERA from European Commission Program FP7.

The new reference for Mass Serialization in glass and other transparent materials. We develop and commercialize the Naginels® patented technology. Using femto-second laser and special optical head, our technology makes it possible to carry out the marking of diffractive codes (DataMatrix for example) inside transparent materials. Contact: Jean-Michel Mestrez, Managing Director, jm.mestrez@trackinside.com; info@trackinside.com.

### Trinity College Dublin - Innovation Village

#10

College Green, Dublin 2, Ireland +353 1 608 1000 info@tci.ie; www.tcd.ie

New Product: We have developed a new type of in-band OSNR monitor for 10G DWDM.

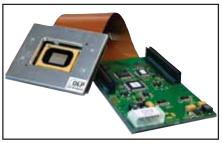
Trinity College Dublin is Ireland's leading University. The Semiconductor Photonics Group lead by Professor John Donegan has a strong commitment to commercial development of his research on devices for optical communications. The new OSNR monitor in an in-band monitor that does not require an OSA and measurements have been carried out over the range <10 dB to >30dB with an accuracy of +/- 0.5 dB. The monitor will be exhibited at Photonics Village. Contact: Professor John Donegan, Professor of Physics, jdonegan@tcd.ie; Dr. Wei-Hua Guo, Senior Researcher, guow@tcd.ie.

### ViALUX GmbH

#503

Am Erlenwald 10, Chemnitz Saxony, Germany, 09128 +49 371 3342470; fax +49 371 3342710 info@vialux.de; www.vialux.de

New Product: DLP® Discovery™ gives control over a mirror array paving the way to new emerging applications.



The V1100 includes a formatter board with custom FPGA design.

ViALUX develops, produces, and distributes electro-optical components and optical measurement systems. As a value-added reseller for the Texas Instruments DLP® Discovery™ line of products, ViALUX supplies the full spectrum of DLP® Discovery™ and

offers customized software and hardware development based on the Discovery™ chip sets. The company's ALP family of controller boards provides a platform for new emerging applications of DLP® technology. Contact: Simone de Bernardo, Marketing Assistant, deBernardo@vialux.de; Dr. Petra Aswendt, CEO, info@vialux.de.

VM-TIM #114

Lutherstr. 48, Jena, Germany, 07743 +49 (0) 3641 384859; fax +49 (0) 3641 384850 info@vm-tim.de; www.vm-tim.de

New Product: beam splitter cubes; waveplates; CaF2-, MgF2-, Si-, Ge-optics; CO2-, He-Cd-, Nd:YAG-, Diode-lasers.

VM-TIM develops, produces and distributes optical and mechanical components as well as He-Ne-, He-Cd-, CO2-, Nd:YAG-, and diodelasers for industry, research and education.

### Vrije Univ. Brussel - Innovation Village #5

ETRO-IR, Pleinlaan 2, Brussels, Belgium, 1050 +32-2-6292397; fax +32-2-6292883 istiens@etro.vub.ac.be; www.etro.vub.ac.be



Multiview projection display using image steering integrated screen technology.

The ETRO Department (Electronics and Informatics) of the Vrije Universiteit Brussels comprises three laboratories which are covering a wide range of generic technologies in Micro- and Optoelectronics (LAMI), Speech & Audio Processing (DSSP), Multidimensional Signal

Processing & Communication (IRIS). Besides its achievements on the level of fundamental and strategic basic research, ETRO is also recognized as a key industrial research pole (IOF) at the Vrije Universiteit Brussel.

More in particular the LAMI group has been working for many years on opto-electronic components that enable efficient manipulation, modulation and detection of infrared radiation, going from the near-IR wavelengths from solid-state lasers (about 1 micron) up to mid-infrared wavelengths of CO2 lasers (9-11 micron wavelength or 30 THz).

- Modulation techniques and technologies to modulate and Q-switch infrared lasers based on novel thin disk semiconductor based devices and/or transverse laser mode switching principles.
- Investigation of Seebeck based detector and cameras for high power CO2 lasers (9-11 micron wavelength - 30 THz) going from giant sub-ns pulses up to CW detection: opto-electronic designs in III-V semiconductors and noise reduction techniques.

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### **Exhibitor Directory**

# Vrije Univ. Brussel - *Innovation Village*

#19

Applied Physics and Photonics Department (FirW-TONA), Pleinlaan 2, Brussels, Belgium, 1050 +32 2 629 21 11 info@vub.ac.be; http://www.tona.vub.ac.be

### Vrije Univ. Brussel - Innovation Village #9

Pleinlaan 2, Brussels, Belgium, 1050 +32 2 629 21 11 info@vub.ac.be: www.vub.ac.be

New Product: Multiview projection display using image steering integrated screen technology for 3D viewing.

The Vrije Universiteit Brussel (VUB) is a medium-size University in the capital of Europe. The Brussels Photonics Team B-PHOT is part of the Faculty of Engineering of VUB. It hosts 45 researchers whose R&D activities are coordinated by Prof. Hugo Thienpont. The group is internationally recognized for its basic, strategic, applied and industrial research in the field of "micro-photonics". B-PHOT-VUB is involved in many industrially-oriented research projects with Flemish and European companies. Contact: Lawrence Bogaert, Ph.D. Researcher, Ibogaert@b-phot.org.

Wiley #713

The Atrium Southern Gate, Chichester, West Sussex, United Kingdom, PO19 8SQ

+44 (0) 1243 779777; fax +44 (0) 1243 770154 customer@wiley.co.uk; www.wiley.com

Wiley-Blackwell, publishing business of John Wiley & Sons, is the leading society publisher and offers libraries peer-reviewed primary research across more than 1250 journals (e.g. the high-quality journals Laser & Photonics Reviews or Journal of Biophotonics) and a global reference source of books, major reference works and databases. New titles on display will feature the just published Nonlinear Optics – An Analytical Approach by Paul Mandel and the Handbook of Plastic Optics by Stefan Bäumer.

### WITec GmbH #305

Lise-Meitner-Str 6, Ulm, Germany, 89081 +49 (0) 731 14070 0; fax +49 (0) 731 14070 200 info@witec.de; www.witec.de

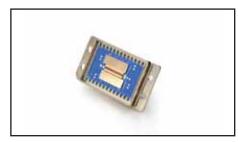
WITec is manufacturer of high resolution optical and scanning probe microscopy solutions for scientific and industrial applications. A modular product line allows the combination of different microscopy techniques such as Raman, NSOM or AFM in one single instrument for flexible analyses of optical, chemical and structural properties of a sample. WITec headquarters and production facilities are based in Ulm, Germany; WITec's US Sales Office, WITec Instruments Corp. is located in Maryville, TN. Contact: info@witec.de.

Xenics #210

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

New Product: Xenics' Xlin-1.7-1024 high-speed NIR linescan detector.



Xenics Xline-1.7-1024: More accurate inspection and smaller particle detection at short wavelengths.

Xenics is the leading developer of innovative infrared detection solutions for a wide range of applications. Xenics designs, manufactures and sells infrared detectors and cameras, both line-scan and 2-D, covering the infrared wavelenath

ranges from 0.4 to 14 micrometers. In addition, Xenics delivers custom products according to the agreed specification and planning. Contact: Sales Department, sales@xenics.com.

### **XiO Photonics**

#313

Hengelosestraat 705, Enschede, The Netherlands, 7521 PA +31 53 4836688; fax +31 53 2011303 info@xiophotonics.com; www.xiophotonics.com

### **Xiton Photonics GmbH**

#300

Kohlenhofstr 10, Kaiserslautern, Germany, 67663 +49 631 414 9944 0; fax +49 631 414 9944 9 jbartschke@xiton-photonics.com; www.xiton-photonics.com

New Product: The new Impact-3C possess switchable wavelengths for demanding micro-machining applications.

Xiton Photonics GmbH is specialized on Nd:YVO4 q-switched lasers. Industrial laser systems comprise 1342nm, 1064nm, 671nm, 532nm, 447nm, 355nm and 213nm fixed wavelength emission. Scientific lasers are SLM or tunable lasers from 400-4500nm as well as custom design lasers. Contact: Dr. Juergen Bartschke, General Manager, jbartschke@xiton-photonics.com; bauer@xiton-photonics.com.

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