

# E. EXHIBITION

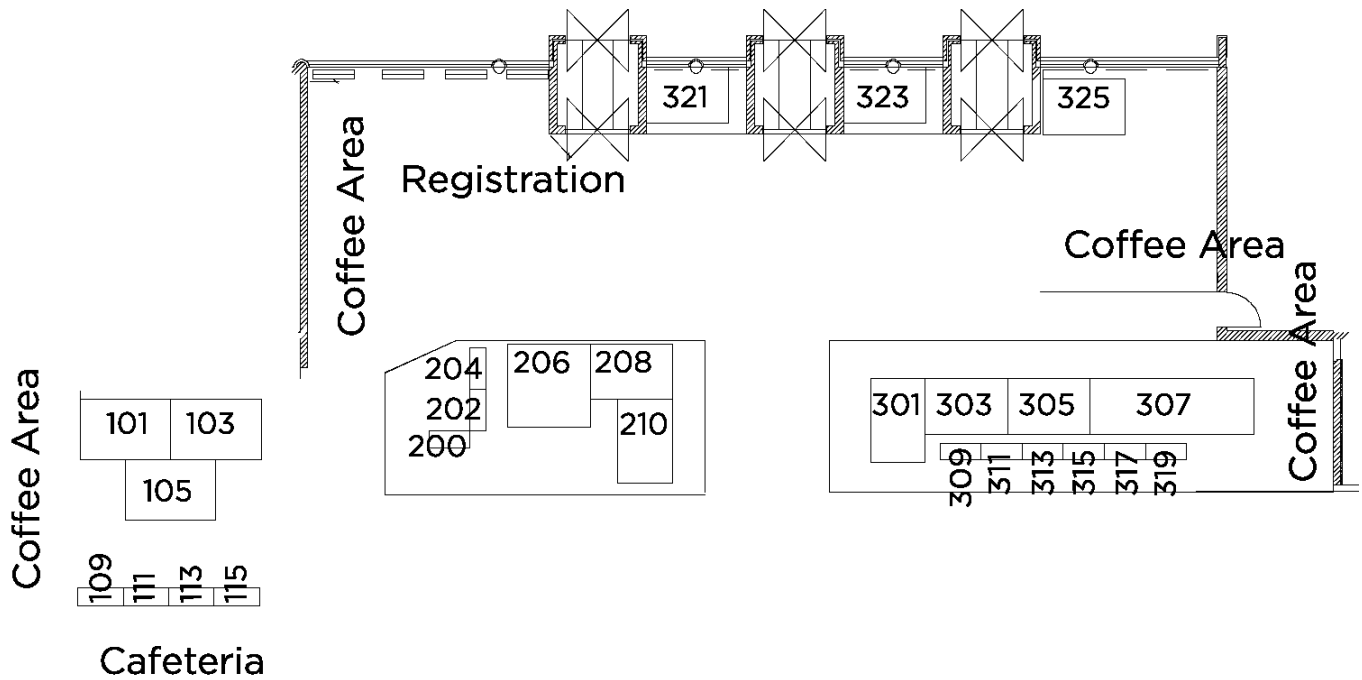
**Tuesday 8 September 2015**  
10:00 to 17:00  
**Wednesday 9 September 2015**  
10:00 to 16:00  
Friedrich-Schiller-University  
Jena, Germany



## Don't Miss the Exhibition

Connect with industry leaders and access the latest innovations in optical design.

### Ground Floor: Eingang Ernst-Abbe-Platz



#### Exhibition Booths

Agilent Technologies . . . . . #101	Fraunhofer-Institute for Applied Optics and Precision Engineering IOF . . . . . #210	Ohara GmbH. . . . . #325	scia Systems GmbH. . . . . #115
ASE Optics Europe . . . . . #315	Jos. Schneider Optische Werke GmbH . . . . . #301	Optics Balzers Jena GmbH . #309	TRIOPTICS . . . . . #103
asphericon. . . . . #311	Layertec GmbH . . . . . #323	OptiLayer GmbH . . . . . #313	Vistec Electron Beam GmbH. . . . . #200
AT-Fachverlag GmbH/Photonik . . . . . #204	Light Tec . . . . . #105	OptoNet e.V. . . . . #202	VM-TIM GmbH . . . . . #111
CDGM Glass Europe . . . . . #315	LightTrans GmbH. . . . . #317	piezosystem jena GmbH . . #307	Zemax Europe Ltd. . . . . #206
DTF Technology GmbH . . . #319	Mahr GmbH. . . . . #109	PROFILEOPTICS - SCOPTIQUE . . . . . #113	ZygoLOT GmbH. . . . . #327
Edmund Optics . . . . . #321		Rolic Technologies Ltd. . . . #303	
fo+ [Freeform Optics Plus] . #305		SCHOTT AG. . . . . #208	

**SPIE.**

# EXHIBITION LISTINGS

## Agilent Technologies

#101

Herrenberger Str 130, Böblingen, 71034 Germany  
+49 7031 4640; fax +49 7031 464 2020  
info@agilent.com; www.agilent.com

### Featured Product: Cary 7000 Universal Measurement Spectrophotometer (UMS)

Agilent is a leader in life sciences, diagnostics and applied chemical markets. The company provides laboratories worldwide with instruments, services, consumables, applications and expertise, enabling customers to gain the insights they seek. Agilent's expertise and trusted collaboration give them the highest confidence in our solutions. More information on: www.agilent.com/chem

## ASE Optics Europe

#315

1-3. UPC Campus Nord K2M, Calle Jordi Girona,  
Barcelona, 08034 Spain  
+34 93 737 98 63; fax +34 93 275 8264  
aseoptics.eu/

ASE Optics Europe specialises in optical engineering, design and fabrication for product development. We design and develop custom optoelectronic and optomechanical systems, precision optics and prototypes. From design to manufacturing, our expertise and core values allow us to serve and cover the needs in optical design, engineering and manufacturing across a broad range of applications areas: medical imaging and medical devices, life sciences, aerospace and defence, remote sensing, automotive and illumination.

## asphericon

#311

**SPIE** Corporate Member

Stockholmer Str 9, Jena, 07747 Germany  
+49 3641 3100500; fax +49 3641 3100501  
sales@asphericon.com; www.asphericon.com

## AT-Fachverlag GmbH/ Photonik

#204

Wilhelm-Pfitzer-Str 28, Fellbach, 70736 Germany  
+49 711 95 29 51 0; fax +49 711 95 29 51 99  
at@at-fachverlag.de; www.at-fachverlag.de

PHOTONIK a German-language trade journal published 6 times a year, covering the high-tech areas of optical technologies (opto-electronics, laser technology, image processing, optical communication, optical metrology etc.). In this area, PHOTONIK provides the highest circulation in the German-speaking marketplace. PHOTONIK publishes technical articles, reports on new products and business news. The magazine is targeted at development engineers and industrial users of such products.

## CDGM Glass Europe

#315

Rotbuchenweg 5, Köln, 50858, Germany  
+49 221 789 49566; fax +49 221 789 46634  
info@cdgm.eu; www.cdgm.eu/

CDGM Glass Company, the world's largest producer of optical glass, maintains an inventory of optical glass with its exclusive distributor, CDGM Glass Company Europe GmbH in Cologne, to service customers in the EU in a short time. CDGM produces an extensive line of optical glass at their industrial park and manufacturing plant, in Chengdu, China. Shipping 8-10.000 tons annually, CDGM provides glass to meet every optical designer's needs. You'll find CDGM's optical glass included in ZEMAX®. CDGM offers equivalent glass types for nearly all known optical glasses and can develop new glasses to meet customers' unique specifications upon request.

## DTF Technology GmbH

#319

Am Promigberg 16, Dresden, 01108 Germany  
+49 35132029200; fax +49 35132029210  
info@dtf-technology.de; www.dtf-technology.de

## General Sponsor

## Edmund Optics

#321

**SPIE** Corporate Member

Zur Giesserei 8, Karlsruhe, 76227 Germany  
+ 49 721 6273730; fax +49 721 6273750  
sales@edmundoptics.eu; http://www.edmundoptics.de

### Featured Product: TECHSPEC® High Power Nd:YAG Laser Mirrors, high reflectivity mirrors, for Nd:YAG laser wavelengths.

Edmund Optics® (EO) is a leading global manufacturer and distributor of precision optics, optical assemblies and image processing components with headquarters in the USA and manufacturing facilities in the U.S. and Asia and sales representatives around the globe. With a portfolio of more than 27.200 products, EO has the world's largest inventory of optical components for immediate delivery and offers products, standard or customized, in small quantities but also in volume for various industries.

## fo+ [Freeform Optics Plus]

#305

Leutragraben 1, Jena, 07743 Germany  
+49 3641 573 36 54; fax +49 3641 573 36 59  
info@optonet-jena.de; www.optonet-jena.de/

Eight leading Thuringian Photonics companies and two prestigious research institutes have teamed up in the innovative Regional Growth Core fo+ [freeform optics plus] to develop and market innovative freeform optical systems for applications in the IR spectral range. The alliance unites all aspects of added value from design, materials, manufacturing, coating, structuring to system integration for the purpose of producing high-quality and efficient freeform optical systems for international customers.

## Fraunhofer-Institute for Applied Optics and Precision Engineering IOF

#210

Albert-Einstein-Str 7, Jena, 07745 Germany  
+49 36 41 807 0; fax +49 36 41 807 600  
info@iof.fraunhofer.de; www.iof.fraunhofer.de

## Jos. Schneider Optische Werke GmbH

#301

Ringstr 132, Bad Kreuznach, 55513 Germany  
+49 671 601 0; fax +49 671 601 109  
industrie@schneiderkreuznach.com; www.schneiderkreuznach.com

### Featured Product: New series of narrow bandpass filters has been especially designed for laser companies use

Jos. Schneider Optische Werke GmbH designs, manufactures and markets optical and precision components and assemblies for machine vision and other image processing applications. Our high-quality optical solutions for image processing help system integrators and machine manufacturers improve their image processing systems.

## Layertec GmbH

#323

Ernst-Abbe-Weg 1, 99441 Mellingen - Germany  
+49-36453-744-0; fax +49-36453-744-40  
Web. www.layertec.de

LAYERTEC combines a precision optics facility for plane, spherical and aspherical optics and a variety of coating techniques (magnetron and ion beam sputtering, thermal and ion assisted e-beam evaporation). This enables LAYERTEC to customise optical components with an optimum of performance and cost efficiency. The variety in size and technology of our coating equipment allows high-volume fabrication as well as flexible prototype manufacturing for R&D. A staff of 170 employees works in our precision optics facility and coating laboratories, 34 coating machines are available.

## Conference Bag Insert Sponsor

### Light Tec

**SPiE** Corporate Member

Pôle d'Activités Hyérois  
1128 Route de Toulon, 83400 Hyères, France  
+33 494 12 18 48; fax +33 494 12 18 49  
sales@lighttec.fr; www.lighttec.fr/

Light Tec offers optical design tools and optical engineering. Light Tec's team is made of 15 employees at 2 locations, one in Hyères (France) and one in Munich (Germany). The tools proposed include: - Optical design software tools (Code V, LightTools, LucidShape, RSOFT) + technical support and training. - Scattering measurement tools including the development and sales of industrial products ("Mini-Diff" and "Reflét"). With a high-skilled team of optical engineers, the company also offers consulting and measurement services. For additional information, please visit Light Tec website: www.lighttec.fr

## #105

## Attendee Pen, General Sponsor

### LightTrans GmbH

Kahlaische Str 4, Jena, 07745 Germany  
+49 36 41 53129 50; fax +49 36 41 53129 01  
sales@lighttrans.com; www.lighttrans.com

**Featured Product: VirtualLab Fusion: unified optical modeling and design software**

LightTrans offers the unified optical modeling and design software VirtualLab Fusion together with design and engineering services. VirtualLab combines ray tracing and field tracing techniques for optical design problems. Applications include analysis and design of diffusers, beam splitters, beam shapers, LED light shaping and homogenization systems, high-NA imaging and laser systems, ultrashort pulses and partially coherent sources, laser resonators and gratings. Contact: Michael Kuhn, CEO, michael.kuhn@lighttrans.com; Daniel Asoubar, Technical Sales Support, daniel.asoubar@lighttrans.com

## #317

### Mahr GmbH

Carl-Zeiss-Promenade 10, Jena, 07745 Germany  
+49 36 41 642 696; fax +49 36 41 643 368  
info-jena@mahr.de; http://www.mahr.de/

**Featured Product: Tactile and non-tactile Roughness, Contour and 3D measurement Equipment for aspheres, free-forms.**

Mahr, Branch Jena is the competence centre of Mahr for optical industries, - Mahr is providing a wide range of solution for roughness, contour and 3D measurement of all kind of optics, - tactile and non-tactile measurements, - for grinding and polishing process

## #109

### Ohara GmbH

Im Langgewann 4, Optical Glass, Hofheim, 65719 Germany  
+49 6192 9650-50; fax +49 6192 9650-51  
info@ohara-gmbh.com; www.ohara-gmbh.com

**Featured Product: OHARA - Optical and Optoelectronic Materials and Products**

OHARA is one of the world's leading companies for manufacturing advanced optical and technical materials. Besides a wide range of Optical Glasses, we produce Low-Thermal Expansion material and high-end Fused Silica. Our products and continuous development are dedicated to needs of the optics and opto-electronics markets.

## #325

### Optics Balzers Jena GmbH

Otto-Eppenstein-Strasse 2, Jena, 07745 Germany  
+49 3641 35 29 30; fax +49 3641 35 29 35  
info.jena@opticsbalzers.com; www.opticsbalzers.com

**Featured Product: Automotive, Biophotonics, Laser&Space, Lighting&Projection, Sensors&Imaging, Industrial Applications**

Optics Balzers is the innovative and independent industry partner for the development and production of coated optical components and subassemblies. The company possesses a broad and in-depth know-how in optical thin-film coating processes, complemented by sophisticated patterning, glass bonding and sealing, and further processing capabilities necessary for producing optical thin-film coated components up to optical subassemblies. Contact: Martin Nern, Sales Manager, martin.nern@opticsbalzers.com; Armin Rupp, Sales Manager, armin.rupp@opticsbalzers.com

## #309

### OptiLayer GmbH

Königsbergerstr 68, Garching, 85748 Germany  
+49 89 997 59 603  
support@optilayer.com; www.optilayer.com

**Featured Product: Software for design, analysis and post-production characterization of multilayer optical coatings**

OptiLayer GmbH distributes thin film software, provides consulting services and organises training courses in the field of optical coatings. OptiLayer software exhibits the highest competence in the area of design, evaluation, simulations, pre-production error analysis and characterization of optical coatings. OptiLayer software consists of three modules: OptiLayer itself, OptiChar, and OptiRE. For real-time optical control of coating deposition OptiLayer GmbH also provides OptiReOpt library. Contact: Tatiana Amochkina, CEO, amotchkina@optilayer.com

## #313

### OptoNet e.V.

Leutragraben 1, Jena, 07743 Germany  
+43 3641 573 36 50; fax +49 3641 573 36 59  
info@optonet-jena.de; www.optonet-jena.de/

**Featured Product: OptoNet - Photonics Network Thuringia**

OptoNet e.V. represents the interests of around 100 actors in Thuringia's thriving photonics cluster - one of the world's leading locations for light technologies - providing a lively platform for expert exchange as well as promoting member networking and partnership. The cluster follows the objective of promoting optical technologies in the region - in order to improve competitiveness and optimise cluster visibility both nationally and internationally. Contact: Klaus Schindler, CEO, info@optonet-jena.de; Nora Kirsten, Marketing, info@optonet-jena.de

## #202

### piezosystem jena GmbH

Stockholmer Str 12, Jena, 07747 Germany  
+49 3641 66880; fax +49 3641 668866  
info@piezोजना.com; www.piezोजना.com

**Featured Product: nanopositioning systems, optical fiber switches, high load actuators, piezocomposite, motion control**

piezosystem jena offers solutions from one to five axis positioners, grippers, mirror tilting systems, optical switches, shutters, rotary stages, objective positioning systems, piezo stack type actuators, high load actuators and piezo composites for material testing and shock generators. The piezocomposite actuators are able to generate fast Shockwaves, high dynamic pulses so as high dynamic vibrations. piezosystem jena also offers stages with a large travel range of up to several millimeters.

## #307

### PROFILEOPTICS - SCOPTIQUE

126 rue Belleville, 33000 Bordeaux, France  
+33 972379378  
contact@profileoptics.com; www.profileoptics.com

**Featured Product: Recruitment and engineering support for optical industry internationally**

Profileoptics is specialised in recruiting best talents for optical industry internationally. We headhunt the key people for your recruitment needs in Europe and beyond. ProfileOptics is the recruitment branch of Scoptique. Scoptique offers engineering support services, with specialisation in optical engineering. Contact: Oksana Bate, Chief Recruiter, oksana.bate@profileoptics.com

## #113

### Rolic Technologies Ltd.

Gewerbestr 18, Allschwil, 4123 Switzerland  
+41 61 487 22 22; fax +41 61 487 22 99  
info@rolic.com; www.rolic.com

**Featured Product: LCMO-Optical films with high resolution retarder structure**

Rolic Technologies Ltd. is a high-tech company specialised in the optical alignment of molecules serving different industries - Display, Security, Organic Electronics. Rolic has been providing its technology and key materials for applications in the display industry since 1997. Light Controlled Molecular Orientation (LCMO) is the core technology which embodies today's production standard for photo aligned LCD manufacturing. Contact: Ralph Scholl, Product Manager, ralph.scholl@rolic.ch

## #303

# EXHIBITION LISTINGS

## SCHOTT AG

**SPiE** Corporate Member

Hattenbergstr 10, Mainz, 55122 Germany  
+49 (0)6131/66-0; fax +49 (0)6131/66-2000  
info.optics@schott.com; www.schott.com/

### Featured Product: ZERODUR®, High Homogeneity Optical Glass, Optical Filters

SCHOTT Advanced Optics, with its deep technological expertise, is a valuable partner in developing products and customised solutions for applications in optics, lithography, astronomy, opto-electronics, life sciences, architecture, and research. With a product portfolio of more than 120 optical glasses, special materials and components, we master the value chain: from customised glass development to high-precision optical product finishing and metrology. Your Partner for Excellence in Optics. Contact: info.optics@schott.com

## scia Systems GmbH

#115

Annaberger Straße 240, Chemnitz, 09125 Germany  
+49 371 5347 780; fax +49 371 5347 781  
info@scia-systems.com; http://www.scia-systems.com/

### Featured Product: The scia Coat 200 for homogeneous coatings of multilayer films, by Dual Ion Beam Deposition (DIBD).

scia Systems manufactures ion beam and plasma processing equipment. The systems are used in the production of microelectronics, MEMS and precision optical components, in both high volume production as well as in research and development. scia Systems provides highly reliable tools together with a superior technology support. The tools are flexible and modular in design. Several vacuum process chambers can be combined into cluster or inline solutions, according to customer-specific requirements,

## TRIOPTICS

#103

**SPiE** Corporate Member

Hafenstr 35-39, Wedel, 22880 Germany  
+49 4103 18006 0; fax +49 4103 180062 0  
sales@trioptics.com; www.trioptics.com

We have the largest spectrum of optical measurement technology and supply test systems for R&D and production for every manufacturing step in optics: From a system for refractive index measurement, via various lens test systems, up to MTF test systems and camera module testers, we can supply the appropriate optical measurement system for every process step. Our field of activity comprises the development and production of optical and precision instruments. Contact: Nadine Ferber, n.ferber@trioptics.com

## Vistec Electron Beam GmbH

#200

Ilmstr 4, Jena, 07743 Germany  
+49 3641 799 80; fax +49 3641 7998 222  
electron-beam@vistec-semi.com; www.vistec-semi.com

### Featured Product: Vistec SB254 a high performance, universal and cost effective electron-beam lithography system (VSB)

Vistec Electron Beam GmbH provides leading technology solutions for advanced electron-beam lithography. Based on the Variable Shaped Beam (VSB) principle, the electron-beam lithography systems are mainly utilised for semiconductor applications and advanced research as silicon direct write, compound semiconductor, mask making as well as integrated optics and several new emerging markets. Contact: Ines Stolberg, Manager Product Management & Marketing, ines.stolberg@vistec-semi.com

## VM-TIM GmbH

#111

Hans-Knöll-Str 6, Jena, 07743 Germany  
+49 3641 384859; fax +49 3641 384860  
info@vm-tim.de; www.vm-tim.de

VM-TIM develops, produces and distributes optical and mechanical components as well as He-Ne-, He-Cd-, CO<sub>2</sub>-, Nd:YAG-, diode lasers and spectrophotometers for industry, research and education. We have polishing and coating equipment as well as a clean room and a chemical laboratory. Our capacities enable us to maintain a substantial supply of most standard optical components in the wavelength range from 190nm up to 3µm. We are also highly involved in OEM development.

## Zemax Europe Ltd.

#206

**SPiE** Corporate Member

Stoney Common Rd, 8 Riverside Business Park, Stansted, CM24 8PL  
United Kingdom  
+44 1279 810911; fax +44 1279 810912  
eusales@zemax.com; www.zemax.com

### Featured Product: OpticStudio - Software for Optical System Design & Lighting: Model, Simulate, Optimize & Tolerance

Zemax Europe is the regional head office for Zemax LLC and is the European provider of the OpticStudio optical and lighting design software. Our typical customers are scientists and engineers who design, tolerance, make and test optical equipment ranging from telescopes, cameras, photocopiers, medical imaging equipment, lenses for mobile phone cameras, to car headlights, LED's, displays and lasers. Contact: Josephine Proehl, Sales Consultant, eusales@zemax.com; Eleonore Guy, Sales Consultant, eusales@zemax.com

## ZygoLOT GmbH

#327

Im Tiefen See 58, Darmstadt, 64293, Germany  
+49 6151 8806 552; fax +49 6151 8806 88  
info@zygolot.de; www.zygolot.de

Zygo Corporation is a worldwide supplier of optical metrology instruments, high precision optical components, and complex electro-optical systems design and manufacturing services.

## EXHIBITOR CATEGORY LISTINGS

### Basic Research, Science

asphericon  
OptiLayer GmbH

### Biomedical, Medical Imaging, Health Care

asphericon  
Optics Balzers Jena GmbH

### Computing Systems, Data Processing

LightTrans GmbH

### Consulting Services

asphericon  
LightTrans GmbH  
OptiLayer GmbH  
PROFILEOPTICS - SCOPTIQUE

### Consumer Electronics

Rolic Technologies Ltd.

### Defense, Security, Law Enforcement

asphericon  
LightTrans GmbH

### Detectors, Sensors

Optics Balzers Jena GmbH

### Displays

LightTrans GmbH  
Rolic Technologies Ltd.

### Displays: Consumer, Information, Entertainment

Rolic Technologies Ltd.

### Earth Sciences, Environmental Monitoring, Climate

Optics Balzers Jena GmbH

### Education and Training

OptiLayer GmbH  
Zemax Europe Ltd.

### Emerging Photonics Technologies

Vistec Electron Beam GmbH

### Laser Components and Accessories

LightTrans GmbH  
Optics Balzers Jena GmbH

### Laser Industry

asphericon  
LightTrans GmbH

### Lighting and Illumination

LightTrans GmbH  
Optics Balzers Jena GmbH

### Lithographic Equipment

Vistec Electron Beam GmbH

### Materials, Abrasives, Chemicals

Ohara GmbH  
Rolic Technologies Ltd.

### Microtechnology

Vistec Electron Beam GmbH

### Nanotechnology products

Ohara GmbH

### Optical Coatings, Thin Films

asphericon  
Optics Balzers Jena GmbH  
OptiLayer GmbH  
Rolic Technologies Ltd.

### Optical Components - Filters, Mirrors, Other

asphericon  
LightTrans GmbH  
Optics Balzers Jena GmbH  
Rolic Technologies Ltd.

### Optical Components - Lenses

asphericon  
Ohara GmbH

### Optical Design and Engineering

Optics Balzers Jena GmbH  
PROFILEOPTICS - SCOPTIQUE

### Optics Manufacturing

asphericon  
Optics Balzers Jena GmbH  
piezosystem jena GmbH

### Positioning Equipment, Motion Control and Accessories

piezosystem jena GmbH

### Software

LightTrans GmbH  
OptiLayer GmbH  
Vistec Electron Beam GmbH  
Zemax Europe Ltd.