



**OPTICAL
TECHNOLOGIES**

CALL FOR PAPERS

**SUBMISSION OPEN
UNTIL MARCH 3, 2017**

WW.CONFTOOL.COM/WPC2017

5th Conference on **Manufacturing of Optical Systems**
4th Conference on **Optofluidics**
2nd Conference on **Light Engineering**
2nd Conference on **Optomechanical Engineering**

WORLD^{OF}PHOTONICS CONGRESS



23rd International Congress on Photonics in Europe
collocated with LASER2017 World of Photonics, June 26-29, 2017

EOS Conference on Manufacturing of Optical Systems



Manufacturing of Optical Systems will highlight significant technology trends, emerging technologies and associated prospective developments in the field of optics fabrication and testing. This conference provides a forum for all aspects of optics fabrication and testing, ranging from micro to large-scale optics and from high value one-off to mass-produced components including lessons learned papers on special manufacturing issues such as polishing process stability and finishing processes for high-end optics, optics featuring clear apertures below 1 mm or above 100 mm in diameter. One main goal of the meeting is to provide a better link between the design, the manufacturing, and the characterization of optical components and systems. For the first time, there will be a reviewed industrial poster session displayed during the whole conference with companies presenting their key technology competences.

General Chair: Oliver Föhnle, FISBA OPTIK AG (CH)

Co-Chair: Sven Schröder, Fraunhofer IOF (DE)

Program Committee

- Marcus Trost, Fraunhofer (DE)
- Zhang Xuejun, Changchun Institute of Optics, fine Mechanics and Physics (CN)
- Roland Geyl, SAFRAN A.S. group (FR)
- Rolf Rascher, THD- Technische Hochschule Deggendorf (DE)
- Frank Frost, Ionenstrahlgestützte Technologien, Leibniz-Institut für Oberflächenmodifizierung e.V. (DE)
- Richard Freeman, Zeeko Ltd (UK)
- David Walker, University of Huddersfield (UK)
- Olaf Dambon, Fraunhofer Institut für Produktionstechnologie IPT (DE)
- Stefan Bäumer, TNO (NL)
- Willhelm Ulrich, Carl Zeiss AG (DE)
- Norbert Kerwien, Carl Zeiss AG (DE)
- Jiri Novak, Czech Technical University in Prague (CZ)
- Massimiliano Rossi, Media-Lario (IT)
- Sven Kiontke, Asphericon (DE)

Invited Speakers

- Olaf Dambon, IPT Aachen (DE)
- Richard Freeman, Zeeko (UK)
- Roland Geyl, REOSC (FR)
- Shay Joseph,
Rafael Advanced Defense Systems Ltd. (IL)
- Martin Lowisch/Tilman Heil, Zeiss SMT (DE)
- Sven Schröder, Fraunhofer IOF (DE)

Topics include

- Optics Fabrication, from single piece to High-Volume Fab, from sub-millimeter optics to meter optics and wafer-level optics
- Testing, Specification, and Characterization of Light Scattering
- Roughness, Shape, Defects, subsurface damage, MTF and mid-spatials
- Finishing methods, e.g. SPDT, MRF, IBF, ductile grinding, FJP, laser polishing, CCP and traditional polishing
- Optimization techniques in optics fabrication
- Fabrication friendly Optical Design and Tolerancing
- Lessons learned producing high level aspheres and freeform optics

INDUSTRIAL POSTER SESSION

For the first time, there will be a reviewed industrial poster session where companies are entitled to present their key technology competences on a poster that will be presented during the whole time of the conference in the conference session room.

Posters presenting competences and know how rather than products will be preferred.

EOS Conference on Optofluidics

Optofluidics emerged approximately 10 years ago aiming at the fusion of integrated optics with microfluidics. Since then, a wealth of new scientific principles and technologies have emerged. Through this conference, the latest developments in Optofluidics will be explored, serving as the main meeting point of the international optofluidics community.

General chair: Demetri Psaltis, École Polytechnique Fédérale de Lausanne (EPFL) (CH)

Co-chair: Andreas Vasdekis, University of Idaho (US)

Program committee

- Xudong Fan, University of Michigan (US)
- Pietro Ferraro, Italian National Institute of Optics (IT)
- David Sinton, University of Toronto (CA)
- A. Q. Liu, Nanyang Technological University (SG)
- Christian Karnutsch, Karlsruhe University of Applied Sciences (DE)
- Ian White, University of Maryland (US)

Plenary Speaker

Demetri Psaltis, École Polytechnique Fédérale de Lausanne (EPFL) (CH)

Invited Speakers

- Christophe Moser, Ecole Polytechnique Federale de Lausanne (CH)
- Jean Charles Ribierre, Center for Organic Photonics and Electronics Research (OPERA) (JP)
- Kevin K. Tsia, The University of Hong Kong (HK)
- Holger Schmidt, UC Santa Cruz (US)
- Anders Kristensen, Danish Technical University (DTU) (DK)
- Hans Zappe, University of Freiburg (DE)
- Carmon Tal, Technion University (IL)
- Roel Baets, University of Ghent (BE)
- David Erickson, Cornell University (US)
- Kishan Dholakia, University of St. Andrews (UK)
- Francesco Merola, Istituto Nazionale di Ottica (IT)
- Pietro Ferraro, Istituto Nazionale di Ottica (IT)

Topics include

- Photonics: fundamental linear and non-linear optics, lasers, sensors, microscopy, opt. Tweezers
- Medicine and Biology: single cell, viral and molecule methods, drug delivery, ultra-high throughput screening
- Imaging: time-stretch imaging, Big-Data approaches
- Handheld Devices for low-resource settings: mHealth, portable diagnostics
- Environment – Energy: optofluidics of plants, photobioreactors, biophysics
- Transport: optics, microfluidics, computational methods
- Microsystem Fabrication
- Novel prototyping methods, 3D and 4D particle generation, BioMEMS
- Hybrid Integration: integrated optics (SERS, waveguides), electronics, and applications
- Soft Matter: liquid crystals, vesicle photonics
- Industry: industrial applications, related technologies and products



EOS Conference on Optomechanical Engineering

Optomechanical Engineering, the branch of Optical Engineering related to the simulation and construction of complete optical systems, is a key discipline in most fields of optics and photonics. The building of instrumentation which needs to work in real-world environments, from space to underwater or inside the human body, strongly relies in the approaches taken to compensate the effects of hostile environments. Optomechanical Engineering will bring on the most relevant experts and approaches of this evolving field in the land between optics and mechanics. Contributions on simulation methods (mechanical, optical, thermal, etc.) tolerancing for optomechanics, novel assembly methods and materials, design strategies, and use cases are welcome. The aim of the conference is to bring together the vibrant community of optomechanical engineers working in fields as diverse as aerospace and medicine to share methods and experiences and exchange practical knowledge.

General Chair: Santiago Royo, Centre for Sensors, Instruments and Systems Development (CD6), UPC-BarcelonaTech (ES)

Co-chair : Michael Pfeffer, Hochschule Ravensburg-Weingarten (DE)

Program Committee

- Josep Arasa, SnellOptics Ltd. (ES)
- James Burge, College of Optical Sciences, University of Arizona (US)
- Chris Dainty, University College, London (UK)
- Marta C. de la Fuente, INDRA Systems (ES)
- Alson E. Hatheway, AEH Inc. (US)
- Peter Kühmstedt, Fraunhofer IOF Jena (DE)
- Bob Breault, BRO inc. (US)

Topics include

- Simulation of optomechanical systems
- Optomechanical systems in hostile environments
- Modelling and mitigation of environmental effects
- Novel methods and geometries for real-world optics
- Metrology of optomechanical components
- Use cases of optomechanical design
- New methods and materials for optomechanical construction



EOS Conference on Light Engineering

The focus of this conference will be to explore new developments in the field of light engineering for a variety of applications, including solid state lighting.

General chair: Paul Urbach, Delft University of Technology (NL)

Co-chairs: Wilbert Ijzerman, Philips Lighting (NL)
Willem Vos, University of Twente (NL)

Program Committee

- Paul Urbach, Delft University of Technology (NL)
- Wilbert Ijzerman, Philips Lighting (NL)
- Willem Vos, University of Twente (NL)

Invited speakers

- Oliver Dross, Philips Lighting (NL)
- Xu Liu, Zhejiang University (CN)

Topics include

- LEDs, OLEDs
- Phosphors
- Non-imaging optics
- Nano-optics
- Diffractive optics for SSL
- Optical materials
- Optical design
- New materials
- Color quality
- Nano-structuring of (O)LEDs
- Lifetime and stability
- Microfluidic lasers
- Scattering



Abstract Submission Deadline (Extended): March 3, 2017

Abstracts should be submitted online via Conftool:

<https://www.conftool.com/wpc2017>

Authors are requested to submit an extended abstract of two pages. The abstract must be formatted according to the EOS abstract guidelines:

www.myeos.org/events/photonics-congress-2017

Contributions will be accepted for oral and poster presentations. Please indicate your preference. At least one author of an accepted contribution is asked to register in advance, separately from abstract submission. For Manufacturing of Optical Systems, **industrial posters** are also welcome.

Paper Publication in JEOS:RP

Presenters at EOS Optical Technologies are kindly invited to consider the submission of a manuscript about their research to the EOS open-access on-line journal JEOS: RP (Journal of the European Optical Society, Rapid Publications, jeos.springeropen.com).

JEOS:RP publishes articles about recent scientific research and technological innovation as well as review papers about a topic in science or innovation from the recent past. A contribution should be original and will be subjected to the journal's standard anonymous peer review process for scientific quality. The average time-to-publication of the journal is of the order of 75 days.

Fee for EOS Members: 950 EUR

World of Photonics Congress 2017

The EOS Conferences on Optical Technologies will be taking place under the umbrella of the World of Photonics Congress (June 25-29, 2017), the leading international congress for optical technologies in Europe and one of the top 3 congresses of its kind worldwide. It is organised by Messe München International and held in conjunction with LASER World of PHOTONICS (June 26-29, 2017), the international trade fair for optical technologies including components, systems and applications, so there is an intense exchange between the scientific and industrial sectors. [www.world-of-photonics.com]

Contact

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Venue

ICM - International Congress Centre Munich

Messegelände, 81823 München, DE

The International Congress Centre Munich (ICM) is integrated into the Munich Trade Fair Centre and is one of the most modern congress centres in the world. It can easily be reached by public transport.

Registration

The registration for EOS Optical Technologies conferences includes admission to all conferences at the World of Photonics Congress as well as to the LASER World of Photonics trade fair. At least one author of an accepted contribution is required to register in advance to the conference. The pre-registration opens March 2, 2017.