#### Community

### **Conference Notes**

DOI 10.1515/aot-2015-0040

## Review: New Records at the LASER-World of Photonics 2015!

Munich, Germany, June 22-25, 2015

More than 30 000 people visited this year's LASER World of PHOTONICS in Munich. This is a more than ten percent growth and it confirmed the position of the LASER as the biggest photonics event again. The number of exhibitors (1277) was up about nine percent. Although both differ in many aspects, one may compare that with the biggest American photonics event SPIE Photonics West, which

closed earlier this year with 1265 exhibiting companies and more than 21 000 visitors.

The growth of the LASER in Munich became apparent with the addition of a fifth hall. All the halls were full of traffic and as usual, the community met in Munich in the booths, at the congress or simply in the halls.

# Application panels as a fast lane to latest photonics trends

This year the Messe München, as the trade show organizer, host arranged for three stages (the so-called Photonics Forum) in the exhibition halls for "pioneering expert talks,



The next LASER World of Photonics is scheduled for May 2017.

awards show and innovative company presentations". Most interesting was a series of application oriented lectures called Application Panels. What may appear as a bit odd to the congress was of great benefit for the visitors of the trade fair: without additional costs they got a large number of mostly excellent presentations. Although some of the talks had a marketing bias, most of them showed very interesting innovations.

One example of cutting edge research presented at these Application Panels was the session on Laser applications and optical diagnostics on the Monday afternoon. Some of Germany's leading experts on ophthalmological systems showed recent results and new trends, such as laser treatment of presbyopia. Almost everyone above a certain age suffers from presbyopia and these researchers work on solutions that avoid the mechanical replacement of the lens.

### Positive business outlook from German manufacturer association

The Working Committee Laser and Laser Systems within the VDMA (German Engineering Association) used the LASER 2015 for their annual press conference and presented recent market data. According to VDMA, the German laser industry shows more encouraging dynamics than the global market trend 2014, their consolidated total output of laser systems exceeded the one billion Euro mark for the first time. Laser systems with CO<sub>2</sub>- and solid-state lasers production in Germany went up 11% to 852 million Euro in 2014. That was the second consecutive year of growth and an increase of 20% in order intake in 2014 signals more good news for 2015. Exports grew by 16% in 2014, with shares of 33.5% in Western Europe, 12.6% in the USA, and 9.1% in China.

On the technology side it saw a trend (in the US markets) towards direct diode laser applications, which are increasingly competing with fiber and disc lasers in the welding segments. What is new is that such competitors are also appearing in the cutting segments.

VDMA also pointed to the latest press release issued by Optech Consulting of Tägerwilen, Switzerland, for global market data. According to Optech Consulting the global market for laser systems achieved in 2014 a record volume of just under US\$ 11.6 billion (EUR 8.7 billion), or a growth of 8% over the reference year 2013. This rate of increase was surpassed by the production and export trends for German laser system manufacturers, as mentioned earlier. This global absorption according to Optech Consulting was marked by laser systems for high speed cutting and welding; finishing, including low power cutting, drilling, and - yet again - welding; and additive processes as the driver. The micro machining demand from the electronics industries, however, showed only a moderate growth worldwide.

www.laser.de

### **Preview: SPIE Optical Systems** Design

Jena, Germany, Conference: 7–10 September, Exhibition: 8-9 September 2015

In 2015 the SPIE Optical Systems Design returns to Jena - the place where Carl Zeiss, Otto Schott and Ernst Abbe founded the main parts of the German optics industry in the 19th century. After some substantial changes in the 1990s, Jena has recovered and presents itself as a flourishing optics town with some national celebrations of the International Year of Light during the conference week.

The symposium on Optical Systems Design in Jena will be the ninth of its kind in Europe. It is intended to provide an interdisciplinary forum for technicians, engineers, researchers, and managers who are involved in instrumental optics at all levels: design, specification, production, and testing.

Chaired by AOT board member Wilhelm Ulrich (Carl Zeiss AG), the conference presents a number of exciting plenary talks:

- Monday 7 September, 8:35, "Micro-Optics: Key Enabling Technology for Photolithography" by Reinhard Voelkel, SUSS MicroOptics (Switzerland)
- 9:20, "Freeforms: How Many Degrees of Freedom Do They Provide?" Pablo Benítez, Univ. Politecnica de Madrid (Spain)
- 10:30, "Diffractive Optical Elements Made from Photonic Metamaterials," Thomas Pertsch, Friedrich-Schiller-Univ. Jena (Germany)
- 11:15, "Optical Lithography Forever: Extending Moore's Law by Extending EUV Optics" Reiner Garreis, Carl Zeiss SMT GmbH (Germany)

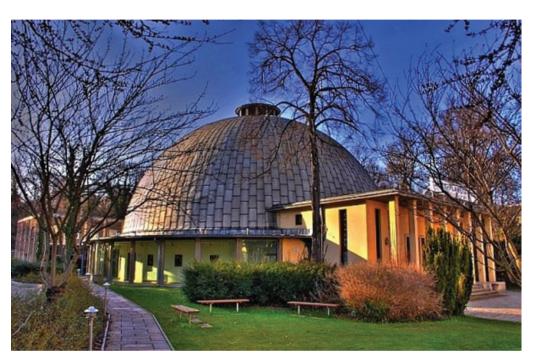
Sponsored by the Schott company, the conference features a special dinner on the occasion of the International Year of Light at the Jena Planetarium on Wednesday, 9 September 19:00. The Zeiss-Planetarium in Jena is the oldest continuously operating planetarium in the world. It was opened on July 18, 1926.

The conference takes place at the Campus Friedrich Schiller University close to the main shopping center DE GRUYTER Conference Notes — 245

Goethe Galerie. This area is of historic importance the area belonged to the ZEISS factory until 1990 and you may still recognize some of the old buildings. The following symposia will be part of the conference:

- Optical Design and Engineering VI, Monday Thursday 7–10 September 2015
- Advances in Optical Thin Films V, Monday Wednesday 7–9 September 2015
- Optical Fabrication, Testing, and Metrology V, Monday Thursday 7–10 September 2015
- Illumination Optics IV, Monday Tuesday 7–8 September 2015
- Computational Optics, Monday Wednesday 7–9 September 2015

http://spie.org/OSD



The location for the International Year of Light Dinner, the Zeiss-Planetarium in Jena is the oldest continuously operating planetarium in the world.