

Community

Conference Notes

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Review: Photonics West

San Francisco, CA, USA, 28 January–2 February 2017

‘Busier, bigger’ – this is how SPIE characterized Photonics West 2017. Just going by the numbers, there were about 23,000 attendees, more than 1380 exhibitors and 4700 conference presentations. This is more than in 2016, which had an attendance of 22,000 and 1345 exhibitors. There were, however, slightly fewer conference presentations than the 4800 technical presentations last year.

It may be of some interest to compare these numbers with those from the other big events in the photonics industry. In March 2017, LASER World of PHOTONICS China will take place, the organizers expect about 850 exhibitors and more than 45,000 visitors.

Its parent event, the LASER World of PHOTONICS Munich, counted 30,000 visitors and 1227 exhibitors in 2015, and further growth can be expected this year. Munich also has a very strong conference program, although it is traditionally rather fragmented. Their World of Photonics Congress, with eight scientific conferences and more than 2700 lectures, drew approximately 3500 participants.

So it seems out that Photonics West is probably the biggest scientific photonics conference with a record number of exhibitors. Little by little industry has adopted the trade show, although the booths are still much smaller than in a fully-industrial trade show where people present machinery, for example.

While LASER Munich will again offer two halls with ‘Lasers and laser systems for production engineering’, those are hard to find at Photonics West. This is, however, not a disadvantage; it is simply a difference. If the focus is on industrial laser machinery, one may turn to more specific events such as EuroBLECH (sheet metal processing with 60,000 visitors) or Fabtech (40,000 attendees and 1700 exhibiting companies with metal forming, fabricating and welding applications).

Why do people attend Photonics West? Andrew Brown, SPIE senior director, stated in a SPIE press release: ‘We heard repeatedly during the week just how important this event is for the community. At this event, they connect

with valuable collaborators, present new research for the first time, introduce new products, learn about the latest photonics technologies, and meet vendors who can provide the right equipment for the lab, factory, or clinic’.

Photonics West 2018 will begin on 27 January 2018.

<http://spie.org/pw>

Preview: UKP Workshop – Ultrafast Laser Technology 2017

Aachen, Germany, 26–27 April 2017

Lasers have been making their way into materials processing since the 1970s. First, CO₂ lasers were seen on the production floor and were soon joined by YAG lasers and the excimer family. The new century saw the introduction of diode, fiber and disk lasers. Now the ultrashort pulsed lasers are ready for large scale applications. It took 30 years of development for these laser systems to become stable and maintenance-free.

The 4th UKP-Workshop: Ultrafast Laser Technology 2017 deals not only with the most advanced ultrashort pulsed laser sources, but with process technology and application cases as well. In fact, over the years the program has shifted from laser sources toward the applications. Now the biggest question is how to capitalize on the precious photons. This is about understanding ablation processes and developing appropriate system technology.

Keynote by AOT board member Koji Sugioka

The workshop will start with a keynote on ‘Advanced Femtosecond Laser Processing for Electronic and Biological Applications’ by Koji Sugioka (RIKEN – The Institute of Physical and Chemical Research, Saitama, Japan) who is a member of the editorial board of this journal. The title shines a light on two major application fields that benefit from the unique features of these lasers, namely high precision and ‘cold’ ablation.

The topic of cold ablation has been questioned in recent years when detailed application studies revealed that such an effect of ablation without heat dissipation in adjacent material is only viable for a certain set of

process parameters. When shining a high repetition rate high energy pulsed laser on the same point for some time, the material heats up no matter how short the pulses are. Guidance on these process parameters can be expected from the second speaker, Thomas Graf (IFSW Uni Stuttgart), and his presentation, ‘Heat Accumulation During Materials Processing with Ultrafast Lasers – The Consequences of Power Scaling’.

Yes, it’s in the stadium!

In total, the workshop features two application sessions, a session on ultrafast laser basics and a session on laser

sources and optics. The previous time, over 160 people visited the workshop and there will likely be an increase in attendance this year. It is also worth mentioning that the evening reception will be at the Ballroom Altes Kurhaus in the old town of Aachen.

The regular workshop location is very unique. It is in the new Tivoli stadium of the local football (American soccer) team, Alemannia Aachen, in the Sportpark Soers in Aachen. A free shuttle bus from three major hotels will be available for transportation to the stadium. Others will need to look for the Business Lounge, Krefelder Str. 205, at the Tivoli stadium in Aachen. More information on driving directions is available at the event site <https://www.ultrakurzpulslaser.de>.

Conference Calendar

April

OSA Biophotonics Congress: Optics in the Life Sciences

San Diego, CA, USA

2–5 April 2017

www.osa.org/meetings/optics_and_photonics_congresses/optics_in_the_life_sciences/

Optical Terahertz Science and Technology (OTST 2017)

London, UK

2–7 April 2017

<http://otst2017.iopconfs.org/home>

Quantum Information and Measurement (QIM) – IV: Quantum Technologies

Paris, France

5–7 Apr 2017

[www.osa.org/Meetings/Topical_Meetings/Quantum_Information_and_Measurement_\(QIM\)_-IV_Qu](http://www.osa.org/Meetings/Topical_Meetings/Quantum_Information_and_Measurement_(QIM)_-IV_Qu)

SPIE DSS 2015

Anaheim, CA, USA

9–13 April 2015

<http://spie.org/x6770.xml>

MRS Spring Meeting

Phoenix, AZ, USA

17–21. April 2017

www.mrs.org/spring2017/

SPIE Optics + Optoelectronics

Prague, Czech Republic

24–27 April 2017

<http://spie.org/conferences-and-exhibitions/optics-and-optoelectronics>

UKP Workshop

Aachen

26–27 April 2017

www.ultrakurzpulslaser.de/en.html

May

SPIE Micro Technologies

Barcelona, Spain

8–10 May 2017

<http://spie.org/x26212.xml>

CLEO

San Jose, CA, USA

Technical Conference:

14–19 May 2017

Exhibition

16–18 May 2017

www.cleoconference.org

June

118. Annual Meeting DGaO

Dresden, Germany

6–10 June 2016

www.dgao.de/de/jahrestagung

Laser Ignition Conference

Bucharest, Romania

20–23 Jun 2017

www.osa.org/Meetings/Topical_Meetings/Laser_Ignition_Conference

LASER World of Photonics

Munich, Germany
26–29 June 2017
www.laser.de

European Conferences on Biomedical Optics (ECBO)***SPIE Optical Metrology*****Lasers in Manufacturing (LiM 2017)*****CLEO Europe***

Munich, Germany
25–29 June 2017
www.photonics-congress.com

NEW: SPIE Digital Optical Technologies*

Munich, Germany
26–29 June 2017
<http://spie.org/conferences-and-exhibitions/digital-optical-technologies>

EOS Optical Technologies*

EOS Conference on Manufacturing of Optical Systems
EOS Conference on Optofluidics
EOS Conference on Light Engineering
EOS Conference on Optomechanical Engineering
Munich, Germany
26–29 June 2017
www.myeos.org/events/photonics-congress-2017

*AOT will be presented at the World of Photonics Congress, probably with a separate booth in the congress center. For more information please contact us at: contact@advanced-optics.org

OSA Imaging and Applied Optics Congress

3D Image Acquisition and Display: Technology, Perception and Applications
Applied Industrial Optics
Computational Optical Sensing and Imaging
Imaging Systems and Applications
Mathematics in Imaging
Propagation Through and Characterization of Atmospheric and Oceanic Phenomena
San Francisco, CA, USA
26–29 June 2017
www.osa.org/Meetings/OSA_Meetings/Imaging_and_Applied_Optics_Congress

July**OSA Optical Design and Fabrication Congress**

International Optical Design Conference
Optical Fabrication and Testing
Freeform Optics
Denver, CO, USA
9–13 July 2017
www.osa.org/en-us/meetings/osa_meetings/optical_design_and_fabrication/

OSA Advanced Photonics Congress

Integrated Photonics Research, Silicon, and Nano-Photonics
Novel Optical Materials and Applications
Optical Sensors
Photonic Networks and Devices
Photonics in Switching
Signal Processing in Photonics Communications
New Orleans, LA, USA
24–27 Jul 2017
www.osa.org/Meetings/OSA_Meetings/Advanced_Photonics

2017 CLEO Pacific Rim Conference

Singapore, Singapore
31 Jul–4 Aug 2017
www.osa.org/Meetings/Global_Calendar/Events/cleopr

August**SPIE Optics + Photonics**

San Diego, CA, USA
6–10 August 2017
<http://spie.org/x306.xml>

September**SPIE Security + Defense****Remote Sensing**

Warsaw, Poland
11–14 September 2017
<http://spie.org/x124462.xml>
<http://spie.org/x124461.xml>

SPIE Photomask Technology + EUV Lithography

Monterey, CA, USA
11–14 September 2017
<http://spie.org/x6323.xml>

FiO/LASER Science 101st OSA Annual Meeting

Washington, DC, USA
17–21 September 2017
www.frontiersinoptics.com/home/

5th EOS Topical Meeting on Blue Photonics

Sopot, Poland
NEW: 18–20 September 2017
www.myeos.org/events/bluephotonics5

October**ASSL**

Nagoya, Japan
1–5 October 2017
www.osa.org/en-us/meetings/global_calendar/events/advanced_solid_state_lasers/

SPIE Optifab

Rochester, NY, USA
16–19 October 2017
<http://spie.org/x6567.xml>

FOC 2017 Frontier of optical coating

Guangzhou, China
22–26 October 2017
<http://foc.tongji.edu.cn>

32nd ASPE Annual Meeting

Charlotte, NC, USA
October 29–November 3, 2017
<http://aspe.net/technical-meetings/32nd-annual-meeting/>

November**The 22nd Microoptics Conference MOC2017**

Tokyo, Japan
19–22 November 2017
www.moc17.com

2018**SPIE Photonics West**

San Francisco, CA, USA
27 January–1 February 2018
Exhibition: 30 January–1 February 2018
<http://spie.org/pw>

SPIE Advanced Lithography

San Jose, CA, USA
18–22 February 2018
<http://spie.org/al>

OFC

11–15 March 2018
San Diego, CA, USA
www.ofcconference.org

SPIE Defense + Commercial Sensing

Orlando, FL, USA
15–19 April 2018
<http://spie.org/dcs>

SPIE Photonics Europe

Strasbourg, France
23–26 April 2018
Exhibition: 24–25 April 2018
<http://spie.org/pe>

AKL '18 International Laser Technology Congress

Aachen, Germany
2–4 May, 2018
www.lasercongress.org

LASYS

Stuttgart, Germany
5–7 June 2018
www.lasys-messe.de

SLT '18 – Stuttgart Laser Technology Forum

Co-located with LASYS
Stuttgart, Germany
5–7. Juni 2018
www.slt.uni-stuttgart.de

SPIE Astronomical Telescopes and Instrumentation

Austin, TX, USA
10–15 June 2018
<http://spie.org/astronomical-instrumentation.xml>

SPIE Optics + Photonics

San Diego, CA, USA
19–23 August 2018
Exhibition: 21–23 August 2018
<http://spie.org/op>

SPIE Security + Defense

Berlin, Germany
10–13 September 2018
Exhibition: 11–12 September 2018
<http://spie.org/sd>

FiO/LASER Science: 102nd OSA Annual Meeting

Washington, DC, USA
16 September 2018–26 September 2018
www.frontiersinoptics.com/home/