



FRAUNHOFER INSTITUTE FOR LASER TECHNOLOGY ILT

**FOREWORD** 

Are you looking for a forum where users, manufacturers and developers can intensively exchange ideas on the current state and perspectives of laser technology? Do you appreciate personal networking of technology suppliers and customers, all to develop new strategies for your area of responsibility and to profit from experience from this sector? Then you have found the right event, the AKL'18.

For the 12th time, laser manufacturers and laser users from various branches will meet at the biannual International Laser Technology Congress AKL. Featuring over 600 participants, around 70 speakers and over 50 sponsors and exhibitors, the AKL has established itself as the leading forum for applied laser technology in Europe. Supporting organizations include European Commission, Arbeitskreis Lasertechnik e.V., European Laser Institute, OptecNet as well as industrial associations such as SPECTARIS, VDA, VDMA, VDI and the European Photonics Consortium FPIC

Join us and profit from AKL's international character, thanks to its simultaneous translations in German and English. In addition, you can use the environment of the congress to find out more about the newest technological breakthroughs in over 80 live presentations of the Fraunhofer ILT.

We look forward to seeing you there!

Prof. Dr. rer. nat. Reinhart Poprawe

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Director of the Fraunhofer Institute for Laser Technology ILT

WWW.LASERCONGRESS.ORG

# Organization

Fraunhofer Institute for Laser Technology ILT www.ilt.fraunhofer.de

#### Contact

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### **Supporting Organizations**

- Arbeitskreis Lasertechnk e.V.
- ELI European Laser Institute
- EPIC European Photonics Industry Consortium
- European Commission
- OptecNet Innovation Networks for Optical Technologies
- SPECTARIS German Industry Association for Optical, Medical and Mechatronical Technologies
- VDA German Association of the Automotive Industry
- VDI Technology Center
- VDMA German Engineering Federation

#### **Media Partner**

**WILEY-VCH** 

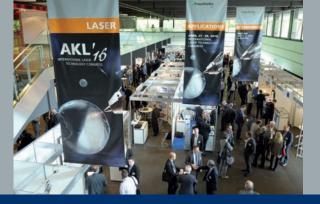
LASER

# **AKL-INTERNATIONAL LASER TECHNOLOGY CONGRESS**

MAY 2 - 4, 2018 IN AACHEN

**ANNOUNCEMENT** 











AKL'18 - INFORMATION, INSPIRATION, NETWORKING

PROGRAM STRUCTURE - AKL'18

# **FACTS AND FIGURES – AKL'16**

- 691 Participants
- 79 Speakers
- 91 Live Presentations
- 52 Exhibitors

### ■ AKL'18 – Laser Technology Conference

The AKL'18 Laser Technology Conference provides a comprehensive overview of current developments in laser materials processing in macro and micro areas and in laser beam development. Over 70 experts from research and industry will bring you up to date on the current trends in laser technology. Whether you are active in the automotive or aerospace industry, electrical or power engineering, mechanical engineering or microtechnology – you will get firsthand know-how and practice-relevant suggestions at the AKL'18. Moreover, it offers the ideal platform to intensively exchange ideas and experience.

# Laser Technology Live

Over 80 live presentations will take place at Fraunhofer Institute for Laser Technology ILT and companies of the Application Center.

#### | Sponsors' Exhibition

International companies from laser engineering show innovative products and processes, encompassing all aspects of laser technology, to interested congress participants.

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# Technology Business Day

The Technology Business Day is directed at leading managers and marketing directors who want specific information on the status and perspectives in the European, American and Asian laser markets.

# Seminar Laser Technology ABC's

If you have little or no experience in laser technology you can obtain the foundations on how lasers work and where they can be applied in the Seminar Laser Technology ABC's.

# Forums "Process Control" and "Laser Additive Manufacturing"

If you would like to delve deeper into Process Control or Laser Additive Manufacturing, you can get a comprehensive overview on state of the art and current developments in two separate forums, as well as useful contacts to experts in these fields.

### **ACCOMPANYING EVENTS**

# Innovation Award Laser Technology 2018

The Innovation Award Laser Technology is an European research prize awarded by Arbeitskreis Lasertechnik e.V. and ELI in recognition of outstandingly innovative work in the field of laser technology. The official presentation of the award will take place at the AKL'18.

# Opening of the "Research Center DPP"

During the AKL'18 we invite you to take part in the inauguration of the "Research Center Digital Photonic Production DPP". This new 4.300 m² net floor building features interdisciplinary research competence in Aachen.

Lectures are presented in English and German with simultaneous interpreting.

### WEDNESDAY

Seminar Laser Technology ABC's

Forum Process Control

**Technology Business Day** 

Forum Laser Additive Manufacturing

**Sponsors' Exhibition** with 50 sponsors

**Dinner with Presentation** of the "Innovation Award Laser Technology 2018"

# **THURSDAY**

### Gerd Herziger Session

- Perspectives and Challenge for Laser Technology
- Digital Photonic Production

#### Laser Material Processing – Macro

Selective Laser Melting

#### Laser Material Processing – Micro

Micro Structurino

#### Laser Beam Sources

Solid State and Fiber Lasers

### Laser Technology Live

 Over 80 Live presentations at Fraunhofer ILT & Application Center

### **FRIDAY**

# Laser Material Processing – Macro

- Cutting
- Welding
- Laser Material Deposition

#### Laser Material Processing – Micro

- Micro Joinin
- Ultrafast Lasers Application
- Polishing and Thin Film Processir

#### Laser Beam Sources

- Ultratast Lasers Beam Sources
- Lasers with Tailored Wavelengths
- Diode Lasers

#### Outlook

Prof. Reinhart Poprawe

**Sponsors' Exhibition** with 50 sponsors

#### Official Opening

of the "Research Center DPP"

Program subject to minor changes.