

AKL'22 - International Laser Technology Congress
May 4–6, 2022, Aachen, Germany

Contact

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LOCATION Eurogress Aachen, Monheimsallee 48, 52062 Aachen, Germany, www.eurogress-aachen.de/en

ORGANIZATION Fraunhofer Institute for Laser Technology ILT
Steinbachstraße 15, 52074 Aachen, Germany
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PARTICIPANTS Over 500 Participants (as of May 2, 2022)

LECTURES 85 speakers and 15 chairmen

CONFERENCE STRUCTURE

- Wednesday, May 4, 2022**
- Seminar Laser Technology ABC's
 - Technology Business Day
 - Forum Quantum Technology & Photonics
 - Forum Process Control & Digitization
 - Forum Laser Additive Manufacturing
 - Dinner with Presentation of the Innovation Award Laser Technology
 - Accompanying Sponsors' Exhibition
- Thursday, May 5, 2022**
- AKL'22 – Laser Technology Conference
 - Accompanying Sponsors' Exhibition
 - "Laser Technology Live" at Fraunhofer ILT with opening of the Hydrogen Lab
 - AKL'22 Networking with Snacks at the Eurogress Conference Center
- Friday, May 6, 2022**
- AKL'22 – Laser Technology Conference
 - Accompanying Sponsors' Exhibition

CHOICE OF TOPICS: May 4, 2022

- Seminar Laser Technology ABC's**
- Basics of Laser Applications
 - Overview and Applications of High Power Lasers
 - Modern Scanning Systems for Laser Machining
 - Intelligent Quality Assurance
 - Radiation Safety Aspects
 - Future Trends in Laser Technology
- Technology Business Day**
- International Laser Market in Europe, America and Asia
 - Trends of Laser Processing in Microelectronic, Automotive Industry and Additive Manufacturing
 - Challenges and Opportunities of Industrial Laser Processes
- Forum Quantum Technology & Photonics**
- Introduction, Challenges and Application of Quantum Computing
 - Quantum-Save Encryption and Quantum Light for Inline Process Monitoring
 - Quantum and Photonics
- Forum Process Control & Digitization**
- Process Monitoring and Control in Laser Welding with Robotic Guidance
 - AI-supported Quality Inspection in Laser Material Processing
 - Holisitc, Intelligent and Networked – Industrie 4.0
- Forum Laser Additive Manufacturing**
- Additive Manufacturing of f Rocket Engine Components
 - Alloy Development for Coating, Repair and Additive Manufacturing
 - Further Developments of EHLA – EHLA 3D
 - Insights into LPBF

CHOICE OF TOPICS: May 5–6, 2022 – LASER TECHNOLOGY CONFERENCE

- Gerd Herziger Session**
- Perspectives for the Laser Source Development
 - Digitization in Photonic Production

- Laser Beam Sources**
- Solid State and Fiber Lasers
 - Ultrafast Lasers
 - Lasers with Tailored Wavelengths
 - Diode Lasers

- Laser Material Processing Macro**
- Laser Powder Bed Fusion
 - Laser Cutting
 - Laser Welding
 - Laser Material Deposition

- Laser Material Processing Micro**
- Micro Structuring
 - Micro Joining
 - Material Processing with USP-Lasers
 - Polishing and Thin Film Processes

Further information and photos at www.lasercongress.org

LASER TECHNOLOGY LIVE

Nearly 60 live demonstrations and exhibits at the Fraunhofer Institute for Laser Technology ILT and companies in the Institute's Application Center

EXHIBITION

44 laser, component and system manufacturers showcase their products at the accompanying conference exhibition

SUPPORTING ORGANISATIONS

- EPIC – European Photonics Industry Consortium
- European Commission
- OptecNet Deutschland e. V. – Innovation Networks for Optical Technologies
- Photonics Germany
- SPECTARIS – German Industry Association for Optical, Medical and Mechatronical Technologies e. V.
- VDA – German Association of the Automotive Industry e. V.
- VDI Technology Center GmbH
- VDMA – German Engineering Federation e. V.

INNOVATION AWARD

The 10,000 € doped "Innovation Award Laser Technology" is a European research prize awarded every other year by the associations Arbeitskreis Lasertechnik AKL e. V. and the European Laser Institute ELI e. V. The award can be conferred on an individual researcher or on an entire project group, whose exceptional skills and dedicated work have led to an outstanding innovation in the field of laser technology. The scientific and technological projects in question must center on the use of laser light in materials processing and the methods of producing such light, and must furthermore be of demonstrable commercial value to industry. The Award Ceremony takes place on May 4, 2022 at the evening event of the AKL'22 in the Coronation Hall of Aachen's town hall. The winners of the "Innovation Award Laser Technology" in 2020 and 2022 will be honored.

Further information and photos at www.innovation-award-laser.org
