

PRESS RELEASE

"Laser Technology Live" at the AKL'18 International Laser Technology Congress in Aachen

From May 2 to 4, the laser community convenes for the 12th time at AKL'18 in Aachen. Laser manufacturers, laser users and laser novices alike will have the chance to see 77 presentations on innovative applications from industry as well as the latest scientific research. At the Fraunhofer Institute for Laser Technology ILT, over 600 participants from Germany and abroad will also be able to experience "Laser Technology Live" in Europe's largest laser park. Register now for AKL'18 at www.lasercongress.org and take advantage of the early booking discount until March 9, 2018!

At the "Laser Technology Live" event at the Fraunhofer ILT's user center on May 3, 2018, visitors to AKL'18 will be able to discuss new technological developments in depth with the Aachen-based researchers. The laser experts will be presenting a new development targeting quality assurance in Additive Manufacturing. Using the example of Extreme High-Speed Laser Material Deposition EHLA, visitors will be able to see for the first time how the measurement of powder feed nozzles can be automated and standardized with a system-integrated module. This means the user knows exactly how much powder is being supplied, allowing the patented measurement technique to make a significant contribution to ensuring process quality and stability.

In the field of ultrafast lasers with high average power, it is all about power scaling: How can the increased average power be efficiently translated into machining processes with the aim to process metal, ceramics, and glass even faster while maintaining accuracy? Here, experts will be showcasing the two fundamental concepts: For the one thing the parallelization, using multi-beam technology and for another thing the machining with high repetition rates using fast deflection systems, such as a polygon scanner. Researchers will be available to answer any questions on these and other topics at over 80 live presentations.

Launch of the I³-Research Center Digital Photonic Production

On the evening of May 3, 2018, Fraunhofer ILT invites the participants of AKL'18 to the inauguration of the I³-Research Center DPP. In adopting the I³ format – integrated interdisciplinary institutes – RWTH Aachen University is pioneering a new and trendsetting form of interdisciplinary university collaboration. At the I³-RCDPP, 16 institutes from across 6 faculties will conduct research together on the use of the photon's unique physical properties in the production of the future. The German federal and state governments are funding a new research facility for this interdisciplinary research

Editorial Notes

PRESS RELEASE February 22, 2018 || Page 1 | 4



program, and the new building will be completed in the summer of 2018. The facility will be home to some 80 research scientists working on shaping the future of digital photonic production over 4300 square meters of laboratories and floor space. It joins the privately funded Industry Building DPP, opened in 2016, as a further addition to the Digital Photonic Production research campus.

Conference exhibition

The specialist technology side of the conference will be accompanied by a sponsors' exhibition featuring more than 50 renowned laser technology companies. Visitors will have the opportunity to enter into one-on-one conversations with the exhibitors, allowing them to learn more about innovative products and processes in laser technology, make new contacts or strengthen existing ones. All conference presentations will be given either in English or in German, with simultaneous translation into the other language.

Contributing organizations

The AKL'18 International Laser Technology Congress is organized by the Fraunhofer Institute for Laser Technology ILT. It is supported by input from the European Commission, the European Photonics Industry Consortium EPIC, the Arbeitskreis Lasertechnik e. V., the European Laser Institute ELI, OptecNet and the SPECTARIS, VDA, VDMA and VDI industry associations.



Image 1: Laser Technology Live at Fraunhofer ILT during AKL'16. Seen here: the LIFTSYS cell printer. © Fraunhofer ILT, Aachen, Germany. PRESS RELEASE February 22, 2018 || Page 2 | 4





Image 2:

Expert discussions at Laser Technology Live at Fraunhofer ILT's application center during AKL'16 in Aachen, Germany. © Fraunhofer ILT, Aachen, Germany.

PRESS RELEASE

February 22, 2018 || Page 3 | 4



Image 3:

The new I³-RCDPP research facility is a further addition to the Digital Photonic Production research campus. © Carpus + Partner, Aachen, Germany.





Image 4: Register Now! AKL'18 logo. © Fraunhofer ILT, Aachen, Germany.

PRESS RELEASE February 22, 2018 || Page 4 | 4

The **Fraunhofer-Gesellschaft** is the leading organization for applied research in Europe. Its research activities are conducted by 72 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of more than 25,000, who work with an annual research budget totaling 2.3 billion euros. Of this sum, almost 2 billion euros is generated through contract research. Around 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.

Contact

Dipl.-Phys. Axel Bauer | Head of Marketing and Communications | Telephone +49 241 8906-194 | axel.bauer@ilt.fraunhofer.de **Dipl.-Betrw. Silke Boehr** | Group Manager Marketing | Telephone +49 241 8906-288 | silke.boehr@ilt.fraunhofer.de Fraunhofer Institute for Laser Technology ILT, Aachen, Germany | akl@lasercongress.org | www.ilt.fraunhofer.de | www.lasercongress.org