

Press Release

Aachen,
January 26, 2010

Laser Technology at it's Best – Anniversary Celebration in Aachen

The Fraunhofer Institute for Laser Technology ILT will celebrate its 25th anniversary at the 8th International Laser Technology Congress AKL'10, which is being held from May 5 to 7, 2010, in the historic city of Aachen. This will provide the occasion for a laser show of innovations that are set to shape the sector in the coming years. As the organizer of AKL'10, the Fraunhofer ILT is looking forward to welcoming more than 400 guests, who will be able to benefit from three days of in-depth information about trends and applications in laser technology.

The Fraunhofer Institute for Laser Technology ILT was founded 25 years ago by Prof. Gerd Herziger. Based in Aachen, the Institute employed five members of staff. Under the auspices of the Fraunhofer-Gesellschaft the research institute flourished and is now the largest laser center in Europe. The institute's 300 staff develop processes, systems and beam sources for laser manufacturing and laser measurement. Its customers represent a wide range of industrial sectors, from medical engineering to the auto and aviation industry. The researchers at the Fraunhofer ILT register an average of one patent a month and handle several hundred contract-research projects every year. Highlights of the past 25 years include the 40-KW CO₂ laser, developed in collaboration with industrial partner Trumpf, and the 4-KW diode-pumped solid-state laser, developed together with Rofin-Sinar. Applying the results of Fraunhofer ILT's research, the electronic switch systems manufacturer Marquardt became the first company to successfully use a diode laser to weld plastic components. The development and qualification of selective laser melting and the combined cutting and welding method using special optics was a pioneering advance in laser-based process technology.

**Fraunhofer Institute
for Laser Technology ILT
Marketing and Communications
Dipl.-Phys. Axel Bauer**
Steinbachstraße 15
52074 Aachen
Phone +49 241 8906-194
Fax +49 241 8906-121
axel.bauer@ilt.fraunhofer.de
www.ilt.fraunhofer.de

Prof. Reinhart Poprawe has been Director of the Fraunhofer ILT and head of the Chair for Laser Technology LLT at RWTH

January 26, 2010
Page 2

Aachen University since 1996. He is therefore able to ensure a close relationship between research and teaching. The research institute permanently supports around 50 undergraduate and 70 postgraduate students. Several former staff members have gone on to set up their own companies, using the knowledge and expertise they have acquired; over the past two decades there have been one or two spin-offs every year. Since 1988 the Fraunhofer ILT has provided another highly innovative form of knowledge transfer: the Laser Application Center. Here, partners are given the opportunity to occupy specially assigned facilities at the Institute and to benefit from its excellent laser technology infrastructure. At the time this arrangement was introduced, it was the only example of its kind in the laser sector. Now the idea is being taken one step further in the CAMPUS model used by RWTH Aachen University. In addition to its close cooperation with three faculties at RWTH Aachen, the Fraunhofer ILT has built up strong regional, national and international networks, for example through branch establishments in France and the USA.

The Fraunhofer ILT will celebrate its 25th anniversary on May 6, 2010 at AKL'10 in the Ludwig Forum for International Art. During the course of the three-day Congress, more than 60 lectures will be held on the latest trends and applications in laser technology. At the Laser Technology Live event, held on the premises of the Fraunhofer ILT, experts from the Institute and the cooperating faculties of RWTH Aachen will hold more than 60 presentations demonstrating innovative laser applications. Highlights will include laser polishing of three-dimensional components and laser deposition welding in turbine repair work.

Registrations for the AKL'10 can be submitted at www.lasercongress.org. Early Bird Registrations are possible until March 26, 2010.

January 26, 2010
Page 3

Caption:

Figure 1: Repair work on aircraft turbines performed by means of laser deposition welding.

Picture source: Fraunhofer ILT.

Figure 2: Metal mold for glass manufacture, the upper part has been laser-polished.

Picture source: Fraunhofer ILT.

Contact partners from the organization team of the AKL'10:

Dipl.-Betw. Silke Boehr

Phone +49 241 8906-288

Dipl.-Phys. Axel Bauer

Phone +49 241 8906-194

akl@lasercongress.org

www.lasercongress.org

Fraunhofer Institute for Laser Technology ILT
Steinbachstrasse 15
52074 Aachen