Photonic Industry on the Upswing

The global photonics industry gathered at the Laser World of Photonics and Europe's largest Photonics Congress, the World of Photonics Congress, in Munich from 13 to 16 May 2013. The bottom line: more exhibitors than ever before, visitor numbers stable at a high level, a high number of product premieres and an insight into revolutionary technologies, such as 3D printing, digital photonic production, medical technology or biophotonics.

The Laser World of Photonics was celebrating 40 years of existence. The anniversary event was booked like never before, closing with a record number of 1,136 exhibitors and represented companies. With almost 27,000 trade visitors from 74 countries, visitor numbers again reached a very high level. The proportion of foreign visitors rose to a record level of 54 per cent. Significantly more visitors came from China, Russia and South Korea.

Thanks to the many positive meetings, exhibitors were very satisfied with the way the trade fair went. Dr. Wilhelm Kaenders, Chairman of the Laser World of Photonics Advisory Board and Board of Management Member of Toptica Photonics AG, said: "We enjoy the world-leading character, the international show public and the strong congress program. At 40, the Laser World of Photonics exudes a maturity that will benefit the continuing disproportionate growth in photonics."

The congress too is considered worldwide to be the industry's top event. Prof. Dr. Peter Loosen, Chairman of the Steering Committee of the World of Photonics Congress and Deputy Director of the Fraunhofer Institute for Laser Technology ILT expressed his satisfaction: "The congress is one of the most important events in the world in the Photonics field. The combination of trade fair and congress is unique. The congress's Application Panels, held in the trade fair halls, are a good example of the successful intertwining of basic research and application-oriented industrial implementation."

Top Trends

Top trends among the great variety of offerings were additive production, ultrashort pulse lasers, laser applications for electro-mobility, energy technology and automotive engineering, modern solid-state light sources (LED, OLED),
Automated Visual Inspection, lasers for analytics and imaging in biophotonics as well as laser applications and optical diagnostics in medicine.

A highlight was the strongly visited special exhibition "Digital Photonic Production" in collaboration with the Fraunhofer Institute for Laser Technology ILT. It illustrated the advantages of the additive production process and demonstrated 3D printing in metal. Other visitor favorites: the special exhibition "Photons in Production" with live demonstrations including laser-based joining of lightweight materials and the "biophotonics research focus area" stand. Absolute crowd pullers were the user forums in the halls under the umbrella of the World of Photonics Congress. Staffed with high-ranking speakers from the Photonics industry, from research or user industries such as the automotive sector or medical technology, for days the latest challenges in the various areas were dealt with using practical examples.

**Industry Report**

On the first day of the trade fair, the Federal Ministry of Education and Research (BMBF) presented the "Photonics industry report 2013", drawn up in collaboration with the Spectaris, VDMA and ZVEI associations. "Photonics has developed from a niche technology to a key technology, is regarded as a driver of innovation and plays an important "enabler" role for many customer markets", explained Thilo Brodtmann, Deputy Managing Director of the German Engineering Federation VDMA in the run-up to the trade fair in Munich. And Dr. Tobias Weiler, Managing Director, Spectaris German Industry Association for Optical, Medical and Mechatronical Technologie (Deutscher Industrieverband für optische, medizinische und mechatronische Technologien e.V.), emphasized the point: "Photonics is an important industry and growth driver for very many application areas. The Laser World of Photonics is the showcase for the Photonics industry."
The study found that the global photonics market in 2011 was worth around 350 billion euros - compared with 228 billion euros in 2005. As such, notwithstanding the financial crisis, the Photonics industry is posting solid average annual real growth of around 6.5 per cent. And the prospects for the industry are good: The study estimated that the global photonics market would grow to around 615 billion euros by 2020.

**World of Photonics Congress**

The congress attracted a high level of international attention thanks to its illustrious organizers: the European Physical Society (EPS), the Optical Society (OSA), the IEEE Photonics Society, the European Optical Society (EOS), the Wissenschaftliche Gesellschaft für Lasertechnik (Scientific Society for Laser Technology - WLT) and the International Society for Optics and Photonics (SPIE).

Around 3,500 international participants attended the total of six conferences of the Congress with its 2,800 lectures and poster presentations. Scientists, students and users from throughout the world were engaged in lively debate into the evening hours.

One event was the bestowing of the Herbert Walther Award, which this year was conferred on the US scientist Jeff Kimble of the California Institute of Technology (Caltech). The award has existed since 2007 and is considered to be very prestigious: among the previous four prizewinners, the two scientists Serge Haroche and David J. Wineland have since been honored with the Nobel Prize for physics.

Overall, congress participants were enthusiastic about the latest findings and the excellent technical level of the lectures. Renowned speakers emphasized the importance that the World of Photonics Congress enjoys worldwide.

Prof. Dr. Stefan W. Hell, Deputy Managing Director at the Max-Planck Institute for Biophysical Chemistry and, head of the NanoBiophotonics Department drove the point home: "The World of Photonics Congress is an extremely important congress. I have been coming here for many years. You pick up on the latest research developments - and also the latest industrial exhibits from the associated trade fair. At the end of the day, we're working experimentally and this is an outstanding place to find out about the latest market developments. That in turn has a major influence on the developments we ourselves are working on in the laboratory."

The next Laser World of Photonics will be held from **22 to 25 June 2015**, the next World of Photonics Congress from 21 to 25 June 2015.

**More information:**
http://world-of-photonics.net