

Munich, June 11, 2019

Press Release

LASER World of PHOTONICS 2019

A gauge for the dynamic rate of innovation in photonics

- Almost 60 entries for the 2019 Innovation Award – 15 finalists nominated in five categories
- Innovations in all exhibition areas, from biophotonics and production to imaging and metrology
- LASER World of PHOTONICS: the world's largest innovation platform for photonics

Photonics is now indispensable in many industries and areas of our lives. As the world's leading trade fair, LASER World of PHOTONICS will reflect this inventive spirit in Munich from June 24 to 27. Innovations, startups, and the international congress make the fair a gauge for the dynamic rate of innovation in photonics.

When photonics has a problem, it helps itself with photonics. A recent example of this is the Berlin-based Scansonic MI with a new development for manufacturing electric motors, which will be shown for the first time at LASER World of PHOTONICS 2019. The application involves laser welding of copper hairpins that replace windings in modern e-motors. The problem is that copper is a difficult material to weld and the reflection from the hairpins differs depending on how they have been machined. The welding points are awkward to identify. Scansonic MI solves the problem with photonics: New welding optics recognize the processing point by means of an integrated camera and guide the laser beam to them with an accuracy of a tenth of a millimeter. The camera also has another important task: continuous process monitoring – and, consequently, extremely high process reliability.

Numerous entries for the 2019 Innovation Award

The world first from Scansonic MI is just one of the many innovations that can be seen in June at the world's leading photonics trade fair in Munich. Exhibitors in

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five categories have submitted almost 60 innovations alone for the Innovation Award, which Messe München will be presenting in cooperation with publishing company Europa Science. To qualify, the entries must be components, systems, plants, processes, and services that have been developed within the last twelve months. When they are submitted, the entries have to be market-ready and be shown at the exhibitor's booth during the fair.

The submitted innovations are split evenly among five categories in which the jury recently picked the three [finalists](#). They include a [linear array detector](#) for the visible infrared range (VIS SWIR), a [femtosecond laser](#) for biophotonics and the new blue [NUBURU laser](#) with 500 watts power for machining reflective metals. [Civan Advanced Technologies](#) is presenting an innovation based on its optical phased array technology for electro-optical beam control for shorter processing times and improved process quality. TRUMPF, TOPTICA, Rofin Sinar UK, Xenics, SWIR Vision Systems, Sumitomo Electric Industries, Qingdao Lasence, and many more exhibitors have announced new solutions for manufacturing, biophotonics, optoelectronics, imaging, sensors, and the production of optical components.

Startup Awards: Six finalists have been chosen

In addition to the established manufacturers, newly founded companies are also driving innovation in photonics. LASER World of PHOTONICS offers them a platform at the joint startup booth and will be presenting the Startup Award for the third time this year. Here, too, the jury has picked six [finalists](#). They see their entrepreneurial future in [LiDAR](#) sensors and [SWIR cameras](#) for driver assistance systems and autonomous vehicles, real-time sensors for [bacteria](#) on food, [3D and infrared sensors](#), and the generation of free-floating hologram-like images and [videos](#), and the production of [miniature spectrometers](#) based on fiber Bragg gratings that can be inscribed in the fiber core with ultrashort pulse lasers. After a live pitch on June 25 from 10:30 a.m. on the stage of the Photonics Forum "Laser Materials Processing" in Hall A3, the decision will be made which startup will receive the 2019 award, which also comes with €5,000.

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Top jury picks finalists

“I have been very impressed by the quality of the submissions and the innovative strength of the products and developments that have been presented,” says Gabriele Jansen, founder and managing director of Vision Ventures and a member of the Innovation Award jury.

The jury for the LASER World of PHOTONICS Awards comprises:

- Dr. Markus Bartram, Picolas GmbH
- Jonathan Blackburn, AILU / TWI Ltd
- Dr. Wilhelm Kaenders, TOPTICA Photonics AG
- Professor Peter Loosen, Fraunhofer ILT
- Jürgen Niederhofer, Newport Spectra-Physics GmbH
- Dr. Andreas Olmes, High-Tech Gründerfonds Management GmbH
- Dr. Andreas Popp, TRUMPF Lasertechnik GmbH
- Professor Jürgen Popp, Leibniz Institute of Photonic Technology, Jena
- Gregory Quarles, The Optical Society (OSA)
- Dr. Ronald Sroka, LIFE-Center, Hospital of University Munich
- Professor Falk Strascheg, Strascheg Center for Entrepreneurship (SCE)
- Dr. Wenko Süptitz, SPECTARIS
- Professor Andreas Tünnermann, Fraunhofer IOF
- Professor Paul Urbach, TU Delft
- Gabriele Jansen, Vision Ventures, Germany

LASER World of PHOTONICS – the innovation platform

As well as the new business ideas, product and process innovations, thousands of scientists from all over the world will attend the [World of Photonics Congress 2019](#) in Munich – and will introduce the latest trends and research results at seven scientific conferences. These will include presentations from dynamic innovation fields like attosecond physics, quantum technology, and additive manufacturing. In each of these areas the initial theory applies: When photonics has to overcome hurdles, it helps itself with photonics. After all, light is and will remain the fastest, most precise, and most innovative tool for human beings. Whether in production, biomedical research and practice, metrology, space

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exploration. or in future fields, such as mixed reality, smart mobility, or nanostructuring of microprocessors with extreme UV light. LASER World of PHOTONICS 2019 brings innovations and innovators together and, as a result, acts as a gauge for the dynamic rate of innovation in our industry.

About LASER World of PHOTONICS

The LASER World of PHOTONICS is the world's leading platform for the laser and photonics industry. Europe's largest World of Photonics Congress will be taking place in parallel with the trade fair. The program comprises a variety of scientific conferences of leading global organizations. Supplementing this Messe München GmbH will be offering practical lectures on the applications of photonics ("Application Panels"). In 2017 the trade fair set an exhibitor record with 1,293 exhibitors from 42 countries. More than 32,000 trade visitors from 90 countries entered the Messe München site. The World of Photonics Congress registered around 3500 participants, with around 3,000 lectures and presentations including poster presentations on offer. The LASER World of PHOTONICS has been organized by Messe München International every two years since 1973; the next event will take place in Munich from June 24–27, 2019, the next World of Photonics Congress will take place in parallel from June 23–27, 2019 in the ICM - International Congress Center Munich.

www.world-of-photonics.com

About the LASER World of PHOTONICS global network

The LASER World of PHOTONICS has developed an international trade fair network. The LASER World of PHOTONICS in Munich is the world's leading laser and photonics trade fair and as the innovation pacemaker is where the global photonics industry gathers every two years. The [LASER World of PHOTONICS CHINA](#) and the [LASER World of PHOTONICS INDIA](#) are leading regional trade fairs for laser and optical technologies and are staged annually in China (Shanghai) and in India (alternating between Bengaluru, Mumbai, Bangalore and New Delhi). With these trade fairs in Munich, China and India, Messe München is the world's leading trade fair organizer for lasers and photonics.

Messe München

Messe München is one of the leading exhibition organizers worldwide with more than 50 of its own trade shows for capital goods, consumer goods and new technologies. Every year, a total of over 50,000 exhibitors and around three million visitors take part in more than 200 events at the exhibition center in Munich, at the ICM – Internationales Congress Center München and the MOC Veranstaltungszentrum München as well as abroad. Together with its subsidiary companies, Messe München organizes trade shows in China, India, Brazil, Russia, Turkey, South Africa, Nigeria, Vietnam and Iran. With a network of associated companies in Europe, Asia, Africa and South America as well as around 70 representations abroad for over 100 countries, Messe München has a global presence.