

TEEM PHOTONICS: NEW IR lasers, **AD WORLD:** Conference; **SLM:** GE's Future-Factory; **ANIRG:** Conference; **WHAT'S ON:** NMW 11-13 May. **WHAT'S AVAILABLE:** Demonstration of HySpex cameras.



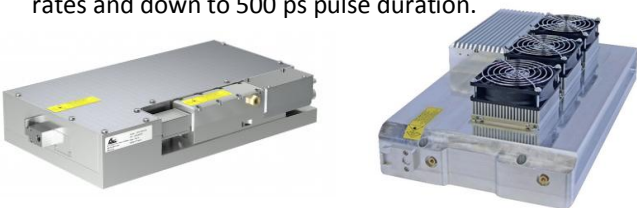
Teem Photonics has the largest standard offer of passively Q-switched microlasers. These diode pumped microchip solid state lasers are distinctive for their subnanosecond pulses allowing the achievement of the highest peak powers out of compact and rugged packages.

The features and benefits include ultrashort pulses as low as 300ps durations, High peak power up to 200kW per pulse, a variety of frequency options – free running up to 130kHz, triggerable to 4kHz with excellent beam quality: Gaussian, TEM₀₀, $M^2 \leq 1.2$

Teem Photonics has released NEW 1064nm and 1535nm infrared (IR) laser series:



Microchip SLM version series, a true single longitudinal mode laser with 70 - 100 kHz repetition rates and down to 500 ps pulse duration.



PicoOne and **PicoMega** two versions of our new amplified laser platform with either more energy per pulse or 1 MHz pulse rate with <200ps pulse duration.

For more information email: info@raymax.com.au

The fourth edition of the Additive World Conference in the Netherlands ran 22nd -23rd March 2016. The Additive World Conference was organised to learn the latest about industrial additive manufacturing from a broad perspective that included the scientific and education perspective and from experienced users from all stages of the Additive Manufacturing process: design, simulation, production, quality control and post-processing.

The opening address by Nienke Meijers, of Fontys University of Applied Sciences raises the issues facing the uptake of additive manufacturing in industry emphasizing the important role of science, engineering and education.

<https://www.youtube.com/watch?v=6kiwNg018tg>

The conference was well attended and a wide range of speakers addressed differing issues and



different sectors of AM application. One such case was LEGO, Jorgen W. Rasmussen reported about how Lego has investigated the

potential of direct metal AM technologies for producing injection mold inserts for production tooling for high-volume parts with high accuracy demands. Three different LEGO case studies are under way covering advantages and disadvantages as well some surprises, or challenges, arising in a real manufacturing environment. The LEGO AM status currently, and the focus for the future, is to determine what is the right AM technology that can support the requirement from LEGO's perspective.

For more information about the conference go to:

<http://additiveworld.com/Conferences/Additive-world-conference-2016>



Behind the scenes of GE's future-forward factory.

"It feels like a scene from a movie. I'm standing in the lobby of a brand-new research facility where video screens set in large circular stands beam the company's achievements from their high-res flat screens.... This is GE's brand-new Advanced Manufacturing Works in Greenville, South Carolina.' The author visits sections of the factory to view: '3D Optical Scanner'; 'Laser MicroJet', an 'Autonomous Robot', and '3D Printing'. It is in this section that four SLM Solutions lasers are located.

The author observes that 'not only is the AMW using 3D printing to produce parts from scratch, they're also using the technology to create molds from sand to cast larger parts that wouldn't be feasible to 3D print. The technique speeds the testing of new designs from months to weeks.'



If you'd like to read more of this industry up-take story go to:

<http://www.gizmag.com/ge-plant/42984/>

Report on the NIR Spectroscopy Conference in Moama, NSW.

This conference is a presentation of the latest developments in NIR spectroscopy. Two days of short courses were followed by the Conference and Exhibition. Key notes were from three internationals: Professor Soren Balling Engelse from the University of Copenhagen discussed his research of high-throughput quantitative spectroscopic methods. Dr Vincent Baeten from Belgium, a Marie Curie awardee of 1996-98, Head of the Food and Feed Quality Unit at the Walloon Agricultural Research Centre, talked about the Unit's projects dealing with the

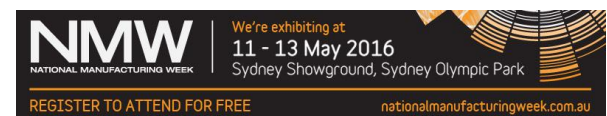
development of spectroscopic methods for assessing quality, safety, traceability and authentication of food and feed products. Professor Tom Fearn, heads the Statistical Science Department at University College, London discussed validation of results. These were followed by many presentations from leading researchers in Australia and New Zealand.

At each ANISG conference an award is presented for the winners of the *Kaji Competition* for the three best entries based on the predicted results and spectroscopic explanation of the products and attributes of interest of the spectra of 308 rice grain samples, and reference values for % Protein and % WC (Amylose) content – the example was provided by the organisers. The winner was Kyle Devey from the University of Waikato.

Raymax presented a HySpex camera and the MicroNIR. For copies of abstracts contact Dr Cédric Chaminade at Raymax Applications Pty Ltd on 02 9979 7646 or info@raymax.com.au

WHAT'S ON:

Raymax is exhibiting with SLM Solutions at NMW.



Stefan Ritt from SLM Solutions will be presenting at the concurrent:



RMIT is hosting an **International Forum of Additive Manufacturing** 23-24 June 2016. If you would like more information contact info@raymax.com.au or register direct on <http://cmrmit.eventbrite.com.au>.

WHAT'S AVAILABLE:

Dr Cédric Chaminade has two HySpex Cameras available for viewing and testing. Both cameras produce high quality hyperspectral imaging suitable for field, laboratory, airborne and industrial application. If you wish to look at the VNIR-1800 or SWIR-384 in your research facility or workplace please email or call: 02 9979 7646 or info@raymax.com.au