

World First at LOPE-C – Laser Processing for Customized OLEDs by 4JET and NOVALED

Selective Layer Modification enables processing of encapsulated OLEDs

Dresden / Alsdorf, June 11th 2013 – 4JET Technologies GmbH (Alsdorf, Germany) introduces a new laser process for customization and optimizing of organic LEDs at LOPE-C 2013. The new technology is a joint development with [Novaled](#) AG (Dresden).

The innovation allows defined customization or grey scaling of encapsulated standard OLEDs. It also enables to optimize lighting density and is also suitable to isolate short circuits.

The new SLAM (**S**elective **L**ayer **M**odification) process thus enables to create OLED signage solutions in lot size 1 and allows for individual logos or patterns.

The use of ultra short laser pulses leaves no visible traces in the processed area when the OLED is turned off.

The flexible laser processing of the delicate films requires no lithography processes. Hence for the first time custom tailored signage applications can be created after manufacturing of the OLEDs.

The partners 4JET and [Novaled](#) will commercialize the SLAM process together. 4JET offers both fully integrated production systems, as well as job shop processing of OLEDs.

The joint innovation is patent pending.

About 4JET

4JET supplies laser systems for processing delicate technical surfaces.

Key markets include the tire-, solar- and display industry. In the company's Alsdorf facility a team of engineers and physicists develops laser processes and integrated manufacturing tools for industrial applications.

The customers in over 30 countries are served by an international network for sales and service.

About Novaled:

Novaled AG is a leader in the research, development and commercialization of technologies and materials that enhance the performance of OLEDs (organic light-emitting diodes) and other organic electronics. Novaled offers OLED product manufacturers a unique combination of proprietary technology, materials and expertise, and is currently the only company licensing and selling organic conductivity doping technology and materials for use in the commercial mass production of display products in the OLED industry.

Novaled has developed strategic partnerships with key OLED innovators and producers throughout the world and, with a broad portfolio of more than 500 patents granted or pending, has a strong *IP* position in OLED technologies, structures and materials.

Commercially active since 2003, Novaled was founded in 2001 as a spin-off of the Technical University and the Fraunhofer Institute of Dresden. Novaled is headquartered in Dresden with sales offices in Korea and Japan. www.novaled.com

About OLEDs:

OLEDs (organic light-emitting diodes) are solid-state devices composed of multiple thin layers of organic materials often only a few nanometers thick that emits diffuse light when electricity is applied to them. Because they are an area light source, OLEDs are a key part of fulfilling the dream of the rapidly growing flat panel display market: paper-thin, highly-efficient displays with brilliant colors and excellent design flexibility.

OLEDs may also lead to new lighting products that combine color and shape to create innovative decorative lighting applications and personalized environments. In addition, OLED lighting products have the potential to offer greater cost and energy savings than current lighting technologies.

Press contact:

Julia Cremer – julia.cremer@4jet.de

4JET Technologies GmbH. Konrad Zuse Strasse 1, 52477 Alsdorf, Germany

Tel. +49 (0) 2404 / 55230 – 0, Fax +49 (0) 2404 / 55230 – 11

www.4jet.de

Novaled

Anke Lemke

MarCom Manager

Phone: +49 (0) 351 7965819

anke.lemke@novaled.com