

## PRESS RELEASE

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### **Plextronics and Novaled to Collaborate on Development of Organic Lighting Technology**

**Novaled AG, a leader in energy saving and long living OLEDs (Organic Light Emitting Diodes), and Plextronics, Inc., an international company that specializes in conductive organic inks for printed lighting, solar and other electronics, announced today that they have agreed to jointly develop doped and solution processed organic materials for OLED applications. OLED technology is expected to become a major ingredient of flat displays and drive a new era lighting innovation with its flexible design and energy efficiency advantages.**

The collaboration agreement specifies that the companies will combine their respective technologies to develop an advanced solution processible Hole Injection Layer (HIL) technology for OLEDs. By leveraging Plextronics' organic conductive ink technology and Novaled's organic dopant technology, the companies will target these advanced HIL materials for use with solution processed polymer and small molecule emitters, as well as with vacuum deposited small molecule emitters. Novaled and Plextronics aim to offer a solution processed HIL with the same performance as a Novaled doped small molecule HIL deposited in a vacuum process. The Novaled doped HIL is part of the Novaled PIN OLED<sup>®</sup> technology, which has demonstrated some of the highest power efficiency together with a long lifetime.

Plextronics and Novaled will co-market Plexcore<sup>®</sup> OC inks that incorporate Novaled dopant materials.

"Novaled is well-known for its power efficient OLED technology and is considered to be a world leading supplier of doping material," says **Andrew Hannah, President and CEO of Plextronics**. "We expect that the combination of Plextronics' conductive ink for OLED - Plexcore<sup>®</sup> OC - and Novaled's doping technologies will enable the high performance printing of OLED devices."

"Plextronics is an international leader in organic ink", adds **Gildas Sorin, CEO of Novaled**. "It is Novaled's strategy to partner with key industry players, like Plextronics, in order to enlarge our business offering for customers. Together with Plextronics, we are able to introduce the Novaled PIN OLED<sup>®</sup> technology to the world of printed electronics."

#### **About Plextronics**

Plextronics, Inc. is an international technology company that specializes in printed solar, lighting and other organic electronics. Headquartered in Pittsburgh, PA, the company's focus is on organic solar cell and organic light emitting diodes (OLED), specifically the conductive inks and process technologies that enable those and other similar applications. With a company vision of enabling 15 billion printed electronic devices by 2015, Plextronics is creating technology capable of commercial-scale manufacturability and performance. The company's device design, process technology and Plexcore<sup>®</sup> branded inks enable the formation of active electrical layers - the key drivers of printed electronics. The privately held company was founded in 2002 as a spinout from Carnegie Mellon

University, based upon conductive polymer technology developed by Dr. Richard McCullough. Over the past seven years, Plextronics scientists have refined and further developed this technology to deliver exceptional performance for printed electronics. For more information about Plextronics, visit [www.plextronics.com](http://www.plextronics.com).

#### **About Novaled**

Novaled AG is a world leading company in the OLED field specialized in high efficiency long lifetime OLED structures and an expert in synthetic and analytical chemistry. The company offers complete solutions to the organic electronic markets, commercializing its Novaled PIN OLED® technology along with its proprietary OLED materials. Novaled has developed long term partnerships with major OLED players worldwide. Based on more than 400 patents granted or pending, Novaled has a strong IP position in OLED technology, and was named No. 1 on a list of coming world market leaders by the German newspapers Handelsblatt and Wirtschaftswoche. Main investors are eCAPITAL, Crédit Agricole Private Equity, TechnoStart, TechFund and CDC Innovation. For details please visit [www.novaled.com](http://www.novaled.com) or the currently released Asian pages [www.novaled.com/jp](http://www.novaled.com/jp) and [www.novaled.com/kr](http://www.novaled.com/kr)

#### **About OLEDs**

OLEDs (organic light-emitting diode) are semiconductors made of thin organic material layers of only a few nanometers thickness. They emit light in a diffuse way to form an area light source. In a fast growing display market OLEDs are key part of a revolution: the dream of paper-thin, highly efficient displays with brilliant colors and great flexibility in design. OLEDs represent the future of a vast array of completely new lighting applications. By combining color with shape, organic LEDs will create a new way of decorating and personalizing personal surroundings with light. At the same time OLEDs offer the potential to become even more efficient than energy-saving bulbs.

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