



# BASF presents its InkSet 2000SL and a new demonstrator at Printed Electronics USA

- InkSet 2000SL: ink set for organic thin film transistors (OTFTs) with increased mobility
- Active matrix sensor for high-resolution pressure sensing

Ludwigshafen, Germany – November 15, 2017 – BASF New Business is exhibiting together with InnovationLab at Printed Electronics USA in Santa Clara, CA, November 15-16. Part of the IDTechEx Show!, Printed Electronics is one of the most important exhibitions in the USA for the printed electronics industry. BASF's Printed Electronics Team is presenting ready-to-use inks and ink sets for printing organic thin film transistors (OTFTs) for various applications, as well as real-life and mass-producible demonstrators built in collaboration with InnovationLab, a platform for research and knowledge transfer in the field of printed electronics.

### New InkSet 2000SL

BASF has added a new InkSet package to its materials portfolio. "InkSet 2000SL is our latest offer in a series of packages that provide all inks required to manufacture thin film transistors. A comprehensive description of how to process the inks comes with the package. InkSet 2000SL enables higher mobility OTFTs than InkSet 1000SP and is thus suitable for active matrix for LCD and EPD backplanes as well as for circuitry," says Kai Exner, Head of Technology, Organic Electronics. BASF New Business.

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#### Active matrix sensor demonstrator

BASF is further strengthening its collaboration with InnovationLab to develop and manufacture devices that demonstrate the feasibility of printed organic electronics and its benefits in various applications. The latest joint project is a high-performance sensor that can simultaneously detect the shape, size and pressure of objects that are on it. The sensor prototype is equipped with an active matrix of OTFTs manufactured with BASF materials. The active matrix allows crosstalk to be avoided and "ghost" or false touch issues to be overcome. This is especially crucial when the pressure on fast moving items needs to be measured accurately, for instance to detect and monitor people access in public areas or to check contact pressure on print rolls or automotive parts.

"In principle, this solution is suitable for all applications for high-resolution pressure sensing or sensing of other physical effects that need flexible, unbreakable, cost competitively producible sensing elements," says Heike Pfistner, Head of Marketing, Organic Electronics, BASF New Business. "Product and system designers can make use of the entire available surface area. Since sensors are becoming more and more ubiquitous following the advent of the Internet of Things, we are convinced that this solution has high market potential."

"Through their cooperation, BASF and InnovationLab are together moving toward a position in the value chain that is currently almost unoccupied yet crucial for success: we offer products that our customers can apply directly, eliminating the need for them to handle any printing or integration themselves. The active matrix sensor demonstrator is our latest joint project to reflect this approach," adds Kai Exner.

Visit us at Printed Electronics USA, booth N12! – We look forward to presenting our latest achievements as well as our view of the market and value chain at the technical conference on November 16.

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#### **About BASF New Business**

BASF New Business GmbH (BNB) searches out long-term trends and innovative topics in industry and society as well as future markets, analyzes their growth potential and checks whether potential new business areas are suitable for BASF. The activities are focused on the client sectors transportation, building and construction, consumer goods, health & nutrition, electronics, agriculture and energy & resources where new business opportunities outside of the existing businesses of BASF are identified. The most promising topics are built up as new business areas for BASF by the subsidiary. BASF New Business concentrates on new chemical-based materials, technologies and system solutions. BNB also promotes technological progress through the development of new products. To evaluate the technology and the market, BNB works closely with BASF's global research platforms and the divisions. In addition, BASF New Business cooperates with research institutes, universities, startups and industrial partners. The subsidiary BASF Venture Capital invests directly in startups that work in strategically relevant technology fields. More information at <a href="https://www.basf-new-business.com">www.basf-new-business.com</a>.

## **About BASF**

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 114,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into five segments: Chemicals, Performance Products, Functional Materials & Solutions, Agricultural Solutions and Oil & Gas. BASF generated sales of about €58 billion in 2016. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at: www.basf.com.