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Press Release

10th LOPEC in Munich, Germany, in March 2018

Printed electronics: from vision to product

From March 13 - 15, 2018, LOPEC, the international exhibition and conference for the printed electronics industry, will take place for the tenth time. As the leading event in this sector, it has always covered the entire value chain – from materials development and plant engineering to applications. In this interview, Hans-Jürgen Lemp (Director Global Sales & Business Development New Platforms, Merck KGaA), Thomas Kolbusch (Vice President, Coatema Coating Machinery GmbH) and Dr. Wolfgang Clemens (Head of Product Management, PolylC GmbH & Co. KG) talk about a decade of printed electronics and the markets of tomorrow.

Mr. Kolbusch and Mr. Clemens, you presented your companies at the first LOPEC in 2009. Do you still remember it?

Thomas Kolbusch: Yes, very well in fact. The first LOPEC took place in Frankfurt – it was much smaller than it is now in Munich.

Wolfgang Clemens: And much more technical. In the early days, the event focused on science and technological developments. Nowadays, we exhibit more and more products that you can buy.

Progress in printed electronics depends on new materials. What has happened over the past decade?

Hans-Jürgen Lemp: With organic electronics, the area that we are concerned with, you do not only need materials expertise but also an in-depth understanding of how individual printed layers interact and how they can be optimally matched to each other. The mobility of electrons is important, otherwise electricity cannot flow. In recent years, we have significantly increased...
this mobility. This is important, because the more mobile electrons are, the more applications are possible.

Kolbusch: Organic photovoltaics is a good example. Initially, the solvents in the printing materials were problematic and you had to work in a nitrogen atmosphere. Now there are stable systems with safer solvents that are suitable for large-scale production.

Clemens: We are not against organic conductors but our basic material is silver. We can now print tracks on polyester film so finely that you cannot see them with the naked eye. Such transparent, conductive films are, for example, suitable for displays with a touch function. This remains a major market.

Kolbusch: Hybrid systems which combine printed and conventional electronics are also an interesting prospect. One example is the integration of silicon components into the printing process, i.e. the placing of chips while the production line is running.

Printed electronics has developed very quickly. To what extent has LOPEC changed over the years?

Kolbusch: I still remember trade fairs where we were the only mechanical engineering company. The printing systems are now much more advanced and this plays a key role in market success. Anyone who would like to turn an idea into reality will find a suitable system.

Clemens: We have noticed that more and more sectors are showing an interest. Large companies, especially those from the automotive or consumer industry, send their technology scouts to LOPEC. They look at what technologies they can use in product development rather than research.

Lemp: LOPEC was always an ideal platform for us. More and more of the latest prototypes are shown here. This attracts large numbers of visitors who are looking for smart solutions. At LOPEC, we can present such innovations and discuss possible applications.
Where is the greatest potential for printed electronics at the moment, in your opinion?

Clemens: A great deal is going on in the automotive industry. There are still a lot of buttons and knobs inside a car, but these will disappear. The older generation might like to press a button but our children already prefer touch displays. We are seeing big changes everywhere – this includes household appliances and consumer electronics.

Kolbusch: As far as sensors for medicine, sportswear and other wearables are concerned, we are also seeing a breakthrough because we have solutions that you can put in the laundry.

Lemp: The adaptability of printed electronics is making entirely new applications possible. Take the Internet of Things: how do objects and devices communicate with each other? What material properties do I need for this? Things that already exist today are becoming smarter, more interactive and more communicative. Printed electronics is helping to make visions reality.

What role does LOPEC play in realizing future trends?

Kolbusch: For us, it is important to get involved with new sectors and maintain contact with our existing customers. At LOPEC, you can see new projects and talk about them. Our systems can be found in research institutions – we see them too at LOPEC because they are involved in the Scientific Conference.

Clemens: For us, LOPEC is the trade fair where we can show an international audience what sensor systems are capable of. We are open to all sectors and believe that now is the right time.

Lemp: We see ourselves as more than just material developers. We offer solutions which allow entirely new possibilities. For us, LOPEC is a stage, a place for inspiration, where inventors and users meet.

Thank you for the interview and good luck at the upcoming LOPEC!
The rise of printed electronics: the LOPEC success story

Whether it be OLEDs, smart packaging or test strips for diagnostic purposes, printed electronics is conquering mass markets. One reason for this success is LOPEC, the international exhibition and conference for the printed electronics industry which will take place for the tenth time in March 2018.

The first “Large-area, Organic & Printed Electronics Convention” to give the event its full name took place in Frankfurt am Main in June 2009. In 2012, LOPEC moved to Munich, where it is organized by the OE-A (a working group within the VDMA) together with Messe München. LOPEC has been a success ever since it started: At LOPEC 2017, there were 154 exhibitors – three times as many as in 2009 and 50 percent more than in 2012. At the same time, visitor numbers have increased from 600 in 2009 to almost 2,600 in 2017. Around one in two visitors and exhibitors is from abroad.

While visitors to the trade fair can meet the big names from the sector and admire their new products, renowned industry experts present the latest trends in around 200 conference presentations. In order to cover all areas of printed electronics and meet the needs of the sector in the best way possible, the LOPEC conference is subdivided into various modules: the Plenary Session, the Business Conference, the Technical Conference, the Scientific Conference as well as Short Courses, the Start-up Forum, and the Poster Session.

The positive development looks likely to continue as printed electronics remains a growing industry. According to the business climate survey by the OE-A, more than 80 percent of members surveyed expect the sector to continue growing in the coming year. The companies predict a 16 percent increase in turnover in 2018.

More information about LOPEC can be found at: www.lopec.com

Photos in print quality and film material are available free of charge.
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LOPEC
LOPEC (Large-area, Organic & Printed Electronics Convention) is the leading international event for printed electronics. The combination of an exhibition and a conference is the perfect way to depict the complex and dynamic nature of this young industry. 2,585 participants from 50 countries attended the event in 2017. There were 154 exhibitors from 17 countries, and 182 conference presentations from 22 countries. LOPEC is organized jointly by the OE-A (Organic and Printed Electronics Association) and Messe München GmbH. The next event takes place from March 13 to 15, 2018 at the ICM – Internationales Congress Center München in Munich, Germany.

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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 Veranstaltungcenter 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.

OE-A
The OE-A (Organic and Printed Electronics Association) was founded in December 2004 and is the leading international industry association for organic and printed electronics. The OE-A represents the entire value chain of this industry. The members are world-class global companies and institutions, ranging from R&D institutes, mechanical engineering companies and material suppliers to producers and end-users. Well over 200 companies from Europe, Asia, North America, South America, Africa and Oceania are working together to promote the establishment of a competitive production infrastructure for organic and printed electronics. The OE-A is building a bridge between science, technology and application. The OE-A is a working group within VDMA.

www.oe-a.org