

reference OE-A-2022-01-E
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date February 24, 2022

OE-A at LOPEC: Printed electronics competition bigger than ever

The “OE-A Competition 2022” shows the many possibilities of flexible, organic, and printed electronics with inspiring products, prototypes, and fresh designs live at LOPEC 2022.

Frankfurt, 24. February 2022 – How can printed electronics be useful for monitoring sleeping babies or to support people who lost their leg? And what role can printed electronics components play for the gaming world? The answers to these exciting questions will be given at LOPEC 2022, the international platform for printed electronics, from 22-24 March live at ICM, Messe München.

This year 23 international companies, research institutions and universities take part in the “OE-A Competition 2022” to present their new products, prototypes, and concepts. The submitted projects are judged by a jury of representatives from well-known international companies and institutes in three categories: "Prototypes & New Products"; "Freestyle Demonstrator"; and "Publicly Funded Project Demonstrator". As every year, all submitted products and demonstrators will be presented to the international community at the OE-A booth at LOPEC and online at oe-a.org.

Promising ideas for printed electronics

"We are happy that the competition is growing every year since its start. We received more than 20 submissions from 11 countries. It is a great pleasure to see the number of products for automotive and healthcare which are close to market growing year by year." says Dr. Klaus Hecker, Managing Director of the OE-A, an international working group within VDMA.

Printed electronics for babies and gamers

This year, the expert jury will have to discuss and rate more contributions than ever at the jury meeting in Munich. For a first insight, three examples briefly explained:

A sensing artificial leg, submitted by IEE, helps people feel every step and tackles the problem of phantom pain. Market standard prostheses often lack the capability to recreate a sensing of the missing body parts. This prosthesis has a sensing surface facilitated by a sensor foil integrated in a sock that is imposed to the artificial foot. It comes with a readout electronic with wireless transmitter and an actuator for human feedback. It creates a better control of movements and provides feedback which helps those affected to feel the ground and the sense of touch reduces phantom pains.

The Holst Centre has developed an ultrathin, conformable smart sensor mat that can detect a baby's breathing rate, heart rate and posture. The multi-modal sensing mat consists of a combination of printed piezo-resistive and piezo-electric sensors and can be placed under a bed sheet, enabling long-term monitoring of babies in a hospital bed or at home.

The non-intrusive device simply disappears into the object in which it is integrated and a variety of applications not only in healthcare is possible: e.g., when used in a car seat, the mat can monitor posture and driver alertness.

The 3 D gaming device handed in by Nuremberg Tech is portable and the user can play "Tic-Tac-Toe" alone or in pairs. The three-dimensional game is designed on an attractive free-form surface and is fully operated through touch functionality. The demonstrator combines the functionality of printed electronics with standard surface-mount technology components on an initially flat flexible dielectric substrate. The direct integration of touch functionality inside the assembly, opens up wide fields of application, for example, in automotive applications, for white goods or for consumer electronics with a maximum freedom of design.

Every project is a winner at LOPEC

All visitors are invited to make their choice for the "Public Choice Award" at the OE-A booth at LOPEC (Hall B0, 306), on March 23rd and 24th. "Have a closer look at the broad range of submissions to the OE-A Competition, from concept to product, which illustrates the potential printed electronics offers. And cast your vote to choose which demonstrator deserves the "Public Choice Award", asks Klaus Hecker.

The winners of all categories will be announced on the evening of Wednesday, March 23rd during the LOPEC Get-together & Award Show. Additionally, the winner of the "Public Choice Award" as well as the price winners of the other categories will present their demonstrators at a web seminar in April 2022.

Meeting point OE-A booth at LOPEC

LOPEC visitors will get a comprehensive insight into printed electronics applications at the OE-A booth at LOPEC 2022. A visit at the OE-A booth is also worthwhile to learn about the latest edition of the OE-A Roadmap, the results of the new business climate survey and the activities of the numerous international working groups. "We invite you to visit our booth to look at the demonstrators but also to get an update on OE-A's latest activities and future events," says Klaus Hecker.

Journalists can be [accredited for LOPEC 2022](#). The LOPEC 2022 press conference including presentation of the latest OE-A Business Climate Survey will take place Wednesday, March 23rd at 11:00.

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If you have any questions, please do not hesitate to contact Dr. Klaus Hecker, OE-A Managing Director, phone: +49 69 66 03-13 36, e-mail: <mailto:klaus.hecker@oe-a.org>



Sensing Leg Prothesis
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3D Electronic Gaming Device

© Nuremberg Tech, Germany

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Organic and Printed Electronics Association

The OE-A (Organic and Printed Electronics Association) was founded in December 2004 and is the leading international industry association for flexible, organic, and printed electronics. The OE-A represents the entire value chain of this emerging industry. Our 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, and Africa are working together to promote the establishment of a competitive production infrastructure for organic and printed electronics.

The vision of the OE-A is to build a bridge between science, technology, and application. The OE-A is a working group within VDMA. More than 3,400 member companies from the engineering industry make VDMA the largest industry association in Europe. oe-a.org

Organic and printed electronics

Organic and printed electronics stands for a revolutionary new type of electronics: they are thin, lightweight, flexible, robust, and produced at low cost. It enables new applications, including single-use devices enabling ubiquitous electronics.

LOPEC

The OE-A and Messe München are the hosts of LOPEC, the premier international exhibition and conference for the printed electronics industry. It addresses end-users, engineers, scientists, manufacturers, and investors. LOPEC 2022 will be held March 22 to 24, 2022 at Messe München, Germany. lopec.com