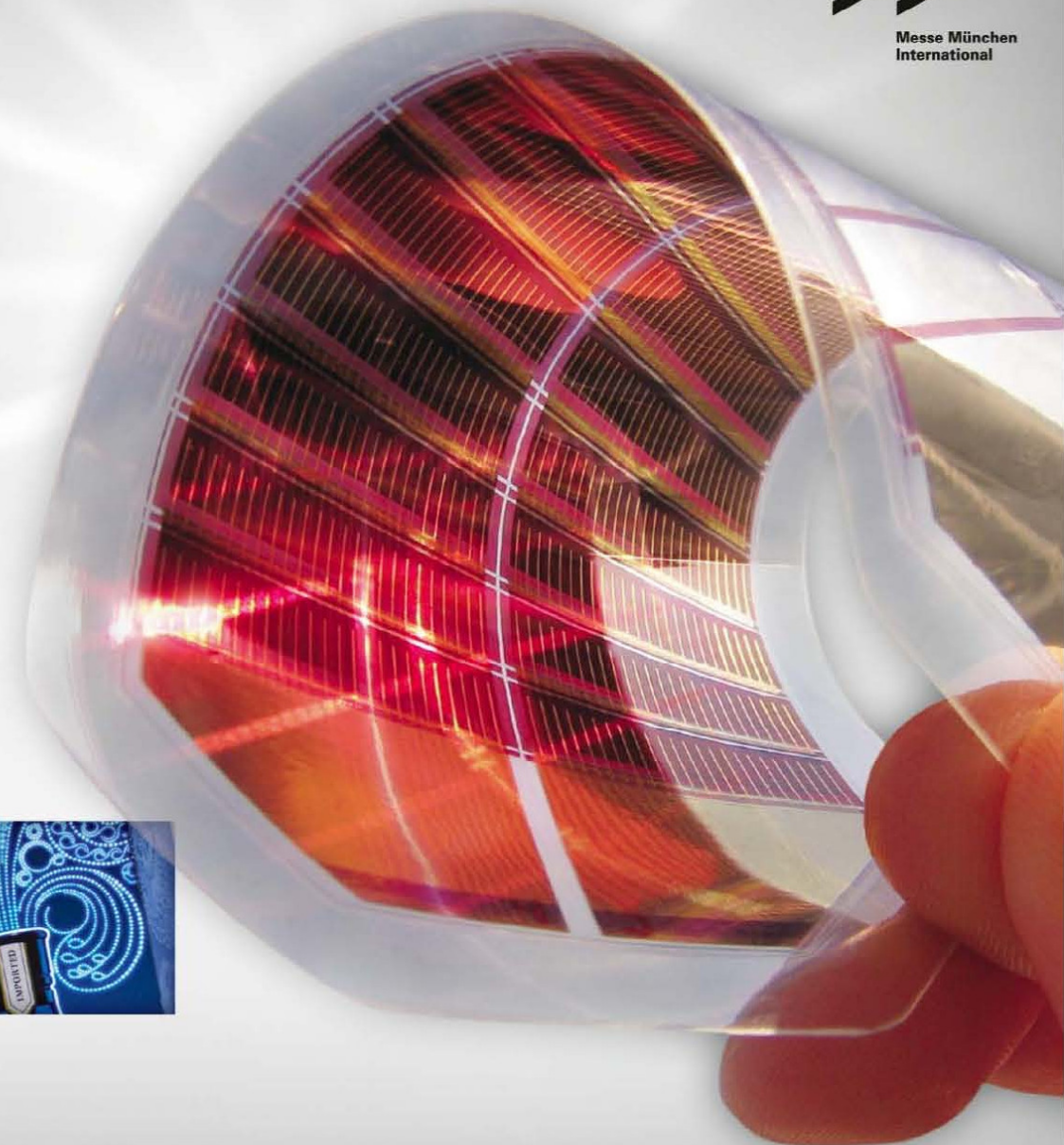


# LOPEC 2014

## Conference Programm



**6th International Exhibition  
and Conference for the  
Printed Electronics Industry**  
[www.lopec.com](http://www.lopec.com)

Exhibition: 27.–28. Mai 2014  
Conference: 26.–28. Mai 2014  
Messe München, Germany



**LOPEC**



Customized Building Blocks for Your Participation | Program Overview (for details see www.lopec.com)

Conference Program Overview – Day 1

Monday – May 26, 2014

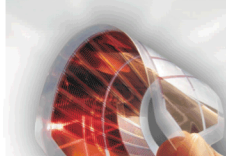
Conference Program Overview – Day 2

Tuesday – May 27, 2014

Conference Program Overview – Day 3

Wednesday – May 28, 2014

Short Courses		Scientific Conference		Plenary Session – Room 14b				EXHIBITION – Hall B0 Start-up FORUM EXHIBITOR FORUM	EXHIBITION – Hall B0 EXHIBITOR FORUM						
<b>09:30 am</b> Materials for Organic and Printed Electronics Room 14b		<b>09:20 am</b> Sensors and Systems Room 14a		<b>09:20 am</b> Printing Technologies Room 14c		<b>09:00 am</b>   Words of Welcome <b>09:15 am</b>   Heraeus' Strategy towards Future Growth Markets <b>09:40 am</b>   EU strategy for organic electronics & photonics <b>10:05 am</b>   Flex Nodes for Connected People									
COFFEE BREAK		COFFEE BREAK		COFFEE BREAK											
<b>11:30 am</b> Solution processable organic electronic devices Room 14b		<b>11:30 am</b> Encapsulation and Processing Room 14a		<b>11:30 am</b> Inkjet Printing Room 14c		<b>Technical Conference</b>				<b>Scientific Conference</b>					
<b>11:30 am</b> Organic Electronic Systems Room 13a		<b>11:30 am</b> Advances in Flexible Display Technologies Room 13b		<b>11:30 am</b> OPV Room 14a		<b>11:30 am</b> Novel Printing and Processing Room 14c				<b>Technical Conference</b>		<b>Business Conference</b>			
LUNCH		LUNCH		LUNCH		LUNCH				LUNCH					
<b>02:00 pm</b> Printing, Deposition and Patterning Room 14b		<b>02:00 pm</b> Thin Film Transistors Room 14a		<b>02:00 pm</b> Inorganic Materials and Nanomaterials Room 14c		<b>02:00 pm</b> Technology and Manufacturing Advances in OPV and Battery Technologies Room 13a				<b>02:00 pm</b> Touch Screens and Surfaces Room 13b		<b>02:00 pm</b> Integrated Smart Systems and RFID Room 14a		<b>02:00 pm</b> Device Design Room 14c	
COFFEE BREAK		COFFEE BREAK		COFFEE BREAK		COFFEE BREAK				COFFEE BREAK					
<b>04:00 pm</b> Hybrid Systems: Stretching the Limits of Electronics Room 14b		<b>04:00 pm</b> Analysis and Optimization of PE Technologies Room 14a		<b>04:00 pm</b> Processes for OLED Manufacturing Room 14c		<b>04:00 pm</b> Emerging Technologies for Organic and Large Area Electronics Room 13a				<b>04:00 pm</b> Upscaling Production – Processing Methods and Equipment Room 13b		<b>04:00 pm</b> OLEDs Room 14a		<b>04:00 pm</b> Organic Materials Room 14c	
						<b>06:00 pm</b> TC Poster Session – ICM Foyer				<b>06:00 pm</b> SC Poster Session – ICM Foyer					
						<b>08:00 pm</b>   LOPEC Dinner and Awards									



**Short Courses | Monday, May 26, 2014 | Room 14b**

**Materials for Organic and Printed Electronics (09:30 am — 11:00 am)**

**Organic Materials for Organic Electronics Applications**

Prof. Ullrich Scherf

Macromolecular Chemistry group and Institute for Polymer Technology, Bergische Universität Wuppertal, Macromolecular Chemistry group and Institute for Polymer Technology, Germany

**Solution processable organic electronic devices (11:30 am — 01:00 pm)**

**Solution processable organic electronic devices**

Prof. Ronald Österbacka

Åbo Akademi, Turku, Professor of Physics, Chair of Center for Functional Materials, Finland

**Printing, Deposition and Patterning (02:00 pm — 03:30 pm)**

**Manufacturing methods and challenges for printing electronics.**

Mr Tim Claypole

Swansea University, UK

**Hybrid Systems: Stretching the Limits of Electronics (04:00 pm — 05:30 pm)**

**Stretching the Limits of Electronics**

Mr M. Marc Koetse

Integration Technologies for Flexible Systems, Holst Centre, Netherlands



**Scientific Conference | Monday, May 26, 2014**

**Sensors and Systems | Room 14a**

- 09:20 am **Fully gravure printed carbon nanotube based flexible and disposable wireless cyclic voltammetry tag**  
Dr Younsu Jung  
Suncheon National University, Korea, South
- 09:40 am **Multi-Parametric Flexible Sensors Based on Nanoparticles**  
Ms Meital Segev-Bar  
Technion - Israel Institute of Technology, Israel
- 10:00 am **Chip-on-Foil Devices for DNA Analysis Based on Inkjet Printed Silver Electrodes**  
Mr Sebastian Wünsch  
Friedrich Schiller University Jena, Germany

**Printing Technologies | Room 14c**

- 09:20 am **Towards fully roll-to-roll solution processed large area OLED devices**  
Prof. Dr Pim Groen  
Holst Centre - TNO, Netherlands
- 09:40 am **Porous Air bearing techniques for contactless handling, flattening and stabilization of flexible substrates**  
Mr Ivo Hamersma  
IBS Precision Engineering, Netherlands
- 10:00 am **Simulation of Doctoring and Inking Processes for Gravure Printing of Silver Micro Patterns on Thin Film**  
Mr Huu Phuong Hoang  
Konkuk University, Korea, South
- 10:20 am **Development of patterning and printing technologies for large area functional films**  
Dr Xuechuan SHAN  
SIMTech, Singapore



**Scientific Conference | Monday, May 26, 2014**

**Encapsulation and Processing | Room 14a**

- 11:30 am **High Quality Metallic Grid Preparation on Large Area ITO-Coated Plastic Substrates**  
Dr Larissa Grinis  
Bar-Ilan University, Senior Scientist, Israel
- 11:50 am **Time dependent permeation of water vapor through multilayer barrier films used for the encapsulation of organic photovoltaic modules**  
Mr Oliver Miesbauer  
Fraunhofer-Institut für Verfahrenstechnik und Verpackung IVV,  
Germany
- 12:10 pm **Capillary Suspensions- A New Formulation Route for Printable Electronics**  
Ms Monica Schneider  
Karlsruhe Institut of Technology, Germany
- 12:30 pm **Insights on the blend morphology and process optimization by optical metrology for roll-to-roll organic photovoltaics applications**  
Dr. A. Laskarakis  
Aristotle University of Thessaloniki, Greece

**Inkjet Printing | Room 14c**

- 11:30 am **Jetting of functional structures on moulded 3D devices**  
Mr Bernhard Polzinger  
HSG-IMAT, Head of Group Printing Technology, Germany
- 11:50 am **UK/Catalan project DigiPRINT on Large Area High Resolution Digital Printing for Organic Thin Film Transistor Fabrication (Year-1 update)**  
Dr Dimitris Karnakis  
Oxford Lasers Ltd, Technical Manager - R&D Projects, UK
- 12:10 pm **Fabrication of transparent electrodes by printing and self assembly of metal precursors and nanoparticles**  
Mr Michael Layani  
The Hebrew University of Jerusalem, PhD Student, Israel
- 12:30 pm **Inkjet printing and intense pulsed light sintering of nanoparticle silver patterns – Influence of flashing parameters and substrate**  
Ms Dana Weise  
Technische Universitaet Chemnitz, Germany



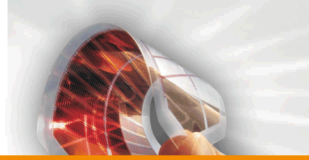
**Scientific Conference | Monday, May 26, 2014**

**Thin Film Transistors | Room 14a**

- 02:00 pm **High performance printed organic transistors using a novel scanned thermal annealing technology**  
Mr Gerd Grau  
University of California, Berkeley, PhD Student, USA
- 02:20 pm **Novel high-performing photopatternable dielectrics for organic Thin-Film-Transistors**  
Dr Herbert Gold  
Joanneum Research, Scientist, Austria
- 02:40 pm **Key control factor for mass-production of fully roll-to-roll (R2R) gravure printed carbon-nanotube-based thin film transistors**  
Mr Hyunmo Koo  
Suncheon National University, Korea, South

**Inorganic Materials and Nanomaterials | Room 14c**

- 02:00 pm **SILVER NANOWIRE NETWORKS FOR FOLDABLE TRANSPARENT ELECTRODES**  
Dr Xinning Ho  
Singapore Institute of Manufacturing Technology, Singapore
- 02:20 pm **Copper Precursors for Flexible and Plastic Electronics**  
Prof. Shlomo Magdassi  
The Hebrew University of Jerusalem, Israel
- 02:40 pm **Selective sintering of inkjet-printed metal nanoparticles onto polyethylene terephthalate substrate**  
Dr Daniel ?yme?ka  
Ecole des Mines de Saint-Etienne, Post-doctoral research fellow, France
- 03:00 pm **Transparent metal oxide thin film with high thermal stability, hardness, and chemical**  
Prof. Dr Hsueh-Shih Chen  
National Tsing Hua University, Taiwan



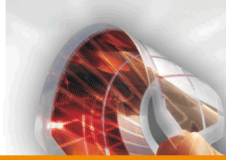
**Scientific Conference | Monday, May 26, 2014**

**Analysis and Optimization of PE Technologies | Room 14a**

- 04:00 pm **INKJET GATE ARRAY: Novel concept to implement electronic systems**  
Prof. Dr Jordi Carrabina  
Universitat Autònoma de Barcelona, Laboratory Director, Spain
- 04:20 pm **Semi-automatic PE Technology & Device Library Characterization for PDK Development**  
Mr Francesc Vila  
IMB-CNM (CSIC), Engineer, Spain
- 04:40 pm **Analysis of Geometric Modeling of Slot Die Lips**  
Mr NAOKI RIKITA  
MMC RYOTEC CORPORATION, Technical Director, Japan

**Processes for OLED Manufacturing | Room 14c**

- 04:00 pm **Solution processing of self-assembled monolayers in printing relevant timescales**  
Mr Milan Alt  
Merck KGaA / Karlsruher Institut für Technologie, PhD student, Germany
- 04:20 pm **OLED on flexible Glass from Sheet-to-Sheet to Roll-to-Roll Fabrication**  
Dr Stefan Mogck  
Fraunhofer COMEDD, Germany
- 04:40 pm **Inkjet-printed diodes based on metal-insulator-semiconductor (MIS) structure for rectifying application in flexible electronics**  
Mr Kalyan Yoti Mitra  
Technische Universität Chemnitz, Germany
- 05:00 pm **Large-area, flexible, ITO-free Organic Light Emitting Diodes fabricated on fabric-based electrodes**  
Dr Oscar Fernandez  
CSEM, Switzerland

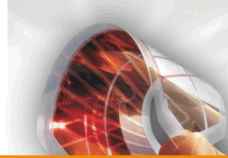


**Plenary Session** | Tuesday, May 27, 2014 | Room 14b

**Words of Welcome**

- 09:00 am **Welcome to LOPEC 2014**  
Mr Wolfgang Mildner  
General Chair LOPEC, PolyIC GmbH & Co KG, Managing Director, OE-A Vice-Chairman Europe
- 09:15 am **Heraeus' Strategy towards Future Growth Markets**  
Mr Rolf Najork  
Heraeus Holding GmbH, COO, Germany
- 09:40 am **EU strategy for organic electronics & photonics**  
Mr Khalil Rouhana  
European Commission, Director-General for Communications Networks, Content & Technology , Belgium
- 10:05 am **Flex Nodes for Connected People**  
Mr Jaap Lombaers  
Holst Centre, Managing Director, Netherlands





**Technical Conference | Tuesday, May 27, 2014**

**Organic Electronic Systems | Room 13a**

- 11:30 am **Recent Progress in the Development of Integrated Stand-alone Electronic Systems**  
Mr Henrik Sjoeborg  
Thin Film Electronics AB , Sr Vice President, Product Management , Sweden
- 11:50 am **Complementary organic transistors printed on foil: from process technology to circuits and systems**  
Dr. Eugenio Cantatore  
TU Eindhoven, Associate Professor , Netherlands
- 12:10 pm **Electrical and printing integration for printed electronic on paper:**  
Dr Delattre Anastasia  
CTP, Chemist ingerieur, France
- 12:30 pm **Applications of Printed Electronics on Paper-based Substrates: Creating sustainable and functional packaging**  
Dr Gary Li  
FPInnovations, Scientist, Canada

**Advances in Flexible Display Technologies | Room 13b**

- 11:30 am **Advanced Detaching Technique for Plastic AMOLED**  
Prof. Jin Jang  
Kyung Hee University, Korea, South
- 11:50 am **Active Matrix OLED backplanes made of organic thin-film transistors**  
Dr. Hans Kleemann  
Novaled, Germany
- 12:10 pm **Low temperature organic transistor process for flexible displays with 1mm bend radius**  
Dr Simon Ogier  
Centre for Process Innovation, R&D Manager, UK



**Technical Conference | Tuesday, May 27, 2014**

**Technology and Manufacturing Advances in OPV and Battery Technologies | Room 13a**

- 02:00 pm **Towards roll-to-roll mass production of efficient organic vacuum-deposited p-i-n tandem solar cells**  
Dr Christian Uhrich  
Heliatek, Head of R&D Physics, Germany
- 02:20 pm **High efficiency polymer semiconductors for organic photovoltaics with improved stability**  
Dr Owen Lozman  
Merck Chemicals, R&D Manager, UK
- 02:40 pm **Custom made OPV by ink jet printing**  
Dr Charles Roger  
DisaSolar, Materials & Processes Engineer, France
- 03:00 pm **Thin Batteries and their Applications**  
Mr John Gannon  
Blue Spark Technologies, Inc., President and CEO, USA

**Touch Screens and Surfaces | Room 13b**

- 02:00 pm **Silver Nanowires: Enabling the Future of Touch**  
Dr. Tryg Jensen  
Carestream Advanced Materials, R&D Manager, USA
- 02:20 pm **High-Conductive PEDOT:PSS in Touch Sensors**  
Dr. Andreas Elschner  
Electronic Materials Division, Head Technical Service BU FC, Germany
- 02:40 pm **PolyTC® - Metal mesh based Touch sensors**  
Mr Johannes Schad  
PolyIC GmbH & Co. KG, Product Manager, Germany



**Technical Conference | Tuesday, May 27, 2014**

**Emerging Technologies for Organic and Large Area Electronics | Room 13a**

- 04:00 pm **Flexible thin film plastic photovoltaics for energy harvesting and off-grid solar**  
Dr. Michael Niggemann  
Eight19 Ltd, CTO, UK
- 04:20 pm **MC10's Biostamp platform: Delivering seamless, body-integrated computing that dissolves the boundaries between technology and humans.**  
Mr Brian Elolampi  
MC10, USA
- 04:40 pm **New manufacturing process step for LEC, enabling additive layer application without need for orthogonal solvent systems.**  
Dr Andreas Sandström  
LunaLEC AB, CTO, Sweden
- 05:00 pm **Potential free plasma technology for treatment of electrical high sensitive films**  
Mr Frank Hochstrate  
SOFTAL Corona & Plasma GmbH, Area Manager, Germany

**Upscaling Production - Processing Methods and Equipment | Room 13b**

- 04:00 pm **Patterning and Thin Film layer application methods for Printed Electronics**  
Mr Thomas Kolbusch  
Coatema, Vice President, Germany
- 04:20 pm **Printing versus coating technology – Which way Printed Electronics will go?**  
Ms Andrea Glawe  
KROENERT GmbH & Co KG, Director R&D, Germany
- 04:40 pm **Inkjet production equipment; scale-up from lab to fab**  
Mr Joost Valeton  
Roth&Rau B.V., Netherlands
- 05:00 pm **Changing the Future in R2R Manufacturing of Flexible Electronics**  
Dr Sorin Stan  
VDL FLOW, Netherlands



Scientific Conference | Tuesday, May 27, 2014

OPV | Room 14a

- 11:30 am **Analysis of Dynamic Electrical Response of Fresh and Degraded Organic Solar Cells**  
Mr Martin Neukom  
Fluxim AG, Switzerland
- 11:50 am **Matching the subcell currents in organic tandem solar cells via spatial photocurrent mapping**  
Mr Konstantin Glaser  
Karlsruhe Institute of Technology (KIT), Germany
- 12:10 pm **Plasmonic organic photovoltaics based on shape controllable silver nanoplates.**  
Mr Hsu Hsiang-Lin  
Ming Chi University of Technology, Taiwan
- 12:30 pm **Assessing batch-to-batch variation of photovoltaic polymers by spectroscopy and optical simulation**  
Dr Markus Kohlstädt  
Fraunhofer Institute for Solar Energy Systems ISE / Universität  
Freiburg, Germany

Novel Printing and Processing | Room 14c

- 11:30 am **Customised Solutions for Rapid Photonic Processing**  
Prof. Dr Uwe Krönert  
Heraeus Noblelight Ltd., Cambridge, UK, Scientific consultant,  
Germany
- 11:50 am **Wireless Bio Sensing Platform using Printed Electrodes and Flexible Battery**  
Dr Fredrik Jonsson  
KTH, Royal institute of Technology, Sweden
- 12:10 pm **Integrated applications driven by printed primary battery solutions**  
Dr Andreas Willert  
Fraunhofer ENAS, Senior Scientist, Germany
- 12:30 pm **Towards an all plasma-printed biosensor**  
Mr Peter Verhoeven  
InnoPhysics B.V., Netherlands



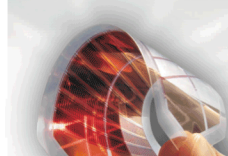
Scientific Conference | Tuesday, May 27, 2014

Integrated Smart Systems and RFID | Room 14a

- 02:00 pm **Fully Inkjet Printed, Multilayer Lithium-ion Battery**  
Mr James Cooper  
Georgia Institute of Technology, Graduate Research Assistant, USA
- 02:20 pm **Integration of printed electronic components for devices**  
Dr. Mark Allen  
Nokia Research Centre, Senior Researcher, UK
- 02:40 pm **Printed Smart RFID Labels for the Monitoring of Perishable Goods**  
Dr Danick Briand  
Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
- 03:00 pm **Vertically-Integrated Inkjet Printed Electronics Process (VIPRE) for High Efficiency RF and mm-Wave Components**  
Mr Benjamin Cook  
Georgia Institute of Technology, USA

Device Design | Room 14c

- 02:00 pm **Light Management for Organic Photovoltaics**  
Dr Ton Offermans  
CSEM, Switzerland
- 02:20 pm **Integration of OLED lighting in automotive plastic components**  
Dr Bert Geyer  
ZOEK GmbH, Germany
- 02:40 pm **Printed Fringing Field Capacitive Sensors: A Multidisciplinary Approach**  
Mr João Gomes  
CeNTI - Centre for Nanotechnology and Smart Materials, R&D manager of the Smart Materials and Systems, Portugal
- 03:00 pm **Smart Skin for Robotics – an Example of a Complex System-In-Foil**  
Dr Harald Richter  
Institut für Mikroelektronik Stuttgart, Germany



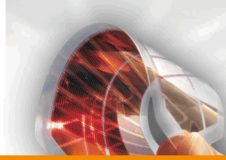
Scientific Conference | Tuesday, May 27, 2014

OLEDs | Room 14a

- 04:00 pm **Design tool for light scattering enhancement in OLEDs**  
Mr Thomas Lanz  
Fluxim AG, Technical consultant, Switzerland
- 04:20 pm **High-Performance Stacked Inverted Top-Emitting Green and White Electrophosphorescent Organic Light-Emitting Diodes**  
Mr Keith Knauer  
Georgia Institute of Technology, Graduate Research Assistant, USA
- 04:40 pm **Characteristics of all-solution printed transparent OLED signage and lighting panels**  
Mr Markus Tuomikoski  
VTT, Finland

Organic Materials | Room 14c

- 04:00 pm **New Materials for OLED and OPV**  
Dr Arnulf Scheel  
Heraeus Precious Metals GmbH&Co.KG, Germany
- 04:20 pm **Printed and encapsulated environmental sensors on biodegradable polylactic acid (PLA)**  
Mr Andrés Vásquez Quintero  
Ecole Polytechnique Fédérale de Lausanne (EPFL), Research Assistant, Switzerland
- 04:40 pm **Studying the influence of temperature treatment on Poly(3,4-ethylenedioxythiophene) polystyrenesulfonate (PEDOT:PSS) thin films**  
Mr Antonio Marques  
CeNTI - Centre for Nanotechnology and Smart Materials, Researcher, Portugal



**Start-up Forum | Tuesday, May 27, 2014 | LOPEC Forum**

**launch event**

11:00 am **the key parameters to make a start-up successful**  
Mr Gildas Sorin  
Novalad GmbH, CEO, Germany

**B-Round**

11:20 am **Organic and printed electronics: innovative smart products**  
Mr Pascal Pierron  
Dracula Technologies, Business Developer, France

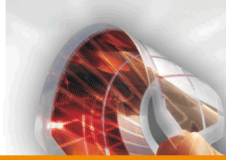
11:30 am **PST Sensors - making sense with silicon**  
Mr David Britton  
PST Sensors, South Africa

11:40 am **Additive Manufacturing of 3D Printed Thin Film Electronics and Circuits Using Precision Shadow Masks and Alignment – Bridging the Gap between Integrated Circuits and Printed Circuit Boards**  
Mr Whitten (Whit) Little  
Advantech US, Inc., President and CEO, USA

11:50 am **Singlet Harvesting Emitters for highly efficient OLEDs**  
Dr Tobias Grab  
Cynora GmbH, CEO, Germany

12:00 pm **Slot die coating – a key technology for scalable manufacturing of Organic & Printed Electronics**  
Mr Miguel Friedrich  
nTact, Vice President Sales & Marketing, USA

12:10 pm **Annealing Free Metal Nanoink**  
Prof. Dr Masayuki Kanehara  
Colloidal Inc. Co., Ltd., CEO, Japan



**Start-up Forum | Tuesday, May 27, 2014 | LOPEC Forum**

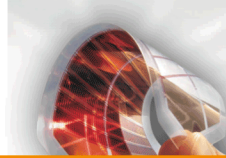
**B-Round**

- 12:30 pm **Printed Electrochromic Film for Architectural and Automotive Applications**  
Dr Damoder Reddy  
Argil, Inc., Founder & CEO, USA
- 12:50 pm **Fabrigen – Lightweight Flexible PV**  
Dr Robert Carpenter  
FlexiSolar Ltd, MD, UK

**Seed Financing**

- 12:20 pm **How to outperform ITO**  
Ms Valérie ZOPPI  
Genes'ink, Project leader - Senoir material engineer , France
- 12:40 pm **Foils for vehicles**  
Mr Antti Backman  
Delektre Ltd., CEO, Finland





**Technical Conference Poster Session | Tuesday, May 27, 2014 | ICM Foyer**

**Technology and Manufacturing Advances in OPV and Battery Technologies (06:00 pm — 08:00 pm)**

- 1.1 **OPV - A STEP TO COMPETITIVENESS & NEW OPPORTUNITIES**  
Mr BARREAU FRANCOIS  
ARMOR SAS , Marketing Manager, France

**OLED Lighting (06:00 pm — 08:00 pm)**

- 2.1 **Scaling up the Optoelectronics Platforms - technology and challenges**  
Mr Mike Clausen  
Centre for Process Innovation (CPI), Optoelectronics Platform Manager, UK
- 2.2 **Simultaneous Multilayer Coating for mass-producible flexible light**  
Mr Moritz Graf zu Eulenburg  
InovisCoat GmbH, Managing Director, Germany
- 2.3 **Study, design and development of encapsulation process for organic devices supported by an semi-automatic equipment**  
Mr Andre Pinto  
CeNTI - Centre for Nanotechnology and Smart Materials, Researcher, Portugal

**Advances in Substrates and Materials for Printed Electronics (06:00 pm — 08:00 pm)**

- 4.1 **Advanced parameter control for inkjet material development**  
Dr Jack Beurskens  
Roth&Rau B.V., Netherlands
- 4.2 **Solvay formulations for Organic Field Effect Transistors devices.**  
Dr Mathieu Fenoll  
Solvay, R&D Specialist, Belgium

- 4.3 **Photonicallly and Thermal Sintered Silver Conductors for Printed Electronics Applications**  
Dr Dave Hui  
DuPont (UK) Limited, Product Development Scientist, UK
- 4.4 **The importance of Suspensions in the value-added chain for organic electronic applications**  
Mr Ulf Koepke  
EXAKT Advanced Technologies GmbH, R&D Manager, Germany
- 4.5 **Copper Nanoparticle Ink for Reverse Offset Printing and its Application to Thin Film Transistors (TFTs)**  
Mr Masayoshi Koutake  
JAPER, Japan
- 4.6 **Nanoparticulate n- and p-type metal oxide interfaces for different architectures in polymer solar cells**  
Dr Norman Lüchinger  
Nanograde AG, Switzerland
- 4.7 **Tungsten Carbide Lip Slot Die**  
Mr NAOKI RIKITA  
MMC RYOTEC CORPORATION, Technical Director, Japan
- 4.8 **Next-Generation Printable Conductive Nanotube Materials and Sensors**  
Mr Ramachandran Trichur  
Brewer Science Inc, Business Development Manager, USA
- 4.9 **Advances in Thin, Printable Conductors**  
Mr Peter Willaert  
Agfa-Gevaert N.V., Product Manager Printed Electronics, Belgium



**Technical Conference Poster Session | Tuesday, May 27, 2014 | ICM Foyer**

**Advances in Substrates and Materials for Printed Electronics (06:00 pm — 08:00 pm)**

- 4.10 **Flexible electronics materials using roll-to-roll atomic layer deposited coatings**  
Dr Kimmo Lahtinen  
Lappeenranta University of Technology, Finland

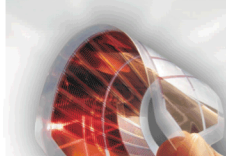
**Advances in Flexible Display Technologies (06:00 pm — 08:00 pm)**

- 6.1 **P-Ink Displays: Flexible, Low Power, Reflective Color**  
Dr Andre Arsenault  
Opalux Inc., CTO, Canada
- 6.2 **Challenges of Thin Film Processing on flexible GLASS SUBSTRATES.**  
Mr Uwe Beier  
Adenso GmbH, Germany
- 6.3 **Flexible organic Light Emitting Diodes with patterned top electrode using gravure offset printer**  
Dr Hyun-Woo Dang  
Jeju National University, Doctor, Korea, South

**Upscaling Production - Processing Methods and Equipment (06:00 pm — 08:00 pm)**

- 7.1 **Large volume continuous synthesis of metal oxide nanoparticle inks toward inkjet printed TFT devices**  
Dr Sean Butterworth  
Promethean Particles, UK
- 7.2 **Formalization of Design Rules and generation of related structures using pCells**  
Mr Mohammad Mashayekhi  
Universitat Autònoma de Barcelona, Laboratory Director, Spain

- 7.3 **Electroluminescent devices scale-up by screen printing R2R processes**  
Mrs. Cristina Casellas  
CETEMMSA, Product Manager, Spain
- 7.5 **Bridging the gap between R2R R&D and Pilot Production**  
Mr Miguel Friedrich  
nTact, Vice President Sales & Marketing, USA
- 7.6 **Towards the industrial scale production of printed electronic devices by roll-to-roll inkjet printing combined with photonic sintering**  
Prof. Dr Pim Groen  
Holst Centre - TNO, Netherlands
- 7.7 **In-line Monitoring & Quality Control of R2R Processes for Production Optimization of Printed Electronics**  
Dr Christos Koidis  
Organic Electronic Technologies P.C., General Manager, Greece
- 7.8 **Development of new products with optimized slot dies**  
Mr Maick Nielsen  
TSE Troller, CEO, Switzerland
- 7.9 **Airship with printed surfaces**  
Mr Tommi Rintala  
Delektre Ltd., VP Technology, Finland
- 7.10 **Non-contact motion in vacuum for OLED deposition processes**  
Mr Jan van Gerwen  
Bosch Rexroth B.V., Business Development Manager, Netherlands
- 7.11 **Drying and sintering of printed functionalities: comparison of Infrared and Xenon flash technology**  
Mr Juergen Weber  
Heraeus Noblelight GmbH, project manager, Germany



**Technical Conference Poster Session | Tuesday, May 27, 2014 | ICM Foyer**

**Upscaling Production - Processing Methods and Equipment (06:00 pm — 08:00 pm)**

**7.12 Continuous Flow Synthesis of Regioregular Poly(3-Hexylthiophene): Ultrafast Polymerization with High Throughput and Low Polydispersity Index**

Prof. Anil Kumar  
Indian Institute of Technology Bombay, Professor, India

**Thin Film Encapsulation and Test Methods (06:00 pm — 08:00 pm)**

**8.1 Development and characterization of Ultra high barrier for organic electronics using atomic layer deposition and Ca mirror test.**

Mr Claus Lubber  
Fraunhofer COMEDD, Germany

**8.2 High Barrier Material Test Methods**

Mr Andreas Roos  
Paul Lippke Handels GmbH, Product Manager, Germany

**Sensing in Health and Wellbeing Applications (06:00 pm — 08:00 pm)**

**10.1 Ink-jet printed electrochemical immunosensors**

Mr Alexey Yakushenko  
Forschungszentrum Jülich, Germany

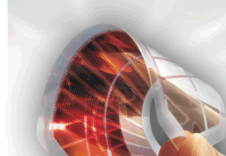
**Emerging Technologies for Organic and Large Area Electronics (06:00 pm — 08:00 pm)**

**12.1 High Quality Metallic Grid Preparation on Large Area ITO-Coated Plastic Substrates**

Dr Larissa Grinis  
Bar-Ilan University, Senior Scientist, Israel

**12.2 Printing Electronic Systems using a Novel Bulk Material Patterning Technique**

Mr Scott Lauer  
Advantech US, VP Product Development, USA



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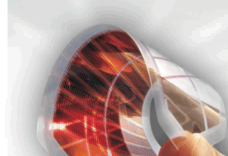
**Materials (06:00 pm — 08:00 pm)**

- 1.1 **Deposition of transparent conducting AZO thin films on flexible ITO/PET substrate**  
Ms Nihan Ak?n  
Gazi University, Turkey
- 1.2 **Synthesis of silicon nanowire arrays for photovoltaic applications**  
Mr Amir Bani Hashemi  
University of Ulm, Germany
- 1.3 **Photophysical studies of the thermally-activated delayed fluorescence of a mononuclear copper(I) compound**  
Ms Larissa Bergmann  
cynora GmbH, Germany
- 1.4 **Surface morphology and PCBM aggregation control in P3HT: PCBM thin film by applying various electrostatic fields on BHJ polymer solar cells, critical performance and photovoltaic characterization comparison**  
Ms Fatemeh Davoudi  
Islamic Azad University, science and research branch, Iran
- 1.5 **High Silver Content Nanoparticle-Based Conductive Inkjet Ink**  
Dr. Hsin Chem Chang  
Industrial Technology Research Institute, Taiwan
- 1.6 **Highly concentrated and conductive reduced graphene oxide nanosheets by monovalent cation pi interaction: Toward printed electronics**  
Dr Seung-Yol Jeong  
Korea Electrotechnology Research Institute, Senior Researcher, Korea, South

- 1.7 **Laser induced one step method for synthesis and patterning of onion like carbon.**  
Dr Kyungtae Kang  
Korea Institute of Industrial Technology, Korea, South
- 1.8 **Partial carbon footprint estimate for printed electronic circuit**  
Mr Simo Siitonen  
Stora Enso Oyj, Research Centre Imatra, Research Engineer, Finland
- 1.9 **Ultra-barrier encapsulation by ALD R2R processing for flexible large area devices.**  
Dr ALFRED SMITH  
Centre for Process Innovation Ltd. (CPI), Business Development Manager, UK
- 1.10 **Solution Processing of Hierarchical Polymeric Nanoarrays for Thermal Management and Energy Applications**  
Mr Matthew Smith  
Georgia Institute of Technology, USA

**Devices (06:00 pm — 08:00 pm)**

- 2.1 **Parameter Simulation of Transmission System by Electromagnetic Oscillations of Radio-Frequency Bandwidth in the ELECTRONICS WORKDENCH Software Environment**  
Prof. Dr Erkin Artykov  
Moscow State University of Printing Arts, Head, section of Electrical Engineering and Electronics, sub-faculty of Natural Sciences, Russia
- 2.2 **Roll to Roll printing of large area Organic Photovoltaic Modules**  
Dr Gianni Corso  
eni spa, Italy



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**Devices (06:00 pm — 08:00 pm)**

- 2.3 **Modification of high resolution PEDOT:PSS electrodes for performance enhancement of fully printed transistor devices and circuitries**  
Mr Daniel Höft  
Technische Universität Chemnitz, Germany
- 2.4 **Illumination effects on Organic Thin-Film Transistor**  
Prof. Chin-Tsou Kuo  
Tatung University, Prof., Taiwan
- 2.5 **Inkjet-based OFET biosensor on flexible substrate platform**  
Ms Carme Martínez-Domingo  
Universitat Autònoma de Barcelona, Researcher, Spain
- 2.6 **Use of Identification Marks in Automated Control Systems (ACS) of a Printing Enterprise**  
Dr Olga Mikhaylova  
Moscow State University of Printing Arts, Associate Professor, Russia
- 2.7 **Screen printed resistors based on PEDOT:PSS**  
Mr Silvan Pretl  
University of West Bohemia, PhD student, Czech Republic
- 2.8 **Manufacturing of thin-film transistors using industrial inkjet printheads**  
Mr Enrico Sowade  
TU Chemnitz, Germany
- 2.9 **Smart RFID label printed on PET substrate with CMOS sensors**  
Mr Andrés Vásquez Quintero  
Ecole Polytechnique Fédérale de Lausanne (EPFL), Research Assistant, Switzerland

- 2.10 **Comparative degradation study of P3HT solar cells using different hole transporting materials**  
Mr Simon Zuefle  
Fluxim AG, Switzerland

**Printing, Patterning Technologies and Appropriate Equipment (06:00 pm — 08:00 pm)**

- 3.1 **Femtosecond laser structuring of metal electrodes for organic solar cells**  
Mr Joshua Alejandro Fragoso Garcia  
Karlsruhe Institute of Technology, Research coworker, Germany
- 3.2 **Optimization of SU-8 via Fabrication using ink jet printing**  
Mr Adam Giang  
MicroChem, Applications Engineer, USA
- 3.3 **The Influence of the Doctoring Process Parameters on the Performance of Organic Thin Film Transistor in R2R Gravure Printing Process**  
Mr Ji-Youp Kim  
Konkuk university, Korea, South
- 3.4 **The preparation and characterization of CuO inkjet inks for material printing**  
Mr Petr Kr?má?  
Tomas Bata University in Zlín, Czech Republic
- 3.5 **Development of inkjet-printed flexible temperature sensors used in inserted soles**  
Ms Laura Liedtke  
HSG-IMAT, Research assistant, Germany
- 3.6 **The preparation and characterization of ITO ink for gas sensing**  
Mr Jan Maslik  
Tomas Bata University in Zlin, Czech Republic



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**Printing, Patterning Technologies and Appropriate Equipment (06:00 pm — 08:00 pm)**

- 3.7 **Characterization of printed NFC tags on paper using different printing and sintering processes**  
Mr Victor THENOT  
Arjowiggins, Research Engineer - PhD Student, France
- 3.8 **A Study on Performance Evaluation of Metal Grid Mesh Transparent Conductive Films for Organic Light Emitting Diodes**  
Prof. Dr Dong Soo Kim  
Hanbat National University, School of Global Convergence Studies,  
Professor, Korea, South

**Products (06:00 pm — 08:00 pm)**

- 4.1 **High luminescence flexible surface by LEDs bonded into flexible foil with plastic overmoulding**  
Mr Arttu Huttunen  
VTT Technical Research Centre of Finland, Research scientist, Finland
- 4.2 **Fabrication and characterization of transparent conducting film using single-walled carbon nanotubes/Ag nanowires via R2R processes**  
Prof. Dr Haeseong Lee  
Jeonju University, Professor, Korea, South

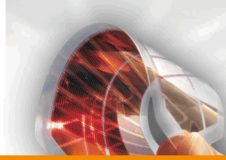
**Device and Circuitry Design, Simulations (06:00 pm — 08:00 pm)**

- 5.1 **Design and simulation of frequency selective screen at 2,4 GHz**  
Mr Matija Mraovic  
Pulp and paper institute, Young researcher, Slovenia

- 5.2 **An inkjet adaptive backend strategy for low-yield OTFT digital circuits**  
Dr Eloi Ramon  
Universitat Autònoma de Barcelona, Researcher, Spain
- 5.3 **Sub-micrometer organic thin-film transistors: technology assessment**  
Mr Frédéric Zanella  
CSEM SA / EPFL, Ph.D. Student, Switzerland

**Quality Control in Production Lines (06:00 pm — 08:00 pm)**

- 6.1 **Consideration of water vapor adsorption effects for the reliable testing of the water vapor transmission rate of ultra-barrier samples**  
Dr Wulf Grählert  
Fraunhofer IWS, Germany
- 6.2 **Tension control of winder web in roll-to-roll printing system using fuzzy PID control method**  
Prof. Dr Chung Hwan Kim  
Chungnam National University, Korea, South



**Plenary Session | Wednesday, May 28, 2014 | Room 14b**

**Words of Welcome**

- 09:00 am **Japan's strategy for the growth of printed electronics technology and business**  
Mr Hitoshi Abe  
Dai Nippon Printing Co., Ltd., President of JAPER, Japan
- 09:25 am **Metal Mesh Touch Sensors**  
Mr Bob Mackey  
Synaptics, Principal Scientist, USA
- 09:50 am **Organic Photovoltaic in building applications. Glass Solutions for Zero Energy Buildings**  
Mr Frédéric Bonnefoy  
AGC Glass Europe, Product Manager Active Glass, Belgium
- 10:15 am **Printed Intelligence Towards Products and Industrialisation**  
Prof. Dr. Harri Kopola  
VTT Technical Research, Vice President, Microtechnologies and Electronics, Finland



**Technical Conference | Wednesday, May 28, 2014**

**OLED Lighting | Room 13a**

- 11:30 am **OLEDs for functional lighting applications**  
Mr Eric Meulenkamp  
Philips Technologie GmbH, R&D manager, Netherlands
- 11:50 am **Flexible OLEDs for Lighting Applications**  
Dr Joanne Wilson  
Holst Centre/TNO, Program Manager, Netherlands
- 12:10 pm **Silver Nanowires: The Ultimate Transparent Electrode for OLED and OPV**  
Dr Rahul Gupta  
Cambrios Technologies, Senior director of business development, USA

**Thin Film Encapsulation and Test Methods | Room 13b**

- 11:30 am **Ultra-high permeation barriers and functional films for large-area flexible electronics**  
Dr John Fahlteich  
Fraunhofer - FEP, Senior Scientist-Project Manager, Germany
- 11:50 am **Environmental barriers for flexible displays**  
Dr Lorenza Moro  
Samsung Cheil, Principal Scientist-Project Manager, USA
- 12:10 pm **Comparing water permeation metrologies**  
Dr Giovanni Nisato  
CSEM, Business and technology development senior manager, Switzerland





**Technical Conference | Wednesday, May 28, 2014**

**Advances in Substrates and Materials for Printed Electronics | Room 13a**

- 02:00 pm **Materials for Printed Electronics: Boosting System Performance and Processability**  
Dr Jochen Brill  
BASF, Senior Manager, Germany
- 02:20 pm **Materials for Organic Electronic Applications**  
Dr Jeremy Burroughes  
Cambridge Display Technology, CTO, UK
- 02:40 pm **Next-Generation Printable Conductive Nanotube Materials and Sensors**  
Mr Ramachandran Trichur  
Brewer Science Inc, Business Development Manager, USA
- 03:00 pm **New Developments for Films for Touch Screens and Printed Electronics**  
Dr Bill MacDonald  
DuPont Teijin Films, Business Research Associate, UK

**3D Printing and Digital Fabrication | Room 13b**

- 02:00 pm **Leading the Next Industrial Revolution**  
Dr. Jan Sumerel  
MakerBot Industries, LLC, Vice President of Research and Development, USA
- 02:20 pm **3D-printing with light: Materials and applications**  
Prof. Dr. Juergen Stampfl  
Vienna University of Technology, Professor / Inst. of Materials Science and Technology, Austria
- 02:40 pm **Integration of Functional Circuits into 3D Printed Parts**  
Ms Alissa Wild  
Stratasys, Inc., Senior Materials Engineer, USA



**Technical Conference | Wednesday, May 28, 2014**

**Sensing in Health and Wellbeing Applications | Room 13a**

- 04:00 pm **Opportunities for Printed Electronics for the Diagnostics Industry**  
Dr. Sophie Laurensen  
Abbott, Project Manager, Germany
- 04:20 pm **Manufacturing automation: dispensing of reagents on biosensors and rapid diagnostic tests**  
Mr Markku Käsäkoski  
VTT Technical Research Center of Finland , Finland
- 04:40 pm **Printed sensors for the healthcare sector**  
Dr Laura Lopez  
CETEMMSA, Head of Scientific Valorisation, Spain



**Business Conference | Wednesday, May 28, 2014 | Room 14a**

**Turning Printed Electronics into Business**

11:30 am **A smarter everyday powered by Printed Electronics – Bringing intelligence to everything**  
Dr. Davor Sutija  
Thinfilm, CEO, Norway

11:50 am **Partnering - the key enabler to develop the printed electronics industry**  
Mr Bjorn Hofman  
Merck KGaA, Senior Vice President, Performance Materials ?  
Advanced Technologies , Germany

12:10 pm **Printed Electronics moving from R&D to products to answer market mega-trends : internet-of-things, user interfaces for consumer electronics, new health care equipments**  
Mr Laurent Jamet  
ISORG, Co-founder, Director Business Development, France

12:30 pm **Open Innovation Partnerships to move Technology to Market**  
Mr Ross Bringans  
PARC, Vice President, Electronic Materials and Devices Laboratory,  
USA

**Industry forecasts and end-user Requirements**

02:00 pm **THE ELUSIVE BUSINESS OF PRINTED ELECTRONICS**  
Mr Dale Pritchett  
Rodman Media, Group Publisher, USA

02:20 pm **Towards a Better Forecast for Printed Electronics**  
Mr David Barnes  
BizWitz LLC, USA

02:40 pm **Smart Packaging: Opening New Horizons for the Packaging Industry**

Mr Martin Glatz  
KARL KNAUER KG, Leiter Verkauf & Marketing, Germany

03:00 pm **Solution processed display printing meets the 'year of wearables**

Mr Dan Rogers  
Smithers, Head of Digital Publishing, UK

**OPV - Quo vadis?**

04:00 pm **Organic Photovoltaics – Market driven Business Approaches**

Dr. Ralph Paetzold  
Belectric, CEO, Germany

04:20 pm **Organic Solar Films for active integrated BiPV materials**

Mr Aron Guttowski  
Heliatek GmbH, Manager Business Development, Germany