

FRAUNHOFER INSTITUTE FOR ORGANIC ELECTRONICS,
ELECTRON BEAM AND PLASMA TECHNOLOGY FEP



# Wearable and Projection Displays

Follow-Up & Statistics

Welcome to SID-ME 2017!

SID-ME CHAPTER SPRING MEETING 2017!

SID-ME 2017!

13 - 14 MARCH 2017 | DRESDEN, GERMANY

Micro and small size display technologies, systems and applications



# **FOLLOW-UP**

This year's SID Mid-Europe (SID-ME) Spring Meeting with focus on "Wearables and Projection Displays" was organized by Fraunhofer FEP, Dresden, Germany.

The announced talks and presentations of 20 internationally renowned speakers, thereof 3 keynote speakers from Microsoft Corp., Technical University of Dresden and University of Cambridge as well as 5 invited speakers were attracting more than 100 participants from 18 countries worldwide. Additionally to this, more than 10 poster contributions attracted the interest of many participants.

Before the start of the conference the scientific tour program to Fraunhofer FEP's campus in the city centre and north site took place with more than 20 conference participants as well as representatives of the press. The sucessful first conference day with many interesting talks ended with a reception and evening event at Dresden city centre. Thanks to our sponsor the participants of the conference could enjoy an unique and impressive illumination and laser show of the Dresden Zwinger Palace during an pleasant dinner above the rooftops of Dresden historic city centre. Watch the video here: Attps://youtu.be/PwyjJyaeG2Q

Conference day two came up with some impressive keynote talks of Prof. Frank H.P. Fitzek and Prof. Arokia Nathan as well as further highly recommended talks about OLED microdisplays and their use in wearables, QLEDs, AMOLED Displays and a contribution from the European Commission. Another highlight was the "Best Student Award" of the Society of Information Display (SID) during the conference day 2. Mr. Felix Fries of Technical University



of Dresden was the happy winner of this meetings award with his contribution and poster about "Organic light emitting diodes allow for active beam-shaping without additional optical elements".

Both days were accompanied by poster sessions with 13 poster contributions as well as an industrial exhibition with 6 booths and many possibilities for networking and interesting conversations.

Many thanks to our sponsors and all participants and contributions!

See you at Fraunhofer FEP or the next SID-ME meeting!



Dr. Uwe Vogel

Head of Division Microdisplays and Sensors Deputy Director General Conference Chair



# STATEMENTS AND FEEDBACK

"Many thanks for the invitation, the fantastic organisation and the wonderful evening event, which I will remember for long! It were two very interesting and informative days in the wonderful city of Dresden!"

"It was a great pleasure to attend the conference and I came away feeling that it had been very worthwhile and that I had learned a lot!"

"I was very impressed by the event and learned a lot from it."

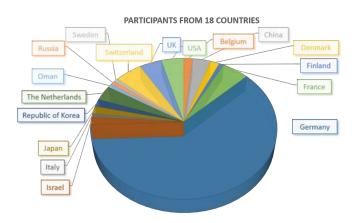
"For me the conference was very worthwhile!"



# **STATISTICS**

## **Participants**

- 119 participants
- International participations from 18 different countries
  - Austria, Belgium, China, Denmark, Finland, France, Germany, Israel, Italy, Japan, South Korea, The Netherlands, Oman, Russia, Sweden, Swizerland, UK, USA





#### Scientific Tours

2 Scientific tours with more than 20 participants each on 13.3.2017 to:

- Fraunhofer Campus North
  - Showroomtour Fraunhofer FEP and Fraunhofer IPMS
  - Tour through Microdisplay Cleanroom
  - Presentation about Fraunhofer FEP
- Fraunhofer Campus City Centre
  - Electron Beam Micropatterning and Thermal Processing of OLED devices
  - Pulse magnetron sputtering for pre-encapsulation and large area precision, PreSensLine
  - PreSensLine for precision coatings on large substrates
  - Coatings on flexible glass in a roll-to-roll process, FOSA LabX 330 Glass
  - Coatings of flexibles substrates, high-rate roll-to-roll coating and evaporation processes for the development of novel Li-ion and thin-film batteries, coFlex® 600 Roll-to-roll pilot sputter roll coater
  - Flexible organic electronics, Roll-to-roll research line for OLED and OPV



#### Poster Session

12 Poster contributions

- Characterization and Modelling of Tandem structure OLED
  - Hanning Mai, University of Edinburgh, UK
- High-resolution OLED Patterning for Microdisplays
   Dr. Matthias Schober, Fraunhofer FEP, Germany
- Pulse magnetron sputtering for pre-encapsulation and large area precision optical coatings
   Dr. Daniel Glöß, Fraunhofer FEP, Germany
- FEF: Fast Ellipse Fitting in Real-World
   Marcus Penzel, University of Applied Sciences Zwickau,
   Germany
- Organic light-emitting diodes allow for active beamshaping without additional optical elements
   Felix Fries, Technische Universität Dresden, Germany
- Integration of light functionality within textiles by flexible OLED lighting
  - Jan Hesse, Fraunhofer FEP, Germany
- The Personal Reader: A New Way to Read Avram Shlemeh Adler, Personal Reader Project, Israel
- A novel IPS-VA pixel architecture for phase modulation and beam-steering application
   Clément Abélard, CEA-Leti, France
- The LOMID H2020 project for large microdisplays James Whitby, Amanuensis GmbH, Switzerland



- OLEDs on CMOS Automated Encapsulation Cluster Jens Drechsel, CreaPhys GmbH, Germany Wolfgang Ganter, M. Braun Inertgas-Systeme GmbH, Germany
- Electron Beam Micropatterning and Thermal Processing of Organic Light Emitting Devices
   Elisabeth Bodenstein, Fraunhofer FEP, Germany
- Ultraviolet Laser Separation of Flexible Devices Ralph Delmdahl, Coherent LaserSystems GmbH & Co. KG, Germany



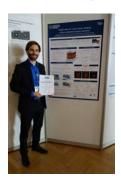
#### **Talks**

20 talks, thereof:

- 3 Keynote speakers:
  - Bernard Kress, Microsoft Corp., USA
  - Frank H.P. Fitzek, TU Dresden
  - Arokia Nathan, University of Cambridge, UK
- 5 Invited speakers:
  - Ian Underwood, University of Edinburgh, UK
  - Hong K. Choi, Kopin Corp, USA
  - Gunther Haas, Microoled, France
  - Henri Rajbenbach, EU Commission, Belgium
  - Martin Dawson, University of Strathclyde, UK

#### SID Best Student Award

The winner of this year's SID-ME Chapter Spring Meeting Best Student Award is Mr. Felix Fries from Technische Universität Dresden, Germany with his paper about "Organic light emitting diodes allow for active beam-shaping without additional optical elements". Congratulations!





### **Evening Event**

- 13.3.17 at Restaurant "felix im Lebendigen Haus" Dresden City Centre:
  - Illumination and Lasershow
  - Thanks to our sponsor Meyer Burger (Deutschland) AG!

#### Industrial Exhibition with 6 booths

## 7 Sponsors

- Meyer Burger (Deutschland) AG
- HOLOEYE Photonics AG
- Wirtschaftsförderung Sachsen
- X-FAB Dresden GmbH & Co. KG
- Aspect Aystems GmbH
- Fraunhofer IOF
- Fujifilm Dimatix, Inc.