Final Program

Eurodisplay 2015

21-23 September 2015
Het Pand, Ghent, Belgium

Schedule and
Session Overview
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:30</td>
<td><strong>Registration</strong>&lt;br&gt;Location: Entry Hall&lt;br&gt;<em>Coffee and croissants available!</em></td>
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<tr>
<td>9:25</td>
<td><strong>Welcome Notes and Conference Opening</strong>&lt;br&gt;Location: Room “Refter”</td>
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<tr>
<td>9:30</td>
<td><strong>Keynote: &quot;Fourth Generation Optics&quot;</strong>&lt;br&gt;dr. Nelson Tabiryan, BeamCo&lt;br&gt;Location: Room “Refter”</td>
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<tr>
<td>10:10</td>
<td><strong>Coffee break (Entry Hall)</strong>&lt;br&gt;<em>Opening of the Exhibition (Room “Kapittel”)</em></td>
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<tr>
<td>10:40</td>
<td><strong>Session 1: Liquid Crystals Beyond Displays</strong>&lt;br&gt;Room “Refter”</td>
<td><strong>Session 2: Quantum Dots I</strong>&lt;br&gt;Room “Vermeulen”</td>
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<tr>
<td>12:10</td>
<td><strong>Lunch break</strong>&lt;br&gt;<em>Complimentary lunch sponsored by Barco &amp; TP-Vision will be served in the Entry Hall</em></td>
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<tr>
<td>13:20</td>
<td><strong>Session 3: Liquid Crystals: Modelling &amp; Materials</strong>&lt;br&gt;Room “Refter”</td>
<td><strong>Session 4: Manufacturing technology</strong>&lt;br&gt;Room “Vermeulen”</td>
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<td>14:50</td>
<td><strong>Coffee break (Entry Hall)</strong></td>
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<td>15:10</td>
<td><strong>Session 5: Emerging Liquid Crystal Technologies</strong>&lt;br&gt;Room “Refter”</td>
<td><strong>Session 6: Backlights</strong>&lt;br&gt;Room “Vermeulen”</td>
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<td>16:30</td>
<td><strong>Short break</strong></td>
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<td>16:40</td>
<td><strong>Session 7: 3D</strong>&lt;br&gt;Room “Refter”</td>
<td><strong>Session 8: Human Interaction</strong>&lt;br&gt;Room “Vermeulen”</td>
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<tr>
<td>18:00</td>
<td><strong>Reception in the historical City Hall of Ghent</strong></td>
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## Tuesday 22/9

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>9:00</td>
<td><strong>Keynote:</strong> “European Research in Electronic Displays in Context”</td>
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<td></td>
<td>prof. dr. Ian Underwood, Edinburgh University</td>
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<td></td>
<td>Location: Room “Refter”</td>
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<tr>
<td>9:40</td>
<td><strong>Best student award ceremony</strong></td>
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<td>Thin film polarized liquid crystal backlight</td>
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<td></td>
<td><em>M. Mohammadimasoudi, J. Beeckman and K. Neyts (Ghent University)</em></td>
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<tr>
<td></td>
<td>Location: Room “Refter”</td>
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<tr>
<td>10:10</td>
<td><strong>Coffee break (Entry Hall)</strong></td>
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<td></td>
<td><strong>SID-ME General Meeting (Room “Refter”)</strong></td>
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<tr>
<td>10:40</td>
<td><strong>Session 9: Display Devices</strong></td>
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<td>Room “Refter”</td>
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<td></td>
<td><strong>Session 10: Quantum Dots II</strong></td>
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<td></td>
<td>Room “Vermeylen”</td>
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<tr>
<td>12:10</td>
<td><strong>Lunch break</strong></td>
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<td>Complimentary lunch sponsored by Barco &amp; TP-Vision will be served in the Entry Hall</td>
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<tr>
<td>13:20</td>
<td><strong>Session 11: Metrology</strong></td>
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<td>Room “Refter”</td>
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<td><strong>Session 12: Oxide TFTs</strong></td>
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<td>Room “Vermeylen”</td>
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<td>15:10</td>
<td><strong>Coffee break sponsored by Instrument Systems (Entry Hall)</strong></td>
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<tr>
<td>15:30</td>
<td><strong>Dedicated exhibition time</strong></td>
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<td>Location: Room “Kapittel”</td>
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<tr>
<td>16:00</td>
<td><strong>Author interviews (Monday and Tuesday sessions)</strong></td>
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<td>Location: Room “Refter”</td>
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<tr>
<td>17:30</td>
<td><strong>Assemble for special event</strong></td>
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<tr>
<td>18:00</td>
<td><strong>Special Event:</strong> Boat trip along the canals in Ghent</td>
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<td>19:00</td>
<td><strong>Special Event:</strong> Reception and Dinner at the monumental arts center “Vooruit”</td>
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| 9:30  | **Plenary invited talk:** Projection-Displays: New Technologies, Challenges and Applications<br>
P. Candra and B. Maximus (Barco n.v.)<br>Location: Room “Refter”                                                                       |
| 10:00 | **Coffee break (Entry Hall)**                                                                                                         |
| 10:30 | **Session 13: Human Factors and Characterization**<br>Room “Refter”<br>**Session 14: OLEDs**<br>Room “Vermeylen”                          |
| 12:00 | **Lunch break**<br>Complimentary lunch sponsored by Barco & TP-Vision will be served in the Entry Hall                                 |
| 13:10 | **Session 15: Automotive**<br>Room “Refter”                                                                                          |
|       | **Session 16: NTE**<br>Room “Vermeylen”                                                                                              |
| 14:00 | **Poster Session & Author interviews**<br>Location: Room “Kapittel”<br>

Coffee and refreshments will be served during the poster session |
| 16:30 | **Closing remarks**<br>Location: Room “Refter”                                                                                      |
Session 1: Liquid Crystals Beyond Displays

Monday 21/9, 10:40 - 11:50
Location: Room “Refter”
Chair: Prof. Dr. K. Neyts, Ghent University

10:40 **Invited:** Photoaligned Ferroelectric Liquid Crystals: the New Horizons in Physics and Applications
*V. Chigrinov (ECE Dept, HKUST, HK)*

11:10 PZT-based transmissive liquid crystal lens approach
*O. Willekens, J. George., K. Neyts and J. Beeckman (Ghent University, Belgium)*

11:30 ‘Continuous’ Nanoscale Photo-alignment Structure Patterning for Thin Film Pancharatnam-Berry Phase Diffractive Lens
*A. Ming Wai Tam, F. Fan, D. Tao (Hong Kong University of Science and Technology), H. S. Chen (National Chiao Tung University), V. Chigrinov, H. S. Kwok (Hong Kong University of Science and Technology) and Y. H. Lin (National Chiao Tung University)*

Session 2: Quantum Dots I

Monday 21/9, 10:40 - 12:10
Location: Room “Vermeylen”
Chair: Prof. Dr. H. Zhong, Beijing Institute of Technology

10:40 **Invited:** Cathodoluminescence Images and Spectra of Single Nanometre Sized Phosphor Crystals Excited in a Field Emission Transmission Electron Microscope
*J. Silver, D. den Engelsen, G. R. Fern, P. Harris, A. Lipman, and T. G. Ireland (Brunel University London)*

11:10 Eco-friendly Quantum Dot Light Emitting Diode with Inorganic Charge Transport Layer
*M. S. Oh, C. J. Han, B. Yoo, J. Lee, H. Y. Kim, Y. J. Park (Korea Electronics Technology Institute (KETI)), B. K. Joo (Korea University), Y. Kim and A. Wedel (Fraunhofer Institute for Applied Polymer Research)*

11:30 Uniform Quantum Dot Light Emitting Diodes fabricated by Transfer Mold Method
*M. Nakamoto and J. Moon (Shizuoka University, Japan)*

11:50 Large scale and electro-switchable polarized emission from semiconductor nanorods aligned in polymeric nanofibers
*T. Aubert (Ghent University), L. Palangetic (University of Leuven), M. Mohammadimasoudi, K. Neyts, J. Beeckman (Ghent University), C. Clasen (University of Leuven), and Z. Hens (Ghent University)*
Session 3: Liquid Crystals: Modelling & Materials

Monday 21/9, 13:20 - 14:50
Location: Room “Refter”
Chair: Prof. Dr. I. Kompanets, P.N. Lebedev Physical Institute of RAS

13:20 Invited: Modelling of liquid crystal structures

13:50 Chiral mesomorphic compounds and materials for display applications
V. Bezborodov (Belarusian State Technological University) and V. Lapanik (Institute of Applied Physics Problems)

14:10 Dielectric properties of liquid crystals for display and sensor applications
V.V. Belyaev, D.N. Chausov, A.D. Kurilov, D.O. Rybakov, A.S. Solomatin (Moscow Region State University), A.A. Murauski, A.A. Muravsky (Institute of Chemistry of New Materials NAS Belarus), V.G. Chigrinov and F. Fan (Hong Kong University of Science and Technology)

14:30 Switchable Liquid Crystal Devices for Efficient Light Steering
X. Shang, J. De Smet, P. Joshi, D. Cuypers (Ghent University and imec), J.-Y. Tan, O. Willekens, J. Beeckman, K. Neyts (Ghent University), T. Baghdasaryan, M. Vervaekte, H. Thienpont (Vrije Universiteit Brussel), and H. De Smet (Ghent University and imec)

Session 4: Manufacturing technology

Monday 21/9, 13:20 - 14:50
Location: Room “Vermeylen”
Chair: Prof. Dr. P. Kathirgamanathan, Brunel University London

13:20 Invited: Inkjet printing in industrial applications and its use in display manufacturing
W. Zapka, Xaar

13:50 8th Generation Linear Source for AMOLED mass production
S. Kim, D. Chi, H. Seo, and E. Jung (R&D center of YAS, Korea)

14:10 Printed Circuit and OLED on foldable paper substrates
S. M. Jo and B. D. Chin (Dankook University)

14:30 Colored OLED with a Multilayered Graphene Electrode for Light-Adaptable Displays
Session 5: Emerging Liquid Crystal Technologies

Monday 21/9, 15:10 - 16:30
Location: Room “Refter”
Chair: Prof. Dr. H.S. Kwok, HKUST

15:10  Fast Bistable Intensive Light Scattering in Helix-Free Ferroelectric Liquid Crystals
Fast Bistable Intensive Light Scattering in Helix-Free Ferroelectric Liquid Crystals
A. Andreev, T.Andreeva, I.Kompanets (Lebedev Physical Institute, Russia), H.Xu, M.Pivnenko and D.Chu (University of Cambridge, UK)

15:30  Polymer Stabilized Blue Phase Liquid Crystal Dispersions
E. Kemiklioglu (Celal Bayar University) and L.-C. Chien (Stanford University)

15:50  Importance of Alignment layers in Blue Phase Liquid Crystal Devices
P. Joshi, X. Shang, J. De Smet, D. Cuypers, G. Van Steenberge (imec and Ghent University, Belgium),
S. Van Vlierberghe, P. Dubruel (Polymer Chemistry and Biomaterials Group, Ghent University,
Belgium), and H. De Smet (imec and Ghent University, Belgium)

16:10  Polymer Stabilized Electrically Suppressed Helix Ferroelectric Liquid Crystal
L. Shi, Y. Ma, A. K. Srivastava, V.G.Chigrinov and H.S.Kwok (Hong Kong University of Science and Technology)

Session 6: Backlights

Monday 21/9, 15:10 - 16:30
Location: Room “Vermeylen”
Chair: Dr. B. Maximus, Barco

15:10  Stable color gamut for high-end professional displays
S.P.W. Carton, F. van der Schans and A.R. de Wit (NDF Special Light Products)

15:30  An advanced optical thin film structure for fabricating multi-domain display
C. Zhao, F. Fan, T. Du, V. G Chigrinov and H. S. Kwok (Hong Kong University of Science and Technology)

15:50  Photoaligned Diffractive Thin Film Polymer Polarizer to Double the Efficiency of
Conventional Polarizers
T. Du, F. Fan, A. M. W. Tam, C. Zhao, V. G Chigrinov and H. S. Kwok (The Hong Kong University of
Science & Technology)

16:10  K2SiF6:Mn4+ as a Red Phosphor for Remote Phosphor LEDs
Session 7: 3D

Monday 21/9, 16:40 - 18:00
Location: Room “Refter”
Chair: Dr. J. Kimmel, Nokia

16:40  Dual-layer moiré display
V. Saveljev (Hanyang University) and S.-K. Kim (KIST)

17:00  Spatial Light Modulator on Glass for High Display Quality of Digital Holography

17:20  Holographic Direct View System with 4K2K LCOS SLM and LED Reconstruction Light Source
P.-S. Chiu, C.-H. Chen, W. W.-C. Chiang (Jasper Display Corp.)

17:40  Two sides of the moiré effect in 3D displays
V. Saveljev (Hanyang University)

Session 8: Human Interaction

Monday 21/9, 16:40 - 18:00
Location: Room “Vermeylen”
Chair: Prof. Dr. H. Okumura, Toshiba Corp.

16:40  Color Volume based Wide Color Gamut Mapping for Rec. 2020 Video Contents in Digital Television
B. Min, H. Wey and Y. Moon (Samsung Electronics)

17:00  Quantifying the ability of individuals with macular disease to see and read content on virtual and augmented reality devices
H. Moshtael (Heriot-Watt University), L. Fu (Princess Alexandra Eye Pavilion), I. Underwood and B. Dhillon (University of Edinburgh)

17:20  Content Capture and View Interpolation Algorithm for Multiview Autostereoscopic Displays
L. Jovanov, H. Luong and W. Philips (TELIN-IPI-iMinds Ghent University)

17:40  Viewpoint Image Generation for Head Tracking 3D Display Using Multi-Camera and Approximate Depth Information
M. Date, Hi. Takada and A. Kojima (NTT Media Intelligence Labs., Nippon Telegraph and Telephone Corp.)
**Session 9: Display Devices**

Tuesday 22/9, 10:40 - 12:10  
Location: Room “Refter”  
Chair: Prof. Dr. S.-H. K Park, KAIST

10:40 **Invited:** Progress in Bridged-grain TFT  
*H. S. Kwok, M. Wong, W. Zhou and R.S. Chen (HKUST)*

11:10 **Segmented Electrochromic Display Demonstrator showing Long-Term Switching Stability**  
*J. Remmele (University of Stuttgart), D. E. Shen, T. Mustonen (BASF) and Norbert Fruehauf (University of Stuttgart)*

11:30 **3D Grayscale Images Generation on Optically Rewritable Electronic Paper**  
*W. Zhang, J. Sun, A. K. Srivastava, V. G. Chigrinov and H.S. Kwok (Partner State Key Laboratory (PSKL) on Advanced Displays and Optoelectronics Technologies)*

11:50 **ESHFLCS High Resolution Display a Better Alternative for the IPS Displays**  
*A. K. Srivastava, V. G. Chigrinov and H.S. Kwok (Hong Kong University of Science and Technology)*

**Session 10: Quantum Dots II**

Tuesday 22/9, 10:40 - 12:10  
Location: Room “Vermeylen”  
Chair: Prof. Dr. M. Nakamoto, Shizuoka University

10:40 **Invited:** Emerging Materials and Processes for Quantum Dots based Display Technology  
*H. Zhong (Beijing Institute of Technology)*

11:10 **Cathodoluminescence Imaging and EELS of Quantum Dot in Rods Excited in a Field Emission Transmission Electron Microscope**  

11:30 **Efficiency Enhancement of InP-based Inverted QD-LEDs by Polyethylenimine Modified Al:ZnO Layer**  
*Y. Kim, C. Ippen and A. Wedel (Fraunhofer Institute for Applied Polymer Research)*

11:50 **Transmission Electron Microscope Study of Symmetry-related Transitions in Cubic Y2O3:Tb3+**  
*D. den Engelsen (Brunel University London), G. R. Fern, T. G. Ireland, P. G. Harris and J. Silver*
Session 11: Metrology

Tuesday 22/9, 13:20 - 15:10
Location: Room “Refter”
Chair:

13:20  **Invited:** Display-Metrology: A historical review
      *M. E. Becker (Display-Messtechnik & Systeme)*

13:50  Spectral BRDF & BTDF of Display Optical Components
      *P. Boher, T. Leroux, T. Bignon and V. Collomb-Patton (ELDIM)*

14:10  On the Value and Impact of a Display Measurement Standard
      *J. Miseli (JVM Research)*

14:30  High Accuracy Imaging Colorimeter

14:50  Colorimetric Evaluation of Directional Variations
      *J. Neumeier (Instrument Systems GmbH) and M. Becker (Display-Messtechnik und Systeme)*
Session 12: Oxide TFTs

Tuesday 22/9, 13:20 - 15:10
Location: Room “Vermeylen”
Chair: Prof. Dr. J. Genoe, imec

13:20 Invited: Architectures of Oxide TFT for High Resolution Display
S.-H. K Park (KAIST), C.-S. Hwang (ETRI), H.I. Yeom, J.B. Ko (KAIST) and S. Cho (ETRI)

13:50 High Mobility Thin-Film Transistors by means of Plasma-Enhanced Atomic Layer Deposition
H.-I. Yeom (KAIST), J.-B. Ko (KASIT), C.-S. Hwang, S. Cho (ETRI), and S.-H. K. Park (KAIST)

14:10 Influence of layer thickness and homogeneity on contactless deposited high performance indium-oxide thin-film transistors
S. Meyer, S. Grenz, A. Merkulov, R. Anselmann (Evonik Industries AG, Marl, Germany) and R. Schmechel (Nanostructures & Technology and Center for NanoIntegration Duisburg-Essen (CENIDE) University of Duisburg-Essen, Duisburg, Germany)

14:30 Effect of Plasma Power of Plasma-Enhanced Atomic Layer Deposition Process for Gate Insulator Deposition in Top-Gate Thin-Film Transistors
J. B. Ko and H. I. Yeom (KAIST), C. -S. Hwang and S. Cho (ETRI), and S. -H. K. Park (KAIST)

14:50 Self-aligned a-IGZO TFTs: Impact of S/D contacts formation on their negative-bias-illumination-stress (NBIS) instability
M. Nag (imec & KUL, Belgium), S. Steudel, S. Smout (imec, Belgium), A. Bhoolokam, J. Genoe (imec & KUL, Belgium), B. Cobb, A. K. (Holst Centre, The Netherlands), G. Groeseken and Paul Heremans (imec & KUL, Belgium)
Session 13: Human Factors and Characterization

Wednesday 23/9, 10:30 - 12:00
Location: Room “Refter”
Chair: Dr. S. Day, University College London

10:30  **Invited:** Visual Performance Characterization of Flexible Mobile Displays  
*J. Kimmel (Nokia Technologies)*

11:00  Quantification Model of Proper Curvature for Large-Sized Curved TVs  
*Y. Park, D. Kang, S. Kim and J. J. Yoo (LG Display)*

11:20  Optical Characterization of OLED displays  
*P. Boher, T. Leroux, V. Collomb-Patton and T. Bignon (ELDIM)*

11:40  Image Quality Simulations of Curved Displays  
*A. Marsal, A. Sycev, T. Kloth, C. Lehnert and K. Blankenbach (Pforzheim University, Display Lab, Germany)*

Session 14: OLEDs

Wednesday 23/9, 10:30 - 11:40
Location: Room “Vermeylen”
Chair: Prof. Dr. D. Den Engelsen, Brunel University London

10:30  **Invited:** OLEDs and QLEDs  
*P. Kathirgamanathan, L. M. Bushby, M. Kumaraverl, S. Ravichandran, and S. Surendrakumar (Brunel University London)*

11:00  Degradation Behavior of Blue OLEDs  
*X. Jiang, P. Volkert and C. Xu (Institute of Microelectronics, Saarland University)*

11:20  Anisotropy in OLEDs  
*M. Callens (Ghent University), D. Yokoyama (Yamagata University) and K. Neyts (Ghent University)*
Session 15: Automotive

Wednesday 23/9, 13:10 - 14:00
Location: Room “Refter”
Chair:

13:10  **Invited:** Monocular AR Display for Automobile Navigation and Safety Driving
H. Okumura, T. Sasaki, A. Hotta (Corporate Research & Development Center, Toshiba Corporation) and K. Shinohara (Graduate School of Human Sciences Osaka University)

13:40  Exploring Crosstalk Perception for Stereoscopic 3D Head-Up Displays in a Crosstalk Simulator
S. Höckh (Robert Bosch GmbH, Technische Universität Berlin), A. Frederiksen (Robert Bosch GmbH), S. Renault, K. Hopf (Fraunhofer Heinrich Hertz Institute), M. Gilowski (Robert Bosch GmbH) and M. Schell (Technische Universität Berlin, Fraunhofer Heinrich Hertz Institute)

Session 16: NTE

Wednesday 23/9, 13:10 - 13:50
Location: Room “Vermeylen”
Chair: Prof. Dr. N. Fruehauf, University of Stuttgart

13:10  SVGA Bi-directional OLED Microdisplay for Near-to-eye Projection

13:30  See-through multi-aperture near-to-eye display with waveguide
P. Schreiber, M. Lorenz, P. Dannber and F. Fuchs (Fraunhofer IOF)
Poster Session

Wednesday 23/9, 14:00 - 16:00
Location: Room “Kapittel”

P1: Nonspecular reflectors using one step spray coating for brightness enhancement in reflective displays
S. Pan and H.-S. Kwok (State Key Lab on Advanced Displays and Optoelectronics, Department of Electronic and Computer Engineering, Hong Kong University of Science & Technology, Hong Kong)

P2: UV Penetration Depth in Hybrid–Aligned Reverse Mode Liquid Crystal Cell
R. Yamaguchi, T. Takatsu and K. Inoue (Akita University)

P3: Optical switching of scattering mode liquid crystal light shutters
K.-T. Cheng, Y.-C. Liu (Department of Optics and Photonics, National Central University) and A. Y.-G. Fuh (Department of Physics, Department of Photonics, National Cheng Kung University, Tainan 701, Taiwan)

P4: Assessment of Liquid Crystal Display Image Defects by Pixel Capacitance Measurement based on Electrical Model for Panel Design
Y. Miyake (Keysight Technologies International Japan G.K.), A. Ota (True Step, Ltd.) and H. Nishimura (Graduated School of System Design and Management, Keio University)

P5: Increasing the dynamic range of LCD displays
P. Cirkel, L. Penninck and R. Wittebrood (TPVision)

P6: Preserved Color Gamut and high Color Stability by Local Dimming for LC-panels
D. Schäfer and C. Xu (Saarland University)

P7: Saliency-based Backlight Regulation Method for LCD Display
J. S. Park, I. Hwang and N. I. Cho (Seoul National University, Seoul Korea)

P8: Study of the bend oriented liquid crystal phase grating
Z. Shuyuan and Y. Tao (DaLian Maritime University)

P9: Electrically Tunable Grating Using Holographic Polymer Templated Blue Phase Liquid Crystal
C. P. Chen (Shanghai Jiao Tong University), Z. He (Southwest University), Y. Li and Y. Su (Shanghai Jiao Tong University)

P10: Influence of dye molecular structure on liquid crystal anchoring energy
N.N. Barabanova, V.V. Belyaev, D.L. Bogdanov, A.K. Dačivanyan, A.P. Nazarov (Moscow Region State University), O.V. Noah (Moscow State University) and V.G. Chigrinov (Hong Kong University of Science and Technology)
P11: Nanoparticles- and ionic liquid modified liquid crystal systems for spatial light modulators
M. Czajkowski (WCB EIT+, Poland), J. Cybinska (WCB EIT+ Poland, University of Wroclaw, Poland), J. Klajn, K. Komorowska (WCB EIT+) and M. Gordel (Wroclaw University of Technology, Poland)

P12: Transparent conductive electrode based on hydrogen doped zinc oxide for OLED application
S. Chen and S. Wang (South University of Science and Technology of China)

P13: Measurement of Ultra-low Water Vapor Permeability through Barrier-coated Flexible Films with Varying Temperature and Humidity for OLED
B. I. Choi, S.-W. Lee, S. B. Woo, J. C. Kim (KRISS) and S. J. Seo (Sungkyunkwan Univ)

P14: Key technology of 8G In-line Deposition System for OLED TV
M. Choi, K. Yu, O. Jeon, S. Lee, S. Kim, H. Kim, J. Seo and K. Jeong (YAS Co. Ltd., Korea)

P15: Enhancement of Extraction Efficiency in OLED with Multi-Cathode Structure Prepared on a Plastic Substrate
A. Mikami and S. Doi (Kanazawa Institute of Technology)

P16: Efficient ITO-Free Organic Light-Emitting Diodes Based on Highly Conductive Polymer Electrodes
Y. H. Kim (Department of Display Engineering, Pukyong National University, Korea), J. Lee (OLED Research Team, Electronics and Telecommunications Research Institute (ETRI), Korea), L. Müller-Meskamp and K. Leo (Institut für Angewandte Photophysik, Technische Universität Dresden, Germany)

P17: Highly Efficient Green Phosphorescent Top-Emitting Organic Light-Emitting Diodes with IZO/Ag/IZO Reflective Electrode
J. Kim, S. Han and J. Jang (Kyung Hee University)

P18: Study of interfacial treatment on the metal-oxide electron transport layer in the InP quantum dot light-emitting diodes
J. Kim (Korea Electronics Technology Institute), I. Jang (Chung Ang University), C. Ippen, Y. Kim (Fraunhofer IAP), W. Kim (Korea Electronics Technology Institute), A. Wedel (Fraunhofer IAP), S. K. Park (Chung Ang University) and C. J. Han (Korea Electronics Technology Institute)

P19: Characteristic of thermal behavior and optical performance of AC powder electroluminescence panel under controlled temperature

P20: Effects of the Channel Thickness on Characteristics of Ga-doped Zinc Oxide Thin Film Transistors Fabricated on Glass
D. Han (Peking University)

P21: Organic Thin-Film Transistors using V-shaped organic semiconductor with various interfacial layers
S. Shaari, S. Naka and H. Okada (University of Toyama, Japan)
P22: A study on the characteristics of IZO-TFTs with high-k HfSiOx gate insulator annealed in various conditions
Y. Lim, Y. J. Im, S. Ha, C. Park, M. Jang, S. Choi, J. Park and M. Yi (Pusan National University)

P23: Effect on electrical performance TiOx doped InZnO Thin-Film Transistor (TFT)
C. Park and M. Yi (Pusan National University)

P24: Effect of Mechanical Strain on Charge-Transfer Vt-shift Compensation Circuits for Flexible AMOLED Displays
N. P. Papadopoulos, C.-H. Lee, M. Sachdev and W. S. Wong (University of Waterloo)

P25: The Nanocomposite on the Base of Liquid Crystal Material with Aluminum Nitride for Sulphur Dioxide Optical Sensor
O. Sushynskyi, T. Prystay and Z. Mykytyuk (Lviv Polytechnic National University, Ukraine)

P26: Design of structured surfaces and anisotropic materials for display and photonic applications
V. Bezborodov (Belarusian State Technological University), V. Lapanik (Institute of Applied Physics Problems), V. Zhylinski (Belarusian State Technological University) and A. Smirnov (Belarusian State University of Informatics and Radioelectronics)

P27: Optical Structure of Back Light Unit for 2D/3D Switchable Autostereoscopic 3D Display with Low x-talk Performance

P28: Electric and magnetic fields in ORW technology
O. Semina, A. Dubtsov, D. Shmeliova, S. Pasechnik (Moscow State University of Information Technologies, Radioengineering and Electronics) and V. G. Chigrinov (Hong Kong University of Science and Technology)

P29: Examination of the accommodation response of integral photography still images
S. Yano (Shimane University) and M.-C. Park (KIST)

P30: Luminance distribution measurements in CAVE-type virtual reality systems
A. Mazikowski (Gdańsk University of Technology, Faculty of Electronics, Telecommunications and Informatics, Department of Metrology and Optoelectronics)

P31: Fast and Easy-to-Use Approach of BRDF Measurements by Use of Fixed Small Light Source and Luminance Imager
A. Marsal, A. Sycev, K. Blankenbach (Pforzheim University, Display Lab, Germany) and A. Smirnov (Belarusian State University of Informatics and Radioelectronics, Lab for Information Displays and Optical Processing Systems, Belarus)

P32: Impact of Halogen Ion Size of Chemical Agent System on Electrical and Optical Characteristics of rGO Layers
V. Eskandari, M. R. Fathollahi, E. Mohajerani, A. Fallahi, P. Tahani (Shahid Beheshti University, Tehran)

P33: Absorption-Scattering Based High Pitch Cholesteric Liquid Crystal (HP-CLC): 3D Active Shutter and General Lighting
S. Manna, K. Sathaye, S. Abbas, S. Le-Gall, L. Dupont, J.L. De Bougrenet de la Tocnaye (Telecom Bretagne, France)