3rd International Symposium on Flexible Organic Electronics (IS-FOE10)
6-9 July 2010, Eagles Palace Hotel, Halkidiki, Greece

Program

Tuesday 6 July 2010

17:00 – 20:00	**Registration**
18:00 – 18:20	**"Welcome and Opening Remarks"** S. Logothetidis *IS-FOE Chairman*
Special Session: "Strategy of Europe, USA and Asia in Organic Electronics" Part I **Chairs: G. Hadziioannou**, Laboratoire de Chimie des Polymères Organiques (LCPO) ENSCBP/CNRS , France **J. Kallitsis**, Department of Chemistry, University of Patras, Patras, Greece	
18:20 – 18:40	**"FP7 Project OPERA: For the Future of Organic & Large Area Electronics in Europe"** Ed van den Kieboom *Plastic Electronics Foundation, The Netherlands*
18:40 – 19:00	**"Supporting the European OLAE Community by the NoEs PolyNet and FlexNet"** Lars Heinze *Senior Consultant, VDI/VDE Innovation + Technik GmbH, Germany*
19:00 – 19:20	**"FP7 Project OLAtronics"** Stergios Logothetidis *Physics Department, Aristotle University of Thessaloniki, Greece*
19:20 – 19:40	**"Flexible autonomous cost efficient energy source and storage – FACESS project"** Jukka Hast *VTT Technical Research Centre, Finland*
19:40 – 20:00	**"FP7 Project Fast2light"** Gerwin Gelinck *Holst centre/TNO, The Netherlands*
21:00	**End of 1st Day** **IS-FOE10 Welcome Reception**

Wednesday 7 July 2010

08:00 – 20:00 **Registration**

SESSION: Organic electronic materials (Part I)

Chairs: J. Hast, VTT Technical Research Centre, Finland
J. Ulanski, Department of Molecular Physics, Technical University of Lodz, Poland

09:00 – 09:30 **INVITED**
Nano-morphology and charge photo-generation in Si-PCPDTBT and C-PCPDTBT bulk heterojunctions using fullerene acceptors
Mauro Morana[1], Hamed Azimi[1,4], Gilles Dennler[2], H.-J. Egelhaaf[3], Markus Scharber[1], Karen Forberich[2], Jens Hauch[3], Xiaobo Shi, Russel Gaudiana[2], David Waller[2], Zenghuo Zhu[2], Kurt Hingerl[4] , Svetlana S. van Bavel[5], Joachim Loos[5] and Christoph J. Brabec[6]
[1] Konarka Austria, Altenbergerstrasse 69, 4040 Linz, Austria
[2] Konarka Technologies Inc. Boott Mill South, 116 John Street, Suite 12, Lowell, MA 01852, USA
[3] Konarka Technologies GmbH, Landgrabenstr. 94, 90443 Nürnberg, Germany
[4] Christian Doppler Laboratory for Surface Optics, Johannes Kepler University, Linz, Austria
[5] Laboratory of Materials and Interface Chemistry and Soft Matter CryoTEM Research Unit, Eindhoven University of Technology, PO Box 513, NL-5600 MB Eindhoven, The Netherlands6 Friedrich-Alexander-University, Martensstraße 7, 91058 Erlangen, Germany

09:30 – 09:50
"Distribution of charge carrier traps at the band gap edges in MDMO-PPV"
V. Kažukauskas, M. Pranaitis, A. Arlauskas
Semiconductor Physics Dept. and Institute of Applied Research of Vilnius University, Vilnius, Lithuania

09:50 – 10:10
"Innovative Materials and Applications based on Poly(3,4-ethylenedioxythiophene) and Ionic Liquids"
R. Marcilla, M. Döbbelin, C.Pozo-Gonzalo, D. Mecerreyes
New Materials Department, CIDETEC, Centre for Electrochemical Technologies, Parque Tecnológico de San Sebastián, Donostia-San Sebastián, Spain

10:10 – 10:30
"Multilayered polymer organization for organic photovoltaic cells"
A.Nourdine, l. Perrin, l. Flandin, N.D. Alberola
LMOPS, Laboratoire Matériaux Organiques à Propriétés Spécifiques, Université de Savoie Bâtiment IUT Savoie, Le Bourget Du Lac, France

10:30 – 10:50
"Plasmonic composites of semiconductive polymers and metal nanoparticles"
J. Pfleger[1], S. Kazim[1], A. Sharf[1], M. Bondarev[2], J.Vohlidal[2]
[1]Department of Polymer Materials, Institute of Macromolecular Chemistry, Prague, Czech Republic
[2] Charles University in Prague, Faculty of Sciences, Prague, Czech Republic

10:50 – 11:20 ***Coffee Break - Posters – Exhibition - Networking***

SESSION: Organic, inorganic and hybrid materials and systems

Chair: L. Heinze, VDI/VDE Innovation + Technik GmbH, Germany

11:20 – 11:50 **INVITED**
"Electron accepting materials based on different semiconducting quinoline monomers, polymers and CNT hybrids"
A. Stefopoulos[1,3], S. Kourkouli[1,3], S. Economopoulos[4], F. Ravani[3], K. Andreopoulou[1], K. Papagelis[2], A. Siokou[3], J. Kallitsis[1,3]
[1] Department of Chemistry and [2]Department of Materials Science, University of Patras, Patras, Greece
[3] Foundation for Research and Technology Hellas, Institute of Chemical Engineering and High Temperature Processes (FORTH-ICEHT), Patras, Greece.
[4] Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece

11:50 – 12:20 **INVITED**
"Integrated Smart Systems for automotive market"
Nello Li Pira
Advanced Manufacturing and Materials, FIAT Research Centre, Italy

12:20 – 12:40
"Silicon nanowire based electrical devices on flexible substrate: From transistors to gas sensors"
C. Celle, A. Carella, J.P. Simonato
CEA-Grenoble, LITEN/DTNM/LCRE 17, rue des Martyrs 38054 Grenoble Cedex 9, France

12:40 – 13:00
"Engineering organic crystal morphologies with azeotropic mixtures"
R. Z. Rogowski, A. A. Darhuber
Mesoscopic Transport Phenomena Group, Eindhoven University of Technology, Eindhoven, The Netherlands

13:00 – 13:20
"Novel π-Functional Organic Semiconducting Materials: Design, Synthesis, Characterization and Device Performance"
P. Sonar
*Institute of Materials Research and Engineering (IMRE) Agency for Science, Technology and Research (A*STAR) Singapore*

13:20 – 13:40	**"Growth and performance of polycrystalline α-Sexi-thiophene thin films deposited by Supersonic Molecular Beam Deposition"** M. Tonezzer, T. Toccoli, S. Gottardi *IFN-CNR Divisione di Trento via alla Cascata, Povo Trento, Italy*
13:40 – 15:30	***Lunch Break - Networking***
Session: Organic electronic materials (Part II) **Chair: Nello Li Pira,** *Advanced Manufacturing and Materials, FIAT Research Centre, Italy*	
15:20 – 15:50 **INVITED**	**"Layered Distribution of Charge Carriers in Organic Thin Film Transistors"** A. Shehu,[1,2] S. D. Quiroga,[1] P. D'Angelo,[1] C. Albonetti,[1] F. Borgatti,[1] M. Murgia,[1] A. Scorzoni,[2] P. Stoliar,[1] and F. Biscarini[1] *1Consiglio Nazionale delle Ricerche-Istituto per lo Studio dei Materiali Nanostrutturati (ISMN), via P. Gobetti 101, 40129 Bologna, Italy* *2Universita` di Perugia-Dipartimento di Ingegneria Elettronica e dell'Informazione (DIEI), Via G. Duranti 93, I-06125 Perugia, Italy*
15:50 – 16:10	**"Broadband impedance spectroscopy of organic semiconductors"** K. Kisiel, J. Jung, J. Ulanski *Department of Molecular Physics, Technical University of Lodz,Zeromskiego str. 116, 90-924 Lodz, Poland*
16:10 – 16:30	**"The role of perpendicular and parallel momentum in early stages of pentacene growth with SuMBD"** M. Tonezzer, T. Toccoli, S. Gottardi *IFN-CNR Divisione di Trento via alla Cascata, Povo Trento, Italy*
Special Session: Strategy of Europe, USA and Asia in Organic Electronics (Part II) **Chair: Ed van den Kieboom**, Plastic Electronics Foundation, The Netherlands	
16:30 – 16:45	**"POLARIC: Printable, Organic and Large-Area Realisation of Integrated Circuits"** Joachim Steinke *Imperial College London, UK*
16:45 – 17:00	**"FP7 Project INGENIOUS"** Iryna Yakimets *Holst centre/TNO, The Netherlands*
17:00 – 17:15	**"FP7 Project: Embedded organic memory arrays (MOMA)"** Gerwin Gelinck *Holst centre/TNO, The Netherlands*
17:15 – 17:30	**"FP7 Project PRIAM"** Nello Li Pira *Advanced Manufacturing and Materials, FIAT Research Centre, Italy*
17:30 – 18:00	**"Flexible, Organic & Large Area Electronics in the EU. Where do we stand and Where do we go?"** Marc Boukerche *Large Area & Organic Electronics; Display Systems, European Commission, Belgium*
18:00	**End of 1st Day**

Thursday 8 July 2010

SESSION: Organic electronic materials (Part III)

Chairs: J. Kallitsis, Department of Chemistry, University of Patras, Patras, Greece

09:00 – 09:30 INVITED	**"A Bottom-Up Approach to Nanoscience and Nanotechnology: Micro- ,Nano- Structuring of Functional Polymer Materials Via Manipulation of the Self-Organization Process of Polymer Blends and Block Copolymers"** George Hadziioannou *Institut Universitaire de France, Chaire Arkema/Région Aquitaine, Matériaux fonctionnels avancés pour les nouvelles technologies de l'information, de la communication et de l'énergie,* *Laboratoire de Chimie des Polymères Organiques (LCPO) - UMR5629, Université Bordeaux 1 / Institut Polytechnique de Bordeaux (ENSCBP) / CNRS , France*
09:30 – 10:00 INVITED	**"OFET Sensors and Biosensors: overview of recent developments"** Luisa Torsi *Universita Degla Studi Di Bari, Italy*
10:00 – 10:20	**"Island nucleation of oligophenylene molecules on amorphous surfaces"** S. Lorbek[1], T. Potocar[2], G. Hlawacek[1], A. Winkler[2], C. Teichert[1] *[1] Institute of Physics, University of Leoben, Austria* *[2] Institute of Solid State Physics, Graz University of Technologies, Austria*

Special Session: Strategy of Europe, USA and Asia in Organic Electronics (Part III)

Chair: G. Hadziioannou, Laboratoire de Chimie des Polymères Organiques (LCPO) ENSCBP/CNRS , France

10:20 – 10:50	**OLED in Taiwan** J. Jou *Department of Materials Science and Engineering* *National Tsing-Hua University, Hsin-chu, Taiwan 30013, ROC*
10:50 – 11:20	**Strategy of Organic Electronics in USA** G. Malliaras Centre Microélectronique de Provence Ecole Nationale Supérieure des Mines de Saint Etienne, France
11:20 – 11:50	***Coffee Break - Posters – Exhibition - Networking***

SESSION: Flexible substrates, encapsulation methods & materials

Chairs: Armin Wedel, Fraunhofer-Institut für Angewandte Polymerforschung, Germany

11:50 – 12:20 INVITED	**"Cost Effective Production of High Barrier Materials for Encapsulation of Flexible Organic Electronics"** E. Kucukpinar[1], M.M. Schmidt[1], C. Boeffel[2], U. Weber[3], S. Amberg-Schwab[3], W. Lohwasser[4], K. Noller[1] *[1] Fraunhofer Institute for Process Engineering and Packaging, Freising, Germany* *[2] Fraunhofer Institute for Applied Polymer Research, Potsdam, Germany* *[3] Fraunhofer Institute for Silicate Research, Würzburg, Germany* *[4] Amcor Flexibles, Neuhausen, Switzerland*
12:20 – 12:40	**"Gas-barrier properties of multilayer structures: An all-wet process towards low cost solar cells encapsulation"** A. Morlier[1], S. Cros[2], N.D. Alberola[1] *[1]INES-RDI LMOPS, UMR CNRS-UdS, Le Bourget du lac, France* *[2]INES-RDI CEA DRT/LITEN/DTS/LCP, Le Bourget du lac, France*
12:40 – 13:00	**"Reliability of Organic Field Effect Transistors on flexible substrate: Mechanical behaviour"** B. Ben Said[1,2], X. Boddaert[1], P. Benaben[1], R. Gwoziecki[2], R. Coppard[2] *[1]Ecole des Mines de St-Etienne, CMP-GC, Dept., Gardanne, France* *[2]CEA-LITEN, Laboratoire des Composants Imprimés, Grenoble, France*
13:00 – 13:20	**"Impact of mechanical bending on ZnO and IGZO TFTs"** K. H. Cherenack, N. Münzenrieder, G. Tröster *Institute for Electronics, Swiss Federal Institute for Technology, Zürich, Switzerland*
13:20 – 13:40	**"The Ellipsometry Porosimetry used to characterize the density and size of pores and the permeability of barrier layers"** J.L. Stehle, A. Bourgeois, J.Ph. Piel *SOPRALAB, 55 Avenue de l'Europe, 92400 Courbevoie, France*
13:40 – 15:30	***Lunch Break - Posters - Networking***

SESSION: Theory & modelling (materials, components and devices)

Chair: J. Ulanski, Department of Molecular Physics, Technical University of Lodz, Poland

15:30 – 15:50	**"Point defects and impurities in C60 crystals: carrier traps, polymerization, and nanomagnetism"**

	Leonidas Tsetseris[1,2], Sokrates T. Pantelides[2,3] *[1] Department of Physics, National Technical University of Athens, Athens, Greece* *[2] Department of Physics and Astronomy, Vanderbilt University, Nashville, TN, USA* *[3] Oak Ridge National Laboratory, Oak Ridge, TN, USA*
15:50 – 16:10	**"Determining the Optimal Length of a Solar Cell using an Area Dependent Simulation Model"** M. Sams, C. Lackner, T. Ostermann *RIIC – Institute for Integrated Circuits, Johannes Kepler University Linz, Linz, Austria*
16:10 – 16:30	**"Thin film structure of pentacene derivatives probed using Raman spectroscopy"** D. T. James[1], C. Combe[2], I. McCulloch[2], J.-S. Kim[1] *[1]Department of Physics, Imperial College, London, UK* *[2]Department of Chemistry, Imperial College, London, UK*
SESSION: Manufacturing (printing, vacuum, chemical) & quality control processes **Chairs: L. Torsi,** Universita Degla Studi Di Bari, Italy **A. Lymberis,** European Commission, Information Society & Media Directorate-General Micro Systems, Belgium	
16:30 – 16:50 **INVITED**	**"Production technologies for large area printed flexible electronics"** Thomas Kolbusch *Coatema Coating Machinery GmbH, Germany*
16:50 – 17:10 **INVITED**	**"OVPD® Technology for Organic Electronics"** N.Meyer, D.Keiper, M.Schwambera, M.Gersdorff, M.Kunat, M.Heuken *AIXTRON AG, Kaiserstr. 98, 52134 Herzogenrath, Germany*
17:10 – 17:30	**"In-line high quality control of Organic Semiconductor by Spectroscopic Ellipsometry"** D. Cattelan *HORIBA Jobin Yvon S.A.S. France*
17:30 – 17:50	**Coffee Break - Exhibition - Posters - Networking**
17:50 – 18:10	**"In-Line optical investigation of thickness and optical properties of r2r flexible substrates, electrodes & barrier materials"** D. Georgiou, N. Kalfagiannis, C. Koidis, A. Laskarakis, M. Chatzidis, S. Logothetidis *Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece*
18:10 – 18:30	**"Fast dynamic Near infra red Mueller Matrix Ellipsometry: Switching of liquid crystals, stress-imaging of strained materials"** M. Kildemo, L.M. Sandvik Aas, P. G. Ellingsen *Department of Physics, NTNU, Realfagbygget NTNU 7491 Trondheim, Norway*
18:30 – 18:50	**"In situ real time SE analysis of the drying of organic blend for Organic Electronics"** J.L. Stehle, C. Walsh[1], B. Schmidt-Hansberg[2], Xavier Schimowski[1], J.Ph. Piel[1] *(1) SOPRALAB, 55 Avenue de l'Europe, Courbevoie, 92400, France;* *(2) Karlsruhe Institute of Technology, Thin Film Technology, D76131 Karlsruhe, Germany*
18:50 – 19:10	**Nanomechanical properties, morphology and structure of thermal annealed P3HT:PCBM thin films** P.G. Karagiannidis, S. Kassavetis, C. Pitsalidis and S. Logothetidis *Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece*
19:10 – 19:30	**"Effect of e-beam curing conditions of vacuum evaporated polymeric gate dielectric on the performance of pentacene-based thin film transistors"** G. Abbas, H. Assender, K. Malik *Department of Materials, University of Oxford, Oxford, UK*
19:30 – 20:30	***Poster Session – Exhibition - Networking***
19:30 – 20:30	**Thematic Research Network "NANONET": Meeting of Organic Electronics Cluster (Room "Theodora A")**
21:00	**IS-FOE10 Dinner**

Friday 9 July 2010

SESSION 8: Flexible solar cells, displays & batteries

Chairs: G. Malliaras, Centre Microélectronique de Provence Ecole Nationale Supérieure des Mines de Saint Etienne, France
A. Laskarakis, Aristotle University of Thessaloniki, Greece

09:00 – 09:30 **INVITED**	**"Ink-Jet printing of active and passive layers for organic electronic devices"** A. Wedel, B. Fischer, S. Kreissl, A. Lange, C. Boeffel *Fraunhofer-Institute for Applied Polymer Research, Geiselbergstrasse 69, D-14476 Potsdam, Germany*
09:30 – 09:50	**"Improved efficiency of hybrid solar cells based on non ligand-exchanged CdSe quantum dots and poly(3-hexylthiophene)"** Y. Zhou, M. Eck, F. S. Riehle, Y. Yuan, G. Urban, M. Krüger *Freiburg Materials Research Centre (FMF), University of Freiburg, Germany*
09:50 – 10:10	**"Indium doped zinc oxide nanoparticles as n-doped buffer layer in organic solar cells"** A. Puetz, T. Stubhan, M. Reinhard, O. Loesch, A. Colsmann, E. Hammarberg, S. Wolf, C. Feldmann, U. Lemmer *Karlsruhe Institute of Technology, Light Technology Institute, Institute of Inorganic Chemistry, Karlsruhe, Germany*
10:10 – 10:30	**"Investigation of a perylene based n-type polymer as electron acceptor in bulk-heterojunction solar cells"** Alessia Senes[1], Diego Bagnis[1], Peter Kutka[2], Erika Kozma[3], Silvia Luzzati[3], Marinella Catellani[3] Mauro Morana[1], Markus Scharber[1] *[1]Konarka Austria, Altenbergerstrasse 69, A-4040 Linz, Austria* *[2]Konarka Technologies GmbH, Landgrabenstrasse 94, D-90443 Nürnberg, Germany* *[3]Istituto per lo Studio delle Macromolecole-CNR, via Bassini 15, 20133 Milano, Italy*
10:30 – 10:50	**"Polymer solar cells with power conversion efficiencies approaching 6%"** A. Colsmann, A. Pütz, M. Klein, M. Reinhard, J. Czolk, C. Kayser, U. Lemmer *Light Technology Institute, Karlsruhe Institute of Technology, Karlsruhe, Germany*
10:50 – 11:10	**"Printed Li-ion Thin Film Batteries: Strategy of development for the electrolytic membrane"** H. Rouault, A. D'Aprea, N. Giroud, D. Mourzagh, L. Picard, J. Salomon, S. Solan *CEA-Grenoble, Liten/DEHT/LBA, 17 rue des Martyrs, 38054 Grenoble cedex, France*
11:10 – 11:40	***Coffee Break - Posters - Exhibition - Networking***
11:40 – 12:00	**"Anisotropy of optical spectroscopy in uniaxially aligned polythiophene films for field-effect transistors"** M. Lee[1], Z. Chen[1], N. Zhao[2], M. Heeney[3], H. Sirringhaus[1] *[1] Cavendish Laboratory, Physics Department, University of Cambridge, Cambridge, UK* *[2] Research Lab of Electronics, Massachusetts Institute of Technology, Cambridge, USA* *[3] Department of Chemistry, Imperial College of London, London, UK*
12:00 – 12:20	**"Improved Efficiency of Polymer Light Emitting Diodes (PLEDs) by Using Sulfonium Salts as Organic Electron Injecting Layers (EIL)"** D. G. Georgiadou[1,2], M. Vasilopoulou[1], L. C. Palilis[1], L. Sygellou[3], S. Kennou[3], D. Dimotikali[2], P. Argitis[1] *[1]Institute of Microelectronics, National Centre for Scientific Research "Demokritos", Athens, Greece.* *[2]School of Chemical Engineering, National Technical University of Athens, Greece.* *[3]Department of Chemical Engineering, University of Patras, Greece.*

SESSION: Integrated Systems

Chairs: L. Heinze, VDI/VDE Innovation + Technik GmbH, Germany

12:20 – 12:50 **INVITED**	**"Smart textile and Wearable systems: From R&D to Integrated Solutions"** Andreas Lymberis *European Commission, Information Society & Media Directorate-General Micro Systems, Belgium*
12:50 – 13:10	**"Crack prevention of highly bent metal thin films in woven electronic textiles"** T. Kinkeldei, K. Cherenack, C. Zysset, G. Tröster *Wearable Computing Laboratory, Federal Institute of Technology Zurich, Zurich, Switzerland*
13:10 – 13:30	**"An Organic Semiconductor Based Surface-Type Resistive–Capacitive Multifunctional Flexible Sensor"** M. H. Sayyad[1], Z. Ahmad[1], M. Shahid[2], M. A. Munawar[2] *[1] Faculty of Engineering Sciences, GIK Institute of Engineering Sciences and Technology, Topi, Pakistan.* *[2] Institute of Chemistry, University of the Punjab, Lahore, Pakistan*
13:30 – 15:00	***Lunch Break - Networking***

SESSION: Flexible circuits and sessions

Chairs: J. Hast, VTT Technical Research Centre, Finland

15:00 – 15:30 **INVITED**	**"Organic Electronics for Biosensors and Bioactuators"** George Malliaras *Centre Microélectronique de Provence Ecole Nationale Supérieure des Mines de Saint Etienne, France*
15:30 – 15:50	**"Testing of flexible IGZO based TFTs under mechanical strain"** N. Münzenrieder, K. Cherenack, G. Tröster *Institute for Electronics, Swiss Federal Institute for Technology Zürich, Switzerland*
15:50 – 16:10	**"Full printed organic CMOS circuits for large area electronics"** H. Rouault, R. Coppard, J.-M. Verilhac, M. Benwadih, A.-L. Seiler, S. Jacob, C. Bory, J. Bablet, M. Heitzmann, J. Tallal, R. Gwoziecki, I. Chartier, C. Serbutoviez *CEA-Grenoble, LITEN/DTNM/LCI, Grenoble, France*
16:10 – 16:30	***Coffee Break - Posters - Exhibition - Networking***
16:30 – 17:00 **INVITED**	**Correlation between surface morphology and performance of optoelectronic devices** Ana B. Rodríguez,1 Monika Voigt,1 Simon J. Martin,1 Tracie J. Whittle,2 Robert M. Dalgliesh,3 Richard L. Thompson,4 David G. Lidzey,1 and Mark Geoghegan1 *1 Department of Physics and Astronomy, University of Sheffield, Hicks Building, Sheffield S3 7RH, UK* *2 Department of Chemistry, University of Sheffield, Sheffield S3 7HF, UK* *3 ISIS Pulsed Neutron and Muon Source, Rutherford Appleton Laboratory, Chilton, Didcot, UK* *4 Department of Chemistry, Durham University, South Road, Durham DH1 3LE, UK*
17:00 – 17:20	**"Low cost solution-processed high-k gate dielectric materials for large area circuit applications"** W.-Y. Lin[1,2], R. Muller[1], S. Steudel[1], J. Genoe[1], P. Heremans[1,3] *[1]Imec vzw, Leuven, Belgium* *[2]Department of Metallurgy and Materials Engineering(MTM), Katholieke Universiteit Leuven, Belgium* *[3]Department of Electrical Engineering – ESAT, Katholieke Universiteit Leuven, Belgium*
17:20 – 17:40	**"Printed Metal Electrode for Flexible Devices"** M. Yoshida, K. Suemori, S. Uemura, S. Hoshino, N. Takada, T. Kodzasa, T. Kamata *Photonics Research Institute, AIST, Tsukuba Ibaraki, Japan*
17:40 – 17:50	***Young Researcher Award for Best Oral and Best Poster Presentations***
17:50 – 19:00	**Closing Remarks and Discussion** **End of IS-FOE10**

POSTERS

P1	**"Fabrication and Study of Flexible Organic Junction Diodes"** M. H. Sayyad[1], Z. Ahmad[1], M. Shahid[2], M. A. Munawar[2] *Faculty of Engineering Sciences, GIK Institute of Engineering Sciences and Technology, Topi, Pakistan* *Institute of Chemistry, University of the Punjab, Lahore 54000, Pakistan*
P2	**"The Printing Textiles with Chemical Sensors Properties"** Izabella Krucinska, Wieslawa Urbaniak-Domagala, Ewa Skrzetuska *Technical University of Lodz, Faculty of Material Technology and Textile Designing, Lodz, Poland*
P3	**"Energy transfer versus electron transfer in polyindenofluorene: PCBM blend films"** Ying Woan Soon, Tracey Clarke, Weimin Zhang, Tiziano Agostinelli, James Kirkpatrick, Clare Dyer-Smith, James Durrant, Iain McCulloch, and Jenny Nelson *Department of Chemistry, Imperial College London, London, United Kingdom*
P4	**"Fundamental Aspects of Gate Electrode Work Function for Pentacene Field-Effect Devices"** J. S. Choi, J. Park, D. W. Kim *Department of Electrical, Information and Control Engineering, Hongik University, Seoul, Korea*
P5	**"Effect of annealing in the optical, surface and structural properties of P3HT & PCBM thin films"** D. Georgiou, P. Karagiannidis, C. Pitsalidis, A. Laskarakis, S. Logothetidis *Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece*
P6	**"The Melt-Blown Non-woven for Thermal Sensors"** Izabella Krucinska, Beata Surma, Michal Chrzanowski *Technical University of Lodz, Faculty of Material Technology and Textile Designing, Lodz, Poland*
P7	**"Surface Morphology and Optical Properties of α-quaterthiophene Thin Films Deposited by Thermal Evaporation"** C. Pitsalidis, P. Karagiannidis, C. Koidis, A. Laskarakis, S. Logothetidis *Aristotle University of Thessaloniki, Physics Department, Laboratory for Thin Films-Nanosystems and Nanometrology, GR-54124, Thessaloniki, Greece*
P8	**"Improvement of the Performances of the Organic Field Effect Transistors"** O. Boughias, M.S. Belkaid *Electronics Department, Laboratry of Advanced Technologies of Genie Electrics, University of Mouloud Mammeri, Tizi-ouzou, Algeria*
P9	**"Characterization of tungsten and molybdenum oxides as interfacial layers for improving performance in hybrid optoelectronic devices"** M. Vasilopoulou[1], L. C. Palilis[1], D. G. Georgiadou[1], P. Argitis[1], S. Kennou[2], L. Sygellou[2], I. Kostis[3,4], G. Papadimitropoulos[1], N. A. Stathopoulos[3], A. Iliadis[4,5], N. Konofaos[4] and D. Davazoglou[1] *[1] Institute of Microelectronics, NCSR Demokritos, Athens, Greece* *[2] Department of Chemical Engineering, University of Patras, Patras, Greece* *[3] Department of Electronics, Technological and Educational Institute of Pireaus, Aegaleo, Greece* *[4] Department of Information and Communication Systems Engineering, University of the Aegean, Greece* *[5] ECE Department, University of Maryland, College Park, USA*
P10	**"Synthesis, Optical and Electrical Properties of Au Nanoparticles/ Cationic Polythiophene Polyelectrolyte composites"** S. Kazim[1], M. Bondarev[2], J.Vohlidal[2], M. Prochazka[3], J. Pfleger[1] *[1]Department of Polymer Materials, Institute of Macromolecular Chemistry, Prague, Czech Republic* *[2]Charles University in Prague, Faculty of Sciences, Prague, Czech Republic* *[3] Charles University in Prague, Faculty of Mathematics and Physics, Prague, Czech Republic*
P11 (LMP)	**"Novel water-soluble copolymers containing quinoline groups: pH- responsive and sensoring optical properties in aqueous solution"** I. Thivaios, S. Kourkouli, A. Stefopoulos, G. Bokias, J. K. Kallitsis *Department of Chemistry, University of Patras, GR-26504 Patras, Greece*
P12	**"Co-sputtered oxide thin film encapsulated organic electronic devices with prolonged lifetime"** F.L. Wong, M.K. Fung, C.Y. Ng, A. Ng, I. Bello, C.S. Lee, S. T. Lee *Center of Super Diamond and Advanced Thin Films, Department of Physics and Materials Science, City University of Hong Kong, Tat Chee Avenue, Hong Kong, SAR, PR China*
P13	**"Parylene dielectric layers for C60 organic field effect transistors"** G. Schwabegger, C. Simbrunner, M. Ullah, G. Hernandez-Sosa, H. Sitter *Institute of Solid State Physics, Johannes Kepler University, Linz, Austria*
P14	**"On the optimization of gravure printed PEDOT:PSS thin films"** C. Koidis, P. G. Karagiannidis, A. Ioakimidis, S. Kassavetis, N. A. Hastas, A. Laskarakis, and S. Logothetidis

	Physics Department, Aristotle University of Thessaloniki, Thessaloniki, Greece
P15	**"Fabrication of a Complementary Organic Inverter and its modeling and Simulation in CADENCE"** N.P. Papadopoulos[1], R. Picos[3], A. Marsal[2], J. Puigdollers[2], R. Alcubilla[2], A. A. Hatzopoulos[1] *[1] Aristotle University of Thessaloniki, Dept. of Electrical and Computer Eng., Electronics Lab., Greece* *[2] Dept. Enginyeria Electronica, Universitat Politecnica Catalunya, Barcelona (Spain)* *[3] Dept. Física, Univ. Illes Balears, Baleares, Palma, Spain*
P16	**"Influence of Molecular Vibrations and Electrostatic Interactions on Charge Transport Parameters in Oligoacenes"** N. Martinelli[1], L. Muccioli[2], C. Zannoni[2], J. Cornil[1] *[1] Laboratory for Chemistry of Novel Materials, University of Mons, Place du Parc 20, B-7000 Mons, Belgium* *[2] Dipartimento di Chimica Fisica e Inorganica and INSTM, UniVersità di Bologna, Bologna, Italy*
P17 (LMP)	**"From Single Organic Devices to Integrated Circuits"** C. Lackner, M. Sams, T. Ostermann *Institute for Integrated Circuits, Johannes Kepler University, Altenbergerstraße 69, 4040 Linz, Austria*
P18	**"Organic Thin Film Transistor Using Transfer-Printed Ag Electrodes"** Hyunduck Cho, Mingyu Kim, Myoung-jin Park, Chan-mo Kang, Yongtaek Hong, Ki-Woong Whang, Bo Hyung Cho, and Changhee Lee *School of Electrical Engineering and Computer Science, Inter-University Semiconductor Research Center, Seoul National University Seoul 151-744, Korea*
P19	**"Fabrication of large area masters for roll-to-roll imprinting of organic electronic devices on flexible substrates"** G. Lalev[1], H. Hirshy[1], S. Scholz[1], V. Velkova[1], S. Dimov[1], H. Gold[3], B. Stadlober[3], Anja Haase[3], J. Hiitola-Keinänen[2] , M. Ylikunnari[2], J. Hast[2], M. Känsäkoski[2] *[1] Manufacturing Engineering Centre, Cardiff University, Cardiff CF24 3AA, UK* *[2] Printed Functional Solutions centre, Technical research centre of Finland, Oulu, Finland* *[3] Joanneum Research, Institute of Nanostructured Materials and Photonics, Weiz, Austria*
P20	**"Optical, surface, electrical, and nanomechanical properties of roll-to-roll gravure printed PEDOT:PSS thin films"** C. Koidis1, C. Kapnopoulos1, P. G. Karagiannidis, M. Chatzidis1, S. Kassavetis, N. A. Hastas, A. Laskarakis, and S. Logothetidis *1Lab for Thin Films-Nanosystems and Nanometrology (LTFN), Department of Physics, Aristotle Univer-sity of Thessaloniki, GR-54124, Thessaloniki, Greece* *2 Solid State Physics Section, Department of Physics, Aristotle University of Thessaloniki, GR-54124, Thessaloniki, Greece*
P21 (LMP)	**"Inkjet printed organic layers on nano- and microstructured flexible substrates for organic electronic devices"** P. Lewer, K. Schulze, S. Janietz *Polymers and Electronics, Fraunhofer Institute for Applied Polymer Research,* *Geiselbergstr. 69, 14476 Potsdam-Golm, Germany*
P22	**"Influence of alloyed nanocrystal doping on performance of polymer-hybrid light emitting diodes (PLEDs)"** S. Tekoglu[1], U. Abaci[1,2], M. Kus[3], C. Ünlü[4], S. Tilki[3], S. Özcelik[4], N. S. Sariciftci[1] *[1] Linz Institute for Organic Solar Cells (LIOS), Physical Chemistry, Johannes Kepler University of Linz, Linz, Austria*
P23	**"Increased light harvesting in P3HT:PCBM bulk heterojunction solar cells with solvent additives"** Antonietta De Sio, Ralph Huber, Elizabeth von Hauff, Jürgen Parisi *Energy and Semiconductor Research Laboratory, Carl von Ossietzky Universität Oldenburg, Germany*
P24	**"Sputtered ZnO:Al recombination layer for flexible organic tandem solar cells"** A. Bauer, J. Hanisch, E. Ahlswede *Zentrum für Sonnenenergie- und Wasserstoff-Forschung, Stuttgart, Germany*
P25	**"High efficiency organic solar cells using cathode modifier"** Soon Ok Jeon, Jun Yeob Lee *Department of Polymer Science and Engineering, Dankook Universit, Jukjeon-dong, Suji-gu, Yongin-si, Korea*
P26	**"Electric Field Dependence of Charge Generation in PCPDTBT:PCBM Blend Solar Cells"** Fiona C. Jamieson,[a] Andrea Maurano,[a] Tiziano Agostinelli,[b] Jenny Nelson,[b] James. R. Durrant[a] *Departments of Chemistry[a] and Physics,[b] Imperial College London, South Kensington, SW7 2AZ, UK*
P27	**"Improvement of the performances of the P3HT/PCBM based photovoltaic solar cells"** F.Belhocine-Nemmar, MS.Belkaid, D. Hatem, O. Boughias *Laboratory of Advanced Technologies of Genie Electrics, Electronic Department, University of Mouloud Mammeri, Tizi Ouzou, Algeria*

P28 (LMP)	**"The results of the FACESS project after month 24"** J. Hast, P. Kopola, J. Lenkkeri, M. Ylikunnari, J. Petäjä, M. Tuomikoski, A. Maaninen *VTT Technical Research Centre of Finland, Kaitoväylä 1, 90571 Oulu, Finland* T. Aernouts, J. Genoe *Interuniversity Microelectronics Centre, Kapeldreef 75, B-3001 Leuven, Belgium* B. Vandecasteele *Interuniversity Microelectronics Centre, 9052 Zwijnaarde Gent, Belgium* H. Rouault, S. Guillerez *Commissariat à l'Energie Atomique, Rue des Martyrs, 38054 Grenoble, France* M. Siekiersky, A. Nikolajewna, M. Nikolajew *Warsaw Technical University, Plac Politechniki 1, 00-661 Warsaw, Poland* H. Aminian *Umicore S.A., Kasteelstraat 7, BE-2250 Olen Belgium* T. Kolbush, R. Reuscher *Coatema Coating Machinery GmbH, Roseller strasse 4, D-41539 Dormagen, Germany* M. Kohvakka *Suntrica Oy, Verstaankatu 2 C, 33100 Tampere, Finland*
P29 (LMP)	**"Correlation between macromolecular design, morphology and performances on the use of block copolymers as additives in a P3HT/PCBM blend for OPV cells"** C.Nicolet[ab], D. Deribew[ab], C. Renaud[ab], C. Brochon[ab], G. Fleury[ab], E. Cloutet[ab], L. Vignau[cd]. P. Gaillard[e], H. Cramail[ab], G. Hadziioannou[ab]. *[a]Université de Bordeaux, Laboratoire de Chimie des Polymères Organiques, IPB-ENSCBP, 16, Avenue Pey Berland, Pessac Cedex, F-33607, France;* *[b]CNRS, Laboratoire de Chimie des Polymères Organiques, UMR 5629, Pessac Cedex, F-33607, France* *[c]Université de Bordeaux, Laboratoire de l'Intégration du Matériau au Système, IPB-ENSCBP, 16, Avenue Pey Berland, Pessac Cedex, F-33607, France;* *[d]CNRS, Laboratoire de l'Intégration du Matériau au Système, UMR 5218, Pessac Cedex, F-33607, France* *[e]Arkema, GRF/Lacq, Pôle Economique, 1 route nationale 117 F-64170 LACQ, France*
P30	**"High Frequency Operating Pentacene Rectifying Diode with Inkjet Printed Electrode"** Chan-mo Kang, Hyunduck Cho, Mingyu Kim, Myoung-jin Park, Yongtaek Hong, Ki-Woong Whang, Bo Hyung Cho, Changhee Lee *School of Electric Engineering and Computer Science, Inter-university Semiconductor Research Center, Seoul National University, 599 Gwanakro, Gwanak-gu, Seoul, 151-744, Korea*
P31	**"Towards all-printed wireless organic humidity sensor"** Xiaodong Wang, Oscar Larsson, Magnus Berggren, Xavier Crispin *Dept. of Science and Technology (ITN), Linköping University, SE-601 74 Norrköping, Sweden*
P32	**"Temperature dependent photo-conductivity of DNA:PEDOT thin films"** V. Kažukauskas[1], M. Pranaitis[1], O. Krupka[2], F. Kajzar[2], B. Sahraoui[2] *[1] Semiconductor Physics Department and Institute of Applied Research of Vilnius University, Vilnius, Lithuania* *[2] Laboratory POMA CNRS FRE 2988, Angers University, Angers, France*
P33 (LMP)	**"High performance inkjet-printed polymer field-effect transistor and its complementary inverter and ring oscillator circuits"** Kang-Jun Baeg[1], Dongyoon Khim[2], Dong-Yu Kim[2], Antonio Facchetti[3], Soon-Won Jung[1], Jae Bon Koo[1], In-Kyu You[1], and Yong-Young Noh[4] *[1]Convergence Components & Materials Research Laboratory, Electronics Telecommunications Research Institute (ETRI), Daejeon 305-350, Republic of Korea* *[2]Heeger Center for Advanced Materials, Dept. of Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, Korea* *[3]Polyera Corporation, Skokie, Illinois, United States* *[4]Dept. of Chemical Engineering, Hanbat National University, Daejeon, 305-719, Republic of Korea*
P34 (LMP)	**"Role of geometry, substrate and atmosphere on performance of OFETs based on TTF derivatives"** T. Marszalek[1], B. Luszczynska[1], A. Nosal[2], R. Pfattner[3], J. Jung[1], S. Kotarba[1], M. Mas-Torrent[3], M. Gazicki-Lipman[2], C. Crickert[4], G. Schmidt[4], C. Rovira[3] and J. Ulanski[1] *[1] Department of Molecular Physics, Technical University of Lodz, 90-924 Lodz, Poland* *[2] Institute of Mechanical Engineering, Technical University of Lodz, 90-924 Lodz, Poland* *[3] Institut de Ciencia de Materials de Barcelona (ICMAB-CSIC), 08193 Bellaterra, Spain* *[4] Physikalisches Institut (EP3), Universität Würzburg, D-97074 Würzburg Germany*
P35 (LMP)	**"Multilayered polymer organization for organic solar cells"** L. Perrin, A. Nourdine, L. Flandin, N.D. Alberola *LMOPS, Laboratoire Matériaux Organiques à Propriétés Spécifiques, Université de Savoie*

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P36 (LMP)	**"Synthesis of an alternating copolymer in order to improve the organization and the stability of OPV solar cells' active layer"** L. Perrin, M. Legros, R. Mercier *LMOPS, Laboratoire Matériaux Organiques à Propriétés Spécifiques, Université de Savoie* *Bâtiment IUT - Savoie Technolac - 73376 Le Bourget du Lac - FRANCE*
P37 (LMP)	**"Synthesis, characterization and photophysical properties of benzotriazole based copolymers and their photovoltaic applications"** L. Perrin, V. Murugesan, R. Mercier *LMOPS, Laboratoire Matériaux Organiques à Propriétés Spécifiques, Université de Savoie* *Bâtiment IUT - Savoie Technolac - 73376 Le Bourget du Lac - FRANCE*
P38 (LMP)	**"Encapsulation Quality Inspection in Printed Electronics with Ultra-High Resolution Optical Coherence Tomography"** J. Czajkowski1, T. Fabritius1, T. Marszałek2, A. Nosal3, M. Gazicki-Lipman3, J. Ulański2, and R. Myllylä1 *1 Optoelectronics and Measurement Techniques Laboratory, University of Oulu, P.O. Box 4500, 90014 University of Oulu, Finland* *2 Department of Molecular Physics, Technical University of Lodz, 90-924 Lodz, Poland* *3 Institute of Mechanical Engineering, Technical University of Lodz, 90-924 Lodz, Poland*
P39	**"Optical and vibrational properties of pentacene: polymorph identification and impurity effects"** G. Volonakis1, L. Tsetseris2,3, and S. Logothetidis1 *1Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece* *2Department of Physics, National Technical University of Athens, Athens, Greece* *3Department of Physics and Astronomy, Vanderbilt University, Nashville, TN, USA*
P40 (LMP)	**"Transmission Electron Microscopy study of P3HT:PCBM active layer in organic solar cells"** K. Breza, N. Vouroutzis, N. Frangis, P. Karagiannidis, S. Logothetidis *Solid State Physics Section, Department of Physics, Aristotle University of Thessaloniki,* *GR-54124 Thessaloniki, Greece*
P41 (LMP)	**P3HT:PCBM Bulk Heterojunction Solar Cells Characterized by Spectroscopic Ellipsometry** D. Cattelan a , M. Gaillet b , L. Yan c *a,b HORIBA Jobin Yvon SAS, Thin Film Division, Z.A. de la Vigne aux Loups, 5 Av. Arago, 91380 Chilly-Mazarin, France* *c HORIBA Jobin Yvon Inc, 3880 Park Avenue, Edison, NJ 08820-3012, USA, li.yan@horiba.com*
P42 (LMP)	**The results of the OLAtronics project until Month 30** S. Logothetidis, D. Georgiou, A. Laskarakis Aristotle University of Thessaloniki, Greece A. Wedel, S. Amberg-Schwab, K. Noller, M. Schmidt, E. Kucukpinar-Niarchos, U. Weber, H. Krueger, C. Boeffel Fraunhofer Gesellschaft, Germany D. Cattelan Horiba Jobin Yvon, France G. Rieger, W. Roth SIEMENS Aktiengesellschaft, Gernany W. Lohwasser Alcan Technologies & Management, Switzerlandt J. Hauch. M. Morana Konarka, Austria S. Kirchmeyer, W. Lovenich H.C. Starck, Germany K. McGuire Konarka Technologies Inc