8th International Symposium on Flexible Organic Electronics (ISFOE15), 6-9 July 2015, Thessaloniki, Greece

PROGRAM

Monday 6 July 2015

08:00 -	**Registration**
09:00-09:30	**Welcome and Opening Remarks** **S. Logothetidis,** ISFOE15 Chairman
09:30-11:00	**WORKSHOP ON OLAE MATERIALS 1 (Crystal Hall)** **Chairs: R. P. Silva, ATI, University of Surrey, UK**
09:30-10:00 KEYNOTE	**Polymeric Semiconductors for Printed Circuits and Energy Storage** **A. Facchetti** *Department of Chemistry, Northwestern University and Polyera Corporation, IL, USA*
10:00-10:15	**Improved synthesis of semiconducting polymers for organic electronics** A. Kiriy, R. Tkachov Department of Nanostructured Materials Lebniz Institute of Polymer Research Dresden, Hohe str. 6, 01069 Dresden, Germany
10:15-10:30	**Electrical and spectroscopic characterisation of molecular p-doped side-chain polymers with small molecule moieties processed from solution** T. Pürckhauer[1], N. Jürgensen[1], Limberg, Felix;2 Krüger, Hartmut;2 Behrends, Jan;3 Colsmann, Alexander1 *[1] Karlsruhe Institute of Technology (KIT), Light Technology Institute, Karlsruhe, Germany, [2] Fraunhofer Institute for Applied Polymer Research, Potsdam, Germany, [3] Institute of Experimental Physics, Freie Universität of Berlin, Germany*
10:30-10:45	**Bio-Based Block Copolymer Self-Assembly: Nanoparticles and nanostructured thin films** **R. Borsali**, Y. Otsuka, I. Otsuka, S. Halila *Centre de Recherche sur les Macromolécules Végétales, CERMAV, - CNRS Grenoble, France*
10:45-11:00	**Photoelectrochemical hydrogen production through hybrid organic/inorganic interfaces** S. Bellani1, F. Fumagalli1, M. Haro4, S. Leonardi1, H. Comas Rojas1, L. Steier2, A. Ghadirzadeh1, M. Mayer2, A. Tacca3, L. Meda3, J. Bisquert4, M. Grätzel2, S. Gimenez4, M.R. Antognazza1 and F. Di Fonzo1, 1 Center for Nano Science and Technology - IIT@PoliMI, Milano (Italy), 2 Institut des Sciences et Ingénierie Chimiques, EPFL, Lausanne, Switzerland, 3 Eni S.p.A. Istituto ENI Donegani via G. Fauser (Italy) 4 Photovoltaics and Optoelectronic Devices Group, Departament de Fisica, Universitat Jaume (Spain)

11:00 – 11:30	**Coffee Break - Posters – Exhibition - Networking**

11:30-13:30	**WORKSHOP ON OLAE MATERIALS 2 (Crystal Hall)** **Chair: A. Laskarakis, LTFN, AUTh**
11:30-12:00 KEYNOTE	**Nano-Engineered Hybrid Carbon Nanotube Organic heterojunctions for Improved Photovoltaic Performance** K. D. G. Imalka Jayawardena, N. Aamina Nismy, Dimitar Kutsarov, Edward New, Keyur Gandhi, C. A. Mills, **S. Ravi P. Silva*** *Advanced Technology Institute, University of Surrey, Guildford GU2 7XH, United Kingdom.*
12:00-12:30 INVITED	**Asymmetrically functionalised electrodes for organic electronics** **O. Fenwick**1, M. del Rosso1, A. Liscio2, M. Herder3, F. Reinders4, S. Rapino5, F. Richard1, F. Zerbetto5, M. Mayor4,6, S. Hecht3, V. Palermo2, P. Samorì1 *1 ISIS & icFRC, Université de Strasbourg & CNRS, France, 2 ISOF-Consiglio Nazionale delle Ricerche, Bologna, Italy, 3 Dept. Chemistry, Humboldt-Universität zu Berlin, Germany, 4 Dept. Chemistry Univ. Basel, Switzerland.* *5 Dipartimento di Chimica, Universita' di Bologna, Via Selmi, 2, 40126 Bologna, Italy, 6 Karlsruhe Institute of Technology, Institute for Nanotechnology, 76021 Karlsruhe, Germany*
12:30-12:45 PROJECT	**Electrode materials and barrier foils for organic electronics – an overview on the R&D activities within the EU funded project TREASORES** R. Steim, F. Nüesch Empa, Swiss Federal Laboratories for Materials Science and Technology, Laboratory for Functional Polymers, Überlandstrasse 129, CH-8600 Dübendorf, Switzerland
12:45-13:00	**Silver nanowire electrode for a smart window** Kyutae Park, So hui Lee, **Haekyoung Kim** *School of Materials Science & Engineering, Yeungnam University, Gyeongsan 712-749, Korea*
13:00-13:15	**Polythiophenes by Suzuki-Miyaura polymerization using thiophene-derived MIDA boronate esters as highly effective monomers** J. Ayuso-Carrillo, M. Ingleson, M. Turner School of Chemistry, University of Manchester, Oxford Road, M13 9PL, Manchester, United Kingdom
13:15-13:30	**Gravure printed organic photovoltaic modules onto flexible substrates consisting of a P3HT:PCBM photoactive blend** C. Kapnopoulos, E. D. Mekeridis, L. Tzounis, C. Polizoidis, S. Tsimikli, C. Gravalidis, A. Zachariadis, A. Laskarakis, I. Sismanidis, N. Vouroutzis, S. Logothetidis *LTFN, Physics Department, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece*

13:30 – 15:00	**LUNCH BREAK – POSTERS – EXHIBITION – NETWORKING**

15:00-17:15	**OTFTs 1 (Timber Hall 1)** **Chair: T. Anthopoulos, Imperial College London, UK**
15:00-15:30 KEYNOTE	**Oligothiophenes as Model Systems for Investigating Relationships in Polymer Semiconductors** **Alejandro L. Briseño** *University of Massachusetts (Department of Polymer Science & Engineering), 120 Governors Dr, Amherst, Massachusetts 01003, USA*
15:30-15:45	**Large area flexible electrochromic displays based on novel electroactive polymers** J. Fonseca, R. Montes, A. Silva, J. Silva, **M. Ribeiro**, J. Gomes *CeNTI - Centre for Nanotechnology and Smart Materials, Portugal*
15:45-16:00	**Novel, High Capacitance Nanocomposite Dielectrics for Printed Electronics** S. Faraji[1], M. L. Turner[2], L.A. Majewski[1] [1] Microwave and Communication Systems, University of Manchester, UK [2] School of Chemistry, University of Manchester, UK
16:00-16:15	**Highly Planar Polymer Semiconductors Exhibiting Band-like Transport** **J. Lee** *Department of Graphic Arts Information Engineering, Pukyong National University, Rep. of Korea*
16:15-16:30	**Spray-Coating Organic Field effect Transistors based on small molecule semiconductor/polymer insulator blends** T. Kaimakamis, C. Pitsalidis, A. Papamichail, S. Logothetidis *Lab for Thin Films, Nanosystems & Nanometrology (LTFN), Department of Physics, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece*
16:30-16:45	**Flexible temperature sensor realized by inkjet process** M. D. Dankoco, G. Y. Tesfay, E. Benevent, M. Bendahan *Aix - Marseille Université, CNRS, IM2NP – UMR 7334, Marseille, France*
16:45-17:00	**Interface Engineering for Printed and Flexible Organic Electronic Circuits and Memory** Kang-Jun Baeg, Seung Yol Jeong, Hee Jin Jeong, Seon-Hee Seo, J. Tark Han, Geon-Woong Lee *Nano Carbon Materials Research Group, Korea Electrotechnology Research Institute (KERI), Rep. of Korea*
17:00-17:15	**Synthesis, properties and characterization of selected lanthanide bisphthalocyanines in thin layers** J. Černý1, P. Fitl2, J. Vlček2, D. Tomeček2, M. Vondráček3, M. Novotný3, M. Vrňata2, [1] *Center of Organic Chemistry Ltd. Rybitví, Czech Republic* [2] *Dept. Physics & Measurements, University of Chemical Technology, Prague, Czech Republic* [3] *Institute of Physics of the AS CR, v.v.i., Prague, Czech Republic*

15:30-17:15	**WORKSHOP ON LASER TECHNOLOGIES 1 (Timber Hall 2)** **Chair: I. Zergioti, NTUA, Greece**
15:30-16:00 INVITED	**Digital Printing of 3D metal micro-objects by laser transfer methods** M.Zenou *Additive Manufacturing Lab, Orbotech Ltd. P.O. Box 215, Yavne 81101, Israel*
16:00-16:30 INVITED	**Photonic processes in printed electronics** **E. Smits**[1], M. Giesbers[1], R. Hendriks[2], G. Arutinov[1], J. van den Brand[1] [1] *Holst Centre / TNO, High Tech Campus 31, 5656AE, Eindhoven, The Netherlands.* [2] *NovaCentrix, 400 Parker Dr. Suite 1110, Austin TX 78728, USA*
16:30-17:00 INVITED	**On optimization of selective laser scribing of thin-film layers for the production of flexible organic photovoltaics** N. Kontolatis1, C. Kapnopoulos2, E. Mekeridis1, A. Laskarakis2, S. Logothetidis2 1 Organic Electronic Technologies P.C. (OET), Antoni Tritsi 21B, Thessaloniki, 57001, Greece 2 LTFN, Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece
17:00-17:15	**Laser printed reduced Graphene oxide on all printed conductive flexible substrates as highly sensitive gas sensors** M. Makrygianni1, S. Papazoglou1, M. K. Filippidou2, S. Chatzandroulis2, and I. Zergioti1 1. National Technical University of Athens, Physics Department, Greece 2. Inst. of Nanoscience and Nanotechnology, NCSR Demokritos, Greece

17:15 – 20:00	**Coffee Break Poster Presentations ISFOE15 1**

20:00	**DINNER FOR ISFOE15 KEYNOTE AND INVITED SPEAKERS**

Tuesday 7 July 2015

08:00	**Registration**

09:00-11:00	**Workshop on OLAE Materials 3 (Timber Hall 1)** **Chairs: I. Kallitsis, University of Patras, Greece**		
09:00-09:30 **KEYNOTE**	**Barrier coatings based on hybrid polymers (ORMOCER®s) with extended shelf life, controlled quality, environmentally friendly** S. Amberg-Schwab[1], U. Weber[1], A. Holländer[2], K. Noller[3], E. Kucukpinar[3] *[1] Fraunhofer Institute for Silicate Research ISC, [2] Fraunhofer Institute for Applied Polymer Research IAP, [3] Fraunhofer Institute for Process Engineering and Packaging IVV, Germany*		
09:30-10:00 **INVITED**	**Barrier technologies for the encapsulation of organic electronic devices** **C. Boeffel** *Fraunhofer IAP, Potsdam, Germany*	**09:30-11:00**	**Workshop on Manufacturing 1 (Timber Hall 2)** **Chairs: N. Meyer, Coatema, Germany**
		09:30-10:00 **INVITED**	**Advanced micro- and nanomanufacturing of large area organic electronics and functional surfaces** **B. Stadlober[1]**, M. Zirkl ,[1] G. Scheipl ,[1] T. Rothländer ,[1] D. Nees ,[1] U. Palfinger ,[1] S. Ruttloff ,[1] M. Belegratis ,[1] *JOANNEUM RESEARCH, Institute for Surface Technologies and Photonics, Weiz, Austria*
10:00-10:15	**Integration of Active Layers into a Multilayer Barrier Stack - Experimental results and theoretical simulation** **F. Ruess**, O. Miesbauer, M. Reinelt, E. Kücükpinar, K. Noller *Fraunhofer Institute for Process Engineering and Packaging IVV, Freising, Germany*	**10:00-10:15**	**R2R process optimization of printed layers for Flexible Organic Photovoltaics using in-line, real time monitoring for Quality Control** E. Mekeridis[1], N. Kontolatis[1], C. Kapnopoulos[2], A. Laskarakis[2], S. Logothetidis[2] *[1] Organic Electronic Technologies P.C. (OET), Thessaloniki, Greece* *[2] LTFN, Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece*
10:15-10:30	**Lateral water vapor diffusion through adhesives and interfaces in flexible organic electronic devices** **M. Top[1]**, S. Kröpke[2], J. Fahlteich[1], C. Boeffel[2], S. Mogck[1] *[1] Fraunhofer FEP, Dresden, Germany, [2] Fraunhofer IAP, Potsdam, Germany*	**10:15-10:30** **PROJECT**	**EU funded SMARTONICS Project** **A. Laskarakis,** S. Logothetidis *LTFN, Department of Physics, Aristotle University of Thessaloniki, Greece*
10:30-10:45	**Silk flexible electrode using conductive polymer for activity measurement** K. Torimitsu[1], H.Takahashi[1], T. Sonobe[1], Y. Takizawa[1], M. Watanabe[1], M. Nishizawa[1], Y. Furukawa[2], S. Tsukada[2], K. Sumitomo[2] *[1] Tohoku University, Dept. of Bioengineering and Robotics, Miyagi Japan; [2] NTT Basic Res. Labs; [3] Morinosato Wakamiya, Atsugi, Kanagawa, Japan*	**10:30-10:45**	**Continuous monitoring of manufacturing processes dedicated to PE** Michel POPOVIC *IN-CORE SYSTEMES, Saint Priest - FRANCE*
10:45-11:00	**I-V characteristics of organic layers, on the base of transport level concept** A. Y. Saunina, V. R. Nikitenko *National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia*	**10:45-11:00** **PROJECT**	**Flex-o-Fab: a pilot manufacturing chain for flexible OLEDs** **D.J.D. Moet** *Holst Centre / TNO, Eindhoven, The Netherlands*

11:00 – 11:30	**Coffee Break** **Posters ISFOE15 1 – Exhibition – Networking** **EXPO FORUM 1**

	Workshop on OPVs 1 (Timber Hall 2) **Chair: A. Laskarakis, LTFN, AUTh, Greece**		
11:30-12:00 **KEYNOTE**	**Reducing energy losses in small-molecule organic photovoltaic cells** Ulrich Hörmann1, Mark Gruber1, Andrew N. Bartynski2, Stefan Grob1, Theresa Linderl1, Mark E. Thompson2,3, **Wolfgang Brütting1** *1Institute of Physics, University of Augsburg, Germany, 2 Department of Chemical Engineering, University of Southern California & 3 Department of Chemistry, University of Southern California, Los Angeles, USA*		
12:00-12:30 **INVITED**	**All-dry processed high efficient perovskite photovoltaic devices** K. Fostiropoulos, A. Ioakeimidis, G. Chouliaras, B. Wolter, C. Christodoulou *Institute Heterogeneous Material Systems, Helmholtz-Zentrum Berlin für Materialien und Energie Hahn-Meitner-Platz 1, 14109 Berlin, Germany*	**12:00-13:45**	**Workshop on Computational Modelling 1 (Timber Hall 1)** **Chairs: E. Lidorikis, University of Ioannina, Greece**
		12:00-12:30 **INVITED**	**Perovskite/Graphene interfaces: a first-principles study** **G. Volonakis**, F. Giustino *Department of Materials, University of Oxford, Parks Road OX1 3PH, Oxford, UK*
12:30-13:00 **INVITED**	**Spin-Sensitive Probing of Charge Transfer and Triplet States in Organic Solar Cells** **Andreas Sperlich**, Stefan Väth, Vladimir Dyakonov *Julius-Maximilian University of Würzburg, Institut of Physics, Würzburg, Germany*	**12:30-12:45**	**Physicochemical Trends in Organic Molecular Crystals: A High-Throughput DFT investigation** Steven Monaco, Sebastian Jezowski, and Bohdan Schatschneider *The Pennsylvania State University, The Eberly Campus, Department of Chemistry, PA, USA*
		12:45-13:00	**Charge transport in π-conjugated polymers: a combined classical-quantum approach to establish structure-property relationships** Y. Olivier[1], V. Lemaur[1], R. Lazzaroni[1], H. Sirringhaus[2], D. Beljonne[1], J. Cornil[1]

			[1] *Laboratory for Chemistry of Novel Materials, University of Mons, Belgium* [2] *Optoelectronics group, Cavendish Laboratory, University of Cambridge, Cambridge, UK*
13:00-13:15	**A systematic study of P3HT:ICBA polymer solar cells and the production of large, 0.4 cm2 area, 6% power conversion efficiency devices** D. Kutsarov, K. Gandhi, C. Mills, S. Ravi P. Silva *Nanoelectronics Centre, Advanced Materials Institute, University of Surrey, Guildford, Surrey, UK*	**13:00-13:15**	**Model of the hole mobility in linear conjugated polymers** P. Toman, M. Menšík, J. Pfleger *Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague Czech Republic*
13:15-13:30	**Influence of substrate heating on a new Benzothiadiazole derivative blended with C60 in organic solar cells** F. Holzmueller, L. Fang, C. Hauenstein, D. Spoltore, O. Zeika, C. Koerner, K. Vandewal, K. Leo *IAPP, TU Dresden, George-Bähr-Straße 1, 01069 Dresden, Germany*	**13:15-13:30**	**Electromagnetic Modeling of Plasmonic Organic Photovoltaics** I. Vagelidis E. Lidorikis *Department of Material Science and Engineering, University of Ioannina, Ioannina 45110, Greece*
13:30-13:45	**Tailor-Designed Diblock Copolymers as Self-Organized Active Layers for OPVs** E.K. Pefkianakis1, A.D. Nega1, M. Girtan2, G.C. Vougioukalakis1, G. Sakellariou1 *1Department of Chemistry, National & Kapodistrian University of Athens, Greece* *2LPHIA, Physics Department LUNAM, Angers University, 2.Bd. Lavoisier, 49045, France*	**13:30-13:45**	**Computational study on the adsorption of prototype organic semiconductors on the Ag surface** **A. Stamateri**[1], G. Volonakis[2], S. Logothetidis[1] [1] *LTFN, Dept. of Physics, Aristotle University of Thessaloniki, Greece* [2] *Dept. of Materials, University of Oxford, Parks Road, Oxford, UK*

13:30 – 15:00	**LUNCH BREAK – NETWORKING** **ISFOE15 Posters 1**

15:00 – 17:30	**Workshop on Laser Technologies (Timber Hall 2)** **Chairs: P. Delaporte, LP3-CNRS, France**		
15:00-15:30 **KEYNOTE**	**High speed multi beam laser processing for flexible electronics** A. Gillner, C. Hördemann *Fraunhofer-Institute for Laser Technology, Steinbachstrasse 15, 52074 Aachen, Germany*		
15:30-16:00 **INVITED**	**Laser processing for large area polymer photonic applications** G. Van Steenberge, E. Bosman, J. Missinne, K. Kaur, S. Naithani, S. Kalathimekkad, P. Joshi, N. Teigell Beneitez, P. Cardile, A. Gamal, A. De Smet, N. Mangal *Centre for Microsystems Technology, imec/Ghent University, Belgium*	**15:30 – 17:30**	**OLED Displays & Lighting (Timber Hall 1)** **Chairs: M. Gioti, Department of Physics, AUTh, Greece**
		15:30-16:00 **INVITED**	**OLED Research at BASF: Simulation and Device Results** **Falk May**, Christian Lennartz, Christian Eickhoff, Peter Murer, Thomas Geßner, Jan Birnstock, Michael Kröger, Zungsun Choi, Soichi Watanabe, Minlu Zhang, Ilona Stengel, Glauco Battagliarin, Ingo Münster, Klaus Kahle, Gerhard Wagenblast, Hannah Mangold *BASF SE, 67056 Ludwigshafen, Germany*
16:00 – 16:15	**High velocity laser printing of conductive microstructures** D. Puerto[1], E. Biver[1,2], C. Constantinescu[1], D. Karnakis[2], A.-P. Alloncle[1], Ph. Delaporte[1] [1] *Aix-Marseille University, CNRS, LP3 – UMR 7341, Marseille, France* [2] *Oxford Lasers Ltd, Oxfordshire, UK*	**16:00 – 16:15**	**Combined electrical & optical analysis of the efficiency roll-off in phosphorescent organic light-emitting diodes** S. Wehrmeister[1], T. D. Schmidt[1], T. Wehlus[2], A. F. Rausch[2], T. C. G. Reusch[2], W. Brütting[1] [1] *Institute of Physics, University of Augsburg, 86153 Augsburg, Germany* [2] *OSRAM OLED GmbH, 93049 Regensburg, Germany*
16:15-16:30	**Printing of metallic structures with tunable porosivity using laser induced forward transfer** S. Winter, M. Zanou, Z. Kotler *Additive Manufacturing Group, Orbotech Ltd. Israel*	**16:15-16:30**	**ITO-free, all-solution processed transparent organic light emitting diodes** M. Zhang, S. Höfle, A. Colsmann *Light Technology Institute, Karlsruhe Institute of Technology, Karlsruhe, Germany*
16:30-16:45	**High speed printing and pattering of metallic nanoparticle inks for chemical sensors on flexible substrates** I. Zergioti[1], D. Puerto[3], M. Makrygianni[1], F. Zacharatos[1], R. Geremia[2], E. Biver[2], St. Leyder[3], D. Karnakis[2], Ph. Delaporte[3] [1] *National Technical University of Athens, Physics Department, Greece;* [2] *Oxford Lasers Ltd, Oxfordshire, UK* [3] *Aix-Marseille University, CNRS, LP3 – UMR 7341, Marseille, France*	**16:30 – 16:45**	**Synthesis and characterization of polyethers based on bis(styryl)anthracene units for the fabrication of yellow light-emitting devices** M. Gioti[1], C. Pitsalidis[1], C. Chaidou[1], C.A. Polyzoidis[1], L. Tzounis[1], A.K. Andreopoulou[2,3], J.K. Kallitsis[2,3], S.Logothetidis[1] [1] *LTFN, Dept. of Physics, Aristotle University of Thessaloniki, Greece;* [2] *Dept. of Chemistry, University of Patras, Patras, Greece;* [3] *Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece*
16:45-17:00	**Flexible glass for organic lasers** C. Foucher, B. Guilhabert, N. Laurand, M. D. Dawson *Institute of Photonics, Department of Physics, University of Strathclyde, Glasgow, UK*	**16:45 – 17:00**	**CuInS2 (CIS) quantum dots (QDs) for application in large-area white QD-LEDs** S. Wolff[1,2], D. Luebke[1,2], A-Ra Hong[3], Ho Seong Jang[3], G. Bacher[2], and E. Nannen[1,2] [1] *Research group „Solid State Lighting" NanoEnergieTechnikZentrum, University Duisburg-Essen, Germany* [2] *Werkstoffe der Elektrotechnik and CeNIDE, University Duisburg-Essen, Duisburg, Germany* [3] *Materials Architecturing Research Center, Korea Institute of Science & Technology (KIST), Republic of Korea*
17:00-17:15	**Laser Direct Writing of Ag Nano-Particle Inks for RF passive Components on Flexible Substrates** F. Zacharatos[1], N. Iliadis[2], J. Kanakis[2], P. Bakopoulos[2], H. Avramopoulos[2] and I. Zergioti[1] [1] *National Technical University of Athens, Physics Department, Greece* [2] *National Technical University of Athens, School of Electrical & Computer Engineering, Greece*	**17:00 – 17:15**	**Hybrid Solution Processed Light-Emitting Electrochemical Cells (LECs)** M. Di Marcantonio[1,2], D. Andrzejewski[1,2,3], S. Wolff[1,3], F. Vollkommer[2], G. Bacher[3], E. Nannen[1,3] *1 Research Group „Solid State Lighting", NanoEnergieTechnikZentrum, University Duisburg-Essen, Germany* *2 OSRAM GmbH, Corporate Techn. - Research & Innovation - Future Luminaires - Organic Lighting, Germany* *3 Werkstoffe der Elektrotechnik and CeNIDE, University Duisburg-Essen, Germany*
		17:15 – 17:30 **PROJECT**	**Printed Logic for Applications of Screen Matrix Activation Systems** C. Boeffel[1], S. Nau[2], E.J.W. List-Kratochvil[2,3], R. Dixon[4], A. Alk[5], S. Choulis[6], F. Hammerschmidt[6], D. Westerberg[7], A.

			Le Loc'h[8], E. Clarke[9], P. Obene[10], W. Williams[11] *[1] Fraunhofer IAP, Germany, [2] NanoTecCenter Weiz, Austria, [3] Graz University of Technology, Austria, [4] Intrinsiq Material Ltd, UK, [5] 3D-Micromac, Germany, [6] Dept. Mechanical Engineering & Materials Science & Engineering, CUT, Cyprus, [7] Acreo Swedish ICT AB, Sweden, [8] Gemalto, France, [9] C-Tech Innovations, UK, [10] PVI Precision Varionic International, UK, [11] PRA Coatings Technology Centre, UK*
		17:30 – 17:45	**Wirelessly Powered Flexible OLED Lighting** J.-H. Han[1], J. Moon[1], Y.-H. Kim[2], S. Cheon[2], J. Lee[1], N. S. Cho[1], B.-G. Yu[1], **J.-Ik Lee[1]** *[1] Soft I/O Interface Research Section, Electronics & Telecommunications Research Institute (ETRI), Korea* *[2] Natual-mimic I/O Interface Res. Section, Electronics & Telecommunications Research Institute (ETRI), Korea*
		17:45 – 18:00	**Charge transport optimization in OLED structures by using ZnO nanowires** S. Polosan *National Institute for Materials Physics, Bucharest-Magurele 077125, Romania*

17:30 – 18:30	**Coffee Break – Posters – Exhibition** **EXPO FORUM 2**

18:30 - 20:30	**PLENARY SESSION NANOTEXNOLOGY 2015 (Grand Petra)** **Introduction: Prof. S. Logothetidis**, NANOTEXNOLOGY Chairman
18:30 – 19:00	**Introduction by Prof. Stergios Logothetidis** NN15 & ISFOE15 Chairman
19:00 – 19:45 **PLENARY**	**Plastic Electronics: Twenty-Five Years and Counting** **D. Bradley** Centre for Plastic Electronics and Department of Physics, Blackett Laboratory, Imperial College London, UK
19:45 – 20:30 **PLENARY**	**All-scale hierarchical thermoelectrics heat to electrical conversion** **M. Kanatzidis** Department of Chemistry, Northwestern University, USA
21:00	**DRINKS & OFFICIAL DINNER (ISFOE15 & NN15)** **PORTO PALACE CONFERENCE CENTRE & HOTEL - ROOF GARDEN**

Wednesday 8 July 2015

08:00	**Registration**

09:00–11:00	**Workshop on OLAE Materials 4 (Timber Hall 2)** **Chairs: A. Laskarakis, LTFN, AUTh**		
09:00-09:30 **KEYNOTE**	**Organic Electronics: the Endless Frontier** **B. Kippelen** *Georgia Institute of Technology, Center for Organic Photonics and Electronics, USA*		
09:30-10:00 **INVITED**	**On the origin of light absorption in organic semiconductors** Mariano Campoy-Quiles *ICMAB, Spain*	**09:30 - 11:00**	**Workshop on Graphene 1 (Crystal Hall) (ISFOE15+NN15)** **Chairs: E. Lidorikis, University of Ioannina, Greece**
		09:30–10:00 **INVITED**	**Ultrafast photonics with graphene and related materials** D. Popa *Cambridge Graphene Centre, University of Cambridge,Cambridge CB3 0FA, UK*
10:00 –10:30 **INVITED**	**Smart chemical strategies for high performance polymers in organic devices** S. Janietz Dept. of Polymers and Electronics, Fraunhofer IAP, Germany	**10:00 –10:30** **INVITED**	**Fully exfoliated graphenide solutions, Few Layer Graphene from Food Waste and Applications** A. Pénicaud,[1] K. Kampioti,[1] K. Huang,[1] G. Bepete,[1] Y. Wang,[1] C. Drummond,[1] C. Ferreira de Matos,[2] D. Pennington,[3,4] J. Joaug,[3,4] C. Paukner,[4] C. Jaillet-Bartholome,[1] A. Derré,[1] F. Galembeck,[5] A. J. G. Zarbin[4] [1] Centre de recherché Paul Pascal – CNRS, Université de Bordeaux, France, [2] Federal university of Parana, Brazil, [3] GasPlas, Oslo, Norway, [4] Cambridge Nanosystems, Cambridge, United Kingdom, [5] University of Campinas, Brazil
10:30–10:45	**R2R Encapsulation Process and Degradation Study of OPVs on Flexible Substrates** S. Tsimikli1, C. Kapnopoulos2, E. D. Mekeridis1, C. Polizoidis2, N. Kontolatis1, I. Sismanidis1, A. Laskarakis2, S. Logothetidis2 *1 Organic Electronic Technologies P.C. (OET), Antoni Tritsi 21B, Thessaloniki, 57001, Greece* *2 Laboratory for Thin Films, Nanosystems and Nanometrology (LTFN), Department of Physics Aristotle University of Thessaloniki, Thessaloniki, 54124, Greece*	**10:30–10:45**	**Electrospun Graphene/PCL Scaffolds for Neural Stimulation** O. M. Duman1, A. Sendemir Urkmez2 1University of Fribourg, Department of Biology, Fribourg, Switzerland 2Ege University, Bioengineering Department, Bornova, Izmir, Turkey
10:45–11:00	**Iodide-Capped PbS Quantum Dots: Thin Film Application in Photovoltaic** Shaimaa A. Mohamed1,2,, S. Yakunin3 , M. Sytnyk3, M. K. El-Mansy4, S. S. A. Obayy2, N.S. Sariciftci1, D. A. M. Egbe1, W. Heiss3, P. Stadler1 *1. LIOS, Physical Chem., Johannes Kepler University Linz, Austria* *2. Center for Photonic and Smart Materials (CPSM), Zewail City of Science and Technology, Egypt* *3. Institute of Semiconductor & Solid State Physics, Johannes Kepler Univ. Linz, Austria* *4. Department of Physics, Faculty of Science, Benha University, Egypt*	**10:45–11:00**	**Facile synthesis of Fe2O3-graphene nanocomposites by electrochemistry** Zhen Yuan Xia1, Luca Ortolani2, Vittorio Morandi2, Vittorio Bellani3, Vincenzo Palermo1 *1 Istituto per la Sintesi Organica e la Fotoreattività - Consiglio Nazionale delle Ricerche, Bologna, Italy* *2 Istituto per la Microelettronica e Microsistemi - Consiglio Nazionale delle Ricerche, Bologna, Italy* *3 Dipartimento di Fisica and CNISM, Universitá degli Studi di Pavia, Pavia, Italy*

11:00 – 11:30	**Coffee Break – Posters – Exhibition – Networking** **EXPO FORUM 3**

	Workshop on Computational Modelling 2 (Timber Hall 2) **Chairs: E. Lidorikis, University of Ioannina, Greece**		
11:30-12:00 **INVITED**	**Emerging electronic materials: insights from first-principles studies** L. Tsetseris *Department of Physics, National Technical University of Athens, Greece*		**Workshop on Graphene 2 (Crystal Hall) (ISFOE15+NN15)** **Chairs: D. Popa University of Cambridge, UK**
12:00-12:15	**Towards rational design of high-performance organic electrodes for energy harvesting: computational derivation of guidelines and innovation strategies** D. Tomerini1,2, C. Gatti3, C. Frayret1,2* 1 Laboratoire de Réactivité et Chimie des Solides, UMR CNRS 7314, Université de Picardie Jules Verne, 33, Rue Saint-Leu, 80039 Amiens, France 2 Réseau sur le Stockage Electrochimique de l'Energie (RS2E), FR CNRS 3459, France 3 CNR-ISTM, Istituto di Scienze e Tecnologie Molecolari, via Golgi 19, 20133, Milano, Italy	**12:00-12:30** **INVITED**	**Large-scale Manufacturing of Graphene and Related Materials Inks for Flexible (Opto)electronics** F. Torrisi *Cambridge Graphene Centre, Department of engineering, University of Cambridge, UK*
12:15-12:30	**Virtual Screening for Organic Electronic Materials** Jacob Gavartin*, Mathew D. Halls, David J. Giesen, Thomas F. Hughes, Alexander Goldberg, Yixiang Cao, H. Shaun Kwak Schrödinger Inc., San Diego, California, 92122, U.S.A.		
12:30-12:45	**DC modeling of full-printed OTFTs using a modified TFT Amorphous-Si: H model** M. A. Sankhare1*, E. Bergeret1, P. Pannier1, and R. Coppard2	**12:30-12:45**	***Long, 140 ns electron spin lifetime in chemically synthesized graphene and related nanostructures and its strong interplay between the surface bound oxygen***

	1IM2NP, UMR 7334, IMT-Technopôle de Château-Gombert, FRANCE 2CEA-Liten, DTNM, Laboratoire des composants imprimés, 38054 Grenoble, France		*Bálint Náfrádi1, Mohammad Choucair2, László Forró1* *1Institute of Physics of Complex Matter, École polytechnique fédérale de Lausanne, Lausanne, Switzerland.* *2School of Chemistry, The University of Sydney,2006, Sydney, Australia*
12:45-13:00	**Molecular Modeling of Active Materials in the Vicinity of Ag Nanoparticles** C. Trapalis, E. Lidorikis, D.G. Papageorgiou Department of Material Science and Engineering, University of Ioannina, Ioannina 45110, Greece	**12:45-13:15 INVITED**	**Graphene Coating for Remarkable Corrosion Resistance: Current State and Challenges** Raman Singh *Department of Mechanical and Aerospace Engineering, Department of Chemical Engineering, Monash University (Melbourne), Vic 3800, Australia*
13:00-13:15	**Field-dependent transport level and mobility in disordered organic materials** V. R. Nikitenko, N. A. Sannikova, M. N. Strikhanov National Research Nuclear University MEPhI (Moscow Engineering Physics Institute) Moscow, Russia	**13:15-13:30 PROJECT**	**Tuning the Properties of Graphene by Laser Induced Two-Photon Oxidation** P. Myllyperkiö1, J. Aumanen1, A. Johansson2, J. Koivistoinen1, M. Pettersson1 Departments of Chemistry1 and Physics2, Nanoscience Center, Univ. Jyväskylä, Finland
13:15-13:30	**Absorption enhancement in a novel hybrid silicon diamond nanowire for solar cell applications** M. Hussein, 1,2, M.F.O. Hameed,1,3 N.F.F. Areed,1,4, S.S.A. Obayya,1 1Centre for Photonics and Smart Materials, Zewail City of Science and Technology, Giza 12588, Egypt 2Ain Shams University, Faculty of Science, Department of Physics, Cairo, Egypt 3Mansoura Univ., Faculty of Engineering, Dept Mathematics and Engineering Physics, Mansoura, Egypt 4Mansoura University, Mansoura, Egypt		

13:30 – 15:00	**Lunch Break** **ISFOE15 Posters 2** **(NN15 W4, W5 Posters)**

15:00 – 17:00	**OTFTs 2 (Timber Hall 2)** **Chair: A. Briseno, Univ. Massachusetts, USA**	**15:00-17:30**	**Workshop on Bioelectronics (ISFOE15 + NN15 W4) (Dock Six)** **Chair: M. Irimia-Vladu Joanneum Research Forschungsgesellschaft mbH, Austria**	**15:30-18:30**	**Workshop on Graphene 3 (Crystal Hall) (ISFOE15+NN15)** **Chairs: F. Torrisi, University of Cambridge, UK**
15:00-15:30 KEYNOTE	**Imperceptible sheet-type active matrix sensors for cyber–physical systems** **Sekitani Tsuyoshi** *Inst. Scientific and Industrial Research, Osaka Univ., Japan*	**15:00-15:20 INVITED**	**Multi parameter monitoring of live cells using organic electronics** R.M. Owens *Department of Bioelectronics, Ecoles des Mines de St. Etienne Centre Microelectronique de Provence, Gardanne, France*		
15:30-16:00 INVITED	**Advanced materials and patterning paradigms for plastic electronics, energy generation & harvesting systems** **T. Anthopoulos** *Dept. of Physics, Imperial College London,* UK	**15:20-15:40 INVITED**	***Organic electronics biosensors for point of care applications*** M. Magliulo, M.Y. Mulla, K. Manoli, D. De Tullio, P. Seshadri, A. Tiwari, G. Palazzo, L. Torsi *Dipartimento di Chimica, Università degli Studi di Bari, Bari, Italy*	**15:30-16:00 INVITED**	**Solution processable graphene derivatives and related 2D crystals for high efficient organic and perovskite solar cells** E. Kymakis *Center of Materials Technology and Photonics & Electrical Engineering Department, TEI Crete, Greece*
		15:40-16:00 INVITED	**Biomolecular detection via plasmonic nanoplates integrated with OECTs** Margaret Brennan Fournet *Dept Bioelectronics, Ecole Nationale Supérieure des Mines, CMP-EMSE*		
16:00-16:15	**Development of printed capacitive sensors for liquid level measurement in composite materials vessels** M. Ribeiro, J. Fonseca, A. Pinto, A. Montes, J. Gomes *CeNTI - Centre for Nanotechnology and Smart Materials, Portugal*	**16:00-16:15**	***Imaging and chemical surface analysis of biomolecular functionalization of Mach-Zehnder on-chip immunosensors*** A. Budkowski[1], P. Petrou[2], K. Gajos[1], M. Angelopoulou[2], K. Awsiuk[1] , A. Bernasik[3], M.M. Marzec[3], J. Rysz[1], K. Misiakos[4], I. Raptis[4], S.Kakabakos[2] *1Inst. of Physics, Jagiellonian University, Kraków, Poland* *2INRaSTES, National Center for Sci.Research "Demokritos", Greece* *3FPACS & ACMiN, AGH-University of Science & Technology, Poland* *4Inst. Nanoscience & Nanotechnology, NCSR Demokritos, Greece*	**16:00-16:30 INVITED**	**Polarized spin and valley transport across ferromagnetic silicene junctions,integer and half-integer quantum Hall effect** **P. Vasilopoulos** *Concordia University, Department of Physics, Montreal, Quebec, Canada*
16:15-16:30	**Reliability of organic electrophoretic displays under long-term irradiation** M. Beck, M. Pfaff *Brandenburg Technical University, Germany*	**16:15-16:30**	**Fast response aptamer modified biosensors based on flexible carbon nanotube film** I. Komarov[1], I. Bobrinetsky[1], A. Golovin[2], A. Zalevsky[2], R. Aidarkhanov[2] *1. Center for Probe Microscopy and Nanotechnology, National Research University of Electronic Technology Moscow, Russia.* *2. Faculty of Bioengineering and Bioinformatics, Lomonosov Moscow State University, 119991 Moscow, Russia*		
16:30-16:45	**Temperature dependence of contact effects in top-gate staggered p-channel OTFTs with high performance made on flexible substrate** M. Rapisarda, A. Valletta, S. Calvi, G. Fortunato, L. Mariucci *CNR-IMM Roma, Italy*	**16:30-17:00 INVITED**	**MC3T3-E1 cell response of PVD-grown antibacterial thin films on piezoelectric PVDF Substrates for sensor applications** S. Carvalho[1,7], S. M. Marques[1], P. Rico[2,3], I. Carvalho[4,5], J. L. G. Ribelles[2,3,6], , S. Lanceros-Mendez[8] *1 GRF-CFUM, Physics Department, University of Minho, Portugal* *2 Center for Biomaterials and Tissue Engineering, Universitat*	**16:30-17:00 INVITED**	**Dirac Fermion Transport in Graphene through Multiple Magnetic Barriers: Modulation of Ballistic Conductance by Doping and Temperature** N. Myoung and E. Lidorikis *Department of Material Science and Engineering, University of Ioannina, Ioannina 45110, Greece*

16:45-17:00	**Study on fabrication of conducting PEDOT patterns on PET Film by liquid phase depositional polymerization of EDOT and photochemical reaction with 172 nm VUV** JIan-Xiong Li, Yaxiao Ma, Shaoying Lv South China University of Technology Guangzhou, P.R.China		*Politècnica de València, Spain* *3 CIBER Bioingeniería, Biomateriales y Nanomedicina Valencia, Spain* *4 Dept. Control Engineering, Czech Techn. Univ., Czech Republic* *5 CEB, LIBRO, University of Minho, Portugal* *6 Centro de Investigación Príncipe Felipe, Valencia, Spain* *7 SEG-CEMUC Mechanical Engineering Dept., Univ. Coimbra, Portugal* *8 Physics Department, University of Minho, Braga, Portugal*	**17:00-17:15**	**Atomistic simulation of discrete breathers in single layer graphene** *A. Fraile1, E. N. Koukaras2, N. Lazarides1, K. Papagelis2, G. P. Tsironis1* *1CCQCN, Department of Physics, University of Crete, Heraklion, Greece* *2 Institute of Chemical Engineering Sciences, FORTH, Greece*
	Workshop on Smart Textiles (Timber Hall 2) **Chairs: L. Van Langenhove, Univ. Gent, Belgium**				
16:45-17:15 INVITED	To be finalized	**17:00-17:15**	**In vitro extracellular stimulation and electrical recordings of quasi-periodic spikes in brain cancer cells** P. R. F. Rocha[1], P. Schlett[1], H. L. Gomes[2,3], Paul W. M. Blom[1], D. M. de Leeuw[1] 1Max Planck Institute for Polymer Research, Mainz, Germany 2Universidade do Algarve, FCT, campus de Gambelas, Faro, Portugal 3Instituto de Telecomunicações, Av. Rovisco, Lisboa, Portugal	**17:15-17:45 INVITED**	**Linear and nonlinear graphene plasmonics** Yuliy V. Bludov *Centro de Física and Departamento de Física, Universidade, do Minho, Campus de Gualtar, Braga 4710-057, Portugal*
17:15-17:30	**Production and functionalization of PVDF-based piezoelectric filaments** B. Glauss, G. Seide, T. Gries *Man-made fibre technology, RWTH Aachen Univ., Institut für Textiltechnik, Aachen, Germany*	**17:15-17:30**	**Biofunctionalized gold nanoparticles as future tools for biosensors** *D. Arvaniti1, V. Karagkiozaki1, A. Papamichail1, C. Polyzoidis1,D. G. Fatouros2, S. Logothetidis1* *1 LTFN, Physics Dept., Aristotle University of Thessaloniki, Greece* *2Department of Pharmaceutical Technology, School of Pharmacy, Aristotle University of Thessaloniki, Greece*		
17:30-17:45	**A Contemporary Wearable Electronic Fashion Design with Thermal Regulation** Li Li, Jiahui Tong *Institute of Textiles and Clothing, the Hong Kong Polytechnic University Hong Kong*	**17:30**	**Parallel Session ISFOE15 and W3 – Nanomedicine & W4 - Bioelectronics of NN15 (Dock Six)** **Chairs: R.Owens, Centre Microelectronique de Provence, Gardanne, France**	**17:45-18:00**	**Ballistic transport in defective silicene and germanene nanoribbons: A first-principles study** K. Iordanidou1, M. Houssa1, B. van den Broek1, G. Pourtois2, V.V. Afanas'ev1, A. Stesmans1 *1Semiconductor Physics Laboratory, Department of Physics and Astronomy, University of Leuven, Belgium; 2IMEC, Leuven, Belgium*
17:45-18:00	**Development of textiles structures for energy generation and storage** A. Marques, A. Pinto, M. Ribeiro, J. Gonçalves, N. Durães, N. Cardoso, J. Gomes *CeNTI - Centre for Nanotechnology and Smart Materials, Portugal*	**17:30-17:50 INVITED**	**Bio-mimetic Nanostructures Self-assembled from Genetically Engineered Phage or Fusion Proteins: Towards Applications in Biosensing and Biomedicine** A. Liu*, F. Wang, P. Liu, and H. Qi *Laboratory for Biosensing, Qingdao Institute of Bioenergy & Bioprocess Technology, Chinese Academy of Sciences, Qingdao 266101, China.*		
		17:50-18:10 INVITED	**High performance biosensors based on solution-gated flexible transistors with functionalized gate electrodes** Feng Yan *Department of Applied Physics, The Hong Kong Polytechnic University, Hong Kong, China*	**18:00-18:15**	**Modeling Plasmon-Enhanced VIS-MIR Graphene Photodetectors** S. Evangelou, A. Dagkli and E. Lidorikis *Department of Material Science and Engineering, University of Ioannina, Ioannina 45110, Greece*
		18:10- 18:30 Invited	**Organic Electronics with Naturally-occurring Materials for Sustainable Future** Mihai IRIMIA-VLADU *Joanneum Research Forschunsgesellschaft mbH, Weiz, Austria*	**18:15-18:30**	**Combined theory of carrier transport in Graphene/n-Semiconductor Schottky Barriers (SB) Part I: New Thermionic emission model for G/n-Semiconductor SB** AC Varonides *University of Scranton, USA*
		18:30-18:45	**Highly performance OECTs made by inkjet-printing for customized bioelectronics devices** E. Bihar1 2, M Saadaoui1, G Malliaras1, T Hervé2 *1 Department of Bioelectronics, Ecole Nationale Supérieure des Mines, CMP-EMSE, MOC, 13541 Gardanne, France* *2Microvitae Technologies, 1480 Avenue d'Arménie, France*	**18:30-18:45**	**Bound states in the continuum: localization of Dirac-like fermions** L. Rosales 1, N. Cortes 1, M. Pacheco1, L. Chico2 and P.A. Orellana1 *1 Physics Department, Universidad Técnica Federico Santa María, Chile* *2 Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas (ICMM-CSIC) Madrid, Spain*

20:00	**NANOTEXNOLOGY 2015 BEACH PARTY**

Thursday 9 July 2015

08:00 – 20:00	**Registration**

09:00 – 11:00	**Workshop on OLAE Materials 5 (Timber Hall 2)** **Chairs: A. Laskarakis, LTFN, AUTh**		
09:00 – 09:30 **KEYNOTE**	**Polymer Photonic Nano-structuring and Patterning** **Donal D.C. Bradley** *Centre for Plastic Electronics and Department of Physics, Blackett Laboratory, Imperial College London, South Kensington Campus, London SW7 2AZ, UK*		
09:30 – 10:00 **INVITED**	**Ultrafast optical spectroscopy unveils charge transport in polymeric carbon nitride: dimensionality, mobility and functionality** C. Merschjann *Fachbereich Physik, Freie Universität Berlin, Berlin, Germany*	**09:30–11:00**	**Workshop on Graphene & Related Materials 4 (Timber Hall 1)** **Chair: R. Singh, Monash University (Melbourne), Australia**
		09:30–10:00 **INVITED**	**Title to be announced soon** F. Bonnacorso Istituto Italiano di Tecnologia, Graphene Labs, Italy
10:00 – 10:15	**Degradation of organic thin films by monochromatic UV/VIS irradiation investigated by photoelectron spectroscopy (UPS, XPS)** E. Darlatt1, B. Muhsin2, R. Rösch2, M. Kolbe1, A. Gottwald1, C. Lupulescu3, F. Roth4, W. Eberhardt3,4, H. Hoppe2, M. Richter1 *1 PTB, Berlin, Germany; 2 Institute of Physics - TU Ilmenau, Germany; 3 Institute of Optics+Atomic Physics, TU Berlin, Germany; 4 Center for Free-Electron Laser Science/DESY Hamburg, Germany*	**10:00–10:15**	**Graphene Oxide-Metal Composite Electrodes for Electrochemical Capacitors** F.Eylul Sarac1, Ugur Unal1,2,3 *1 Graduate School of Science and Engineering, Koç University, Istanbul, Turkey ; 2 Chemistry Department, Koç University, Turkey ; 3 Koc University Surface Science and Technology Center (KUYTAM), Koç University, Turkey*
10:15 – 10:30	**Improvement of gravure-printed inverted OPV performance by enhancement of ZnO layer properties** C.A. Polyzoidis, C. Kapnopoulos, A. Laskarakis, L. Tzounis, E. Mekeridis, S. Tsimikli, M. Seitanidou, S. Logothetidis *LTFN, Dept. of Physics, Aristotle University of Thessaloniki, Greece*	**10:15–10:30**	**Resonance nonlinear waves in waveguide with graphene monolayer** G.T.Adamashvili Technical University of Georgia, Kostava str. 77, Tbilisi, Georgia
10:30 – 10:45	**Electrochormic properties with polymer gel electrolyte of organic ions** Sohui LEE, Kyutae PARK, Haekyoung Kim *School of Materials Science and Engineering, Yeungnam University, Republic of Korea*	**10:30–10:45**	**Giant Near-Field Magnetic Wave Absorption Enhanced by Diamagnetic Ring Currents in Graphenes** Sang Woo Kim[1,2], Dong-Gyun Kim[2], Min-Woo Gang[2], Junmo Kang[3], Jae-Boong Choi[3,5], Byung Hee Hong[3,4] *[1] Clean Energy Research Center, Korea Institute of Science and Technology, Seoul, Republic of Korea; [2] Clean Energy & Chemical Engineering, University of Science and Technology (UST), Seoul, Korea; [3] SKKU SAINT, HINT, Sungkyunkwan University, Korea; [4] Dept Chemistry, Seoul National University, Korea; [5] School of Mechanical Engineering, Sungkyunkwan University, Korea*
10:45 – 11:00	**Use of Cu-Ag bi-layer films in dielectric/metal/dielectric transparent electrodes to widen their spectra of transmittance** J. C. Bernède1*, L. Cattin2, M. Hssein1,3, S. Tuo1, M. Addou3. *1- L'UNAM, Université de Nantes, MOLTECH-Anjou, CNRS, France ; 2- Univ. Nantes, Institut des Matériaux Jean Rouxel (IMN), CNRS, France ; 3- LOPCM, Université Ibn Tofail, Faculté des Sciences, Morocco*	**10:45–11 :00**	**Defect Engineering in Graphene Monolayers to Quantify different Carrier Scattering Mechanisms** Pawan Kumar Srivastava1, Subhasis Ghosh2 *1Advanced Instrumentation Research Facility, Jawaharlal Nehru University* *2School of Physical Sciences, Jawaharlal Nehru University, New Delhi-110067 (India)*
11:00 – 11:30	**Coffee Break - POSTERS – Exhibition - Networking**		

11 :30 – 14:00	**Workshop on OPVs (Timber Hall 2)** **Chair: K. Fostiropoulos, HZB, Germany**	**11:30–13:30**	**Workshop on Graphene & Related Materials 5 (Timber Hall 1)** **Chairs: F. Bonnacorso**
11:30-12:00 **KEYNOTE**	**Understanding Morphology Evolution and Device Performance.** **Thomas P .Russell** *Polymer Science and Engineering Department, University of Massachusetts, Amherst, MA 01003*		
12:00-12:30 **INVITED**	**Stability of OPV and Current Application Showcases** Tobias Sauermann Belectric OPV GmbH Landgrabenstr. 94, 90443 Nürnberg, Germany	**12:00-12:30** **INVITED**	**Mechanical performance of a prototype graphene-based touch panel display** G. Anagnostopoulos1, Z. Li2, I. A. Kinloch2, R. J. Young2, K. S. Novoselov3, C. Y. Lu4 , J. Parthenios1, C. Galiotis1,5 and K. Papagelis1,6 *1FORTH/ICE-HT, Patras, Greece; 2School of Materials, Univ. of Manchester, UK; 3School of Physics and Astronomy, Univ. of Manchester, Oxford Road, Manchester, UK; 4BGT Materials Limited, 2.312 Photon Science Institute, University of Manchester, UK; 5Department of Chemical Engineering, University of Patras, Greece; 6Department of Materials Science, University of Patras, Greece*
12:30 – 12:45	**Silver nanowires spray-coating on flexible substrates as the transparent electrode in organic photovoltaic devices** Gildas LAURANS, Laurence VIGNAU, Pascal TARDY *Laboratoire de l'Intégration du Matériau au Système, Université de Bordeaux, , France*	**12:30– 12:45**	**Large-area graphene synthesis over platinum surfaces by catalytic CVD: towards biosensor microdevices** L. Assaud1,2,3, H. Vergnes1, D. Evrard2, L. Salvagnac3, V. Conédéra3, P. Gros2, P. Temple-Boyer3, B. Caussat1 1 CNRS, Laboratoire de Génie Chimique, Toulouse, France ; 2 Université de Toulouse, UPS, INPT, Laboratoire de Génie Chimique, Toulouse, France ; 3 Laboratory for Analysis and Architecture of Systems, Toulouse, France
12:45 – 13:00 **PROJECT**	**A Universal Strategy for efficiency enhancement of Organic Photovoltaic Devices via incorporation of Plasmonic metal Nanoparticles** **G. Kakavelakis[1]**, E. Stratakis[1,2], E. Kymakis[1]	**12:45– 13:00** **PROJECT**	**Hybrid Solar Cells based on Graphene Anode Electrodes** E. M. Pechlivani, D. Papas, A. Zachariadis, A. Papamichail, A. Laskarakis S. Logothetidis *Lab for Thin Films, Nanosystems & Nanometrology (LTFN), Department of Physics, Aristotle University of*

	[1]Technological Educational Institute Crete, Center of Materials Techn. & Photonics, Greece [2] Institute of Electronic Structure and Laser (IESL -FORTH), Greece		*Thessaloniki, 54124 Thessaloniki, Greece*
13:00 – 13:15	**Graphene as a buffer layer for small molecule organic solar cell devices** B. Wolter[1], C. Christodoulou[1], G. Peschel[2], I. Lauermann[1], K. Fostiropoulos[1] *[1] Helmholtz Center Berlin (Institute for Heterogenous Material Systems), Berlin, Germany* *[2] Fritz-Haber-Institute der Max-Planck-Gesellschaft (Dept Chemical Physics), Berlin, Germany*	**13:00– 13:15**	**Graphene covalently functionalized with polymer for nonvolatile rewritable memory** Luxing Wang, Bin Zhang, Yu Chen *Key Lab for Advanced Mat., Inst. of Applied Chemistry, East China Univ. Science & Technology, Shanghai, China*
13:15 – 13:45 INVITED	**Non-Fullerene based Heterojunction Films for Organic Photovoltaics and Retinal interface** K. S. Narayan *Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur, Bangalore 560064 India*	**13:15-13:30**	**Fluorinated graphene films from functionalized graphene suspension** *N*.A. Nebogatikova1, I.V. Antonova1,2, V.Ya. Prinz1 *1 Institute of Semiconductors Physics SB RAS, Russia, 630090, Novosibirsk, Lavrent'ev av. 13* *2 Novosibirsk State University, Russia, 630090, Novosibirsk, Pirogov str. 2*
13:45– 14:00	**Novel Design of Thin Film Solar Cell Based On Amorphous Silicon Nano-Rods** Muhammad H. Muhammad [1] , Mohamed F. O. Hameed [1,2], **S. S. A. Obayya** [1*] *[1] Centre for Photonics and Smart Materials, Zewail City of Science and Technology, Egypt* *[2]Faculty of Engineering, Mansoura University, Mansoura, Egypt*		

13:30 – 15:30	**LUNCH BREAK – NETWORKING - ISFOE15 POSTER SESSION II**

15:30 – 18:15	**Workshop on Manufacturing for Industrial Applications 3 (Crystal Hall)** **Chair: A. Laskarakis, LTFN, AUTh**	**15:30 – 17:30**	**Workshop on Graphene & Related Materials 6 (Timber Hall 1)** **Chair: K. Papagelis, University of Patras, Greece**
15:30 –16:00 INVITED	**Two-Step Nucleation and Its Potential to Enable High Performance Large-Area Organic Electronics** **A. Amassian** *Solar and Photovoltaic Engineering Research Center (SPERC), Division of Physical Sciences and Engineering, King Abdullah University of Science and Technology (KAUST)*	**15:30 –16:00 INVITED**	**Strain Engineering in two dimensional atomic crystals** D. Anestopoulos[1], S. Grammatikopoulos[1], C. Androulidakis[1], K. Papagelis[1,2], C. Galiotis[1,3] and J. Parthenios[1] *1 FORTH, Institute of Chemical Engineering and High Temperature Processes, Patras, Greece; 3 Dept. Materials Science, University of Patras, Greece; 4 Dept Chemical Engineering, University of Patras, Greece*
16:00 – 16:30 INVITED	**Flexible & Large-Area Organic Electronics: Equipment Solutions to transfer Processes from Lab to Fab** **N. Meyer** *COATEMA, Germany*	**16:00 – 16:30 INVITED**	**Graphene ballistic high frequency integrated circuits** G. Deligeorgis1, R.Yakimova2, G.Stavrinidis1, G.Konstantinidis1 *1 FORTH – IESL Microelectornics, Greece; 2 Dept. Physics, Chemistry, and Biology, Linköping University, Sweden*
16:30 – 17:00 INVITED	**Challenging developments for advanced R2R printing application for organic electronics** **A. Glawe** *KROENERT GmbH & Co KG, Germany*	**16:30 – 16:45**	**Production of high quality MoS2 crystals of various thickness and stacking sequence** A. Michail1,4, K. Papagelis1,2, C. Galiotis1,3, J. Parthenios1 *1 Institute of Chemical Engineering Sciences, FORTH, Greece; 2 Dept. Materials Science University of Patras, Greece; 3 Dept. Chemical Engineering University of Patras, Greece; 4 Dept. Physics University of Patras, Greece*
		16:45 – 17:00	**Preparation and Property Enhancement of Reduced Graphite Oxide/Polyaniline Containing Nanofibers Prepared Via Electrospinning for Artificial Muscle Applications** *S. Ghobadi1, S. Mehraeen1, M. Papila1, F. C. Cebeci1, 2, S. A. Gursel1, 2* *1Faculty of Engineering and Natural Sciences, Sabanci University, Istanbul, Turkey;* *1Sabanci Univ. Nanotechnology Research & Application Center, Sabanci University, Turkey*
17:00 – 17:30 INVITED	**Towards the development of printed semitransparent OPV modules** M.M. Voigt1, F.Machui1, P.Maisch1, P. Kubis1, F. Fecher1, L. Lucera1, F. Guo2, K. Forberich2, H.D. Schmidt1, H.J.E. Egelhaaf1, C.J. Brabec1,2 *1 ZAE Bayern Regenerative Energies, Haberstrasse 2a, 51068 Erlangen* *2 University of Erlangen, i-MEET, Martensstrasse 7, 51068 Erlangen*	**17:00 – 17:15**	**Optimizing the preparation parameters of GO and r-GO using improved method** Marwa Fathy1, Abd El Hady B. Kashyout1, Aya Gomaa2, Fatma Taher2, Magda El-Fass2 *1 Electronic Materials Department, Advanced Technology & New Materials Institute, SRTA-City, Alexandria, Egypt; 2 Chemistry Department, Al-Azhar University, Cairo, Egypt*
		17:15 – 17:30	**Mass spectrometric method to probe a graphene on copper by using argon cluster ions** K. Mochiji, N. Inui, R. Asa, and K. Moritani *Graduate School of Engineering, University of Hyogo, Hyogo, 671-2280, Japan*
17:30 – 17:45	**Analysis of Geometric Modeling of Slot Die Lips** N. Rikita *R&D Marketing Division, Mitsubishi Materials Ryotec, Tokyo, Japan*		
17:45 – 18:00	**Inkjet Printed Organic Light-emitting Electrochemical Cells for Disposable Lab-on-chip Applications Manufactured at Ambient Atmosphere** Z. Shu1,2; F. Kemper1,2, O. Pabst1,2, E. Beckert2, R. Eberhardt2, A. Tünnermann1,2 *[1] Institute of Applied Physics, Abbe Center of Photonics, Friedrich Schiller University Jena, Jena, Germany; [2] Fraunhofer Institute for Applied Optics and Precision Engineering IOF, Department of Precision Engineering, Jena, Germany*		
18:00 – 18:15	**Preparation of highly strain sensitive all organic materials in controlled manner** V. Lebedev, 1 V. Laukhin,2, 3E. Laukhina,2 C. Rovira,1 and J. Veciana1 *1 Institut de Ciencia de Materials de Barcelona (ICMAB-CSIC), Spain; 2 CIBER de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Spain; 3 Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain*		
18:15 – 18:30	**Young Researcher Award for Best Oral and Best Poster Presentations - Closing Remarks and Discussion - End of ISFOE15**		

POSTERS

	POSTER GROUP 1 **Monday 6 July: Poster Display & Presentations** **Tuesday 7 July: Poster Display** **Nanomaterials: Organic Semiconductors, Electrodes, Barriers, Hybrids**
P1-1	**Study of the new diketopyrrolopyrrole derivatives for organic photovoltaics** J.Honova, A. Kovalenko, M. Vala, M. Weiter *Faculty of Chemistry, Brno University of Technology, Purkynova 118, Brno 612 00, Czech Republic*
P1-2	**Functional low-band gap electron donors and their copolymeric and hybrid structures for organic electronics** S. Aivali1, S. Kakogianni1, C. Anastasopoulos1, A. K. Andreopoulou1,2, J. K. Kallitsis1,2 *1Department of Chemistry, University of Patras, Rio 26504, Greece* *2Institute of Chemical Engineering Science Foundation of research Technology Hellas FORTH/ICE-HT, Patras 26504, Greece*
P1-3	**Performance effect of P3HT:PC60BM and P3HT:PC70BM based polymer solar cells via novel copolymer additives** E. Chatzigeorgiou1, A. Papamichail1, A. Zachariadis1, S. Kakogianni2, J.K. Kallitsis2,3, A.K. Andreopoulou2,3, C. Kapnopoulos1, C. Polyzoidis1, K. Kyriazoudis1, A. Laskarakis1, C. Gravalidis1, S. Logothetidis1 1 Lab for Thin Films-Nanosystems & Nanometrology (LTFN), Department of Physics, Aristotle University of Thessaloniki, GR54124 Thessaloniki, Greece 2 Department of Chemistry, University of Patras, University Campus, Rio-Patras GR26504, Greece 3 Foundation for Research and Technology Hellas, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Platani Str., Patras GR26504, Greece
P1-4	**Effect of various Anode Buffer Layers (ABL) on the performance of small molecule vacuum deposited OPVs** G. Nomikos, A. Papamichail, K. Kyriazoudis, A. Zachariadis, S. Logothetidis *Laboratory for Thin Films-Nanosystems and Nanometrology (LTFN), Physics Department, Aristotle University of Thessaloniki, GR-54124, Thessaloniki, Greece*
P1-5	**Derivatives of tripehenylamine with the naphthalimide moieties linked via ethynyl-containing linkages as effective hole-transporting materials** Dalius Gudeika1, Juozas Vidas Grazulevicius1, Dmytro Volyniuk1, Gytis Juska2, Vygintas Jankauskas2, Gjergji Sini3 *1 Department of Polymer Chemistry and Technology, Kaunas University of Technology, Radvilenu pl. 19, LT-50254 Kaunas, Lithuania Fax: +37037 300152; Tel: +37037 300193* *2 Department of Solid State Electronics, Vilnius University, Sauletekio aleja 9, LT-10222 Vilnius, Lithuania* *3 Laboratoire de Physicochimie des Polymères et des Interfaces, EA 2528 Université de Cergy-Pontoise, 5 mail Gay-Lussac, 95031 Cergy-Pontoise*
P1-6	**Morphological influences on the open circuit voltage in small molecule bulk solar cells** Xia Hao1, Shenghao Wang1, Takeaki Sakurai1 and Katsuhiro Akimoto1 *Institute of Applied Physics, University of Tsukuba, Tsukuba, Ibaraki 305-8573, Japan*
P1-7	**Synthesis and holographic properties of alkyl 2-cyanoacetate acceptor fragment containing push – pull type organic glasses.** V. Kokars1, K. Siltane1, E. Zarins1, A.Ozols2, P. Augustovs2, A. Vembris3, *1Institute of Applied Chemistry, Riga Technical University, 3/7 Paul Walden Str., Riga LV-1048, Latvia* *2Institute of Technical Physics, Riga Technical University, 3/7 Paul Walden Str., Riga LV-1048, Latvia* *3Institute of Solid State Physics, University of Latvia, 8 Kengaraga Str., Riga LV-1063, Latvia*
P1-8	**Tensile and buckling deformations of a silver nanowire for the transparent electrode of flexible devices** Sang Woo Kim1,3, Dong-Gyun Kim1, S.H. Kim2,4, Jae-Pyoung Ahn2,3 *1Clean Energy Research Center, Korea Institute of Science and Technology, Hwarangro 14-gil 5, Sungbuk-gu, 136-791, Seoul, Republic of Korea* *2Advanced Analysis Center, Korea Institute of Science and Technology, Hwarangro 14-gil 5, Sungbuk-gu, 136-791, Seoul, Republic of Korea* *3Clean Energy & Chemical Engineering, KIST campus, University of Science and Technology (UST), Hwarang-ro 14-gil 5, Seongbuk-gu, Seoul 136-791, Republic of Korea* *4Department of Materials Science and Engineering, Korea University, Seoul 136-701, Republic of Korea*
P1-9	**Fabrication of Metal Ink-Based Highly Conductive Electrode Pattern on Flexible Film by Applying Polymeric Buffer Layer and Transfer Printing Method** Ji-Sub Park, Joon-Chan Choi, Imtiaz Mahmud and Hak-Rin Kim *School of Electronics Engineering, Kyungpook National University, Bukgu, Daegu, 702-701, South Korea*
P1-10	**Self-Patterned Black Polymer Layer for Reducing Reflectivity in Ag Grid Transparent Electrode** Joon-Chan Choi, Ji-Sub Park, Byeong-Gon Kim, Hak-Rin Kim *School of Electronics Engineering, Kyungpook National University, 80 Daehakro, Bukgu, Daegu, 702-701, South Korea*
P1-11	**A new D-A conjugated polymer P(PTQD-BDT) with PTQD acceptor and BDT donor unit for BHJ polymer solar cells application** M.L. Keshtov1, S.A. Kuklin1, D. Yu. Godovsky1, S.N. Osipov1, M.A. Topchy1, M.A. Zotova1, A. R. Khokhlov1, N.A. Radychev2, A.U. Nikolaev1, and G. D. Sharma3 *1A.N. Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, Vavilova str., 28, Moscow, 119991, Russia* *2University of Oldenburg, Department of Physics, Energy and Semiconductor Research Laboratory, Oldenburg, Germany.* *3R&D Center for Engineering and Science, JEC Group of Colleges, Jaipur Engineering College, Jaipur, 303101, India*
P1-12	**Synthesis and characterization of two new benzothiadiazole- and Fused Bithiophene Based Low Band-Gap D-A copolymers for polymer solar cells** D. Yu. Godovsky1 , M. L. Keshtov2, S. A. Kuklin1, A. R. Khokhlov1, I.O. Konstantinov1, M.M.Krayushkin2, G. D Sharma 3, Fang-Chung Chen4 *1 Institute of Organoelement Compounds of the Russian Academy of Sciences, Vavilova st., 28, 119991 Moscow, Russian Federation.* *2 Institute of Organic Chemistryof the Russian Academy of Sciences, Leninskiy prospect, 49, 119991 Moscow, Russian Federation* *3 Center for Engineering and Science, JEC group of Colleges, Jaipur Engineering College, Kukas, Jaipur, 303101, India* *4 Department of Photonics, National Chiao Tung University, Hsinchu, Taiwan 300, Republic China*
P1-13	**Synthesis and physical properties of glassy triphenyl group containing derivatives of DCM laser dye** E. Zarins1, A. Vembris2, E. Misina1, V. Kokars1 *1Faculty of Materials Science and Applied Chemistry, Riga Technical University, 3/7 Paula Valdena Street, Riga LV-1048, Latvia* *2Institute of Solid State Physics, University of Latvia, 8 Kengaraga Str., Riga LV-1063, Latvia*
P1-14	**Zinc phthalocyanine and its substituted derivatives as sensitive layers for textile-based gas sensor** E. Marešová[1,2], M. Vrňata[2], P. Fitl[2], J. Bulíř[1], J. Lančok[1], H. Vlček[2], D. Tomeček[2] M. Novotný[1] *1 Institute of Physics, Academy of Sciences of the Czech Republic* *2 Institute of Chemical Technology, Dep. Physics and Measurements*
P1-15	**Ellipsometric study of the optical constants of C60 & C70 thin films** Jean-Paul Gaston1, Céline Eypert2 *HORIBA Jobin Yvon Avenue de Vauve, 91120 Palaiseau, France*
P1-16	**GreeNanoFilms towards innovative bio-electronic materials & devices** N. Ballot & R. Borsali *Univ. Grenoble Alpes, CERMAV, 38041 Grenoble, France, CNRS, CERMAV, 38041 Grenoble, France*
P1-17	**Nitrile Substitution Effect on Triphenodioxazine-Based Materials for Liquid-Processed Air-Stable N-Type Organic Field Effect Transistors** G. Gruntz1, Y. Nicolas1, L. Hirsch2, H. Lee3, A. L. Briseno3, T.Toupance1 *1 University of Bordeaux, 351 cours de la libération 33405 TALENCE cedex France* *2 IMS, Institut Polytechnique de Bordeaux, 167 avenue Pey-Berland 33600 Pessac France* *3 Department of Polymer Science and Engineering, University of Massachusetts, 120 Governors Drive, Amherst, MA 01003, United States of America*
P1-18	**Moisture barrier film of organic/inorganic hybrid structure on Sol-gel method** SungHee Kim1, JunYoung Lee*1 *Department of Chemical Engineering, Sungkyunkwan University, Suwwon 440-746, Republic of Korea*
P1-19	**Phenantrene Centered Metal Free Organic Molecules for Dye Sensitizied Solar Cells** Ahmet Buyukkoyuncu1, Ali Koray Erdinc2, Mesude Zeliha Yigit3, Mustafa Can4, Ceylan Zafer2 and Sermet Koyuncu5

	1Department of Chemistry, Faculty of Arts and Sciences, Çanakkale Onsekiz Mart University 17100 Çanakkale/TURKEY, 2Ege University, Solar Energy Institute, 35040 Bornova, Izmir, Turkey, 3Department of Material Sciences and Engineering,Faculty of Engineering and Architecture, Izmir KatipCelebi University, Cigli, 35620 Izmir, Turkey, 4Department of Engineering Sciences, Faculty of Engineering, Izmir KatipCelebi University, Cigli, 35620 Izmir, Turkey, 5Department Chemical Engineering, Faculty of Engineering, Çanakkale Onsekiz Mart University, 17100, Çanakkale, Turkey
P1-20	**Flexible interconnection technology for future flexible applications** S. Nakajima1, R. Mitsui1, J. Satoh1, S. Takahashi1, K. Nomura2, H. Ushijima2 *1Product Development Centre, Japan Aviation Electronics Ind., LTD. 3-1-1 Musashino, Akishima, Tokyo 196-8555, Japan* *1Flexible Electronics Research Centre, AIST, 1-1-1 Higashi, Tsukuba, Ibaraki 305-8565, Japan*
P1-21	**Holographic photosensitivity of azobenzene molecular and chalcogenide glassy films** P.Augustovs, A.Ozols, E.Zarins, V.Kokars *Faculty of Materials Science and Applied Chemistry, Riga Technical University, Paula Valdena iela 3/7, LV-1007, Riga, Latvia*
P1-22	**Solution-Processed Amorphous Zn-In-Sn-O/ZrO2 Based Field Effect Transistors** Byung Doo Choi, **Myung-Gil Kim1*** *1 Department of Chemistry, Chung-Ang University, 84 Heukseok-Ro, Dongjak-Gu, Seoul 156-756, Republic of Korea*
P1-23	**Color Tunable Poly(dithienylpyrrole) Derivatives** Nese Guven, Pinar Camurlu *Akdeniz University, Department of Chemistry, 07058, Antalya, Turkey*

	POSTER SESSION 2 **Wednesday 8 July: Poster Display** **Thursday 9 July: Poster Display & Presentations** **Devices: OPVs, OTFTs, OLEDs**
P2-1	**Formulation of the Light scattering solution with polymer bead for Light Extraction of Flexible OLED Lighting** Nan Soo Kim1, Dasom Song2, Sun Ryu1, Miyoung Kim2* *1Momentive Performance Materials Korea Co., Ltd., 8F., Daeryung Post Tower 6cha, 50-3, Gasan-dong, Geumcheon-gu, Seoul, 153-715, Korea* *2Korea Printed Electronics Center, Korea Electronics Technology Institute, #820 Palbokdong 2-ga, deokjin-gu, Jeonju-si, Jeollabuk-do, 561-844, Korea*
P1-2	**Synthesis and characterization of polyethers containing anthracene and benzothiadiazole derivatives for light emitting applications** A. Moutsi1, A.K. Andreopoulou1, C. Anastasopoulos1, J.K. Kallitsis1,2 *1 Department of Chemistry, University of Patras, GR-26504 Patras, Greece* *2FORTH /ICE-HT, Stadiou Str., P.O. Box 1414, GR – 26504, Rio-Patras, Greece*
P2-3	**Soluble polymeric Iridium metallocomplexes for PLED applications** K. Simitzi1, D. Tsakaraki1, A.K. Andreopoulou1,2; G. Bokias1,2, J. K. Kallitsis1,2 *1 Department of Chemistry, University of Patras;* *2 Foundation for Research and Technology Hellas, Institute of Chemical Engineering Sciences (FORTH-ICE-HT), Patras GR26504, Greece*
P2-4	**Optical illumination of flexible organic displays** M.Pfaff, M.Beck *Affiliation (Faculty of engineering and computer science, Brandenburg Technical University Cottbus-Senftenberg), Großenhainer Str. 57, D-01968 Senftenberg, Germany*
P2-5	**Organic Light Emitting Diode with Low Modulus Organic-Inorganic Hybrid Sealant apply to Flexible Display** Sun Ryu1, Il-Ji Bae2, Miyoung Kim2* *1Momentive Performance Materials Korea Co., Ltd., 8F., Daeryung Post Tower 6cha, 50-3, Gasan-dong, Geumcheon-gu, Seoul, 153-715, Korea* *2Korea Printed Electronics Center, Korea Electronics Technology Institute, #820 Palbokdong 2-ga, deokjin-gu, Jeonju-si, Jeollabuk-do, 561-844, Korea*
P2-6	**Green and Yellow flexible OLED devices produced by roll-to-roll gravure processes** C. Chaidou1, C. Kapnopoulos1, M. Gioti1, C.A. Poyzoidis1, C. Gravalidis1, C. Pitsalidis1, S. Tsimikli1, A.K. Andreopoulou2,3, E. Mparmpoutsis2, J.K. Kallitsis2,3, S. Logothetidis1 *1Laboratory for Thin Films-Nanosystems and Nanometrology (LTFN), Physics Department, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece* *2Department of Chemistry, University of Patras, University Campus, Rio-Patras GR26504, Greece* *3 Foundation for Research and Technology Hellas, Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Platani Str., Patras GR26504, Greece*
P2-7	**Efficient Electron Injecting Semi-Transparent Cathodes Using Samarium and Silver for Transparent Organic Light-Emitting Diodes** Yongwon Kown1, Jiho Sohn1, Jeonghun Kwak2, and Changhee. Lee1* *1Dept. of Electrical and Computer Engineering, Inter-University Semiconductor Research Center, Seoul National University, 1 Gwanak-ro, Gwanak-gu, Seoul 151-742, Korea* *2Dept. of Electronic Engineering, Dong-A University, 37, Nakdong-daero 550beon-gil, Saha-gu, Busan 604-714, Korea*
P2-8	**Carbazole Based Crosslinkable and Emmisive Donor-Acceptor Polymers For Organic Lighth Emmiting Diodes** Ceylan Doyranli1, Sumeyra Buyukcelebi2,3, Sermet Koyuncu4, Mahmut Kus2,5, Ozlem Usluer6 and Fatma Baycan Koyuncu1 *1 Canakkale Onsekiz Mart University, Department of Chemistry, Canakkale, Turkey, 2 Selcuk University, Advanced Technology Research and Application Center, Konya, Turkey, 3 Selcuk University, Department of Nanotechnology and Advanced Materials, Konya, Turkey, 4Canakkale Onsekiz Mart University, Department of Chemical Engineering, Canakkale, Turkey, 5 Selcuk University, Department of Chemical Engineering Konya, Turkey, 6 Necmettin Erbakan University, Department of Energy Engineering, Konya, Turkey*
P2-9	**Optical, structural and photovoltaic properties of PCDTBT : PCBM organic solar cells** G. Grancharov 1, V. Gancheva1, P. Mokreva1, R. Kalinova1, P. Petrov1, E. Lazarova2, C. Dikov2, G. Popkirov2, P. Vitanov2, M. Sendova-Vassileva2 *1Laboratory of Structure and Properties of Polymers, Institute of Polymers, Bulgarian Academy of Sciences, Acad. G. Bonchev St., Block 103-A, 1113 Sofia, Bulgaria* *2Central Laboratory of Solar Energy and New Energy Sources, Bulgarian Academy of Sciences, Tzarigradsko Chaussee 72, 1784 Sofia, Bulgaria*
P2-10	**Toward efficient hole selective contact in organic solar cells** Shaimaa A. Mohamed1,2,, M. C. Scharber1, S.S.A. Obayya2, M. K. El-Mansy3, N.S. Sariciftci1, D. A. M. Egbe1, P. Stadler1 *1 Linz Institute for Organic Solar Cells (LIOS), Physical Chemistry, Johannes Kepler University Linz, Altenbergerstr. 69, A-4040 Linz, Austria.* *2 Center for Photonic and Smart Materials (CPSM), Zewail City of Science and Technology Sheikh Zayed District, 6th of October City, 12588, Giza, Egypt.* *3 Department of Physics, Faculty of Science, Benha University, Stadium Street, 13518 Benha, Egypt.*
P2-11	**Metal Nanoparticles in Organic Photovoltaic Applications** M. Krassas1, E. Stratakis2, E. Kymakis1 *1Center of Materials Technology & Photonics, Technological Educational Institute (TEI) of Crete, Heraklion 71004 Crete, Greece* *2Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology-Hellas (FORTH), Heraklion*
P2-12	**Extensive morphological and structural studies of perovskite based thin films for photovoltaic applications** L. Tzounis, C. Gravalidis, A. Papamichail, I. Tsiaousis, M. Gioti, A. Laskarakis, S. Logothetidis *Lab for Thin Films Nanosystems and Nanometrology, Physics Department, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece*
P2-13	**Enhanced efficiency of Polymer-Fullerene Bulk Heterojunction Solar Cells via utilization of Laser Ablation produced noble metallic nanoparticles** E. Skoularioti1, S. Kassavetis1,2, A. Spiliotis1, A. Laskarakis1, P. Patsalas1, S. Logothetidis1 *1Laboratory for Thin Films-Nanosystems & Nanometrology (LTFN), Department of Physics, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, K. Makedonia, Greece* *2Department of Materials Science and Engineering, University of Ioannina, GR-45110 Ioannina, Epirus, Greece*
P2-14	**Effect of active layer thickness on the performance of small molecule vacuum deposited OPVs** A. Papamichail, K. Kyriazoudis, G. Nomikos, A. Zachariadis, S. Logothetidis *Laboratory for Thin Films-Nanosystems and Nanometrology (LTFN), Physics Department, Aristotle University of Thessaloniki, GR-54124, Thessaloniki, Greece*
P2-15	**High performance organic-inorganic hybrid triple-junction tandem solar cell** Hyeok Kim1, Changhee Lee1 *Department of Electrical and Computer Engineering, Inter-University Semiconductor Research Center, Seoul National University, 1 Gwanak-ro, Gwanak-gu, Seoul 151-744, Korea*
P2-16	**Modeling and Simulation of Dye-Sensitized Solar Cells Using COMSOL Multiphysics**

	Swati Sahu, Rajesh Kumar Awasthy, Mohan Patel, Anil Verma & Sanjay Tiwari *School Of Studies in Electronics & Photonics, Pandit Ravishankar Shukla University, Raipur-492010, Chhattisgarh, India*
P2-17	**Tuning of intramolecular charge transfer reactions in dipolar pyrimidine and pyrrolo-pyrimidine derivatives and their fluorescence sensing properties** L. Skardziute1, J. Jovaisaite1, T. Buciunas1, J. Dodonova2, J. Bucevicius2, A. Voitechovicius2, S. Tumkevicius2, S. Jursenas1 *1Institute of Applied Research, Vilnius University, Saulėtekio 9-III, LT-10222 Vilnius, Lithuania* *2Department of Organic Chemistry, Faculty of Chemistry, Vilnius University, Naugarduko 24, LT-03225 Vilnius, Lithuania*
P2-18	**Fully inkjet-printed flexible temperature sensors based on carbon and PEDOT:PSS** C. Bali1,2, A. Brandlmaier1, A. Ganster1, O. Raab1, J. Zapf1, A. Hübler2 *1 Siemens AG, Corporate Technology, Research and Technology Center, CT RTC ELE SPT-DE, 81739 Munich, Germany* *2 Institute for Print and Media Technology, Chemnitz University of Technology, 09107 Chemnitz, Germany*
P2-19	**Azide Containing Random Copolymers as Dielectrics for Low-Voltage Organic Field-Effect Transistors** E. Reis Simas[1], A. Gassmann[1], E. Katholing[2], S. Janietz[2], H. von Seggern[1] [1] Technische Universität Darmstadt, Material Science, Darmstadt, Germany [2] Fraunhofer Institute for Applied Polymer Research, Potsdam-Golm, Germany
P2-20	**Effect of Alkyl Chain Length of Self-Assembled Monolayer on Bias Stability of Organic Thin Film Transistors** **J**eongkyun Roh1, Hyeok Kim1, Hyeonwoo Shin1, Heebeom Roh1, Jeonghun Kwak2, Byung Jun Jung3, Changhee Lee1 *1Dept. of Electrical and Computer Engineering, Inter-University Semiconductor Research Center, Seoul National University, 1 Gwanak-ro, Gwanak-gu, Seoul 151-742, Korea* *2Dept. of Electric Engineering, Dong-A University, 37, Nakdong-daero 550beon-gil, Saha-gu, Busan 604-714, Korea* *4Dept. of Materials Science and Engineering, The University of Seoul, 163 Seoulsiripdaero, Dongdaemun-gu, Seoul 130-743, Korea*
P2-21	**Solution-processed organic field-effect transistors fabricated by self-assembled monolayers** Won-You Kim and Sung-Jin Kim *Chungbuk National University, Gaesin-dong, Heungdeok-gu Cheongju, Chungbuk 361-763, South Korea*
P2-22	**Radiation microdosimeters based on the generation of protons in polymer dielectrics** E. Kapetanakis1, C. Katsogridakis2, A. M. Douvas2, S. Koliopoulou2, V. Psycharis2, V. Saltas3, J. Kaliakatsos1, D. Dimotikali4, P. Argitis2, P. Normand2 *1Dept of Electronic Engineering, TEI of Crete, 73133 Chania, Greece* *2INN, NCSR 'Demokritos', 15310 Aghia Paraskevi, Athens, Greece* *3Dept of Natural Resources & Environment, TEI of Crete, 73133 Chania, Greece* *4School of Chemical Engineering, NTUA, 15780 Athens, Greece*
P2-23	**OTFT based immunosensors for ultrasensitive detection of clinically relevant biomarkers** A. Tiwari1, M. Magliulo1, YM. Mulla1, P. Seshadri1, K. Manoli1, G. Palazzo1, L. Torsi1 *Dipartimento di Chimica, Università degli Studi di Bari Aldo Moro, Via Orabona 4, 70126, Bari, Italy*
P2-24	**PCBM C70 n-type thin films transistors: Influence of HMDS deposition temperature on the devices properties** M. R. Fiorillo1, C. Diletto2, P. Tassini2, M. G. Maglione2, E. Santoro1, F. Villani2, R. Liguori1, P. Maddalena3, A. Rubino1, C. Minarini2 *(1) Department of Industrial Engineering, University of Salerno, via Giovanni Paolo II 132, I-84084, Fisciano (SA), Italy* *(2) Laboratory of Nanomaterials and Devices, ENEA C. R. Portici, p.le Enrico Fermi 1, I-80055, Portici (NA), Italy* *(3) Department of Physical Science, University of Napoli "Federico II" - Monte S. Angelo, Via Cintia, I-80126, Napoli, Italy*
P2-25	**Inkjet printed polymer nanocomposite-based chemiresistors** F. Villani1, F. Loffredo1, I. A. Grimaldi1,2, B. Alfano1, T. Polichetti1, E. Massera1, G. Di Francia1, C. Minarini1, *1 ENEA Research Center, P.le E. Fermi, 1 – 80055 Portici (Na), Italy* *2 IREA-CNR, Via Diocleziano 328, 80124 Naples, Italy*

	COMMON POSTER SESSION **Tuesday 7 July: Poster Display** **Wednesday 8 July: Poster Display & Presentations** **Graphene and Related Materials (common with NN15 W5)**
P5-1	**Efficient transfer of graphene grown on copper substrates using electrochemical delamination** D. Papas1, S. Chaitoglou2, A. Zachariadis1, E. M. Pechlivani1, A. Papamichail1, A. Laskarakis1, S. Logothetidis1 *1Lab for Thin Films, Nanosystems & Nanometrology (LTFN), Department of Physics, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece* *2FEMAN Group, IN2BU, Department of Applied Physics and Optics, Universitat de Barcelona, C/ Martí i Franquès, 1, 08028, Barcelona, Spain*
P5-2	**Production of Graphene Reinforced Poly ε-caprolactone (PCL) Scaffolds** G. Cosar, S. Tasdemir, A. Sendemir Urkmez *Ege University Bioengineering Department, Izmir, Turkey*
P5-3	**Modeling of enhanced absorption in graphene caused by plasmonic near fields** A. Dagkli, S. Evangelou, E. Lidorikis *Department of Materials Science and Engineering, University of Ioannina, Ioannina 45110, Greece*
P5-4	**Graphene based micro-sensors using an innovative MEMS/CMOS platform for environmental monitoring applications** D.Ulieru, X.Vila, Oana-Maria Ulieru, A.Topor *SITEX 45 SRL,R&D Department, 114,GHICA TEI BLVD,BL.40,AP.2,DEPT.2,Bucharest 023709,Romania*
P5-5	**Evaluation of graphene oxide-magnetic-gold nanohybrids as enzyme mimics for biosensing applications** D.K. Toubanaki1*, P. Bilalis2, M. Margaroni1, H. Iatrou2, E. Karagouni1 *1 Laboratory of Cellular Immunology, Department of Microbiology, Hellenic Pasteur Institute, 127 Vas. Sofias Ave., 11521 Athens, Greece* *2 University of Athens, Chemistry Department, Panepistimiopolis, Zografou, 15771, Athens, Greece*
P5-6	**Kinetics in CVD graphene growth.The effect of pressure and gases flows.** S. Chaitoglou*, S. Logothetidis§, E. Pascual , J.L. Andújar, E. Bertran *FEMAN Group, IN2UB, Department of Applied Physics and Optics, Universitat de Barcelona,C/ Martí i Franquès, 1, 08028, Barcelona, Spain.* *Lab for Thin Films, Nanosystems & Nanometrology (LTFN), Department of Physics AUTh, , Thessaloniki, Greece*
P5-7	**Heavy metals removal by graphene oxide** S.Šemčuk1, G. Lujanienė1, S. Tautkus *Center for physical sciences and technologySavanorių ave. 231 LT-02300 Vilnius, Lithuania*
P5-8	**Chemical route to get hexagonal boron nitride graphene-like few layers** B. Toury1, S. Yuan1, C. Journey1, A. Brioude1 *1 Laboratoire des Multimatéraiux et Interfaces, University of Lyon, 22, avenue Gaston Berger, 69100 Villeurbanne, France*
P5-9	**Layer-by-layer assembled polyvinyl alcohol/graphene oxide composite for high gas barrier applications** M.-U. Park1, W.-B. Park1, R.K. Layek1, N.-H. Kim1, J.-H. Lee1, 2, * *1Applied Materials Institute for BIN Convergence (BK Plus Global Program), Department of BIN Convergence Technology, Chonbuk National University, Jeonju, Jeonbuk, Korea* *2Center for Carbon Composite Materials, Department of Polymer & Nano Engineering, Chonbuk National University, Jeonju, Jeonbuk, 561-756, Korea*
P5-10	**Facile synthesis of high quality AuNPs/graphene nanohybrids by chemical vapor deposition for non-enzymatic glucose sensor** T.-D. Thanh1, J. Balamurugan1, M.-G. Yu1, J.-S. Ryu1, J.-H. Lee1,2* *1Advanced Materials Institute of BIN Convergence (BK21 plus Global) & Department of BIN Convergence Technology, Chonbuk National University* *2Center for Carbon Composite Materials, Department of Polymer & Nano Science and Technology, Chonbuk National University, Jeonju, Jeonbuk, 561-756, Republic of Korea*

P5-11	**Polyethyleneimine functionalized graphene oxide coating for enhanced hydrogen gas barrier properties** W.-B. Park1, R.-K. Layek1, N.-H. Kim1, L.-K. Kwac2, H.-G. Kim3, J.-H. Lee1, 4* *1Advanced Materials Institute of BIN Convergence (BK21 plus Global) & Department of BIN Convergence Technology, Chonbuk National University* *2Department of Manufacturing Technology and Design Engineering, Jeonju University* *3Department of Mechanical and Automotive Engineering, Jeonju University* *4Center for Carbon Composite Materials, Department of Polymer & Nano Science and Technology, Chonbuk National University, Jeonju, Jeonbuk, 561-756, Republic of Korea*
P5-12	**Synthesis of nitrogen-doped graphene oxide hydrogel for energy electrode materials** N.-H. Kim1, W. Park1, M.-G. Yu1, Tapas Kuila2, J.-H. Lee1,3,* *1Advanced Materials Institute of BIN Convergence (BK21 plus Global) & Department of BIN Convergence Technology, Chonbuk National University* *2Surface Engineering & Tribology Division, CSIR-Central Mechanical Engineering Research Institute, Council of Scientific & Industrial Research (CSIR), India* *3Center for Carbon Composite Materials, Department of Polymer & Nano Science and Technology, Chonbuk National University, Jeonju, Jeonbuk, 561-756, Republic of Korea*
P5-13	**Design of Pyrene Functionalized PMMAs of Different Topologies for the Fabrication of Graphene/Polymer Nanocomposites** K.D. Papadimitriou,1,2 E.N. Skountzos,1,2 S. Gkermpoura,1,2 V.G. Mavrantzas,1,2,3 C. Galiotis,1,2 and C. Tsitsilianis1,2* *1FORTH/ICE-HT, Stadiou Str., P.O. Box 1414, GR 26504, Rio-Patras, Greece* *2Department of Chemical Engineering, Universty of Patras, GR 26504, Patras, Greece* *3Particle Technology Laboratory, Department of Mechanical and Process Engineering, ETH-Z, CH-8093 Zürich, Switzerland*
P5-14	**Investigation on the microwave absorption properties of Fe/ Fe3O4/reduced graphene oxide nanorings** Y.Ding1, Q.L.Liao1,, X.Q.Yan1, X.H.Zhang1, Y.Zhang1 * *1 State Key Laboratory for Advanced Metals and Materials, School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, China*.
P5-15	**Melt-spinning of in-situ polymerised ε-caprolactam in presence of graphene monolayers** J. Mroszczok1, J. Weise1, G. Seide1, T. Gries1 *1Institut für Textiltechnik of RWTH Aachen University (Nano Modified Fibres),Aachen, Germany*
P5-16	**Synthesis and characterization of silver nanoparticles functionalized graphene oxide for using in polymer composites** I. Ion1, M.V. Lungu1, D. Patroi1, V. Marinescu1, V. Tsakiris1, A. Bratulescu1, M. Lungulescu1,M.C. Chifiriuc2, M. Popa2, L. Nistor3, G. Epurescu4 *1.National Institute for R&D in Electrical Engineering ICPE-CA Bucuresti, Romania.* *2.University of Bucharest, Faculty of Biology, Microbiology Departmen6-Bucharest, Romania* *3.National Institute of Materials PhysicsAtomistilor Str., No. 105 bis, 077125, Magurele, Romania* *4.National Institute for Laser, Plasma and Radiation Physics, Bucharest, Romania*
P5-17	**Stationary charge and current distributions in carbon nanocones under magnetic and electric fields** M. Pacheco1, P. Ulloa1, A. Latgé2 *1Physics department, Universidad Técnica Federico Santa María Avda España 1680 Valparaíso, Chile* *2Physics institute,Universidade Federal Fluminense24210-340 Niteroi-RJ, Brazil*
P5-18	**Au NPs/RGO Hybrid for High-Efficient Reduction of 4-Nitrophenol** W. Wang1,2, X. Guo1,2, W. Hao1, L. Zhang1, J. Yu1 and L. Sun2 *1. Jiangsu Key Laboratory of Advanced Metallic Materials, School of Materials Science and Engineering, Southeast University, Nanjing 211189, China;* *2. SEU-JSRI Joint Research Center for the Application of Advanced Carbon Materials, Nanjing 210096,China)*
P5-19	**Transition Metal Dichalcogenide Field-effect Transistors BasedComplementary Inverter Exhibiting High-gain** A.-J. Cho1,2, K.-C. Park3, J.-Y. Kwon1,2 *1 Yonsei Institute of Convergence Technology.* *2 Department of Electric Engineering, Konkuk University.* *3Incheon, 406-840, South Korea.1,2 Seoul, 143-701, South Korea*
P5-20	**Intrinsic graphene surface on a plastic via microwave flash heating** H.-J. Jeong1*, H.-Y. Kim1,2, K.-J. Baeg1, S. Jung1, J.-T. Han1, S.-Y. Jeong1, M.-S. Jeong2, G.-W. Lee1* *1Nanocarbon Material Research Group, Korea Electrotechnology Research Institute (KERI), Republic of Korea* *2IBS center for Integrated Nanostructure Physics, Institute for Basic Science, Sungkyunkwan University, Republic of Korea*
P5-21	**Few-layer graphene Langmuir film decorated by Pd nanoparticles for NO2 gas sensing** D. Kostiuk, S. Luby, M. Benkovicova, P. Siffalovic, K. Vegso, J. Ivanco, M. Jergel, E. Majkova 1Institute of Physics, Slovak Academy of Sciences, Dubravska cesta 9, 84511 Bratislava, Slovakia
P5-22	**DFT investigation of optoelectronic properties of graphene modified with boron atoms** 1Svetlana S. Pelemiš, 2Sanja J. Armaković and 3Stevan Armaković *1 University of East Sarajevo, Faculty of Technology, Zvornik, Bosnia and Herzegovina,* *2 University of Novi Sad, Department of Chemistry, Novi Sad,Serbia,* *3 University of Novi Sad, Department of Physics, Novi Sad, Serbia*
P1-23	**Nanophone** D. Jovanović1, D. Todorović2,3, A. Matković1, M. Spasenović1, M. Milićević1, I. Salom4 and R. Gajić1 *1Center for Solid State Physics and New Materials, Institute of Physics Belgrade, University of Belgrade, Belgrade, Serbia* *2 School of Electrical Engineering, University of Belgrade, Belgrade, Serbia* *3Dirigent Acoustics Ltd, Mažuranićeva 29/9, 11050 Belgrade, Serbia* *4Institute Mihailo Pupin, University of Belgrade, Volgina 15, 11060 Belgrade, Serbia*
P1-24	**Graphene / platinum transparent conductive composite film by plasmaassisted CVD** C.-C. Kuo1,2, S.-H. Chan 2, and Y.-C. Cheng1 *1Graduate Institute of Energy Engineering/Thin Film Technology Center National Central University, Taiwan* *2Department of Optics and Photonics/Thin Film Technology Center, National Central University, Taiwan*
P5-25	**Structural properties of graphene functionalized with hydroxyl and epoxide groupsby density functional theory approach** C. Vacacela Gomez1, E. Robalino2, D. Haro2, T. Tene Fernandez1, J. Orbe2, P. Escudero2 A. Haro2 *1 Dipartimento di Fisica, Università della Calabria, Italia* *2 Escuela Superior Politécnica de Chimborazo, Escuela de Física y Matemática, Ecuador*
P5-26	**Modification of Graphene Oxide as Catalyst Support for Fuel Cells** V. Sadhu1, E. Jamil2, S. Ghobadi2, V. Bayram2, S.A. Gürsel1,2 *1Nanotechnology Research and Application Center, Sabanci University, 34956 Istanbul, Turkey* *2Faculty of Natural Science and Engineering, Sabanci University, 34956 Istanbul, Turkey*
P5-27	**Suppression of bacterial interaction through graphitic coatings** R. Henriquez1, C. Parra1, F. Montero-Silva2, M. Flores3, C. Ramirez4, C. Garin1, J. Correa5, M. Seeger2, P. Haberle1. *1Departamento de Física, Universidad Técnica Federico Santa María, Valparaíso, Chile.* *2Departamento de Química, Universidad Técnica Federico Santa María, Valparaíso, Chile.* *3Departamento de Física, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Santiago, Chile.* *4Departamento de Ingeniería Química y Ambiental, Universidad Técnica Federico Santa María, Valparaíso, Chile.* *5Instituto de Física, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile.*
P5-28	**Fano effect and thermoelectrical properties of bilayer graphene nano-ribbons** P.A. Orellana 1 , L. Rosales 1, M. Pacheco 1, and L. Chico 2 *1 Physics Department, UTFSM, Casilla 110 V, Valparaiso, Chile*

	2 ICMM-CSIC, Madrid, Spain
P5-29	**The effect of thickness of Cu substrate to quality of graphene film** M. Yılmaz1, V.G. Acar2, O. Doğan2 *1Department of Metallurgical and Materials Engineering, N.Erbakan University, A.Cengiz Faculty of Engineering 42370 Seydişehir/Konya, Turkey* *2Department of Physics, N.Erbakan University, A.K. Education Faculty 42090 Meram/Konya, Turkey*
P5-30	**A novel Technique for Preparation of Graphene from Graphite with Using Mechanical Milling** A. Hasanpour*1, Y. Heidari 1. M. Niyaifarr1, … *Department of Physics,college of Science Islamic Azad University, Ahvaz Branch Ahvaz Iran*
P5-31	**Uniaxial tensile strain on free-standing graphene** I. Polyzos1, M. Bianchi2, L. Rizzi2, J. Parthenios1, K. Papagelis1,3, R. Sordan2 and C. Galiotis1,4 *1Institute of Chemical Engineering Sciences, Foundation of Research and Technology-Hellas (FORTH/ICE-HT), Patras, Greece,* *2L-NESS, Department of Physics, Politecnico di Milano, Polo di Como, Via Anzani 42, 22100, Italy,* *3Department of Materials Science, University of Patras, Patras,Greece,* *4Department of Chemical Engineering, University of Patras, Patras,Greece*
	COMMON POSTER SESSION **Thursday 9 July: Poster Display** **Friday 10 July: Poster Display & Presentations** **Bioelectronics (common with NN15 W4)**
P4-1	**Printed Organic Bioelectronic Devices** Q. Thiburce, A. Campbell *Department of Physics, Experimental Solid State Physics Group, Blackett Laboratory, Imperial College London, Prince Consort Road, London SW7 2BZ, UK*
P4-2	**THz oscillations in small DNA segments** K. Lambropoulos, K. Kaklamanis, G. Georgiadis, M. Theodorakou, M. Chatzieleftheriou, M. Tassi, A. Morphis, and C. Simserides *National and Kapodistrian University of Athens, Faculty of Physics, Department of Solid State Physics, Panepistimiopolis, GR-15784 Zografos, Athens, Greece*
P4-3	**Exploring and evaluating micro-environment and nanoparticle dielectrophoretic-induced interactions with image analysis methods** D. J. Bakewell[1], J. Bailey[2,3], D. Holmes[2,4] [1]Department of Electrical Engineering and Electronics, University of Liverpool, Liverpool, UK [2]London Centre for Nanotechnology, University College London, London, UK [3]Centre for Math., Physics, Life Sci. and Experiment. Biology, University College London, London, UK *[4]Sphere Fluidics Ltd, Babraham Research Campus, Babraham, Cambridge, UK*
P4-4	**Three-Mask Polysilicon Dual-Gate TFT for Biosensing Applications** Zeimpekis[1], K. Sun[1], C. Hu[1], O. Thomas[2], M.R.R. de Planque[1], H.M.H Chong[1], H. Morgan[1], and P. Ashburn[1] *[1]Zepler Institute, Electronics & Computer Science, University of Southampton* *Southampton, SO17 1BJ, UK* *[2]Oxford Instruments Plasma Technology* *Yatton, Bristol BS49 4AP, UK*
P4-5	**PPG sensor for noninvasive mobile health monitoring** A. Poghosyan1, V. Mouradian2, L. Hovhannisyan1 *1 Sensogram Technologies, LLC, Yerevan, Armenia* *2 Sensogram Technologies, Inc., Plano, TX, USA*
P4-6	**Ultrasonically sprayed flexible thin film electrodes for implantable bio-fuel cells** Laaroussi[1,2,3], N. Lalaoui[4], N. Reverdy-Bruas[1,2,3], A. Le Goff[4], M. Holzinger[4], S. Cosnier[4], D. Chaussy[1,2,3], N. Belgacem[1,2,3] *[1]Univ. Grenoble Alpes, LGP2, F-38000 Grenoble, France, [2]CNRS, LGP2, F-38000 Grenoble, France, [3]Agefpi, LGP2, F-38000 Grenoble, France, [4]DCM, UMR CNRS-UJF 5250, ICMG FR-2607, Université Joseph Fourier-Grenoble 1, [1,2,3]461 rue de la Papeterie - CS 10065 - 38402 Saint-Martin d'Hères Cedex, France, [4]UFR de chimie, Bâtiment C & NanobioBP 53, 38041 Grenoble Cedex 9, France*
P4-7	**Mordern trends in biosensors and nanosensors** Igbokwe, E.E *Abia State Polytechnic, ABA*
P4-8	**Synthesis and functionalization of Gold Nanoparticles** D. Arvaniti[1], V. Karagkiozaki[1], A. Papamichail[1], D. G. Fatouros[2], L. Tzounis[1], Th. Choli-Papadopoulou[3], S. Logothetidis[1] *[1] Nanomedicine Group, Lab for "Thin Films -Nanosystems & Nanometrology" (LTFN), Physics Department, Aristotle University of Thessaloniki (A.U.Th), Greece* *[2] Department of Pharmaceutical Technology, School of Pharmacy, A.U.Th, Greece* *[3] Biochemistry Lab, Department of Chemistry, A.U.Th., Greece*
P4-9	**Comparative study of the sessile drop and captive bubble methods for the measurement of the dynamic wettability of PEDOT:PSS** C.Duc1, A. Vlandas1, G. Malliaras2, V. Senez1 1 *(BioMEMS, Institut d'Electronique de Microelectronique et de Nanotechnologie, Lille University) , 59491 Villeneuve-d'Ascq, France* *2 (Department of Bioelectronics Ecole Nationale Supérieure des Mines CMP-EMSE, MOC) , 13541 Gardanne, France*