

08:00 - 09:00	Registration
09:00-09:30 WELCOME 🏠 Crystal Hall	Welcome and Opening Remarks S. Logothetidis ISFOE23 Chairman
09:30-11:00 🏠 Crystal Hall	Workshop on OLAE Materials 1 Chair: A. Laskarakis, LTFN, AUTH
09:30-10:00 KEYNOTE	Flexible Electronics: Challenges and Opportunities — a Materials Science Perspective N. Stingelin <i>School of Materials Science and Engineering, Georgia Institute of Technology, U.S.A.</i>
10:00-10:30 KEYNOTE	Printing Large Area and Scalable Organic and Perovskite Solar Cells R. P. Silva <i>Advanced Technology Institute, University of Surrey, Guildford, Surrey, GU2 7XH, United Kingdom</i>
10:30-10:45 YRA Candidate	In-depth study of the rheological behavior and polymer-solvent interaction for P(VDF-TrFE) inks: impact of the solvent polarity and copolymer composition J. D. Isasa, X. Chevalier ² , G. Fleury ¹ , G. Hadziioannou ¹ ¹ <i>Laboratoire de Chimie des Polymères Organiques (LCPO), Université de Bordeaux, France</i> ² <i>Arkema-Piezotech, Rue Henri-Moissan, France</i>
10:45-11:00	Sustainable synthesis of conjugated polymers by Suzuki-Miyaura in aqueous environment, and application of their waterborne dispersions S. Mattiello ¹ , C. Ceriani ¹ , M. Scagliotti ² , T. Losi ² , A. Luzio ² , M. Sassi ¹ , M. Rapisarda ³ , L. Mariucci ³ , M. Caironi ² , L. Beverina ¹ ¹ <i>Department of Materials Science, University of Milano Bicocca, Italy</i> ² <i>Center for Nano Science and Technology@Polimi, Istituto Italiano di Tecnologia, Italy</i> ³ <i>CNR-IMM, Via del Fosso, Italy</i>
11:00-11:30	Coffee Break ISFOE23 Posters- Exhibition - Networking
11:30-13:30 🏠 Crystal Hall	Workshop on OLAE Materials 2 Chairs: M. Gioti, LTFN, AUTH, Greece
11:30-12:00 KEYNOTE	Single-molecule reliable detections with a large-area electronic interface L. Torsi <i>Department of Chemistry University of Bari, Italy</i>
12:00-12:30 INVITED	Multi-layer polymer film extrusion with advanced technologies towards higher barrier and sustainable film applications B. Fillon, M. Skander <i>ECP4 Avenue de Cortenbergh 71 1000 Brussels, Belgium</i> <i>IPC, 2 rue Pierre et Marie Curie, Oyonnax FRANCE</i>
12:30-13:00 INVITED	Synthesis and characterization of highly conductive, printable and stretchable PEDOTs: application to thermoelectricity, photovoltaics and thermotherapy M. N. Gueye ^{1,2} , A. Schultheiss ² , V. M. Mwalukuku ¹ , A. Carella ² , J.P. Simonato ² , R. Demadrille ² ¹ <i>University Grenoble Alpes, France.</i> ² <i>Univ. Grenoble Alpes, CNRS, CEA, SyMMES, France</i>
13:00-13:15	Detection of Defective Conformations in Ferrotronic PVDF-TrFE copolymers from Raman Spectroscopy P. M. Resende ¹ , J.D. Isasa ¹ , G. Fleury ¹ , G. Hadziioannou ¹ <i>Laboratoire de Chimie des Polymères Organiques (LCPO), CNRS UMR 5629, University of Bordeaux, ENSCBP, Allée Geoffroy Saint Hilaire, Bâtiment B8, 2nd Floor 33615 Pessac C EDEX, France</i>
13:15-13:30	Transient delocalization in organic molecular semiconductors D. Beljonne <i>Laboratory for Chemistry of Novel Materials, University of Mons, Belgium</i>
13:30-15:00	Lunch Break ISFOE23 Posters- Exhibition - Networking

15:15-17:00 🏠 Crystal Hall	Workshop on OPVs & Perovskite PVs 1 Chairs: S. Jenatsch, Fluxim, R. Silva, Univ. Surrey, UK	15:00-17:00 🏠 Timber Hall1	Workshop on Open Innovation & Standardization 1 Chair: S. Kassavetis, LTFN, AUTH
15:15-15:45 INVITED	Development of Efficient and Stable Perovskite Solar Cells E. Tekin ^{1,2} , N. Babayigit Askin ³ , M. Sarikaya ⁴ , T. A. Tumay ² ¹ TÜBİTAK MRC, Photonic Technologies Laboratory, 41470 Gebze/Kocaeli, Turkey ² Duzce University, Department of Chemistry, Duzce, Turkey ³ TÜBİTAK NMI, Voltage Laboratory, 41470 Gebze/Kocaeli, Turkey ⁴ Gebze Technical University, Department of Physics, 41400 Gebze/Kocaeli, Turkey	15:00-15:30 INVITED	From simulation workflows to decision process orchestration: BPMN in the context of material manufacturing D. Campagna Research and Development Department, ESTECO SPA, Italy
15:45-16:00	Three-olor white electroluminescence utilizing perovskite quantum dots and organic emitters for displays J. Park Integrated Engineering, Department of Chemical Engineering, Kyung Hee Un., Republic of Korea	15:30-16:00 INVITED	An industry-driven "innovation ecosystem" for Organic Electronics supported by Materials Informatics D. Dykeman ¹ , J.-M. Lucatelli ¹ , V. Etique ¹ , A. Laskarakis ² , S. Logothetidis ² , C. Kapnopoulos ² , B. Pelligrini ³ ¹ Ansys, Cambridge, United Kingdom ² Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ³ Intellegens, Cambridge, United Kingdom
16:00-16:15	Design of optical filters for colored perovskite photovoltaics A. Cabas Vidani ¹ , N. Mehmed ^{1,3} , B. Bluelle ¹ , D. Braga ¹ , S. Jenatsch ¹ , B. Ruhstaller ^{1,2} ¹ Fluxim AG, Winterthur, Switzerland; ² ZHAW, Winterthur, Switzerland; ³ Institut d'Optique Graduate School, Palaiseau	16:00-16:15	Open innovation platform for modelling organic electronic material properties, process, and devices E. Lidorikis Department of Materials Science & Engineering, University of Ioannina Ioannina 45110, Greece
16:15-16:30 YRA Candidate	Fine Structure of Excitons in Vacancy-Ordered Double Perovskites B. Cucco, C. Katan, J. Even, M. Kepenekian and G. Volonakis Univ Rennes, ENSCR, INSA Rennes, CNRS, ISCR - UMR 6226, Rennes, France	16:15-16:30	Optimisation of materials and processes design via an Open Translation Environment: the OntoTrans project O. M. Roscioni ¹ , G. Goldbeck ¹ , N. A. Konchakova ² , N. Adamovic ³ , M. Bueschelberger ⁴ , T. F. Hagelien ⁵ , J. Friis ⁵ ¹ Goldbeck Consulting LTD, Cambridge, UK, ² Institute of Surface Science, Helmholtz-Zentrum Hereon, Geesthacht, Germany, ³ TU Wien, Austria, ⁴ Fraunhofer IWM, Germany.
16:30-16:45	Development and Scaleup of Materials Critical for Efficient Organic and Perovskite PV H. Richter, E. A. Jackson, R. M. Carty, H. Ghiassi, D. Bischoff, T. A. Lada, M. J. Ricci, K. Perez Harwood, P. C. Brookes Nano-C, Inc., 33 Southwest Park, Westwood, MA 02090, USA	16:30-17:00 INVITED	Use of ontologies for data documentation and semantic interoperability J. Friis ¹ , E. Ghedini ² , F. L. Bleken ³ , O. M. Roscioni ⁴ , G. Goldbeck ⁴ ¹ Materials and Nanotechnology, SINTEF Industry, Trondheim, Norway ² Department of Industrial Engineering, University of Bologna, Italy ³ Process Technology, SINTEF Industry, Oslo, Norway, ⁴ Goldbeck Consulting, Cambridge, UK
16:45-17:00	Revolution in Sustainable Agriculture: Organic Semitransparent Photovoltaics (OPVs), 3rd Generation PVs E. Athanasiadou, E. Mekeridis, S. Logothetidis Organic Electronic Technologies 20th KM Thessaloniki - Tagarades, Thermi, Greece		
17:00-17:30	Coffee Break ISFOE23 Poster Session 1		
17:30-18:45 🏠 Crystal Hall	Workshop on OPVs & Perovskite PVs 2 Chairs: S. Jenatsch, Fluxim, R. Silva, Univ. Surrey, UK	17:30-18:45 🏠 Timber Hall1	Workshop on Open Innovation & Standardization 2 Chair: S. Kassavetis, LTFN, AUTH
17:30-18:00 INVITED	Organic, Polymeric and Hybrid Materials for Organic Electronics A. K. Andreopoulou, K. Andrikopoulos, C. Anastasopoulos, S. Aivali, J. Kallitsis Department of Chemistry, University of Patras, 26504 Patras, Greece	17:30-18:00 INVITED	Convert2Green – Open Innovation Network to accelerate uptake of climate neutral materials in innovative products J. Fahlteich ¹ , M. Krokida ² KETMarket GmbH, Dresden, Germany, National Technical University of Athens, Greece
18:00-18:30 INVITED	Automated Manufacturing Production Line for Integrated Printed Organic Photovoltaics V. Kyriazopoulos, E. Mekeridis, S. Logothetidis Organic Electronic Technologies 20th KM Thessaloniki - Tagarades, Thermi, Greece	18:00-18:30 INVITED	Open Innovation, Intellectual Property, and Exploitation of technical ideas R. Harrison Sonnenberg Harrison Partnerschaft mbB - Intellectual Property and Technology Firm, Germany
18:30-18:45	Next generation front sheet for organic photovoltaics P. Schlenz Fraunhofer FEP, Dresden, Germany	18:30-18:45	ESNA – European Sustainable Nanotechnology Association V. Smitka AMIRES, The Business Innovation Management Institute, z.ú. Prague, Czech Republic
21:00	DINNER FOR ISFOE23 KEYNOTE & INVITED SPEAKERS		

09:00-11:00 📍 Timber Hall1	Workshop on OLAE Materials 3 Chair: A. K. Andreopoulou, Univ. of Patras, Greece				
09:00-09:30 KEYNOTE	Solid-state electrocaloric cooling, from materials to devices G. Hadziioannou <i>University of Bordeaux, France</i>	09:30-11:00 📍 Doc Six 2	Workshop on Bioelectronics 1 (NN23 & ISFOE23) Chair C. Pitsalidis		
09:30-10:00 INVITED	Towards a comprehensive understanding of charge transfer, release and transport in doped organic semiconductors G. D'Avino <i>CNRS, Institut Néel, 25 rue des Martyrs, 38042 Grenoble, France</i>	09:30-10:00 INVITED	Electrolyte-gated transistors based on ambipolar reduced graphene oxide: the mechanism of transduction of biorecognition events F. Biscarini ^{1,2} , M. Sensi ¹ , R. Furlan de Oliveira ^{3,4} , M. Berto ¹ , A. Paradisi ¹ , C. A. Bortolotti ¹ , P. Samori ³ ¹ <i>Department of Life Sciences, University of Modena and Reggio Emilia, via Campi 103, Modena 41125, Italy</i> ² <i>Center for Translational Neurophysiology - Istituto Italiano di Tecnologia, Italy</i> ³ <i>Université de Strasbourg, CNRS, ISIS, France</i> ⁴ <i>Brazilian Nanotechnology National Laboratory (LNNano) CNPEM, Campinas 13083-970, Brazil</i>		
10:00-10:30 INVITED	Permeation barrier coatings for flexible opto-electronic devices P. Schlenz, M. Top <i>Fraunhofer FEP, Dresden, Germany</i>	10:00-10:30 INVITED	Organic electronics for neuromorphic sensing and bio-interfacing P. Gkoupidenis <i>Max Planck Institute for Polymer Research, Germany</i>		
10:30-10:45	Detection of molecular hydrogen as a tool to characterize molecular doping of p- and n- type organic semiconductors F. Pallini, S. Mattiello, S. Mecca, M. Sassi and L. Beverina <i>Department of Materials Science, University of Milano-Bicocca, Milano Italy</i>	10:30-11:00 INVITED	Collective effects at the transducing interface of large-area label-free single molecule biosensors G. Scamarcio ^{1,2} , C. Di Franco ^{1,2} , E. Macchia ^{3,4} , L. Torsi ⁴ ¹ <i>Dipartimento Interateneo di Fisica, Università degli Studi di Bari Aldo Moro, Italy</i> ² <i>CNR, Istituto di Fotonica e Nanotecnologie, Sede di Bari, Italy</i> ³ <i>Faculty of Science and Engineering, Åbo Akademi University, Finland.</i> ⁴ <i>Dipartimento di Chimica, Università degli Studi di Bari Aldo Moro, Italy.</i>		
10:45-11:00	Carborane-containing materials for organic electronics with novel applications F. Aniés ¹ , M. Heeney ^{1,2} ¹ <i>KAUST Solar Center (KSC) Division of Physical Sciences & Engineering (PSE), KAUST, Saudi Arabia</i> ² <i>Dept Chemistry and Centre for Processable Electronics, Imperial College London, UK</i>				
11:00-11:30	Coffee Break ISFOE23 Posters- Exhibition - Networking				
11:30-13:30 📍 Timber Hall1	Workshop on OLEDs, OTFTs and Wearables 1 Chair: G. Davino, Institut Neel, CNRS, France	11:00-13:30 📍 Timber Hall2	Computational Modelling (ISFOE23 + NN23) Chair: E. Lidorikis, Univ. of Ioannina, Greece	11:30-13:30 📍 Doc Six 2	Workshop on Bioelectronics 2 (NN23 & ISFOE23) Chair: F. Biscarini
11:30-12:00 INVITED	Analyzing trap state formation during degradation of thermally-activated delayed fluorescent OLEDs S. Sem ¹ , E. Stanzani ^{1,2} , S. Züfle ¹ , B. Ruhstaller ^{1,3} , S. Jenatsch ¹ ¹ <i>Fluxim AG, Winterthur, Switzerland</i> ² <i>Intituto de Ciencia Molecular, Univ. Valencia, Spain</i> ³ <i>Institute of Computational Physics, Zurich University of Applied Sciences (ZHAW), Switzerland</i>	11:30-12:00 INVITED	Ultrafast interactions and saturable absorption in mid-IR graphene modulator E. Lidorikis <i>Department of Materials Science and Engineering, University of Ioannina, 45110 Ioannina, Greece</i> <i>Institute of Materials Science and Computing, University Research Center of Ioannina, 45110 Ioannina, Greece</i>	11:30-12:00 INVITED	Conducting polymer scaffolds: A route towards 3D bioelectronics C. Pitsalidis Khalifa University, Abu Dhabi, UAE
12:00-12:15	Silver and copper screen-printed temperature sensors on flexible substrates C. Vaquero ¹ , L. Bilbao ¹ , A. Pérez ¹ , H. Villaverde ¹ , J. Maudes ¹ , O. Adarraga ¹ , I. Bustero ¹ , I. Santamaria ¹ <i>TECNALIA, Basque Research & Technology Alliance (BRTA), Spain</i>	12:00-12:30 INVITED	Insights into the electronic properties in organic semiconductors from multiscale simulations O. M. Roscioni ^{1,2} , M. Ricci ¹ , C. Zannoni ³ , and G. D'Avino ⁴ . ¹ <i>MaterialX LTD, Bristol, UK;</i> ² <i>Goldbeck Consulting LTD, Cambridge, UK;</i> ³ <i>Industrial Chemistry</i>	12:00-12:30 INVITED	Cell membranes on chip A. M. Pappa <i>Department of Biomedical Engineering, Khalifa University, PO Box – 127788, Abu Dhabi, United Arab Emirates (UAE)</i>

12:15-12:30	<p>Molecular doping of n-type organic semiconductors: tailoring molecular interactions to control thermoelectric properties P. Rossi, N. Pataki, M. Caironi Center for Nano Science and Technology @Polimi, Istituto Italiano di Tecnologia, Milan, Italy</p>		<p><i>Department "Toso Montanari", University of Bologna, Italy; ⁴ Grenoble Alpes University, CNRS, Grenoble, France</i></p>		
12:30-12:45	<p>An organic ultra-fast nanogap-based humidity sensor S. Mandal¹, H. M. Mantilla¹, K. Loganathan¹, H. Faber¹, A. Sharma¹, M. Gedda¹, E. Yengel¹, D. K. Goswami², T. D. Anthopoulos¹ ¹KAUST Solar Center (KSC), Kingdom of Saudi Arabia ² Organic Electronics Laboratory, Department of Physics, Indian Institute of Technology Kharagpur, Kharagpur India</p>	12:30-13:00 INVITED	<p>A digital path for an accelerated computational design of novel membranes in biotechnology A. Kneer^{1,2}, W. Kunz², S. Barbe⁴, B. Nestler^{2,3} ¹ TinniT Technologies, Karlsruhe, Germany ² Hochschule Karlsruhe, Univ. Applied Sciences, IDM, Germany ³ Karlsruhe Institute of Technology, Inst. Applied Materials-Comp. Materials Science, Germany ⁴ Technical University Cologne, Leverkusen, Germany</p>	12:30-13:00 INVITED	<p>Materials and Technologies for Hydrogel-based Bioelectronics A. Da Silva Intelligent Healthcare Technologies Laboratory, Department of Automatic Control and Systems Engineering, Faculty of Engineering, University of Sheffield, Sheffield, UK</p>
12:45-13:00	<p>Exploring the Energy Transfer Processes in Hyperfluorescence OLEDs: a Method to Convert Green emission into Blue K. Stavrou, L. G. Franca, A. P. Monkman Department of Physics, Durham University, UK</p>				
13:00-13:15	<p>Contact Resistance of Low-Voltage n-Channel Thin-Film Transistors Based on Three Different Organic Semiconductors S. Steffens¹, T. Wollandt¹, B. A. R. Günther², L. H. Gade², B. V. Lotsch³, H. Klauk¹ ¹Organic Electronics, Max-Planck Institute for Solid State Research, Stuttgart, Germany; ²Institute of Inorganic Chemistry, Heidelberg University, Germany; ³Nanochemistry, Max-Planck Institute for Solid State Research, Stuttgart, Germany</p>	13:00-13:15	<p>Augmented intelligence for next-generation OLED materials innovation C. M. Krauter¹, H. Abroshan², H. S. Kwak², A. Chandrasekaran³, P. Winget³, M. D. Halls⁴ ¹Schrödinger GmbH, Mannheim, Germany ²Schrödinger Inc, Portland, OR 97204, US ³Schrödinger Inc, New York, NY 10036, US ⁴Schrödinger Inc, San Diego, CA 92121, US</p>	13:00-13:15	<p>Practical and mechanistic aspects of mercury – polythymine aptamer interaction in the design of an electrochemical DNA biosensor A. Szymczyk¹, M. Olszewski², R. Ziótkowski¹, E. Malinowska^{1,3} ¹Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Poland ²Chair of Drug and Cosmetics Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Poland ³Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, Poland</p>
13:15-13:30	<p>OLED R2R Manufacturing and Applications: Lighting in Buildings, Wearables and Automotive V. Kyriazopoulos¹, E. Mekeridis¹, S. Logothetidis^{1,2} ¹ Organic Electronic Technologies (OET), 20th KM Thessaloniki - Tagarades, 57001 Themi Greece ² Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</p>	13:15-13:30	<p>Understanding the morphology formation of absorber layers in solution-processed solar cells with the help of advanced simulations O.J.J. Ronsin¹, J. Harting^{1,2} ¹Helmholtz Institute Erlangen-Nürnberg for Renewable Energy, Forschungszentrum Jülich, Germany ²Department of Chemical and Biological Engineering and Department of Physics, Friedrich-Alexander-Universität Erlangen, Germany</p>	13:15-13:30	<p>BIOASSEMBLER - Bioinspired Assembly of Binders on Multiplex MEMS Biosensors P. Saviranta VTT, Sensing Solutions Espoo, Finland</p>
13:30-15:00	<p>Lunch Break ISFOE23 Posters- Exhibition - Networking</p>				

15:00-17:15 🏠 Timber Hall 1	Workshop on NanoManufacturing, In-Line Metrology & Quality Control Chair: S. Kassavetis, LTFN, AUTH	15:00-17:00 🏠 Doc Six 2	Workshop on Bioelectronics 3 (NN23 & ISFOE23) Chair: A. da Silva
15:00-15:30 INVITED	<p>Characterization of perovskite layers using in line compatible electrical and optical techniques C. Defranoux¹, F. Korsós¹, B. Fodor¹, L. Illés², S. Lenk², P. Tüttő¹, K. Szőke^{1,3}, D. Krisztián¹, D. Selmeczi¹</p> <p>¹Semilab Co. Ltd., Prielle Kornélia u. 4/A. H-1117 Budapest, Hungary ²Department of Atomic Physics, Institute of Physics, Budapest University of Technology and Economics, Műegyetem rkp. 3., H-1111 Budapest, Hungary ³Department of Electron Devices, Institute of Electrical Engineering and Informatics, Budapest University of Technology and Economics, Műegyetem rkp. 3., H-1111 Budapest, Hungary</p>	15:00-15:30 INVITED	<p>Bioelectronic devices and Therapeutic applications: The selective Vagus nerve stimulation as a paradigm of the new Bioelectronic Medicine era D. Koutsouras Imec, The Netherlands</p>
15:30-16:00 INVITED	<p>Achieving High-Volume Roll-to-Roll Manufacturing for Printed Flexible Organic Photovoltaics E. Mekeridis¹, V. Kyriazopoulos¹, S. Fachouri, S. Logothetidis^{1,2}</p> <p>¹Organic Electronic Technologies (OET), 20th KM Thessaloniki - Tagarades, 57001 Thermi ²Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</p>	15:30-16:00 INVITED	<p>Photo-sensitive bio-hybrid interfaces for biophotonic applications: from plants to human living cells M.Ciocca¹, T.M. Brown², L. Petti¹, P. Lugli¹</p> <p>¹Faculty of Engineering, Free University of Bozen-Bolzano, Italy ²Department of Electronic Engineering, University of Rome Tor Vergata, Italy</p>
16:00-16:30 INVITED	<p>The importance of Raw Materials in the new Automotive components N. Li Pira¹, F. Scaffidi Muta¹, G. Deninno²</p> <p>¹CRF STELLANTIS – Sustainable Raw Materials C.so Settembrini 40, 10135 Turin – Italy ²Università degli Studi di Torino, Science dei Materiali, Via Verdi 8 - 10124 Torino– Italy</p>	16:00-16:30 INVITED	<p>In Situ-Actuated, Minimally Invasive Spinal Cord Stimulator (MI-SCS): A Ground-breaking Approach in Pain Management B. J. Woodington¹, V. F. Curto¹, Yi-Lin Yu^{2,3}, H. Martínez-Domínguez⁴, L. Coles¹, E. H. Salim², G. G. Malliaras¹, C. M. Proctor¹, D. G. Barone^{1,2}</p> <p>¹Department of Engineering, University of Cambridge, UK ²Department of Clinical Neurosciences, University of Cambridge, UK ³Department of Neurological Surgery, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan ⁴Tecnológico Nacional de México, Campus Morelia, Morelia, Mexico</p>
16:30-16:45 EU PROJECT	<p>In-line and Real-time Nano-characterization technologies for the high yield manufacturing of Flexible Organic Electronics (RealNano) A. Laskarakis Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</p>	16:30-16:45	<p>A sprayed graphene Lab-on-PCB platform for multi-analyte detection B. Fenech-Salerno, M. Holicky, C. Yao, F. Torrisi Department of Chemistry, Imperial College, London, United Kingdom</p>
16:45-17:00	<p>Time series analysis of a roll to roll sputter process M. Top, G. Oberschelp, M. Fahland Fraunhofer FEP, Dresden, Germany</p>	16:45-17:00	<p>Surface density - dependent orientation of antibody on silicon: TOF-SIMS analysis of noncovalent and covalent immobilization methods A. Budkowski¹, P. Petrou², K. Gajos¹</p> <p>¹Smoluchowski Inst. of Physics, Jagiellonian University, Poland ²INRASTES, National Center for Sci. Research "Demokritos", Greece</p>
17:00-17:15	<p>Organic Photovoltaic Systems Embedded in Building Facilities D. Papaspanopoulos, E.Mekeridis, S.Logothetidis Organic Electronic Technologies 20th KM Thessaloniki - Tagarades, Thermi, Greece</p>		
17:00-17:30	<p>Coffee Break ISFOE23 Posters- Exhibition - Networking</p>		

18:30	PLENARY SESSION	 
18:30-19:00		Introduction by Prof. S. Logothetidis, ISFOE23 & NN23 Chairman
19:00 – 19:30 PLENARY		Prof. Magnus Berggren Laboratory of Organic Electronics and Wallenberg Initiative Materials Science for Sustainability, Linköping University, Sweden Thiophene-Based Trimers for Evolvable and In-Vivo-Manufactured Electrodes and Electronics
19:30 – 20:00 PLENARY		Prof. Peer Fischer Heidelberg University & Max Planck Institute for Medical Research, Germany Nanostructures in motion: chemical motors and nanorobotic systems
20:00 – 20:30 PLENARY		Prof. Sir David King Founder & Chair, Centre for Climate Repair at Cambridge University, UK The Climate Crisis: The State of Climate Science, and What Must be Done Now
21:00	OFFICIAL NANOTECHNOLOGY GALA DINNER PORTO PALACE CONFERENCE CENTRE & HOTEL - ROOF GARDEN	

09:30-11:00 🏠 Timber Hall1	Workshop on OPVs & Perovskite PVs 3 Chair: G. Volonakis, University of Rennes, France	09:30-11:00 🏠 Timber Hall2	Workshop on Bioelectronics 4 (NN23 & ISFOE23) Chair: D. Koutsouras
09:30-10:00 INVITED	Recent advances in processing and efficiency determination of organic solar cells for indoor energy harvesting J. Ackermann <i>CNRS, France</i>	09:30-10:00 INVITED	Peripheral nerve interfaces: Non-invasive stimulation using temporal interference and optoelectronics M. Donahue <i>Linköping University, Sweden</i>
10:00-10:30 INVITED	Design of readily upscalable donor and acceptor materials for photovoltaic applications M. Heeney <i>Chemical Science, King Abdullah University of Science and Technology, Saudi Arabia</i>	10:00-10:30 INVITED	DNA – A bio-organic electronic material C. Yumusak <i>Linz Institute for Organic Solar Cells (LIOS), Institute of Physical Chemistry, Johannes Kepler University Linz, Altenbergerstr. 69, 4040 Linz, Austria</i>
10:30-10:45	Investigation of the effect of photoactivation on printed Organic Photovoltaic devices based on PBDB-T:BTP-12 binary system V. Heben ¹ , C. Kapnopoulos ¹ , C. Stavrak ¹ , A. Paliagkas ¹ , E. Doudis ¹ , D. Tselekidou ¹ , A. Zachariadis ¹ , S. Kassavetis ¹ , E. Mekeridis ² , A. Laskarakis ¹ , S. Logothetidis ^{1,2} ¹ <i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i> ² <i>Organic Electronic Technologies (OET), Greece</i>	10:30-10:45	A 3D printed wearable piezoelectric platform for energy harvesting from artery pulsation I. Sobianin ¹ , S.D. Psoma ¹ , A. Tourlidakis ² ¹ <i>School of Engineering & Innovation, The Open University, UK</i> ² <i>School of Engineering, University of Western Macedonia Greece</i>
10:45-11:00	On the fly short pulse R2R laser patterning processes for the manufacturing of fully printed semi-transparent organic photovoltaics C. Kapnopoulos ¹ , A. Zachariadis ¹ , E. Mekeridis ² , S. Kassavetis ¹ , A. Laskarakis ¹ , S. Logothetidis ^{1,2} ¹ <i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i> ² <i>Organic Electronic Technologies (OET), Greece</i>	10:45-11:00	Fluorescence emission angular dependence on a nanostructured plasmonic grating M. Angelini ¹ , E. Manobianco ² , P. Pellacani ² , F. Floris ¹ , F. Marabelli ¹ ¹ <i>Department of Physics, University of Pavia, Pavia, Italy</i> ² <i>Plasmore S.r.l, Italy</i>
11:00-11:30	Coffee Break ISFOE23 Posters- Exhibition - Networking		
11:30-13:30 🏠 Timber Hall1	Workshop on OPVs & Perovskite PVs 4 Chair: Martin Heeney, Chemical Science, KAUST, Saudi Arabia		
11:30-12:00 KEYNOTE	Strategies for improving the efficiency and stability of organic photovoltaics T. Anthopoulos <i>King Abdullah University of Science and Technology (KAUST), Thuwal 23955-6900, Kingdom of Saudi Arabia</i>	12:00-13:30 🏠 Timber Hall2	Workshop on Bioelectronics 5 (NN23 & ISFOE23) Chair: M. Donahue
12:00-12:30 KEYNOTE	High Temperature Quantum Phenomena in Hybrid Perovskites F. So ¹ , K. Gundogdu ² ¹ <i>Dept of Materials Science and Engineering</i> ² <i>Dept of Physics, North Carolina State University, USA</i>	12:00-12:30 INVITED	Nanocarbon bioelectronics: From cellular investigations to clinical translation R. Garg <i>Department of Neurology, Center for Neuroengineering and Therapeutics, University of Pennsylvania, Philadelphia, USA</i>
12:30-13:00 INVITED	Opto-electronic properties of novel perovskite-like materials for photovoltaics G. Volonakis University of Rennes, France	12:30-12:45	Fully-printed glucose sensor for Continuous Monitoring of metabolism in micro-physiological systems L. Sappia, A. B. Aissa, M. Alique, P. Lacharmoise, C. D. Simaõ, A. Moya <i>Eurecat, Centre Tecnològic de Catalunya, Functional Printing and Embedded Devices Unit, Spain</i>
12:45-13:00		Ultra-sensitive bio-detection by surface plasmon resonance assisted by spectral polarimetry G. Dyankov ^{1,2} , B. Zhang ³ , B. Zhao ³ , P. Kolev ¹ , P. Genova-Kalou ⁴ ¹ <i>Institute of Optical Materials and Technologies "Acad. J. Malinowski" (IOMT), Bulgarian Academy of Sciences (BAS), Bulgaria</i>	

					² Central Laboratory of Applied Physics, Bulgarian Academy of Sciences, Bulgaria; ³ Beihang University, China; ⁴ National Center of Infectious and Parasitic Diseases Bulgaria
13:00-13:15 YRA Candidate	Design rules for selective deposition of silver by condensation coefficient modulation for application in organic photovoltaics S. Abrahamczyk, P. Bellchambers, R. A. Hatton Department of Chemistry, University of Warwick, Coventry, UK		13:00-13:15		Development and characterization of flexible electrochemical biosensors using inkjet printing I.E. Chatzioannou ¹ , K. Papadopoulou ¹ , A. Batsi ¹ , C. Papouli ² , P. Rampota ¹ , A. Orfanos ³ , V. Karagkiozaki ³ , S. Logothetidis ^{1,3} , A. Laskarakis ¹ ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² EIMicLab, Department of Physics, Aristotle University of Thessaloniki, Greece ³ BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece
13:15-13:30	Optimization of electron transport layer for printed organic solar cells for performance and UV-stability enhancement E. Doudis ¹ , A. Zachariadis ¹ , C. Kapnopoulos ¹ , E. Mekeridis ² , D. Tselekidou ¹ , A. Laskarakis ¹ , S. Logothetidis ^{1,2} ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), Greece				

13:30-15:00	Lunch Break ISFOE23 Posters- Exhibition - Networking				
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15:00-17:00 🏠 Timber Hall1	Workshop on OLAE Materials 4 Chair: G. Volonakis, Univ. Rennes, France			15:00-17:00 🏠 Doc Six 2	Workshop on Centers of Excellence (NN23 & ISFOE23) Chair: G. Hadzioannou, University of Bordeaux A. Laskarakis, LTFN, AUTH
15:00-15:30 KEYNOTE	Crystal Design for Organic Electronic Devices J. Anthony Center for Applied Energy Research, University of Kentucky, USA	15:30-17:00 🏠 Timber Hall2	WS5 Graphene 1 Chair: G. Deligeorgis	15:00-15:20	Greece Centre of Excellence for Organic, Printed Electronics & Nano-Technologies (COPE-Nano) S. Logothetidis Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece
15:30-16:00 INVITED	A Novel Rheological Technique for Characterising Mechanical Properties of UV Curing Materials in Photolithography and Printing Applications A. Holder ¹ , A. Claypole ² , J. Claypole ² , T. Claypole ² ¹ A-Gas Electronic Materials Ltd ² Welsh Centre for Printing and Coating (WCPC), Swansea University UK	15:30-16:00 INVITED	Graphene chemistry: reactions under cover L. Vattuone Physics Department, University of Genoa & IMEM-CNR, Genoa, Italy	15:20-15:40	Latvia: Excellence Centre of Advanced Material Research and Technology Transfer (CAMART2) A. Anspoks Institute of Solid State Physics, University of Latvia, Latvia
16:00-16:15	Molecular order improving organic electronic devices: The role of liquid crystals L.G. Franca ¹ , C.H. Stadtober ² , G. Farias ² , J. Eccher ² , H. Bock ³ , A.P. Monkman ¹ , I.H. Bechtold ² ¹ Department of Physics, Durham University, UK; ² Federal University of Santa Catarina, Brazil; ³ Centre de Recherche Paul Pascal, CNRS, Pessac, France	16:00-16:30 INVITED	Pressure and temperature dependent photoconductivity in two-dimensional transition metal dichalcogenide transistors A. Di Bartolomeo ^{1,2} , A. Kumar ¹ , O. Durante ^{1,2} , A. Sessa ¹ , E. Faella ^{1,2} , L. Viscardi ^{1,2} , K. Intonti ^{1,2} , F. Giubileo ² , N. Martucciello ² , A. Pelella ³ ¹ Department of Physics "E.R. Caianiello", University of Salerno, Italy. ² CNR-SPIN, Italy ³ Dipartimento di Scienze e Tecnologia, Università del Sannio, Italy	15:40-16:00	Cyprus: Research and Innovation Centre of Excellence for Intelligent, Efficient and Sustainable Energy Solutions (PHAETHON) C. Christofides University of Cyprus, Cyprus
16:15-16:30	Bio-based Printed Circuit Board from Renewable Material A.S. Honarbari ^{1,2} , P. Cataldi ¹ , A. Athanassiou ¹ ¹ Smart Materials, Istituto Italiano di Tecnologia, Genova, Italy ² Dipartimento di Informatica				

	<i>Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Università Degli Studi di Genova, Genova, Italy</i>				
16:30-16:45	<p>Near Infrared Emissions with Open-Shell π-Conjugated Polyradicals C. P. Yu¹, R. Chowdhury², Y. Fu³, P. Ghosh², W. Zeng¹, P. Murto¹, A. Rao², C. Grey¹, R. Friend², H. Bronstein¹</p> <p>¹Yusuf Hamied Department of Chemistry, University of Cambridge, UK ²Department of Physics, Cavendish Laboratory, Cambridge University, UK</p>	16:30-16:45	<p>Sonification Methods for Enabling Augmented Data Analysis Applied to Graphene Optoelectronics A. J. Bergren¹, A. Beltaos², A. van Dijk²</p> <p>¹Nanotechnology Research Centre, National Research Council of Canada, Alberta, Canada ²Faculty of Science and Technology, Athabasca University, Canada</p>	16:00-16:20	<p>Poland: Centre of Excellence for nanophotonics, advanced Materials and novel crystal growth-Based technologies (ENSEMBLE3) D. Pawlak <i>Institute of Electronic Materials Technology, Poland</i></p>
16:45-17:00		16:45-17:00	<p>Gold-Decorated Graphene Hybrid Nanomaterial Integrated with A Sensing Device for Agricultural Applications L. Dinu¹, I. Geana², A. Baracu¹, M. Stoian¹, O. Brincoveanu¹, C. Pachiu¹</p> <p>¹National Institute for Research and Development in Microtechnologies (IMT Bucharest), Romania ²National Institute for Research and Development for Isotopic and Cryogenic Technologies, Râmnicu-Vâlcea, Romania</p>	16:20-17:00	<p>Round Table Discussion: Building and Governing a successful CoE</p> <ul style="list-style-type: none"> - CoE Establishment and Complementary Funding - Challenges during the expansion of Centers - Business Models of CoE and Best Practices - Discussion on Future Collaboration
17:30-18:00	<p>NANOTECHNOLOGY 2023 Beach Party Boarding to buses at Porto Palace Hotel entrance for transfer to Beach Bar RIVIERA Please ensure that you have your Beach Party tickets for the dinner and drinks</p>				

09:00-11:00 Crystal Hall	Workshop on OPVs & Perovskite PVs 5 Chair: P. Keivanidis, Cyprus University of Technology, Cyprus			09:00-11:00 Timber Hall2	Workshop on Graphene 2 (NN23 & ISFOE23) Chair: G. Deligiorgis
09:00-09:30 KEYNOTE	From materials acceleration to technology acceleration - closing the gap for printed photovoltaics J. A. Hauch ^{1,2} , C. J. Brabec ^{1,2} , H. Egelhaaf ^{1,2} , T. Heumüller ^{1,2} ¹ Forschungszentrum Jülich GmbH, Helmholtz Institute Erlangen-Nuremberg, Immerwahrstr. 2, 91058 Erlangen ² Friedrich-Alexander-University Erlangen-Nuremberg, Institute Materials for Electronics and Energy Technology, Martensstr. 7, 91058 Erlangen			09:00-09:30 INVITED	2D electronics and sensors, towards smart electronic circuits G. Deligeorgis ^{1,2} , F. Iacovella ¹ , D.M. Kosmidis ¹ , A. Provias ^{1,2} , N. Armaou ^{1,2} , A. Papadopoulou ¹ ¹ Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology – Hellas (FORTH), Greece ² Department of Physics, University of Crete, Greece
09:30-10:00 KEYNOTE	Upscaling OPV into production tech What are the obstacles to reach a competitive OPV industry in Europe? T. Kolbusch ¹ , H. Rooms ² , K. Stephan ³ , ... Coatema Coating Machinery GmbH, Germany	10:00-11:00 Timber Hall1	Workshop on OLEDs, OTFTs and Wearables 2 Chair: E. Lidorikis, Univ. of Ioannina, Greece	09:30-10:00 INVITED	Graphene Oxide: Progress and Surprises W.K. Maser ¹ , A.M. Benito ² Instituto de Carboquímica (ICB-CSIC), E-50018 Zaragoza, Spain
10:00-10:30 INVITED	Role of interlayers in fully solution-processed organic electronics B. Orwat ¹ , K. Jankowska ^{2,3} , A. Luczak ¹ , J. Nawrocik ^{2,3} , R. Udovydaska ¹ , J. Jung ¹ , A. Singh ¹ , B. Luszczynska ¹ ¹ Lodz University of Technology, Department of Molecular Physic, Poland ² Faculty of Chemistry, Adam Mickiewicz University, Poland; ³ Center for Advanced Technology, Adam Mickiewicz University, Poznan, Poland;	10:00-10:15	Fully edible transistor: a building block for edible electronics E. Feltri ^{1,2} , P. Mondelli ¹ , F. Ferrarese ^{1,2} , A. Luzio ¹ , M. Caironi ¹ ¹ Center for Nano Science and Technology, IIT, Italy ² Physics Department, Politecnico di Milano, Milan, Italy	10:00-10:15	Laser-assisted high-quality graphene-like structures for energy storage applications M. Athanasiou ¹ , N. Samartzis ^{1,2} , K. Bhorkar ¹ , V. Dracopoulos ¹ , T. Ioannides ¹ , S. N. Yannopoulos ¹ ¹ FORTH/ICE-HT, Rio-Patras, Greece ² Department of Chemistry, University of Patras, Greece
		10:15-10:30	Flexible PLEDs based on green color emitting polymers for biosensing applications K. Papadopoulos ¹ , D. Tselekidou ¹ , A. Zachariadis ¹ , V. Kyriazopoulos ² , S. Kassavetis ¹ , A. Laskarakis ¹ , S. Logothetidis ^{1,2} , M. Gioti ¹ ¹ Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), Greece	10:15-10:30	Effects of ambient humidity on composite graphenethymine and graphene-lipid thin films as a platform for molecular sensing R. Panajotović ¹ , J. Vujin ¹ , M. Vorokhta ² , I. Khalakhan ² , I. Milošević ¹ , W. Huang ³ , and S. Ptasinska ⁴ ¹ Laboratory for 2D materials, Institute of physics, Belgrade, Serbia; ² Department of Surface and Plasma Science, Charles University, Czech Republic; ³ Department of Chemistry and Biochemistry, University of Notre Dame, USA; ⁴ Department of Physics and Astronomy, University of Notre Dame, USA
10:30-11:00 INVITED	Novel Concepts for Perovskite Solar Cells U. Menda ¹ , A. Akalin ^{1,2} , T. Mateus ¹ , A. Vicente ¹ , E. Coimbra ¹ , D. Camilo ¹ , Hugo Aguas ¹ , R. Martins ¹ , M. Mendes ¹ ¹ FN/CENIMAT, Department of Materials Science, Faculty of Science and Technology, Universidade NOVA de Lisboa Caparica Campus, Caparica, Portugal ² Dokuz Eylul University, Center for Fabrication & Application of Electronic Materials, Turkey	10:30-10:45	Middle-sized ZnS-rich ZnCdSeS Quantum Dots for Transparent Electroluminescent Films H. S. Chen, C. W. Yeh, S. Yang Department of Materials Science & Engineering, National Tsing Hua University, Hsinchu, Taiwan	10:30-10:45	
		10:45-11:00	Study of novel conjugated polymers: from emissive thin films to fabricated printed flexible OLEDs D. Tselekidou ¹ , K. Papadopoulos ¹ , A. Zachariadis ¹ , V. Kyriazopoulos ² , K. C. Andrikopoulos ³ , A.K. Andreopoulou ³ , J.K. Kallitsis ³ , S. Kassavetis ¹ , A. Laskarakis ¹ , S. Logothetidis ^{1,2} , M. Gioti ¹ ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), Greece	10:45-11:00	

11:00-11:30	Coffee Break ISFOE23 Posters- Exhibition - Networking	
11:30-13:30 🏠 Timber Hall 1	Workshop on OLEDs, OTFTs and Wearables 3 Chair: M. Gioti, LTFN, AUTH, Greece	11:30-13:30 🏠 Crystal Hall
11:30-12:00 INVITED	A new stretchable Li-ion microbattery design for wearable applications T. Djenizian <i>Department of Flexible Electronics, School of Mines Saint-Etienne, Gardanne, France</i>	11:30-12:00 INVITED
12:00-12:15	Smart Textiles for personal cooling: a PCM cooling vest model K.M.B. Jansen <i>Faculty of Industrial Design Engineering, Delft University of Technology, The Netherlands</i>	12:00-12:30 INVITED
12:15-12:30	Insights into the complex crystalline structure of PVDF-based co- and ter-polymers: impact of the processing and post-treatments on the electroactive properties J. Housseini, G. Fleury, G. Hadziioannou <i>Laboratoire de Chimie des Polymères Organiques (LCPO), Univ. Bordeaux, CNRS, France</i>	12:30-13:00 INVITED
12:30-12:45	Human-integrated biocompatible devices for stress and strain monitoring V. Vit, M. Bettelli, V. Sinisi, M. Villani, N. Coppedè <i>Institute of Materials for Electronics and Magnetism, (IMEM), Italian National Council (CNR), Italy</i>	12:30-13:00 INVITED
12:45-13:00	Biocompatible and biodegradable integrated soft pressure sensor based on functionalized cellulose nanocomposites V. Vit ¹ , V. Sinisi ¹ , L. Riva ^{2,3} , A. Fiorati ^{2,3} , C. Punta ^{2,3} , N. Coppedè ¹ ¹ <i>Institute of Materials for Electronics and Magnetism, (IMEM), Italian National Council (CNR), Italy</i> ² <i>Dept Chemistry, Materials, and Chemical Engineering "G. Natta", Politecnico di Milano, Italy</i> ³ <i>INSTM Local Unit, Politecnico di Milano, Italy</i>	13:00-13:15
13:00-13:15	Real Time controlling of In-Organic material deposition by Digital SE tool for Organic Light Emitting Diodes fabricated on Cluster OVPD PPL M. Chatzidis ¹ , A. Zachariadis ¹ , P.K. Baumann ² , A. Laskarakis ¹ , M. Gioti ¹ , S. Logothetidis ¹ ¹ <i>Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Thessaloniki, Greece</i> ² <i>AIXTRON SE (Dornkaulstr. 2, 52134 Herzogenrath, Germany)</i>	13:00-13:15
13:15-15:00	Lunch Break ISFOE23 Posters- Exhibition - Networking	
15:00-17:30 🏠 Crystal Hall	Workshop on OLAE 6 Chair: A. Laskarakis, LTFN, AUTH, Greece	
15:00-15:30 KEYNOTE	Stars in your eyes - monodisperse macromolecules for photonic and optoelectronic applications P.J. Skabara <i>School of Chemistry, University of Glasgow, Glasgow, United Kingdom</i>	
15:30-16:00 INVITED	Recent advancements in materials for scalable organic Photovoltaics JR. Pouliot, P. Berrouard, A. Hensbee	

	¹ Brilliant Matters Inc. 237 Rue de Liverpool, Saint-Augustin-de-Desmaures, QC G3A2C8 Canada
16:00-16:15	Membrane-based mechanical characterization of screenprinted ink films E. Masarweh ¹ , M. Arseenko ² , P. Guaino ² , D. Flandre ¹ ¹ ICTEAM Institute, UCLouvain, Louvain-la-Neuve; ² Advanced & Smart Surface Solutions, CRM Group, Liège, Belgium
16:15-16:30	Towards Edible Gas Sensors to Reduce Food Waste P. Mondelli, E. Feltri, A. Luzio, M. Caironi Printed and Molecular Electronics, Italian Institute of Technology, Italy
16:30-16:45	Electrospray of PEDOT:PSS: Enhancing the Performance of Solid-State Fiber-Shaped Supercapacitors M.P. Moniz ¹ , A. Rafique ¹ , J. Carmo ¹ , A. C. Marques ^{1,2} , I. Ferreira ¹ , A. C. Baptista ¹ ¹ CENIMAT/I3N, Department of Materials Science, School of Science and Technology, NOVA University of Lisbon, Portugal ² Physics Department, University of Lisbon, Lisbon, Portugal
16:45-17:00	Development of wearable thermoelectric generator for human body energy harvesting. From modelling to the device J. F. S. Claumarchirant, E. Suena-Galindez, O. Fenwick School of Engineering & Materials Science. Queen Mary University of London, UK
17:00-18:00	Closing Remarks and Discussion End of ISFOE23

Nanomaterials: Organic Semiconductors, Electrodes, Barriers, Hybrids and Devices: OPVs, OTFTs, OLEDs Monday 3 July to Thursday 6 July: Poster Display & Presentations Monday 3 July (18:30-20:30): Poster Presentation	
P1-1 YRA Candidate	Zigzag-shaped organic semiconductors conducting mixed-orbital charge transport controlled by heavy chalcogen atoms D. Yamanaka ¹ , Y. Koyama ¹ , M. Mitani ¹ , C. P. Yu ¹ , H. Ishii ² , A. Yamamoto ¹ , S. Kumagai ¹ , J. Takeya ¹ , T. Okamoto ¹ ¹ Department of Advanced Materials Science, Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Chiba, Japan ² Department of Applied physics, Faculty of Pure and Applied Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan
P1-2	Fermi-Level Pinning in Organic Thin-Film Transistors T. Wollandt, K. Küster, S. Steffens, H. Klauk Max Planck Institute for Solid State Research, Stuttgart, Germany
P1-3	An amphiphilic glycolated poly(3,4-ethylenedioxythiophene) for applications in microelectrodes and electrochemical transistors R. Rybakiewicz-Sekita, ^{1,2} M. Gryszel, ^{1,3} G. Pathak, ³ R. Gańczarczyk, ¹ M. Donahue, ³ E. D. Głowacki ^{1,4} ¹ Warsaw University of Technology, Faculty of Chemistry, Warsaw, Poland ² Cardinal Stefan Wyszyński University, Faculty of Mathematics and Natural Sciences, School of Exact Sciences, Warsaw, Poland ³ Linköping University, Laboratory of Organic Electronics, ITN, Norrköping, Sweden ⁴ Central European Institute of Technology, Brno University of Technology, Bioelectronics Materials and Devices Lab, Brno, Czech Republic
P1-4	Synthesis and investigation of new semiconducting oligoaniline based polymers N. A. Durgaryan Department of Organic Chemistry, Yerevan State University, , Armenia
P1-5	Photoluminescent properties of carborane-substituted polycyclic aromatic hydrocarbons A. V. Marsh ¹ , N. J. Cheetham ² , M. Little ² , M. Dyson ² , A. J. P. White ² , P. N. Stavrinou ³ , M. Heeney ^{1*} ¹ King Abdullah University of Science & Technology (KAUST), Thuwal 23955-6900, Kingdom of Saudi Arabia ² Imperial College London, Exhibition Road, London SW7 2AZ, United Kingdom ³ University of Oxford, Oxford, OX1 3PJ, United Kingdom
P1-6	Optical Characterization of Crystalline Phases of NDI-T2 based Oligomers A. Ehm ¹ , E. Bortchagovski ¹ , R. Matsidik ² , M. Sommer ² , D. R. T. Zahn ¹ ¹ Institute of Physics, Semiconductor Physics, Chemnitz University of Technology ² Institute of Chemistry, Polymer Chemistry, Chemnitz University of Technology, Germany
P1-7	Temperature-dependent morphological changes of P3HT thin films via real-time Spectroscopic Ellipsometry S. Bovasianos, A. Zachariadis, S. Logothetidis, A. Laskarakis Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece
P1-8	Utilizing F4-TCNQ Additive for Molecular Doping in Fully Printed Flexible Organic Solar Cells A. Paliagkas ¹ , C. Stavrak ¹ , C. Kapnopoulos ¹ , A. Zachariadis ¹ , V. Heben ¹ , E. Rabota ¹ , S. Logothetidis ^{1,2} , A. Laskarakis ¹ ¹ Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), Greece
P1-9	Investigating the Effects of Chlorine Addition on the Structure and Stability of Printed Perovskite Solar Cells C. Stavrak ¹ , C. Kapnopoulos ² , A. Zachariadis ¹ , S. Kassavetis ¹ , A. Paliagkas ¹ , V. Heben ¹ , C. Gravalidis ¹ , E. Mekeridis ² , S. Logothetidis ^{1,2} , A. Laskarakis ¹ ¹ Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), Greece
P1-10	Star-Shaped Hole Transporting Materials with A Dibenzothiophene Units For Efficient Perovskite Solar Cells R. Durgaryan ^{1,2} , J. Simokaitiene ² , D. Volyniuk ² , J. V. Gražulevičius ² , N. Durgaryan ¹ ¹ Department of Organic Chemistry, Yerevan State University, Yerevan, Armenia ² Department of Polymer Chemistry and Technology, Kaunas University of Technology, Lithuania
P1-11	Fabrication and investigation of ternary-based organic photovoltaic devices based on the PBDB-T:BTP-12:PC60BM system E. Andrioti, G. Atsas, O. Heben, C. Kapnopoulos, E. Rabota, A. Zachariadis, S. Logothetidis, A. Laskarakis Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece

P1-12	<p>Novel crosslinkable acceptors for solar cells E. Kamarauskas¹, L. M. Svirskaitė², T. Malinauskas², K. Genevičius¹, V. Getautis², V. Jančauskas¹, R. J. Čepas¹ ¹<i>Institute of Chemical Physics, Vilnius University, Lithuania</i> ²<i>Department of Organic Chemistry, Kaunas University of Technology, Lithuania</i></p>
P1-13 YRA Candidate	<p>Nanomechanical properties of hole transport layer doped with silver nanoparticles for flexible organic photovoltaics A. Kostopoulou, S. Kassavetis, C. Kapnopoulos, S. Logothetidis, A. Laskarakis <i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i></p>
P1-14 YRA Candidate	<p>The Impact of Light-Induced Annealing on Absorber Layer Crystallization in Organic Solar Cells S. B. Turgut, D. A. Kara, B. Gultekin, <i>Solar Energy Institute Ege University, Izmir, Turkey</i></p>
P1-15	<p>Systematic study of fully printed ternary photovoltaic configurations based on PPDT2FBT:PC70BM:BTP-12 G. Atsas, E. Andrioti, O. Heben, C. Kapnopoulos, E. Rabota, A. Zachariadis, S. Logothetidis, A. Laskarakis <i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i></p>
P1-16	<p>Progress in inline photoluminescence testing of Organic PV structures T. Brigancz¹, Zs. Sánta¹, Z. Kiss¹ and F. Korsós¹, A. Zachariadis², C. Kapnopoulos², V. Kyriazopoulos³, E. Mekeridis³, A. Laskarakis², S. Logothetidis^{2,3} ¹<i>Semilab Co. Ltd., 4/A. Prielle K. str., Budapest, Hungary</i> ²<i>Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece</i> ³<i>Organic Electronic Technologies (OET), Greece</i></p>
P1-17	<p>Understanding contact resistance in nanoscale organic thin-film transistors K. Cordero-Solano, U. Zschieschang, B. Fenk, T. Reindl, T. Wollandt, J. Weis, H. Klauk <i>Max Planck Institute for Solid State Research, Stuttgart, Germany</i></p>
P1-18	<p>Controlling the emission zone in light-emitting electrochemical cells Z. Xiaoying, J. Ráfols-Ribé, C. Larsen, L. Edman <i>Department of Physics, Umeå University, Sweden</i></p>
P1-19	<p>A Printed Optical Flow Sensor, Utilizing Thermochromic Ink D. Barmpakos¹, A. Apostolakis¹, A. Pilatis^{1,2}, D.-N. Pagonis², G. Kaltsas¹ ¹<i>microSENSES Laboratory, Department of Electrical and Electronics Engineering, University of West Attica, Athens, Greece</i> ²<i>Department of Naval Architecture, University of West Attica, Athens, Greece</i></p>
P1-20	<p>Magnesium Boride/Graphene as Potential Electrode Material in Supercapacitors H. A. Kahyaoglu, S.S. Gultekin, B. Gultekin <i>Solar Energy Institute, Ege University, Izmir, Turkey</i></p>
P1-21	<p>Optical temperature sensing utilizing thermochromic inks – A fully printed approach A. Pilatis^{1,2}, F. Skendaj¹, M. Mesiri¹, G. De la Cruz¹, D. Barmpakos¹, A. Apostolakis¹, D. Pagonis^{1,2}, G. Kaltsas¹ ¹<i>microSENSES Laboratory, Department of Electrical and Electronics Engineering, University of West Attica, Athens, Greece</i> ²<i>Department of Naval Architecture, University of West Attica, Athens, Greece</i></p>
P1-22	<p>Battery prototype with a cell based on alloys/carbon nanostructures systems W. Ciesielski, D. Kulawik, S. Żarska <i>Jan Długosz University in Częstochowa, 13/15 Armii Krajowej Ave., 42-200 Częstochowa, Poland</i></p>
P1-23 YRA Candidate	<p>Superficial approach to enhance the properties of commercially available Ag-conductive fabric by Electroless-Deposition-Method for different wearable sensor applications H. Zafar¹, R. Memon², G. Stojanović¹ ¹<i>Department of Power Electronics and Telecommunication, University of Novi Sad, Trg Dositeja Obradovića 3, Novi Sad, Serbia</i> ²<i>Sabancı University, Istanbul, Turkey</i></p>
P1-24 YRA Candidate	<p>A Novel Textile Wearable OECT-Integrated Smart Bandaid for Real-Time Uric Acid Monitoring in Wound Exudate Arcangeli D.¹, Gualandi I.¹, Mariani F.¹, Tessarolo M.², Ceccardi F.¹, Decataldo F.², Melandri F.³, Tonelli D.¹, Fraboni B.², Scavetta E.¹ ¹<i>Department of Industrial Chemistry "Toso Montanari", University of Bologna, Bologna, Italy</i> ²<i>Department of Physics and Astronomy "Augusto Righi", University of Bologna, Bologna, Italy</i> ³<i>Plastod S.p.A., Calderara di Reno, Bologna, Italy</i></p>

P1-25	<p>Polymeric Ferroelectrets for Ultrasensitive Sensing and Nanoenergy Harvesting H. V. Seggern¹, S. Zhukov¹, O. B. Dali², M. Kupnik² ¹Materials and Earth Sciences, Tech. Univ. Darmstadt, Germany ²Measurement and Sensor Technology Group, Tech. Univ. Darmstadt, Germany</p>
P1-26	<p>All-Fibre Photovoltaic Storage Devices for E-Textiles M.P. Moniz, J. Carmo, I. Sequeira, A. Rafique, I. Ferreira and A.C. Baptista CENIMAT/I3N, Department of Materials Science, School of Science and Technology, NOVA University of Lisbon, Portugal</p>
P1-27 YRA Candidate	<p>In-Mold OPV: Improved organic photovoltaic modules properties under injection molding P. Pinyol-Castillo¹, A. López-Porta², N. Lozano², I. Burgués-Ceballos¹, L. Lopez-Mir¹ ¹EURECAT, Centre Tecnològic de Catalunya, Functional Printing and Embedded Devices Unit, Parc Científic TecnoCampus, Av. Ernest Lluch 36, 08302 Mataró, Spain ²EURECAT, Centre Tecnològic de Catalunya, Polymeric and Composites Processes Unit, Parc Tecnològic del Vallès, Spain</p>
<p>Biosensors & Bioelectronics (Common POSTER Session in ISFOE23 & NN23) Tuesday 4 to Thursday 6 July: Poster Display & Presentations Thursday 6 July (17:00-20:00): Poster Presentation</p>	
P4-1	<p>Bottom-Up and "Top-Down" Approaches for the Fabrication of Nanostructured Surfaces with Sensing Applications A. Colniță¹, D. Marconi¹, I. Brezeștean¹, N.E. Dina¹, A. Calborean¹, L. Barbu-Tudoran^{1,2}, I. Turcu¹ ¹Molecular and Biomolecular Physics Department, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania ²Electron Microscopy Centre, Faculty of Biology and Geology, Babes-Bolyai University, Romania</p>
P4-2	<p>Serotonin detection in artificial plasma based on modified graphene-aniline electrochemical sensors S.-M. Iordache¹, A. M. I. Trefilov^{2,3}, A.-M. Iordache¹, A. V. Filip³, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, S. Caramizoiu⁴, C. E. A. Grigorescu¹ ¹Optospintronics Department, National Institute of Research and Development for Optoelectronics—INOE 2000, Romania; ²Nano-SAE Research Center, Faculty of Physics, University of Bucharest, Romania ³National Institute for Laser, Plasma and Radiation Physics, Romania; ⁴National Institute for Research and Development in Microtechnologies, ROMANIA</p>
P4-3	<p>Spectro-electrochemical properties of a new non-enzymatic modified working electrode used for histamine assessment in the diagnosis of food poisoning S.-M. Iordache¹, A.-M. Iordache¹, A. Zubarev², M. Cuzminschi³, R.-E. Bohiltea⁴, C. Giuglea⁴, S. Caramizoiu⁵, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, C.E.A. Grigorescu¹ ¹Optospintronics Department, National Institute of Research and Development for Optoelectronics—INOE 2000, Romania; ²National Institute for Laser, Plasma and Radiation Physics, Romania; ³Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering, ROMANIA ⁴University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania; ⁵National Institute for Research and Development in Microtechnologies, ROMANIA;</p>
P4-4	<p>Complex colorimetric and thermochromic sensor array for the evaluation of urea in artificial saliva A.M. Iordache¹, S.-M. Iordache¹, T. Soare², C. Rizea³, A. Mazlum³, I. C. Vasiliu¹, M. Elisa¹, I. Chilibon¹, C.E.A. Grigorescu¹ ¹Optospintronics Department, National Institute for Research and Development for Optoelectronics—INOE 2000, Romania; ²Department of Pathology, Faculty of Veterinary Medicine, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania ³Roxy Veterinary S.R.L, Romania</p>
P4-5	<p>Label- free electrochemical DNA biosensor to mercury ions detection A. Szymczyk¹, M. Olszewski², R. Ziótkowski¹, E. Malinowska^{1,3} ¹Chair of Medical Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Warsaw, Poland ²Chair of Drug and Cosmetics Biotechnology, Faculty of Chemistry, Warsaw University of Technology, Warsaw, Poland ³Centre for Advanced Materials and Technologies CEZAMAT, Warsaw University of Technology, Warsaw, Poland</p>
P4-6	<p>Printed oxygen indicator for smart food packaging V. Dobiáš¹, D. Filipi², M. Veselá³, M. Vesely⁴ ^{1,2,4}Institute of Physical and Applied Chemistry, Faculty of Chemistry, Brno University of Technology, Czech Republic ³Institute of Food Science and Biotechnology, Faculty of Chemistry, Brno University of Technology, , Czech Republic</p>

P4-7	<p>3D silver metallized nanotrenches and heterostructured ZnO@Ag hybrid substrates used as a highly sensitive and flexible SERS detection platform I. A. Brezeştean¹, D. Marconi¹, M. Suci^{1,2}, N. E. Dina¹, I. Turcu¹, A. Colniţă¹ ¹Department of Molecular and Biomolecular Physics, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania ²Electron Microscopy Centre, Faculty of Biology and Geology, Babes-Bolyai University, Romania</p>
P4-8	<p>Nanotechnology to monitor the SERS response of Cojocna salt lake waters from Transylvania C. Molnár^{1,3}, T. D. Drigla², S. Cintă Pînzaru^{2,3} ¹National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania ²Institute for Research, Development and Innovation in Applied Natural Sciences, Babes-Bolyai University, Cluj-Napoca, Romania ³Biomolecular Physics Department, Babeş–Bolyai University, Cluj Napoca, Romania</p>
P4-9	<p>Surface-enhanced Raman scattering (SERS) for bioanalysis and diagnosis N.E. Dina¹, A. Colniţă¹, D. Marconi¹, I.A. Brezeştean¹, A.M.R. Gherman¹ ¹Department of Molecular and Biomolecular Physics, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania</p>
P4-10	<p>Development of sodium-ion pouch type batteries based on biochar anode materials D. Batsouli¹, D. Hoxha¹, D. Vlachos¹, A. Vavouliotis¹, D. Katsoulotou^{2,3}, J. Papavasiliou^{2,3}, T. Ioannides², G. Avgouropoulos³ ¹Adamant Composites Ltd., Patras, Greece; ²Foundation for Research and Technology Hellas – Institute of Chemical Engineering Sciences (FORTH/ICE-HT) Patras, Greece ³Department of Materials Science, University of Patras, Patras, Greece</p>
P4-11	<p>Bio-functionalized Memristive Nanowires for Ultrasensitive and Specific Electrochemical Bio-sensing and Cancer Early-Detection. I. Tzouvadaki¹, S. Carrara² ¹Centre for Microsystems Technology, Ghent University – IMEC, Ghent, Belgium, ²Bio/CMOS Interfaces (BCI) Laboratory, EPFL, Lausanne, Switzerland</p>
P4-12	<p>Bio-functionalization of flexible printed electrochemical biosensors to detect D-Glucose A. Batsi¹, P. Stavropoulos¹, I. E. Chatziioannou¹, K. Tsimenidis², A. Orfanos², V. Karagkiozaki², S. Logothetidis^{1,2}, A. Laskarakis¹ ¹Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ²BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece</p>
P4-13	<p>Biocompatibility Experiments of Albumin & Fibrinogen on Conductive Metal Nitride Nanocomposites T. Odotola¹, N. Pliatsikas¹, S. Panos¹, I. Fekas¹, S. Kassavetis¹, M. Gioti¹, P. Patsalas¹. ¹Physics Department, Aristotle University of Thessaloniki - Thessaloniki (Greece)</p>
P4-14	<p>Wearable textile organic electrochemical transistor for sweat monitoring E. Dembech¹, P. D'Angelo¹, G. Tarabella¹, V. Sinisi¹, S.L. Marasso^{1,2}, V. Vit¹, M. Bettelli¹, A. A. Babatunde^{1,3}, N. Coppedè¹ ¹Institute of Materials for Electronics and Magnetism, (IMEM), Italian National Council (CNR), Parco Area delle Scienze 37/A, Italy ²χlab-Materials and Microsystems Laboratory, Department of Applied Science and Technology, Politecnico di Torino-Via Lungo Piazza d'Armi 6, 10034 Chivasso, Turin, Italy ³Department of Physics University of Ilorin, Kwara State, Nigeria</p>
P4-15	<p>Electrodeposition of Gold nanoparticles on flexible substrate for electrochemical bio-sensing applications P. Stavropoulos¹, A. Batsi¹, K. Tsimenidis², A. Orfanos², S. Panos¹, P. Rampota¹, V. Karagkiozaki², S. Logothetidis^{1,2}, A. Laskarakis¹ ¹Nanotechnology Lab LTFN, Physics Department, Aristotle University of Thessaloniki, Greece ²BL Nanobiomed P.C., 20th Km Thessaloniki – Tagarades Road, Thessaloniki, Greece</p>
<p>Graphene and Related Materials (Common with NN23 WS5) Tuesday 4 to Thursday 6 July: Poster Display & Presentations Thursday 6 July (17:00-20:00): Poster Presentation</p>	
P5-1	<p>Raman microscopy and spectroscopy studies of nano carbonic material growth by PECVD method C. Pachiu, O. Simionescu, B. Adiaconita, A. Avram, O. Buiu, R. Marinescu, R. Popa, L. Dinu National Institute for Research and Development in Microtechnologies (IMT-Bucharest), Romania</p>
P5-2	<p>In-situ microwave-hydrothermal synthesis of TiO₂-rGO composite structures C. Bandas¹, C. Lazau¹, M. Nicolaescu^{1,2}, C. Orha¹, A. Pop², S. Caprarescu³ ¹National Institute for Research and Development in Electrochemistry and Condensed Matter Timisoara, Romania ²Department of Applied Chemistry and Engineering of Inorganic Compounds and Environment, University "Politehnica" of Timisoara, Romania ³Department of Inorganic Chemistry, Physical Chemistry and Electrochemistry, Faculty of Chemical Engineering and Biotechnologies, University "Politehnica" of Bucharest, Bucharest, Romania</p>

P5-3	Magnesium Boride/Graphene as Potential Electrode Material in Supercapacitors H. A. Kahyaoglu ¹ , S.S. Gultekin ¹ , B. Gultekin ¹ <i>Solar Energy Institute, Ege University, Izmir, Turkey</i>
P5-4	Recycled industrial graphite wastes for the sustainable synthesis of high added value nanomaterials M. Subrati ¹ , E. Galata ¹ , I. Toliou ¹ , K.M. Lyra ¹ , G. Petrou ² , P. Magkaniaris ² , G. Romanos ¹ , Z. Sideratou ¹ , F.K. Katsaros ¹ <i>¹Institute of Nanoscience and Nanotechnology, NCSR "Demokritos", Aghia Parasevi Attikis,, Greece</i> <i>² CARBONTEC E.E., Athens, Greece</i>
P5-5	GO-biochar hybrids as anode materials for sodium ion batteries C. Rista ¹ , J. Papavasiliou ^{1,2} , S. Tombros, G. Avgouropoulos ¹ , V. Georgakilas ¹ <i>¹ Department of Materials Science, University of Patras, GR-26504, Rio-Patras, Greece</i> <i>² Foundation for Research and Technology Hellas – Institute of Chemical Engineering Sciences (FORTH/ICE-HT), Patras, Greece</i>
P5-6	2D-Material Based Plasmonic Devices for Infrared Spectroscopy of Biological Samples Y.W. Kang ^{1,3} , P. Gardner ^{2,3} , T. Echtermeyer ^{1,3,4} <i>¹Department of Electrical & Electronic Engineering, The University of Manchester, United Kingdom</i> <i>²Department of Chemical Engineering, The University of Manchester, United Kingdom</i> <i>³Photon Science Institute, University of Manchester, United Kingdom</i> <i>⁴National Graphene Institute, University of Manchester, United Kingdom</i>