

ISFOE20 PROGRAM
All times displayed in Greece local time (UTC/GMT+3)

Monday 6 July 2020

11:00-11:30 UTC/GMT+3	Welcome and Opening Remarks S. Logothetidis , ISFOE20 Chairman	
11:30-13:00 UTC/GMT+3	Workshop on OLAE Materials 1 Chair: E. Lidorikis, University of Ioannina, Greece	Supported by:  
11:30-12:00 KEYNOTE	Molecular Switches at Interfaces and in Junctions: A Theoretical Perspective J. Cornil <i>Laboratory for Chemistry of Novel Materials, University of Mons, Mons, Belgium</i>	
12:00-12:30 INVITED	Endohedral fullerene hybrids for optoelectronics K. Porfyriakis <i>Faculty of Engineering and Science, University of Greenwich, Central Avenue, Chatham Maritime, Kent, UK</i>	
12:30-12:45	Evidence for Charged Species Formation in High Persistence Length Organic Semiconductors in Solution E. Rezasoltani , ¹ A. W. Parker, ² I. Sazanovich, ² M. Towrie, ² M. Bird, ³ A. Virbule, ¹ M. S. Vezie, ¹ J. Nelson, ¹ S. C. Hayes ⁴ ¹ Physics Dept., Imperial College London, London, UK, ² Central Laser Facility, Research Complex at Harwell, STFC Rutherford Appleton Laboratory, UK, ³ Brookhaven National Laboratory, Upton, NY, USA, ⁴ Dept. of Chemistry, University of Cyprus, Nicosia, Cyprus	
12:45-13:00	The optical tomography of the birefringent liquid crystal microcavity filled with the organic dye S. Piotrowska , ¹ M. Król, ¹ K. Rechcińska ¹ , R. Mirek ² , P. Morawiak ² , P. Kula ³ , W. Piecik ² , B. Piętka ¹ , J. Szczętko ¹ ¹ Institute of Experimental Physics, Faculty of Physics, University of Warsaw, Warsaw, Poland, ² Institute of Applied Physics, Military University of Technology, Warsaw, Poland, ³ Institute of Chemistry, Military University of Technology, Warsaw, Poland	

13:00-14:00	Lunch Break ISFOE20 Posters Display & Presentations (Poster Area 1) – Exhibition - Networking
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14:00-16:00 UTC/GMT+3	Workshop on OLAE Materials 2 Chair: A. Laskarakis, Nanotechnology Lab LTFN, AUTH, Greece	Supported by:  
14:00-14:30 INVITED	Multi-scale modeling of structural and electrical properties of organic electronic materials E. Lidorikis , ^{1,2} C. Trapalis ¹ , K. Kaklamani ¹ , M. Andrea ³ , P. Palomino ¹ , K. Kordos ¹ and D.G. Papageorgiou ¹ ¹ Department of Materials Science & Engineering, University of Ioannina, Ioannina, Greece ² University Research Center of Ioannina (URCI), Institute of Materials Science and Computing, Ioannina, Greece	
14:30-14:45	Structural and photophysical templating of conjugated polyelectrolytes with single-stranded DNA E. Nicolaidou , ¹ L. Peterhans ² , P. Diamantis ³ , E. Alloa ¹ , M. Leclerc ⁴ , M. Surin ⁵ , S. Clément ⁶ , U. Rothlisberger ³ , N. Banerji ² , and S.C. Hayes ¹ ¹ Dept. Chemistry, University of Cyprus, Nicosia, Cyprus, ² Dept. Chemistry and Biochemistry, University of Bern, Switzerland ³ Laboratory of Computational Chemistry and Biochemistry, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland ⁴ Dept. Chemistry, Université Laval, Quebec, Canada, ⁵ Laboratory for Chemistry of Novel Materials, Center for Innovation in Materials and Polymers, University of Mons – UMONS, Belgium, ⁶ Institut Charles Gerhardt Montpellier, CNRS, Université de Montpellier, France	
14:45-15:00	Digitalisation of Multiscale Characterization Protocols for Organic Electronics K. Kaklamani¹, E. Lidorikis¹, J.-M. Lucatelli², J. Lecomte², D. Papageorou¹, M. Andrea¹, K. Kordos¹, L. Steinbach², D. Di Stefano², D. Dykeman² ¹ Department of Materials Science and Engineering, University of Ioannina, Ioannina, Greece; ² Ansys Granta, Cambridge, UK	
15:00-15:30 INVITED	Upscale of a conductive coating system for flexible electronics from a pilot working width of 300 mm to a production working width of 2.000 mm T. Kolbusch , J. Koc, K. Crone <i>Coatema Coating Machinery GmbH, Dormagen, Germany</i>	
15:30-16:00 INVITED	Application of ink rheology: From formulation to volume production T. Claypole , A. Claypole, J. Claypole <i>Welsh Centre for Printing and Coating, College of Engineering, Swansea University, Swansea University, Swansea, UK</i>	

16:00-16:30	Coffee Break ISFOE20 Posters Display & Presentations (Poster Area 1) – Exhibition - Networking
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16:30-20:30 UTC/GMT+3	Workshop on OPVs & Perovskite PVs 1 – Honorary Tribute to Dr. Nico Meyer Chair: M. Gioti, Nanotechnology Lab LTFN, AUTH, Greece	Supported by:   
16:30-17:00 KEYNOTE	Honorary Tribute to Dr. Nico Meyer S. Logothetidis (AUTH), T. Kolbusch (Coatema), J. Kreis (LemnaTec)	
17:00-17:30 KEYNOTE	Emissive and charge-generating donor–acceptor interfaces for organic optoelectronics with low voltage losses K. Vandewal <i>Institute for Materials Research (IMO-IMOMEC), Hasselt University, Wetenschapspark 1, 3590, Diepenbeek, Belgium</i>	
17:30-18:00 INVITED	Electro-thermal simulation and optimisation of organic solar cells and modules M. Diethelm¹, C. Kirsch², R. Hiestand¹, S. Weidmann¹, S. Jenatsch¹, E. Comi², E. Knapp², S. Altazin¹, L. Penninck¹, B. Ruhstaller^{1,2} ¹ Fluxim AG, Winterthur, Switzerland, ² Institute of Computational Physics, Zurich University of Applied Sciences, Winterthur, Switzerland	
18:00-18:15	A study of the morphological and structural properties of the non-fullerene PBDDB-T:ITIC system and the fabrication of fully printed flexible organic solar cells Z. Kyroudis¹, A. Zachariadis¹, C. Kapnopoulos¹, E. Mekeridis², C. Gravalidis¹, A. Laskarakis¹, S. Logothetidis¹ ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Greece, ² Organic Electronic Technologies, Antoni Tritsi 21b, Thessaloniki, Greece	
18:15-18:30	Simulation of thermally stimulated current response of a solar cell using a drift diffusion model approach C. Vael-Garn^{1,2}, S. Züflie¹, S. Jenatsch¹ ¹ Fluxim AG, Winterthur, Switzerland, ² Materials Science and Engineering, École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland	
18:30-19:00 INVITED	Printable new generation solar cells and energy storage systems: opportunities and open issues F. Brunetti <i>Center for Hybrid and Organic Solar Energy (CHOSE), Department of Electronic Engineering, University of Rome Tor Vergata, Rome, Italy</i>	
19:00-19:15	Upscaling of Printed Electronics – From Lab to Pilot and from Pilot to Fab J. Koc, E. Kempe, D. Kourkoulos, T. Exlager, H. Rooms, T. Kolbusch <i>Coatema Coating Machinery GmbH, Dormagen, Germany</i>	
19:15-19:30	Minimizing energy losses in short pulse laser patterning processes from single cell to R2R printed semi-transparent flexible OPV modules C. Kapnopoulos¹, A. Zachariadis¹, E. Mekeridis², Z. Kyroudis¹, K. Tsimermanidis¹, D. Grigoriadis¹, A. Laskarakis¹, S. Kassavetis¹, C. Gravalidis¹, S. Logothetidis¹ ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Greece, ² Organic Electronic Technologies, Antoni Tritsi 21b, Thessaloniki, Greece	
19:30-19:45	R2R processing – future applications beyond hardware coating and printing process and machinery concepts for printed electronics A. Glawe <i>KROENERT GmbH & Co KG, Schuetzenstrasse 105, 22761 Hamburg, Germany</i>	
19:45-20:00	Parallel charge generation and energy transfer in non-fullerene acceptor based binary and ternary devices R. K. Misra¹, K.D.G.I. Jayawardena¹, M. Tariq Sajjad², I. D. W. Samuel² & S. Ravi P. Silva¹	

	¹ Advanced Technology Institute, Department of Electrical and Electronic Engineering, University of Surrey, UK ² Organic Semiconductor Centre, University of St Andrews, UK
20:00-20:15	Self-Assembled MePc:perylene diimide supramolecular system in solution for photovoltaic applications T. Potlog ¹ , V. Furtuna ² , I. Bulimestru ² , N. Popa ² ¹ Physics Dept & Engineering, Moldova State University, R. of Moldova, ² Faculty of Chemistry & Chemical Technology, Moldova State University, R. of Moldova
20:15-20:30	Investigation of the effect of ultraviolet radiation on the stability of fully printed organic solar cells and optimization of electron transport layer E. Doudis ¹ , G. Atsas ¹ , V. Foris ¹ , C. Kapnopoulos ¹ , E. Mekeridis ² , A. Laskarakis ¹ , S. Logothetidis ¹ ¹ Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies P.C.(OET), Greece

Tuesday 7 July 2020

11:00-13:00 UTC/GMT+3	Workshop on OLAE Materials 3 Chair: E. Lidorikis, University of Ioannina, Greece	Supported by:   
11:00-11:30 KEYNOTE	Using molecular doping to enhance the performance of organic opto-electronics T. D. Anthopoulos King Abdullah University of Science and Technology (KAUST), KAUST Solar Centre, Thuwal 23955-6900, Saudi Arabia	
11:30-12:00 INVITED	Impact of Molecular Vibrations on Electronic, Optical Absorption and Transport Properties of Organic Materials F. Ortmann Department of Chemistry, Technische Universität München, Germany, Center for Advancing Electronics Dresden, Technische Universität Dresden, Germany	
12:00-12:15	Process Upscaling – Nanoimprint from small to large areas T. Exlager, D. Kourkoulos, H. Rooms, T. Kolbusch Coatema Coating Machinery GmbH, Dormagen, Germany	
12:15-12:30 PROJECT	FoF SmartLine - Smart In-line metrology and control for boosting the yield and quality of high-volume manufacturing of Organic electronics RealNano - In-line and Real-time Nano-characterization technologies for the high yield manufacturing of Flexible Organic Electronics A. Laskarakis Nanotechnology Lab LTFN and Center of Organic and Printed Electronics Hellas (COPE-H), Aristotle University of Thessaloniki, Thessaloniki, Greece	
12:30-12:45 PROJECT	Switch2Save - Lightweight switchable smart solutions for energy saving large windows and glass façades J. Fahlteich Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP, Dresden Germany	
12:45-13:00 PROJECT	CORNET - Multiscale modelling and characterization to optimize the manufacturing processes of Organic Electronics materials and devices M. Kanta Hellenic Organic & Printed Electronics Association (HOPE-A), Thessaloniki, Greece	

13:00-14:00	Lunch Break ISFOE20 Posters Display & Presentations (Poster Area 1) – Exhibition - Networking
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14:00-16:00 UTC/GMT+3	Workshop on OPVs & Perovskite PVs 2 (Real-Time Metrology & Quality Control) Chair: M. Gioti, Nanotechnology Lab LTFN, AUTH, Greece	Supported by:  
14:00-14:30 INVITED	Industrial Manufacturing of fully printed Organic Photovoltaics (OPVs) by intelligent and automated decision process E. Mekeridis ¹ , C. Varlamis ¹ , A. Galatsopoulos ¹ , V. Kyriazopoulos ¹ , L. Patsiouras ¹ , S. Fachouri ¹ , C. Kapnopoulos ² , A. Zachariadis ² , A. Laskarakis ² , S. Logothetidis ² ¹ Organic Electronic Technologies P.C. Thessaloniki Greece ² Aristotle University of Thessaloniki – LTFN, Thessaloniki Greece	
14:30-15:00 INVITED	Feasibility of in-line characterization of compositional, electronic and structural properties of thin film solar cells M. Tallián, P. Basa, Z. Kiss, C. Defranoux, A. Sütő, F. Korsós Semilab Co. Ltd., 2 Prielle K. str., 1117 Budapest, Hungary	
15:00-15:30 INVITED	Degradation and Stability of Organic Solar Cells Zhe Li School of Engineering and Materials Science, Queen Mary University of London, UK	
15:30-15:45	Automated manufacturing and characterization of state-of-the-art OPV-cells with the materials acceleration platform AMANDA Jens Hauch ^{1,2} , Jerrit Wagner ^{1,2} , Christian Berger ^{1,2} , Xiaoyan Du ^{1,2} , Christoph Brabec ^{1,2} ¹ Helmholtz Institute for Renewable Energies Erlangen-Nuremberg, Erlangen, Germany ² i-MEET, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen, Germany	
15:45-16:00	Degradation study of fully printed Organic Photovoltaics C. Varlamis ¹ , E. Mekeridis ¹ , A. Zachariadis ² , S. Logothetidis ² ¹ Organic Electronic Technologies, Antoni Tritsi 21b, Thessaloniki, Greece, ² Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Greece	

16:00-16:30	Coffee Break ISFOE20 Posters Display & Presentations (Poster Area 1) – Exhibition - Networking
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16:30-18:45 UTC/GMT+3	Workshop on OPVs & Perovskite PVs 3 (Perovskite PVs) Chair: A. Laskarakis, Nanotechnology Lab LTFN, AUTH, Greece	Supported by:  
16:30-17:00 KEYNOTE	Hybrid Perovskite Crystallization: From In-Situ Diagnostics to Robotic Experimentation A. Amassian Materials Science and Engineering, and Organic and Carbon Electronic Laboratories (ORaCEL), North Carolina State University, Raleigh, NC, USA	
17:00-17:30 INVITED	Ferroelectricity in methylammonium lead iodide perovskite solar cells H. Röhm ^{1,2} , T. Leonhardt ^{1,2} , A. D. Schulz ^{1,2} , S. Wagner ^{2,3} , M. J. Hoffmann ^{2,3} A. Colsmann ^{1,2} ¹ Light Technology Institute, Karlsruhe Institute of Technology, Karlsruhe, Germany, ² Material Research Center for Energy Systems, Karlsruhe Institute of Technology, Karlsruhe, Germany, ³ Institute for Applied Materials – Ceramic Materials and Technologies, Karlsruhe Institute of Technology, Karlsruhe, Germany	
17:30-18:00 INVITED	Triple-mesoscopic carbon perovskite solar cells: Architecture, up scaling and economical perspectives S. Meroni, T. Watson SPECIFIC, Swansea University, SA1 8EN, UK	
18:00-18:15	The Involvement of Chlorine in Enhancing Crystallinity and Performance of Solar Cells with Perovskite Structure A. Galatsopoulos ¹ , A. Zachariadis ² , E. Mekeridis ¹ , C. Kapnopoulos ² , S. Logothetidis ² ¹ Organic Electronic Technologies, Antoni Tritsi 21b, Thessaloniki, Greece, ² Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Greece	
18:15-18:30	Printed Electrodes for Planar Perovskite Photovoltaics D. Beynon, V. Stoichkov, C. Woodgate, T. Watson SPECIFIC, College of Engineering, Swansea University, UK	
18:30-18:45	Lead-tin mixed perovskites with high carrier mobilities K. D. G. I. Jayawardena ¹ , R. M. I. Bandara ¹ , S. O. Adeyamo ² , S. Jenatsch ³ , H. J. Joyce ² , S. R. P. Silva ¹ ¹ Advanced Technology Institute, Department of Electrical and Electronic Engineering, University of Surrey, UK; ² Division of Electrical Engineering, Department of Engineering, University of Cambridge, UK; ³ Fluxim AG, Winterthur, Switzerland	

19:00 UTC/GMT+3	PLENARY SESSION		
19:00-19:30	Introduction by Prof. S. Logothetidis, ISFOE20 & NN20 Chairman		
19:30-20:15		Controlling hybrid inorganic/organic electronic materials interfaces N. Koch ^{1,2,3} ¹ Institut für Physik & IRIS Adlershof, Humboldt-Universität zu Berlin, Germany, ² Helmholtz-Zentrum Berlin für Materialien und Energie, Germany ³ Institute of Functional Nano & Soft Materials, Soochow University, China	
20:15-21:00		Matter-to-Life: How to Build a Cell J.P. Spatz Max Planck Institute for Medical Research, Heidelberg, Germany	

Wednesday 8 July 2020

11:00-13:00 UTC/GMT+3	Workshop on OLEDs, OTFTs & Wearables 1 Chair: M. Gioti, AUTH, Greece	  	11:00-13:00 UTC/GMT+3	I3D Conference Session 1 Chair: S. Kassavetis, AUTH, Greece
11:00-11:30 KEYNOTE	Solution processed photodetectors for sensing and imaging applications G.H. Gelinck ^{1,2} ¹ Holst Centre, TNO, Eindhoven, The Netherlands ² University of Technology Eindhoven, Eindhoven, The Netherlands		11:00-11:30 INVITED	An alginate fibre scaffold as a spinal cord organoid E. Delivopoulos University of Reading, RG66AY, UK
11:30-12:00 INVITED	New opportunities for contact-engineered organic transistors Chang-Hyun Kim Dept. of Electronic Engineering, Gachon University, Republic of Korea		11:30-12:00 INVITED	Laser Induced Forward Transfer as a tool for precise bioprinting I. Zergioti National Technical University of Athens, Greece
12:00-12:30 INVITED	Optical assessment of metal mesh for replacement of ITO film in touch sensors for automotive display F. Scaffidi Muta ^{1,2} , L. Belforte ¹ , S. Avataneo ¹ , M. Brun ³ , Nello Li Pira ¹ ¹ Group Materials Labs, C.R.F. S.C.p.A, Orbassano, TO, Italy ² Physics Department, University of Torino, Torino, Italy ³ EMEA Prod. Dev.EE - Audio & Telematics, FCA ITALY S.p.A, Italy		12:00-12:15 C. Carvalho EnvisionTEC GMBH, Germany	3D Bioplotter Over 15 Years of Bioprinting
12:30-12:45	Highly flexible printed luminescent device for textile based automotive interior applications R. Falcão ¹ , C. Pires ¹ , E. Diniz ¹ , K. Rodrigues ² , D. Campanhã ² , R. Mesquita ² , I. Sá ² , H. Costa ² , J. Gonçalves ² ¹ Continental - Indústria Têxtil do Ave, S.A Lousado, Portugal ² Centro de Nanotecnologia e Materiais Técnicos, Funcionais e Inteligentes (CeNTI), Portugal		12:15-12:30 A. Shannon University of Limerick, Ireland	Radioopaque 3D printing for medical application
12:45-13:00	Development of smart RFID Printed Tags for humidity and temperature sensing, with embedded wireless energy charging, and communication capabilities J. Pimenta ¹ , S. Reis ¹ , J. Perdigoto ¹ , R. Mesquita ¹ , J. M. Silva ¹ , J. Silva ¹ , A. Pinto ¹ , H. Costa ¹ , M. Ribeiro ¹ , A. Martins ² , G. Silva ² , P. Castanheira ² , P. Soeiro ² , J. Sousa ² ¹ CeNTI, Centre for Nanotechnology and Smart Materials, Portugal ² Viatel, S.A. Viseu, Portugal		12:30-13:00 INVITED	Utilisation of Microfluidics in 3D Bioprinting A. Sendemir Ege University, Turkey

13:00-14:00	Lunch Break ISFOE20 Posters-Exhibition-Networking			
14:00-16:00 UTC/GMT+3	Workshop on OLEDs, OTFTs & Wearables 2 Chair: E. Mekeridis, OET, Greece	  	14:00-16:00 UTC/GMT+3	I3D Conference Session 2 Chair: S. Kassavetis, AUTH, Greece
14:00-14:30 INVITED	Nano Technology for Power Integration with Fatigue-Free Flexible Displays A. Christou Department of Materials Science, University of Maryland, MD, USA		14:00-14:30 INVITED	Fabrication and characterization of Fused Deposition Modeling 3D printed mm-scaled metasurface units for microwave applications A. Tasolamprou Foundation for Research & Technology-Hellas (FORTH), Greece
14:30-15:00 INVITED	Printed Batteries – New Applications and Funding M. Krebs R&D department, VARTA Microbattery, Varta-Platz 1, D-73494 Ellwangen, Germany		14:30-14:45 A. Orfanos BL Nanobiomed P.C., Greece	Novel fabrication of 3D printed non disposal face masks
			14:45-15:00 M. Maturi University of Bologna, Italy	Phosphorescent Bio-Based Resin for Digital Light Processing (DLP) 3D-Printing
15:00-15:15	Towards Large Scale Manufacturing of Solution processed Polymer OLEDs V. Kyriazopoulos ^{1,2} , D. Tselekidou ² , L. Panagiotidis ² , K. Papadopoulos ² , E. Mekeridis ¹ , M. Gioti ² , A. Laskarakis ² , S. Logothetidis ² ¹ Organic Electronic Technologies, Antoni Tritsi 21b, Thess., Greece ² Nanotechnology Lab LTNF, AUTH, Greece		15:00-15:15	An embedded vision-based solution for closing the loop in Additive Manufacturing C. Theocharatos Computer Vision Systems, IRIDA Labs S.A., Greece
15:15-15:30	Ultrasonic spray coating of polyethylenimine(ethoxylated) as electron injection and transport layer for organic light emitting diodes I. Verboven ^{1,2} , R. Shanivarasanthe Nithyananda ^{1,2} , W. Deferme ^{1,2} ¹ Institute for Materials Research, Hasselt University, Belgium ² IMEC vzw – Division IMOMEC, Diepenbeek, Belgium		15:15-15:30	ABS/ expanded perlite microspheres filament for 3D printing of lightweight and thermal insulating components through Fused Filament Fabrication method P. M. Angelopoulos National Technical University of Athens, Greece
15:30-15:45 PROJECT	FlexFunction2Sustain – An Open Innovation Ecosystem for Sustainable Nano-Functionalized Plastic and Paper Surfaces and Membranes J. Fahlteich Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP, Dresden Germany		15:30-15:45	Effect of gamma irradiation on the mechanical and physicochemical properties of Stereolithography (SLA) 3D printed Formlabs Grey resin JAC Sy Industrial Technology Development Institute, Philippines

15:45-16:00	Ultra-precise deposition technology for high-resolution printing of highly transparent electrodes in OLEDs P. Kowalczewski, A. Wiatrowska, K. Fiączyk, M. Łysień, F. Granek <i>XTPL SA, Stabłowicka 147, 54-066 Wrocław, Poland</i>	15:45-16:00	A novel resin vat design to accelerate the resin flow in quasi-continuous vat photopolymerization Huachao Mao <i>Purdue University, USA</i>
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16:00-16:30	Coffee Break ISFOE20 Poster Session – Exhibition - Networking
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16:30-19:00 UTC/GMT+3	Workshop on OLEDs, OTFTs & Wearables 3 Chair: A. Laskarakis, AUTH, Greece	16:30-19:00 UTC/GMT+3	I3D Conference Session 3 Chair: C. Gravalidis, AUTH, Greece
16:30-17:00 INVITED	Flexible Hybrid Electronics: from Materials to Sensor Systems L. Petti, G. Cantarella, N. Münzenrieder, P. Lugli <i>Faculty of Science and Technology, Free University of Bolzano-Bozen, Bolzano, Italy</i>	16:30-17:00 INVITED	Strengthening of stainless steel by reinforcement addition and grain refinement during additive manufacturing B. AlMangour <i>Saudi Arabia Basic Industries Corporation, Saudi Arabia</i>
17:00-17:15	Flexible solution processed sky-blue OLEDs based on polyfluorene derivative K. Papadopoulos ¹ , D. Tselekidou ¹ , V. Kyriazopoulos ² , S. Kassavetis ³ , S. Logothetidis ¹ , M. Gioti ¹ ¹ <i>Nanotechnology Lab LTFN, Aristotle Univ. Thessaloniki, Greece</i> ² <i>Organic Electronic Technologies, Thessaloniki, Greece</i>	17:00-17:30 INVITED	Anisoprinting technology: continuous fiber 3D printing for manufacturing of optimal composites F. Antonov <i>Anisoprint, Russia</i>
17:15-17:30	Optical, Photophysical and Electroemission Properties of Single Layer White OLEDs D. Tselekidou ¹ , K. Papadopoulos ¹ , A. K. Andreopoulou ² , K. Andrikopoulos ² , J. K. Kallitsis ² , C. Gravalidis ¹ , S. Logothetidis ¹ , M. Gioti ¹ ¹ <i>Nanotechnology Lab LTFN, Aristotle Univ. Thessaloniki, Greece</i> ² <i>Department of Chemistry University of Patras, Greece</i>		
17:30-17:45	Vapor-printed p-type organic semiconductors for flexible thin film transistor applications Sunghwan Lee, Michael Clevenger <i>School of Engineering Technology, Purdue University, West Lafayette, Indiana 47907, USA</i>	17:30-17:45	Development of a machine for the manufacture of micro-optical lens and layered geometric forms of chalcogenide E.S. Vasilyeva <i>Peter the Great St. Petersburg Polytechnic University, Russian Federation</i>
17:45-18:00	Ultrasonic spray coating of a gold nanoparticle-containing hole injection layer for optimized luminous efficacy in OLEDs Rachith S N ^{1,2} , Maarten Erdelenkens ³ , Naveen Reddy ^{1,2} , Thierry VERBIEST ³ , Wim Deferme ^{1,2} ¹ <i>Hasselt University, Institute for Materials Research (IMO), Diepenbeek, Belgium</i> ² <i>IMEC vzw, division IMOMEC, Belgium</i> ³ <i>Molecular Imaging and Photonics, Leuven, Belgium</i>	17:45-18:00 PROJECT	Emerging Laws for 3D Product Design Ilise L Feitshans <i>JD and ScM and DIR</i>
18:00-18:15	Investigation of the energy transfer mechanisms in three-phase blend-layer white OLEDs V. Foris ¹ , M. Gioti ¹ , D. Tselekidou ¹ , C. Gravalidis ¹ , P. Patsalas ² , S. Logothetidis ¹ ¹ <i>Nanotechnology Lab LTFN, Aristotle Univ. Thessaloniki, Greece</i> ² <i>Department of Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece</i>	18:00-18:15	XJET NanoParticles Jetting Ceramic and metal additive manufacturing technologies & solutions Dror Danai <i>Xjet Ltd., ISRAEL</i>
18:15-18:30	Roll-to-Roll Gravure Printing and Relative Printing Speed Control for Printed Electronics and Wearable Applications X.C. Shan, V. Sunappan, B. Salam, L. S. Tan, B. K. Lok <i>Singapore Institute of Manufacturing Technology, Singapore</i>	18:15-18:30	SCIL – An Emerging, Advanced Nanoimprinting Technology S. Stan ¹ , M. Verschueren ² ¹ <i>VDL Enabling Technologies Group, GH Eindhoven, The Netherlands</i> ² <i>SCIL Nanoimprint Solutions, AR Eindhoven, The Netherlands</i>

Thursday 9 July 2020

11:30-13:00 UTC/GMT+3	Workshop on Biosensors & Bioelectronics 1 (ISFOE20-NN20) Chair: C. Gravalidis, AUTh, Greece		
11:00-11:30 KEYNOTE	Electronics on the Brain G. Malliaras <i>Cambridge University, UK</i>	11:30-13:00 UTC/GMT+3	Workshop on Graphene & Related Materials 1 (ISFOE20-NN20) Chair: A. Laskarakis, AUTh, Greece
11:30-12:00 INVITED	Plasmonic nanostructured surfaces for bio-interfaces and sensing of living cells F. De Angelis <i>Italian Institute of Technology, Italy</i>	11:30-12:00 INVITED	Pressure, temperature and radiation effects on back-gate transistors based on layered 2D materials A. Di Bartolomeo <i>University of Salerno, Italy</i>
12:00-12:30 INVITED	Electrolyte-gated transistors for neuromorphic electronics P. Gkoupidenis <i>Max Planck Institute for Polymer Research, Germany</i>	12:00-12:30 INVITED	Covalent functionalization of exfoliated MoS₂ with organic motifs for the selective recognition of ions and molecules A. Stergiou <i>National Hellenic Research Foundation, Greece</i>
12:30-13:00 INVITED	Photoactive materials for bioelectronics from photosynthetic microorganisms G.M. Farinola ¹ , M. Trotta ² , F. Biscarini ^{3,4} , R. Ragni ¹ , F. Milano ² , M. Di Lauro ^{3,4} , ¹ Dipartimento di Chimica, Università degli Studi di Bari, Italy ² CNR IPCF Bari, Italy ³ Dipartimento di Scienze della Vita, Università di Modena, Italy ⁴ Center for Translational Neurophysiology of Speech and Communication, IIT Ferrara, Italy	12:30-12:45	Laser-pulse-driven control of Landau-Zener transitions in graphene O. Kochanowska <i>University of Warsaw, Poland</i>
		12:45-13:00	Vortex-like current density structures in graphene subjected to a bicircular laser field J. Derlikiewicz <i>University of Warsaw, Poland</i>

13:00-14:00	Lunch Break ISFOE20 Posters-Exhibition-Networking
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14:00-16:00 UTC/GMT+3	Workshop on Biosensors & Bioelectronics 2 (ISFOE20-NN20) Chair: C. Gravalidis, AUTh, Greece	14:00-16:00 UTC/GMT+3	Workshop on Graphene & Related Materials 2 (ISFOE20-NN20) Chair: A. Laskarakis, AUTh, Greece
14:00-14:30 INVITED	Engineering long-lasting and spatially selective active neural interfaces for bioelectronic medicine V. Giagka <i>Delft University of Technology, Netherlands</i>	14:00-14:30 INVITED	Investigating the Interface between MoS₂ and Insulating Oxides P. K Hurley <i>Tyndall National Institute, Ireland</i>
14:30-15:00 INVITED	Selective Single-Molecule Detection of clinically relevant biomarkers with an Organic Transistor E. Macchia, ¹ R. A. Picca, ² K. Manoli, ² Cinzia Di Franco, ³ G. Scamarcio, ⁴ G. Palazzo, ^{2,4} F. Torricelli, ⁵ R. Österbacka, ¹ & L. Torsi ^{1,2,4} ¹ Faculty of Science and Engineering, Åbo Akademi Univ., Finland ² D. Chimica, Università degli Studi di Bari "Aldo Moro", Bari, Italy ³ CNR, Istituto di Fotonica e Nanotecnologie, Sede di Bari, Italy ⁴ Università degli Studi di Bari "Aldo Moro", Bari, Italy ⁴ CSGI, Centre for Colloid and Surface Science, Bari, Italy ⁵ Dept. Information Engineering, University of Brescia, Italy	14:30-15:00 INVITED	Carbon Nano-Tube and Transition Metal Dichalcogenide smart electronics G. Deligeorgis <i>FORTH IESL, Greece</i>
15:00-15:30 INVITED	Morphology and mobility as tools to control X-ray sensitivity in organic thin-films B. Fraboni <i>University of Bologna, Italy</i>	15:00-15:30 INVITED	Heterostructures of two-dimensional transition metal dichalcogenides: formation, ab initio modeling and possible applications A. Krivosheeva <i>Belarusian State University of Informatics and Radioelectronics, Belarus</i>
15:30-15:45	Nanocellulose Coated Paper as Substrates for a sustainable, quantitative and environmentally friendly bio sensing platform D. Kourkoulos <i>Coatema Coating Machinery GmbH, Germany</i>	15:30-15:45	A study on the electronic properties of Graphene Nanoribbons using the Offset Logarithm function N. Jisrawi <i>Centre for Advanced Materials Research, UAE</i>
15:45-16:00	Opportunities and Challenges in the Use of Conductive Polymeric Scaffolds for Stem Cell Culture J. Morgado <i>Instituto de Telecomunicações, Portugal</i>	15:45-16:00	Soft, flexible and transparent graphene-based active spinal cord implants for optogenetic studies A. I. Velea <i>Delft University of Technology, The Netherlands</i>
16:00-16:15	Microelectrodes coated with conducting polymers for bioelectronics: scaling properties and biosensing D. A. Koutsouras <i>Max Planck Institute for Polymer Research, Mainz, Germany</i>		
16:15-16:30	Partially-Oxidized Phosphorene-Based Sensors and Surface Oxidation Effects J. M. Marmolejo-Tejada <i>Pontificia Universidad Javeriana, Colombia</i>		
16:30-16:45	Computational analysis and design of microchambers for multianalyte aptamer-based biosensor applications S.D. Psoma <i>The Open University, U.K.</i>		
16:45-17:00	Synthesis and characterization of biofunctionalized AuNPs for future use in screen-printed electrochemical immunosensors S. Grammatikos <i>Aristotle University of Thessaloniki, Greece</i>		
17:00-17:15	Gold nanoparticle-based biosensor for rapid liquid biopsy applications P. Kalligosfyri <i>University of Patras, Greece</i>		
17:15-17:30	Plasmonic nanoaperture arrays for biosensing applications M. C. Suster, P. Wróbel <i>Faculty of Physics, University of Warsaw, Warsaw, Poland</i>		
17:30-17:45	Closing Remarks and Discussion End of ISFOE20		

POSTERS

	POSTER SESSION Monday 6 July, Tuesday 7 July (13:00-14:00, 16:00-16:30): Poster Display & Presentations Wednesday 8 July, Thursday 9 July (13:00-14:00, 16:00-16:30): Poster Display Nanomaterials: Organic Semiconductors, Electrodes, Barriers, Hybrids and Devices: OPVs, OTFTs, OLEDs
area I -Group A	Hybrid Flexible Thermoelectric Generators by Printing Processes J. Silva ¹ , J. Pimenta ¹ , S. Silva ¹ , V. Machado ¹ , A. California ¹ , M. Ribeiro ¹ , A. Pereira ² , A. Pires ² , M. Maia ² , J. Silva ² , F. Navarro-Medina ³ , V. Darau ³ , C. Ulloa ³ , V. Botelho ³ , Y. Hallack ³ , P. Roy ⁴ , M. Baptiste ⁴ , R. Jamier ⁴ , J. Auguste ⁴ , O. Frazão ⁵ , P. Robalinho ⁵ ¹ CeNTI, Centre of Nanotechnology and Smart Materials, R. Fernando Mesquita, Vila Nova de Famalicão, Portugal ² IFIMUP, Instituto de Física e Materiais da Universidade do Porto, Porto, Portugal, ³ University of Vigo, Vigo, Spain, ⁴ XLIM Research Institute, Limoges, France, ⁵ INESC-TEC, Porto, Portugal
area I -Group B	Effect of substrate nature on the structural, optical and electrical properties of In2S3 thin films F. Aousgi ¹ , A. Sbai ¹ , B. Khalfallah ² , R. Chourou ¹ ¹ Laboratory of Nanomaterials and Renewable Energy Systems LaNSER, Research and Technology Center of Energy, Borj-Cedria Science and Technology Park, Hammam-Lif, Tunisia ² Université Tunis El Manar, Ecole National d'Ingénieurs de Tunis, Laboratoire de Photovoltaïque et Matériaux Semi-conducteurs, Tunis, Tunisia
area I -Group C	Highly-efficient and stable organic photovoltaics using a zinc molybdate-mixed ZnO electron transport layer A. Soulata ¹ , G. Papadimitropoulos ¹ , N. Dimogerontaki ^{1,2} , S. Kamarialis ³ , D. Davazoglou ¹ , P. Argitis ¹ , M. Vasilopoulou ¹ ¹ Institute of Nanoscience and Nanotechnology, National Center for Scientific Research Demokritos, Agia Paraskevi, Athens, Greece ² Department of Physics, University of Patras, Patras, Greece ³ Department of Electrical and Electronics Engineering, University of West Attica, Aegaleo, Greece
area I -Group D	Prototype of Nano-fiber collector generated by vertical electrospinning A. Rodriguez ¹ , P. Silva ¹ , M. Hurtado-Morales ¹ ¹ Electronic Engineering Department, Central University, Cra 5°-21-38 Bogotá-Colombia
area I -Group E	Solution processed single emitting layer white OLEDs based on novel copolymers K. Papadopoulos ¹ , D. Tslekidou ¹ , M. Gioti ¹ , V. Kyriazopoulos ² , S. Kassavetis ¹ , A. K. Andreopoulos ³ , K. Andrikopoulos ³ , J. K. Kallitsis ³ , A. Laskarakis ¹ , S. Logothetidis ¹ ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece ² Organic Electronic Technologies P.C. (OET), Antoni Tritsi 22B, Thessaloniki, Greece, ³ Department of Chemistry University of Patras, University Campus, Rio-Patras, Greece
area I -Group F	Optical and structural characterization of Blue emissive polymers as active layer for OLEDs D. Tslekidou ¹ , K. Papadopoulos ¹ , V. Kyriazopoulos ² , A. K. Andreopoulos ³ , K. Andrikopoulos ³ , J. K. Kallitsis ³ , M. Gioti ¹ ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece ² Organic Electronic Technologies P.C. (OET), Thessaloniki, Greece, ³ Department of Chemistry University of Patras, University Campus, Rio-Patras, Greece
area I -Group G	Fabrication and Electrical characterization of smOLED devices A. Singh ¹ , J. Geurts ² , A. Malik ³ , X. Nikolaou ⁴ , M. Van Kooten ⁵ ¹ Iatronix Technologies Pvt Ltd 1, OLED Technologies B.V, Netherlands
area I -Group H	Improvement of flexible OFET devices performance by employing spray coated small molecule:polymer insulating blends S. Grammatikos, T. Kaimakamis, S. Panos, A. Laskarakis, S. Logothetidis ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece
area I -Group I	Electronic properties at the interface of prototype organic semiconductors and the silver surface A. Stamateri, S. Logothetidis ¹ Nanotechnology Lab LTFN, Dept. Physics, Aristotle University of Thessaloniki, Thessaloniki, Greece
	POSTER SESSION Tuesday 7 July (13:00-14:00, 16:00-16:30): Poster Display & Presentations Biosensors & Bioelectronics (common with NN20 W4)
area I -Group L	Culture-independent detection of carbapenemase-producing bacteria with plasmonic nanosensors G. Santopolo ¹ Son Espases University Hospital; Palma de Mallorca, Spain
area I -Group M	Nanoparticle Reservoirs for Paper Immunosensors Alejandra Alba-Patiño ¹ Son Espases University Hospital, Spain
area I -Group N	Synthesis, Characterization, and Sintering Behavior of Doped Nanocrystalline Ceria Powders I.A. Kobykhno ¹ Saint Petersburg Polytechnic University Russia
area I -Group O	Flexible sensing solutions for healthcare and biotechnological applications R. Carvalho ¹ , M. Campos ¹ , A. Poças ¹ , A. Joskowiak ¹ , A. Leite ¹ , J. Matos ¹ , H. Costa ¹ , J. Gomes ¹ , M. Ribeiro ¹ , P. Henriques ¹ , E. Erkal ² , O. Canberi ³ , J. Redol ^{4,5} ¹ Centro de Nanotecnologia e Materiais Técnicos, Funcionais e Inteligentes (CeNTI), V. N. Famalicão, Portugal ² Turgut İlaçları A.Ş. - Gebze OSB Mahallesi, Gebze/Kocaeli, Turkey, ³ Roboteck Otomasyon Teknolojileri Ltd., Tosb Otomotiv Osb/Çayırova/Kocaeli, Turkey, ⁴ Neutoplast S.A., Zona Industrial, Sobral Monte Agraço, Portugal, ⁵ Beyondevices S.A., Zona Industrial, Sobral Monte Agraço, Portugal
	POSTER SESSION Thursday 9 July 13:00-14:00, 16:00-16:30): Poster Display & Presentations Graphene and Related Materials
area I -Group P	Theoretical prediction of Sb ₂ Se ₃ growth morphology and orientation on muscovite mica substrates M. Bertašius ¹ Center for Physical Sciences and Technology (FTMC), Lithuania
area I -Group Q	Influence of intrinsic vacancies on the photocatalytic properties of hybrid ZnS/WS ₂ nanotubes: Prediction from first principles I. Isakovica ¹ University of Latvia, Latvia
area I -Group R	CO ₂ electroreduction toward C ₂ H ₄ at Cu decorated graphene nanofilm: Prediction from first principles S. Piskunov ¹ University of Latvia, Latvia
area I -Group S	Investigation of graphene based resistive strain sensors for vital signal monitoring V. Tsouti ¹ National Center for Scientific Research "Demokritos", Greece
area I -Group T	Conductive Smart-Inks development base on Graphene and MoS ₂ and their uses in Ink-Jet systems J. Rubi, C. Ospina, M. Hurtado ¹ SEM2 Surface, Energy and Modern Materials LAB Electronic Engineering Department. Universidad Central
area I -Group U	Investigation of treatment parameters on electrical properties of graphene E.S. Vasilyeva ¹ , D.N. Tonkov ¹ , M.V. Kobylatskaya ¹ , V.E. Gasumyan ^{1,2} ¹ Higher School of Engineering and Physics, Saint Petersburg Polytechnic University, Saint-Petersburg, Russia ² Department of Physical Electronics, Herzen State Pedagogical University of Russia, Saint-Petersburg, Russia

