

AGENDA

Monday 30 October 2023

08:00-	Registration & Networking Coffee	
09:30-10:30	Official Opening Ceremony ICEFPE 2023	
09:45-10:00	Welcome by the Chairman S. Logothetidis, <i>Chairman ICEFPE2023</i>	
10:00-10:30	Official Salutations <ul style="list-style-type: none"> Theodoros Skylakakis, Minister of Environment and Energy, Representative of Greek Government President Miltiadis Zamparas, Head of the Environment and Energy Department of SYRIZA-PA Panos E. Vardas, Secretary of Innovation, Research & Technology Sector of PASOK-KINAL 	
10:30-11:30 Session 1	Building the FPEs clean Industry for green Energy, Decarbonization and Net Zero Chairs: A. Laskarakis, J. Kallitsis	
10:30-11:00 Chairman	Towards a Sustainable and Clean Manufacturing Industry for Flexible Printed Electronics and Green Energy S. Logothetidis, <i>Nanotechnology Lab LTFN & HOPE-A, Greece</i>	
11:00-11:30 Keynote	Routes to Net Zero via Printed Electronics R. P. Silva, <i>University of Surrey, UK</i>	
11:30-12:00	Coffee, Networking, Posters, Exhibitors	
12:00-13:30 Session 2	Digital and Intelligent Manufacturing of FPEs Chair: E. Mekeridis, E. Lidorikis	
12:00-12:30 Keynote	The impact and challenges of using Roll 2 Roll processes in industrial scale up in OPV & Perovskite solar cells Th. Kolbusch, <i>Coatema Coating Machinery GmbH, Germany</i>	
12:30-12:50 Invited	Automated Manufacturing Production Line for Integrated Printed Organic Photovoltaics (IPVs) V. Kyriazopoulos, <i>Organic Electronic Technologies (OET), Greece</i>	
12:50-13:10 Invited	Digitalization and traceability challenges in the Printed electronic industry M. Popovic, <i>In-Core Systemes, France</i>	
13:10-13:30 Invited	Enhancing Quality Control with Inline Processes for Flexible Printed Electronics T. Brigancz, <i>Semilab Semiconductor Physics Laboratory Co. Ltd., France</i>	
13:30-15:00	Lunch, Networking, Posters, Exhibitors	
15:00-17:00 Session 3	OPV Manufacturing Technologies and Processes Chairs: R.P. Silva	
15:00-15:20 Invited	Achieving Industrial Scale Manufacturing for Printed Flexible Organic Photovoltaics E. Mekeridis, <i>OE-Technologies P.C., Greece</i>	
15:20-15:35 Invited	Laser Patterning for Fully Printed Semi-Transparent Organic Photovoltaics: An Industrial R2R Perspective C. Kapnopoulos, <i>Nanotechnology Lab LTFN, Greece</i>	
15:35-15:50 Invited	Advances in ultrashort pulse laser patterning of flexible printed solar cells V. Sabonis, <i>Workshop of Photonics, Lithuania</i>	
15:50-16:05 Invited	Optimizing Flexible Printed Electronics (FPE) Assembly Lines: Automation, Handling, and Quality Control Tools A. Apraiz, <i>Monragon Assembly, Spain</i>	
16:05-16:20 Invited	Achieving high precision processes and interoperability in R2R Manufacturing of FPEs D. Gklavakis, <i>Depia Automations, Greece</i>	
16:20-17:30 Panel Discussion	Policies: FPEs in Clean Manufacturing, Green Energy, Net Zero Chairs: S. Logothetidis,	
16:20-16:30 Invited	Policies at National and Global level for the Growth of a Green & Digital Industry A. Chatziparadeisis, <i>HOPE-A, Greece</i>	
16:30-17:30 Panel Discussion	Policies for the Growth of the FPEs Green and Sustainable Industry (Manufacturing, Energy, Net Zero) M. Popovic (France), P. Berrouard (Canada), T. Kolbusch (Germany), A. Chatziparadeisis (Greece), R.P. Silva (UK)	
17:30	End of Day 1 - ICEFPE	
17:30-20:00	HORIZON EUROPE Project Meetings	
21:00	Dinner for Invited Speakers ICEFPE & F2E	

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AGENDA

Tuesday 31 October 2023

08:00-19:00	Registration, Posters, Exhibitors	
09:00-11:30	FPE Materials & Devices in Green Energy & Lighting	
Session 4	Chairs: G. Hadziioannou, Ch. Gravalidis	
09:00-09:30	Polymers, electronics and the genesis of polymer printed flexible electronics	
Keynote	G. Hadziioannou, <i>University of Bordeaux, France</i>	
09:30-09:45	Perovskite PVs enabled by 2D materials for self-powered, miniaturized IoTs devices and solar farms	
Invited	E. Kymakis, <i>Hellenic Mediterranean University Research Center, Greece</i>	
09:45-10:00	Advanced materials and innovative interface engineering strategies for efficient and stable perovskite PVs	
Invited	P. Falaras, <i>Institute of Nanoscience and Nanotechnology, N.C.S.R. "Demokritos", Greece</i>	
10:00-10:15	Scale-up of industrial R2R Flexo machine for Recyclable Printed Electronics on Paper substrate	
Invited	V. Thenot, <i>Fedrigoni, France</i>	
10:15-10:30	ELORPrintTec a facility enabling the emerging science & technology of organic/polymer electronics and systems	
	G. Hadziioannou, S. Ducat, G. Payrot, S. Khiev, W. Smaal, <i>University of Bordeaux, France</i>	
10:30-10:45	COPE-Nano Center of Excellence for Innovation and Sustainability in FPEs and Bioelectronics	
Invited	A. Laskarakis, <i>LTFN/COPE-H, Department of Physics, Aristotle University of Thessaloniki, Greece</i>	
10:45-11:00	OLED Manufacturing and Applications: Lighting in Automotive, Buildings and Wearables	
	V. Kyriazopoulos, <i>Organic Electronic Technologies (OET), Greece</i>	
11:00- 11:30	Coffee, Networking Break, Posters, Exhibitors	
11:30-12:30	Novel Materials, Testing & Multiscale Modelling for FPEs Manufacturing	
Session 5	Chairs: E. Mekeridis, G. Payrot	
11:30-12:00	MUSICODE: a novel modelling platform for optimizing manufacturing and accelerating innovation in OE industry	
Keynote	E. Lidorikis, <i>University of Ioannina, Greece</i>	
12:00-12:15	Reliability Test Data: Opportunities to scale printed electronics manufacturing	
Invited	E. Tsuyuzaki, <i>Bayflex Solutions, LLC, USA K</i>	
12:15-12:30	Active Layer Materials for OPV – a Manufacturer's Perspective	
Invited	A. Hendsbee, <i>Brilliant Matters, Canada</i>	
12:30-13:45	FPEs Applications in Buildings and Automotive	
Session 6	Chairs: F. Scaffidi, P. Berrouard	
12:30-12:45	Organic Photovoltaics for low light applications	
	S. Alem, <i>Advanced Electronics and Photonics Research Centre, National Research Council of Canada, Canada</i>	
12:45-13:00	Flexible electronic integration in Automotive industry	
Invited	F. Scaffidi Muta, <i>Centro Ricerche Fiat, Italy</i>	
13:00-13:15	OPVs and OLEDs in Buildings, Automotive, Tourism and Agriculture and Market Prospects	
	S. Koutsouvaloglou, <i>Organic Electronic Technologies (OET), Greece</i>	
13:15-13:30	Aluminium windows: From passive to energy producer	
Invited	A. Athanasiadis, <i>ALUMIL S.A., Greece</i>	
13:30-13:45	The integration of printed photovoltaics in float glass for applications in architecture	
	A. Gourgiotopoulos, <i>Kiriakidis Vas. S.A., Greece</i>	
13:45-15:00	Lunch, Networking, Posters, Exhibitors	
15:00-17:00	Maximizing Agricultural efficiency: Agrivoltaic Optimization Strategies	
Session 1	Chair: S. Logothetidis, A. Laskarakis,	
15:00-15:20	Agrivoltaics Revolution for Sustainable Agriculture and Energy Generation: Boosting Greenhouse Crop Yield and Germination with 3rd Generation Semitransparent OPVs	
Invited	E. Athanasiadou, <i>Organic Electronic Technologies P.C. Greece</i>	
15:20-15:40	Numerical and experimental evaluation of Organic Photovoltaics for greenhouse use	
Invited	T. Bartzanas, <i>Agricultural University of Athens, Iera Odos 75, Athens, Greece</i>	
15:40-16:00	InsolagrIn agrivoltaic crop protection approach	
Invited	R. Kasapis, <i>Insolight, Switzerland</i>	
16:00-16:20	A Greenhouse Plants' Heating System Based on Low Temperature Long Wave Radiation Emission	
	G. Papadakis, <i>Agricultural University of Athens, Iera Odos 75, 11855, Athens</i>	
16:20-18:30	ICEFPE Poster Session	AGRIVOLTAICS Poster Session
Poster Session	Coffee, Networking	Coffee, Networking
18:30-20:00	HORIZON EUROPE Project Meetings	
21:00	Dinner Invited Speakers AGRIVOLTAICS	

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AGENDA

Wednesday 1 November 2023

08:00-	Registration & Networking Coffee	
09:45–10:30	Official Opening Ceremony	AGRIVOLTAICS 2023
09:45–10:00	Welcome by the Chairman S. Logothetidis, <i>Chairman AGRIVOLTAICS 2023</i>	
10:00–10:30	Official Salutations · Dionysios Stamenitis, Deputy Minister at The Ministry of Rural Development and Food	
10:30-11:30	Advancements in Crop Harvesting by Integrated OPV and OLED in Greenhouses	
Session 2	Chairs: G. Hadziioannou, Th. Bartzanas	
10:30-11:00	Revolutionizing Crop & Energy Production: Semitransparent and Flexible OPVs in Agriculture embracing the Triple Land Use S. Logothetidis, <i>HOPE-A, and Nanotechnology Lab LTFN, AUTH, Greece</i>	
10:55-11:15	In-greenhouse Crop-responsive Agrivoltaic tracking system Invited E. Magadley, <i>Triangle Research and Development Center, Israel</i>	
11:15-11:30	LED and OLED Lighting technologies to promote Crop Yield in next generation Greenhouses Invited A. Laskarakis, <i>Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece</i>	
11:30-12:00	Coffee, Networking Break, Posters, Exhibitors	
12:00-12:20	Crop Specific Solar Panels for Optimized Agri-PV Deployment: Technology and Installation Implementations Invited N. Kanopoulos, <i>Brite Solar Technologies, Greece</i>	
12:20-13:30	Global Synergy for Agrivoltaics Collaborative Technologies and Ventures	
Session 3	Chairs: S. Kassavetis, E. Athanasiadou	
12:20-12:40	The Photokipia Project: The role of academia in agrivoltaics research C. Gravalidis, <i>Nanotechnology Lab LTFN, AUTH, Greece</i>	
12:40-13:00	Agrivoltaics a State of the Art boost in Greenhouse Crop Yield and Germination AGRORES and OpenEnergy E. Athanasiadou and S. Zygridou, <i>Organic Electronic Technologies P.C. Greece</i>	
13:00-13:20	New Research Projects of IMIDA on Agri-photovoltaic Systems in Southern Spain F. Contreras López, <i>Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental (IMIDA), Spain</i>	
13:20-13:40	Concentrating Light on the Food-Energy Nexus: An Agro-Voltaic Solution in Challenging Environments K. Younes, <i>Khalifa University, Abu Dhabi, UAE</i>	
13:40-15:00	Lunch, Networking, Posters, Exhibitors	
15:00-16:30	Sensors and Biosensors for Healthcare and Wellbeing	 COPE-Nano CoE
Session 7	Chairs: A. Laskarakis	
15:00-15:30	Advances in Bioelectronics Technology for Healthcare applications Keynote G. Malliaras, <i>University of Cambridge, UK</i>	
15:30-15:50	Production of Printed Biosensor Invited K. Tsimenidis, <i>BL Nanobiomed, Greece</i>	
15:50-16:10	Manufacturing Flexible & Printed RFIDs and Sensors S. Fachouri, <i>Organic Electronic Technologies P.C. Greece</i>	
16:10-16:30	Applications of Biosensors in Wearables & Healthcare Industry A. Orfanos, <i>BL Nanobiomed, Greece</i>	
16:30-17:30	Coffee, Networking Break, Posters, Exhibitors	
17:30-19:00	Competition Start-Up of the Year and Award	 COPE-Nano CoE
Session 8	Chairs: Th. Kolbusch, A. Chatziparadeisis	
17:30-17:45	HOPE-A's promotion of innovation through the support of companies Invited E. Bakalis, <i>HOPE-A, Greece</i>	
17:45-18:20	Pitches from Start-Ups (5 min each) OET, BL-NanoBioMed, Brite Solar, Apollo Green Solutions, Enfos Solar, Inventa Energy	
18:20-19:00	Awards & Main Points by the Committees and the Chairman Closing Remarks and Discussion	

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POSTERS

P1	High Definition Printing of Electronic Materials using Electrophotographic Printing Technology C. Y. Ngu, K. Kozuki, R. Hanazaki, H. Oshida, S. B. Lee, and M. Sakai Department of Electrical and Electronic Engineering, Chiba University, Japan
P2	Exploring Various Plastic Combinations and Assessing Quality of Lightweight PV Modules A. Baležentis ^{1,2} , J. Ulbikas ^{1,2} , P. Dubravskij ¹ , E. Fataraitė-Urbonienė ^{2,3} , J. Donėlienė ² , M. Rudzikas ² ¹ JSC Modern E-Technologies, Lithuania ² Applied Research Institute for Prospective Technologies, Lithuania ³ Kaunas University of Technology, K. Donelaičio str. 73, LT-44249 Kaunas, Lithuania
P3	Exploring the influence of photoactive layer morphology on photoactivation and performance of slot-die coated Organic Photovoltaics V. Heben ¹ , C. Kapnopoulos ¹ , A. Zachariadis ¹ , D. Tselekidou ¹ , E. Mekeridis ² , A. Laskarakis ¹ , S. Logothetidis ^{1,2} ¹ Nanotechnology Lab LTFN, Department of Physics, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), 20th KM Thessaloniki - Tagarades, 57001 Themi, Greece
P4	Exploring the Influence of Chlorine Incorporation on the Structure and Stability of MAPbI₃ - Based Flexible Printed Perovskite Solar Cells C. Stavraki ¹ , C. Kapnopoulos ¹ , A. Zachariadis ¹ , A. Paliagkas ¹ , S. Kassavetis ¹ , C. Gravalidis ¹ , E. Mekeridis ² , S. Logothetidis ^{1,2} , A. Laskarakis ¹ ¹ Nanotechnology Lab LTFN, Department Of Physics, Aristotle University Of Thessaloniki, Greece ² Organic Electronic Technologies P.C. (OET), 20th KM Thessaloniki - Tagarades, 57001 Themi, Greece
P5	Improving the Electrical Efficiency of Fully Printed Flexible Organic Solar Cells through Molecular Doping A. Paliagkas ¹ , C. Stavraki ¹ , C. Kapnopoulos ¹ , A. Zachariadis ¹ , V. Heben ¹ , E. Rabota ¹ , S. Logothetidis ^{1,2} , A. Laskarakis ¹ ¹ Nanotechnology Lab LTFN, University of Thessaloniki, Greece ² Organic Electronic Technologies P.C. (OET) 20th KM Thessaloniki - Tagarades, 57001 Themi Greece - Thessaloniki
P6	Optimizing Electron Transport Layer in printed Organic Solar Cells for enhanced UV-stability and electrical performance 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, Department of Physics, Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies (OET), 20th KM Thessaloniki - Tagarades, 57001 Themi, Greece
P7	Printable green light emitting polymers for PLED based optical sensing K. Papadopoulos ¹ , D. Tselekidou ¹ , A. Zachariadis ¹ , V. Kyriazopoulos ² , S. Kassavetis ¹ , A. Laskarakis ¹ , S. Logothetidis ¹ , M. Gioti ¹ ¹ Nanotechnology Lab LTFN Aristotle University of Thessaloniki, Greece ² Organic Electronic Technologies P.C. (OET), Themi, Greece
P8	Synthesis, characterization and preclinical testing of Curcumin-PLGA nanoparticles for targeted drug delivery M. Kioutsouki ¹ , K. Meliopolou ¹ , M. Pitou ¹ , S. Ploumistou ¹ , I. Chatziioannou ¹ , E. Rabota ¹ , K. Tsimenidis ² , A. Orfanos ² , M. Gioti ¹ , A. Laskarakis ¹ , C. Gravalidis ¹ , V. Karagkiozaki ² , S. Logothetidis ^{1,2} ¹ Nanotechnology Lab LTFN, Aristotle University of Thessaloniki, Greece ² BL Nanobiomed P.C., 20th km Thessaloniki – Tagarades Road, Thessaloniki, Greece
P9	EKOBUILT Organic Photovoltaic Systems Embedded in Building Facilities (NSRF 2014-2020 project)
P10	Transparent OPVs in urban environment (NSRF 2021-2027-Regional Program for Central Macedonia)
P11	WINENERGY “Free electricity from any surface” (Greece 2.0 – National Recovery and Resilience Fund)
P12	RealNano - In-line and Real-time Nano-characterization technologies for the high yield manufacturing of Flexible Organic Electronics (H2020 -DT - NMBP -08 - 2019)
P13	3GPV-4INDUSTRY Development of efficient third generation PV materials and devices to enhance the competitiveness of enterprises to the green energy production (Greece 2.0 – National Recovery and Resilience Fund)

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P14	Energetic and agronomic evaluation of a mobile photovoltaic shading mesh in a tomato crop R. Abadía ¹ , J. Muñoz-Acero ¹ , S. Pardo ¹ , H. Puerto ¹ , C. Rocamora ¹ , S. García-Martínez ¹ , F.J. Ferrández-Pastor ² , J.M. Cámara-Zapata ¹ ¹ Instituto de Investigación e Innovación Agroalimentaria y Agroambiental. Universidad Miguel Hernández, Spain ² Instituto Universitario de Investigación Informática. University of Alicante, IUII-UA, Spain
P15	Enhancing Precision Agriculture with a Multimodal Sensing System using the ANTONIO's Data Platform M.Karagiovanidis ¹ , S.Rilling ² , X.A.Pantazi ¹ , V.Fragos ¹ , P.Karnoutsos ¹ , N.Koukovinos ¹ , C.Paraskevas ¹ ¹ Aristotle University of Thessaloniki, University Campus, Thessaloniki, 54124, Greece ² Fraunhofer Institute for Intelligent Analysis and Information Systems IAIS, Germany
P16	AgroSYS - An Autonomous Collaborative Robotic System of Precision Viticulture Integrating Electric UAVs and UGVs and Autonomous PV Charging Stations A. Balafoutis ¹ , G. Banias ¹ , D. Kateris ¹ , D. Bochtis ¹ , M. Moraitis ^{1,2} , G. Papadakis ² , C.-S. Karavas ² , V. Arapostathis ² , K. Biniari ² , M. Stavrakaki ² , D. Paliokostas ² , P. Lagios ³ , E. Lolos ³ , K. Tsiatsou ⁴ , G. Stasimiotis ⁴ , P. Langouranis ⁴ , P. Zervas ⁴ ¹ Institute of Bio-economy & Agro-technology, Dimarchou Georgiadou 118, 38333, Volos. ² Agricultural University of Athens, Iera Odos 75, 11855, Athens. ³ GIZELIS ROBOTICS A.B.E.E, Kormatzini, 32009, Schimatari. ⁴ ENERGY TRADING A.E., Aioulou 67, 10559, Athens
P17	A Greek-Turkish collaborative project aiming to enhance solar energy innovation ecosystems, including the predesign of agri-PV systems adapted to the local conditions J. Nikolettatos ¹ , D. Kuzkaya ² , R. Turan ² ¹ Centre for Renewable Energy Sources and Savings CRES, Greece ² Centre for Solar Energy Research and Applications ODTÜ-GÜNAM, Ankara, Türkiye
P18	GLASS: a research project on Agri-photovoltaic Greenhouse Systems in Spain V. Hernández Pérez ¹ , F. Contreras López ¹ , P. Hellín García ¹ , E. Fernández ² , F. Almonacid Cruz ² , J. Gabriel Bessa ² , Á. Fernández Solas ² , A. Cruz Escabias ² , M. Giménez ³ , P. Flores Fernández-Villamil ¹ ¹ Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental (IMIDA), Spain ² Advances in Photovoltaic Technology (AdPVTech), CEACTION, University of Jaén, Spain ³ J. Huete International, 30820 Alcantarilla (Murcia), Spain
P19	Approaches for the Development of Sustainable Agrivoltaic Systems in Southern Spain V. Hernández, P. Hellín, F. Contreras López, J. Fenoll, I. Garrido, P. Flores Instituto Murciano de Investigación y Desarrollo Agrario y Medioambiental (IMIDA), Spain
P20	PHOTOKIPIA Semitransparent Organic and Printed Photovoltaics for Energy Efficient Mediterranean Greenhouses (NSRF 2014-2020 project)
P21	AGRORES Energy Autonomous Greenhouse Exploiting Renewable Energy Sources (NSRF 2014-2020 project)
P22	OPENENERGY Roof Integrated Conformable OPV Products for Energy Generation (NSRF 2014-2020 project)

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