

CONFERENCE PROGRAMME



18th - 21st September

€·MRS 2023 Fall Meeting

Conference and exhibition held at the Main Campus of the
Warsaw University of Technology
Plac Politechniki 1 - Warsaw, Poland



European Materials
Research Society



Warsaw University
of Technology



Polish Materials
Science Society



Institute of Physics
Polish Academy of Sciences



AQUA MATER



Lukasiewicz
Institute of Microelectronics
and Photonics

GENERAL TIMETABLE

Symposium symbol	Symposium location		Monday September	Tuesday September	Wednesday September	Thursday September
			18 th	19 th	20 th	21 st
Symposium A	Main Building	437	09:00-17:30 (1)	09:00-17:45	14:00-17:30	
Symposium B	Main Building	208	09:00-17:40 (1)	09:00-17:35 (2)	13:45-17:45	09:00-17:00
Symposium C	Main Building	231	08:45-17:30 (1)	09:00-17:30	14:00-16:45	09:00-15:30
Symposium D	Main Building	226	09:00-17:35	09:00-17:05 (2)		
Symposium E	Main Building	144	08:55-17:15 (1)	09:00-17:15 (2)	14:00-17:15	09:00-16:00
Symposium F	Main Building	206		14:00-18:15 (2)	14:00-18:00	
Symposium G	MINI Building	101	14:00-17:30	09:00-17:30 (2)	14:00-17:15	
Symposium H	Main Building	437a	11:30-17:30 (1)	09:00-17:30	14:00-17:30	
Symposium I	Main Building	315	08:45-17:30 (1)	08:30-17:30 (2)	14:00-18:00	08:30-17:15
Symposium J	Main building	134	09:00-17:30	09:00-17:30 (2)	14:00-17:30	
Symposium K	Main Building	309	08:00-18:00	08:00-17:30 (2)	14:00-17:30	08:30-17:30
Symposium L	Main Building	219	9:00-15:30	09:00-17:30 (2)	14:00-17:30	09:00-12:30
Symposium M	MINI Building	105	09:00-17:30 (1)	09:00-12:45		
Symposium N	Main Building	306	09:00-17:45	09:00-17:30 (3)	14:00-17:30	09:00-17:30
Symposium O	MINI Building	105		14:00-17:00 (3)	14:00-17:15	
Symposium P	Main Building	213	09:00-17:30	09:00-17:30 (3)	14:00-17:35	
Symposium Q	MINI Building	107	09:00-17:30	09:00-18:00	14:00-18:15	08:30-17:30
Symposium R	MINI Building	327	09:00-17:15 (1)	09:00-17:30		
Symposium S	MINI Building	103		08:50-17:15 (3)	14:00-17:30	09:00-12:30
Symposium T	MINI Building	210	09:00-17:30 (1)			
Symposium U	MINI Building	102	09:00-17:30 (1)	09:00-15:30	14:00-17:30	
Symposium V	MINI Building	210		09:00-15:15 (3)		
Symposium W	Main Building	308	14:00-17:30	09:00-17:10	14:00-17:30	
Symposium X	MINI Building	329	09:00-17:30	09:00-17:30	14:00-17:30	09:00-15:30
Symposium Y	Main Building	206	14:00-17:20	09:00-12:30		
Poster Session*	Physics Building - Aula		(1) 17:30-19:30	(2) 17:30-19:30		
	Main Building Small Hall (237)			(3) 17:30-19:30		

* Poster Session
17:30-19:30 but may
vary depending on
symposium timing

Symposium Sponsors



Symposium I

Sessions: Room 315 | Main Building
Poster Session: Aula | Physics Building

MANUFACTURING

SYNTHESIS AND CHARACTERIZATION OF FUNCTIONAL NANOCOMPOSITE MATERIALS

Symposium organizers:

- | | |
|--|---------------------------------------|
| Aurora RIZZO | - University of Salento - CNR NANOTEC |
| Ermelinda M. S. MACOAS | - University of Lisbon |
| Raghvendra Singh YADAV
(Main organizer) | - Tomas Bata University in Zlin |
| Tayebeh AMERI | - University of Edinburgh |

17:15 Earth Abundant Elements Based Lithium Niobate type Chalcogenide Nanocomposites for Micro-Energy Harvesting
 Anuja DATTA 186

POSTER SESSION IPO2

17:30	Plasma and laser assisted fabrication of silicon-based composite nanostructures Mikalai TARASENKA	01_1019
17:30	Cobalt-Iron bi-metallic catalyst for chirality-specific growth of single-walled carbon nanotube Qingmei HU	02_1040
17:30	Demonstration of synthesis of MXenes (Ti ₃ C ₂) by using HF-etchant mixed in supercritical CO ₂ Jui-Yang FENG	03_1096
17:30	Solid-State Displacement Synthesis of Alkaline-Earth Selenide for White Emission Yanze WANG	04_1170
17:30	Enhanced Dispersibility, Antibody Immobilization, and Electrical Performance of Gold Nanostars for Biomedical Applications Yong-Sang KIM	05_120
17:30	Growth And Synthesis Of Graphene-based ZnO-nanorods For Strain Seung Mun BAEK	06_1200
17:30	Controlled Nanoscale Doping Effect on Metal-Polymer Nanocomposites Properties for Optoelectronics Applications Inshad JUM'H	07_125
17:30	Investigation of Properties of Protein Based Coating for Anti-Icing Virginija JANKAUSKAITE	08_1257
17:30	The effect of surfactants and precursors on the structure and properties of ZnS:Cu nanocrystalline particles Milena DILE	09_1328
17:30	A flexible molecular-imprinted antifouling electrochemical sensor with synergistic effect of SWCNTs base and Pt single atom catalyst was used for ultrasensitive detection of emerging phenols ___ ZHANG	10_1345
17:30	Composites based on microcrystalline cellulose and K ₃ Tb(PO ₄) ₂ and K ₂ Eu(PO ₄)(WO ₄) complex oxides phosphors Serhii NEDILKO	11_1352

17:30	UV-Accelerated Synthesis of Gold Nanoparticle-Pluronic Nanocomposites in Application X-ray Computed Tomography Contrast and in vivo Maternal and Fetal Toxicity Assays in Rats Aline Beatriz DA SILVA SANTOS	12_1372
17:30	Graphene-polymer nanocomposite via float-stacked method Seung-II KIM	13_1375
17:30	Fundamental study of Niobium laser polishing processes Florian BROCKNER	14_1382
17:30	Binder Free Approach to Synthesize MoO ₂ Electrodes for Energy Storage Applications Pramod KUMAR	15_1384
17:30	Nanocomposite Synthesis using Colloidal reduced Graphene Oxide/Sodium Silicate Solution Yu Na LEE	16_1406
17:30	Investigations of the formation of thin MXene films with different chemistries and particle sizes for VOC microsensors Kamila �WIK	17_1417
17:30	Analysis of Rheological and Multifunctional Properties of CNT Reinforced Epoxy Nanocomposites Coating Merve YASACAN	18_1434
17:30	Environmental Effects on the Performance of Luminescence Solar Concentrators Based on Colloidal QDs in Polyacrylate Nanocomposites Meghna SIRIPURAPU	19_1437
17:30	The electronic structure of the carbon nanotubes modified with CdTe nanoparticles Nataliia KURGAN	20_1443
17:30	Combined laser-plasma assisted approach for the formation of metal oxides heterostructures Uladzislau KORNEU	21_1451
17:30	Correlative morphology of two-dimensional material MoS ₂ with sputtering deposition time Prachi GURAWAL	22_1462
17:30	Exploring the impact of irradiation on the structural and electrical properties of PEDOT:PSS nanocomposites Halyna KLYM	23_1463
17:30	Enhanced thermo-physical properties of epoxy resin with carbon nanotube reinforcements Halyna KLYM	24_1467

17:30	Synthesis and Characterization of IZO thin films obtained by Pulsed Laser Deposition for Surface Acoustic Wave sensors Izabela CONSTANTINOIU	25_1469
17:30	Synthesis of magnetic Fe ₃ O ₄ @Mn-MOFs core-shell composites with tunable shell thickness Saumaya KIRTI	27_1544
17:30	Investigation of Low-Concentration Phosphoric Acid-Doped PBI Membrane Yuki NAKAMURA	28_1566
17:30	High-Quality Bioethanol and Vinegar Production from Saudi Arabia Dates: Characterization and Evaluation of Their Value and Antioxidant Efficiency Fahad ALMINDEREJ	29_157
17:30	A novel process intensification tool in catalysis: Electromagnetic treatment of water Dimitrios GIANNAKOUDAKIS	30_1570
17:30	Efficient removal of indigo carmine dye by zeolite imidazole framework-67 (ZIF-67) Duygu YANARDAĞ	31_1571
17:30	Synthesis of porous Ag-Ag ₂ S@Ag-Au hybrid nanostructures with broadband absorption properties and their photothermal conversion application Astrini PRADYASTI	32_183
17:30	Synthesis, Characterization, and Performance of Pyridomethene-BF ₂ Fluorescence Dye-Doped PVA Thin Film and PVP Nanofibers as Low γ -ray Dosimeters Fahad ALMINDEREJ	33_193
17:30	Impact of synthesis conditions on optical and electrochemical properties of SnO ₂ nanomaterials Reynald PONTE	34_201
17:30	Reduced graphene oxide - porous silicon hybrid structures for sensing application Igor OLENYCH	35_214
17:30	One-step electrodeposition of molybdenum nickel cobalt sulfides on Ni foam for high-performance asymmetric supercapacitors Evariste UWAMAHORO	36_252
17:30	Investigating the effect of the annealing parameters on the resistance of indium tin oxide nanocrystalline films Michele BELLINGERI	37_28
17:30	Optical absorption and electric conductivity of two-dimensional carbon nitride films prepared by thermal chemical vapor deposition Habuchi HITOE	38_332