

<b>Materials Europe - Tentative Program</b>	
<b>July 09–11, 2025   Universidad Carlos III de Madrid, Spain</b>	
<b>DAY – 1, 09 July, 2025</b>	
<b>09:00 - 09:40</b>	<b>Registrations</b>
<b>09:40-10:00</b>	<b>Opening, Welcome, and Announcements by Rosa Maria</b>
	<b>Session Chair:</b>
	<b>Session: Materials Science and Engineering</b>
<b>10:00-10:30</b>	<b>Keynote Talk: In-situ Investigation of Nanomaterials with Advanced Electron Probes</b> Maria Varela Del Arco, Universidad Complutense de Madrid, Spain
<b>10:30-10:50</b>	<b>Invited Talk: Thermoplastic Coatings on Basalt Fibers: A Strategy to Achieve Interfacial Self-Healing in Composites</b> Alessandro Pegoretti, University of Trento, Italy
<b>10:50-11:10</b>	<b>Invited Talk: Bilayer Magnetic Composite Systems Made of Few-Layer Graphene and Amorphous Magnetic Microwires for Stealth Technology</b> Maria Pilar Marin Palacios, Universidad Complutense de Madrid, Spain
<b>11:10 - 11:30</b>	<b>Coffee Break</b>
<b>11:30 - 12:00</b>	<b>Keynote Talk: Advances in Curvilinear Magnetism: Cylindrical Magnetic Nanowires</b> Manuel Vazquez Villalabeitia, ICMM-CSIC, Spain
<b>12:00 - 12:20</b>	<b>Invited Talk: An Artemisia Sphaerocephala Krasch-based Food-grade Superabsorbent Polymer for Food Industrial Applications</b> Lai Chun Him Nathanael, The Hong Kong Polytechnic University, Hong Kong
<b>12:20 - 12:40</b>	<b>Invited Talk: The Optical Properties of Mn Based Halide Compound Semiconductors</b> Bingsuo Zou, The Guangxi University, China
<b>12:40 - 13:00</b>	<b>Invited Talk: Spark Plasma Sintering of High-TC Sodium–Bismuth Titanate Ferroelectric Ceramics That Exhibits Superior Piezoelectric Performance</b> Chun-Ming Wang, The Shandong University, Chain
<b>13:00 - 14:00</b>	<b>Lunch Break</b>
	<b>Session Chair: Alain Ponton, Paris Cite University, France.</b>
	<b>Session: Materials Science and Engineering</b>
<b>14:00 - 14:30</b>	<b>Keynote Talk: Functional Materials for Energy Storage Applications: Extending Lifetime and Electrochemical Performance</b> Fatima Montemor, Universidade de Lisboa, Portugal
<b>14:30 - 15:00</b>	<b>Keynote Talk: Features of Hydrogels and Composites for Selective Adsorption</b> Alain Ponton, Paris Cite University and National Center for Scientific Research, France
<b>15:00 - 15:20</b>	<b>Invited Talk: Structural and Magnetic Properties of FePt Thin Films Grown on Various Substrates</b> Abdellah Lisfi, Morgan State University, USA
<b>15:20 - 15:40</b>	<b>Invited Talk: Unusual Properties of Interlocked Metal Organic Nanocages</b> Antonino Famulari, Politecnico di Milano, Italy.
<b>15:40 - 16:00</b>	<b>Coffee Break</b>
<b>16:00 - 16:20</b>	<b>Invited Talk: The Influence of Oxide Layer formation on Multimetalic Materials on their Catalytical Performance</b> Piotr Zabinski, AGH University of Krakow, Poland
<b>16:20 - 16:40</b>	<b>TBA</b> TBA

16:40 - 17:00	TBA
	TBA
17:30 Onwards	Networking Cocktails

	<b>DAY – 2, 10 July, 2025 - Room A</b>
	<b>Session: Advanced Functional Materials and Characterization</b>
	<b>Session Chair: Clement Kanyinda Malu, University Rey Juan, Spain.</b>
09:30-09:50	<b>Invited Talk: Cellulose Nanocrystals Functionalized with Waste Vegetable Oils for Sustainable Applications in Advanced Materials</b>
	Loredana Maiuolo, The University of Calabria, Italy
09:50-10:10	<b>Invited Talk: High-throughput Screening and Optimization of Microfluidic-Synthesized Lipid-based Nanocarriers</b>
	Ilaria Clemente, The University of Siena, Italy
10:10-10:30	<b>Invited Talk: Excellent Piezoelectric Properties and Electrical Resistivity of Bismuth Titanate-ferrite</b>
	Qian Wang, The Shandong University, China
10:30-10:50	<b>Invited Talk: Expanding Horizons of Metal–Phenolic Networks by Tailoring Electrochemical Strategies (Online)</b>
	Maddalena Corsini, The Universita di Siena, Italy
10:50-11:20	<b>Coffee Break</b>
11:20-11:40	<b>Invited Talk: Organic Resin and Inorganic Fiberglass Recovery form Wind Turbine Blades using Pyrolysis Technology</b>
	Sophia A.Tsipas, Universidad Carlos III de Madrid, Spain
11:40-12:00	<b>Invited Talk: Bioactive Metal Complexes With Thiourea Derivatives</b>
	Aleksandra Drzewiecka-Antonik, the Institute of Physics of the Polish Academy of Sciences, Poland.
12:00-12:20	<b>Invited Talk: Methods of High Entropy Alloys Oxidation</b>
	Katarzyna Skibinska, AGH University of Krakow, Poland
12:20-12:35	<b>Oral Talk: Characterization of Lipidic Nanoformulations Encapsulating the Antifungal Drug Natamycin</b>
	Luigi Talarico, The University of Siena, Italy
12:35-12:55	<b>Oral Talk: Tuning Magnetism in Graphene Nanoribbons via Strain and Adatoms</b>
	Pablo Moles, Universidad Complutense de Madrid, Spain
12:55 -14:00	<b>Lunch Break</b>
	<b>Session: Advanced Functional Materials and Characterization</b>
	<b>Session Chair:</b>
14:00-14:20	<b>Invited Talk: Organic Resin and Inorganic Fiberglass Recovery form Wind Turbine Blades using Pyrolysis Technology</b>
	Sophia A.Tsipas, Universidad Carlos III de Madrid, Spain
14:20-14:40	<b>Invited Talk: Synergistic Strengthening-toughening Design and Multiscale Construction Mechanisms of Carbon Aerogels</b>
	Fuhua Xue, Harbin Institute of Technology, China
14:40-15:00	TBA
	TBA

<b>15:00-15:15</b>	<b>Oral Talk: Mechanical Strain-induced Degradation of Magnetic Properties in Feco-2V Alloy</b> Sirapob Toyting, University of Cambridge, UK
<b>15:15-15:30</b>	<b>Oral Talk: Extremely Low Resistivity Size Effect Enabled by Epitaxial Growth of Nickel-Cobalt Alloy Thin Films for Next-Generation Interconnects</b> Ju Young Sung, The Ajou University, South Korea
<b>15:30-16:00</b>	<b>Coffee Break</b>
<b>16:00-16:15</b>	<b>Oral Talk: Achievement of Single-phase Body-centered Cubic CoMo Alloy Thin Films with Reduced Resistivity Size Effect</b> Ye Bin Lim, The Ajou University, South Korea
<b>16:15-16:30</b>	<b>Oral Talk: Atomic Layer Deposition of MoO<sub>2</sub> Thin Films for Next-generation DRAM Capacitor Electrodes</b> Kyung Joon Lee, The Ajou University, South Korea
<b>16:30-16:45</b>	<b>Oral Talk: Porous Silicon Structural, Morphological and Optical Properties Enhancement After Doping with Nd<sub>2</sub>O<sub>3</sub></b> Ismail Selmi, University of Tunis El Manar & LPV-CRTEn, Tunisia
<b>16:45-17:00</b>	<b>Oral Talk: Innovative Bio-Composites for Noise Reduction</b> Dehenenet Tassaw, Lodz University of Technology, Poland
<b>17:00-17:30</b>	<b>Poster Presentations</b>

	<b>DAY – 2, 10 July, 2025 - Room B</b>
	<b>Session: Biomaterials and Biomedical Applications</b>
	<b>Session Chair: Mario Italo Trioni, National Research Center of Italy (CNR), Italy.</b>
<b>09:30-09:50</b>	<b>Invited Talk: Infrared Nanosecond Pulse Laser Polishing Improves the Corrosion Behaviour in Simulated Body Fluid (SBF) of Ti6Al4V Fabricated by Electron Beam Powder Bed Fusion (EB-PBF) and Laser Beam Powder Bed Fusion (LB-PBF)</b> Juan Ignacio Ahuir-Torres, Liverpool John Moores University, UK
<b>09:50-10:10</b>	<b>Invited Talk: Characterization of Pharmaceutical Tablets under Diametral Compression using DIC and SEM</b> Alex Fok, University of Minnesota, USA
<b>10:10-10:30</b>	<b>Invited Talk: Nano-Topographic Cues: The Role in T Cell Stimulation and Immunotherapeutic Applications</b> Mark Schwartzman, The Ben-Gurion University, Israel
<b>10:30-10:50</b>	<b>Invited Talk: Hierarchical, Flower-like, Nanostructured Layers of Biophenols as Green Corrosion Inhibitors</b> Regina Fuchs-Godec, The University of Maribor, Slovenia
<b>10:50-11:20</b>	<b>Coffee Break</b>
<b>11:20-11:40</b>	<b>Invited Talk: Surface Modification of Cellulose with Amino Groups for Antibacterial Functionality</b> Paola Costanzo, University of Calabria, Italy
<b>11:40-12:00</b>	<b>TBA</b> TBA
<b>12:00-12:20</b>	<b>TBA</b> TBA

12:20-12:35	<b>Oral Talk: Electrospinning Multi-Polymer Nanofibers Based on Gelatin, Sodium Alginate, PVA, and Pectin for Biomedical Applications</b> Huynh-Ngoc-Truc Nguyen, National Yang Ming Chiao Tung University, Taiwan
12:35-12:50	<b>Oral Talk: Cell/derived ECM loaded PCL/Chitosan nanofibers for improved periodontal tissue regeneration strategies (Online)</b> Mafalda Santos, University of Oxford, Uk
12:50 -14:00	<b>Lunch Break</b>
	<b>Session: Novel Materials for Energy and Environment Applications</b>
	<b>Session Chair:</b>
14:00-14:20	<b>Invited Talk: H2O and CO2 Interaction with Perovskitic (110) Surface: The Case of SrFeO3</b> Mario Italo Trioni, National Research Center of Italy, Italy
14:20-14:40	<b>Invited Talk: Composition, Structure and Phonon Softening in High Entropy Alloys Based on PbTe Thermoelectrics</b> Norbert Marcel Nemes, Universidad Complutense de Madrid, Spain
14:40-15:00	<b>Invited Talk: Enhancing Supercapacitor Performance Through Mn-Doped ZnO: A Defect Engineering Approach</b> Ameen Uddin Ammar, The National Institute for Research and Developmet of Isotopic and Molecular Technologies, Romania
15:00-15:20	<b>Invited Talk: Stoichiometry engineering of sputtered Molybdenum Oxide thin films as Hole-Selective Contact for Silicon Solar Cells</b> Maria Miritello, CNR-IMM, Italy
15:20-16:00	<b>Coffee Break</b>
16:00-16:20	<b>Invited Talk: 4-Nitrophenol Reduction and Antibacterial Activity using Green-Synthesized Ag–Cu Bimetallic Nanocatalysts Immobilized on Modified Kaolin</b> Stavros Pouloupoulos, Nazarbayev University, Kazakhstan
16:20-16:40	<b>TBA</b> TBA
16:40-16:55	<b>Oral Talk: Modelling Ambient PM2.5 Particulate Matter Concentrations in the UK</b> Jafet Cardenas Escudero, Complutense University of Madrid, Spain
17:00-17:30	<b>Poster Presentations</b>
ME001	<b>Development of a Power Generator Based on a Snap-Action Bistable Structure and Shape Memory Alloy Springs</b> Chi Hsiang Pan, National Chin-Yi University of Technology, Taiwan
ME002	<b>Phosphorous doped Si Nanowires for High-capacity Battery Anodes and High-power Supercapacitors</b> Sumana Kumar, IIT Bombay, India
ME003	<b>Acoustic-Based Damage Detection Using ZnO Sensors: A Machine Learning Approach for Structural Damage Detection Employing Ambient Vibrations</b> Keshavmurthy Subramanian Srikanth, London South Bank University, UK
ME004	<b>A Transformer-based Discontinuity Detection Method for Numerical Simulation of Porous Materials</b> Jiaqian Dan, The Harbin Institute of Technology, China
ME005	<b>Acoustic and Optical Responses of Hollow Au Nanoparticles to Femtosecond Laser Irradiation</b> Behnoush Khammar, The Polytechnic University of Valencia, Spain

ME006	<b>Study of Bio-based Fillers and Additives for the Production of Biodegradable Biopolymers</b> Gioele Foltran, University Ca' Foscari of Venice, Italy
ME007	<b>Structure and Morphology of Hydrothermally Synthesized Sm-doped Ceria</b> Kolyo Kolev, Bulgarian Academy of Sciences, Bulgaria
ME008	<b>Graphene Oxide as a Support for the Active Components of the Catalyst</b> Darja Pecar, University of Maribor, Slovenia
ME009	<b>Surface Engineering of Metal Powders: Scalable Modification via Fluidized Bed Processing</b> Neyder Aleixer Sandoval Vargas, Universidad Carlos III de Madrid, Spain
ME010	<b>Photo-degradation of Organic dye Mixtures and Ciprofloxacin Antibiotic Utilizing Spray Deposited Li-Nb co-doped SnO<sub>2</sub> Thin Films</b> Gouranaga Maharana, National Institute of Technology, India

	<b>DAY – 3, 11th July, 2025 - Room A</b>
	<b>Session: Polymer Science and Engineering</b>
	<b>Session Chair:</b>
09:30-09:50	<b>Invited Talk: Numerical strategies to enhance the use of topologically optimized designs with real load and material conditions, and a stiffness-volume space to perform AI accelerated designs</b> Luis Saucedo Mora, The Polytechnic University of Madrid, Spain.
09:50-10:10	<b>TBA</b> TBA
10:10-10:25	<b>Oral Talk: Magnetic NiFe<sub>2</sub>O<sub>4</sub>-PVDF Composites: Combining Flexibility, Stability, and Superior Magnetic Properties for Functional Applications</b> Sarah Baayad, Mohammed VI Polytechnic University, Morocco
10:25-10:40	<b>Oral Talk: Biocompatible BCZT Core@CuFe<sub>2</sub>O<sub>4</sub> Shell Structure Embedded in PVDF Matrix: A Sustainable Approach for High-efficiency Magnetoelectric Energy Harvesting</b> Chaymae Bahloul, Mohammed VI Polytechnic University, Morocco
10:40-10:55	<b>Oral Talk: Advanced Reaction Pathways in the Atomic Layer Deposition of TiN Thin Films for Reduced Resistivity</b> Kyeong Hyeon Choi, The Ajou University, South Korea
11:00-11:30	<b>Coffee Break</b>
	<b>Session: Advanced Materials Synthesis and Characterization</b>
	<b>Session Chair:</b>
11:30-11:50	<b>Invited Talk: The Effects of Pore Channel Features on the Fatigue Performances of Selective Laser Melted Dievar Mold Steel</b> Ming-Wei Wu, National Taipei University of Technology, Taiwan
11:50-12:05	<b>Oral Talk: Construction of Perovskite Heterostructures for Next-Generation DRAM Capacitor Fabrication via Atomic Layer Deposition</b> Se Eun Kim, The Ajou University, South Korea
12:05-12:20	<b>Oral Talk: Physical and Mechanical Properties of Pumice and Clay Reinforced Aluminum Syntactic Foams Produced By Pressure Infiltration Technique</b> Ibrahim Abdusselam Tantoglu, Istanbul Technical University, Turkey

12:20-12:35	<b>Oral Talk: Dual-Functional Coupling Agent for CF/EP Composites: Comparative Study of Carbonaceous Nanofillers with Zwitterionic Silane Modification for Enhancing CF/EP Mechanical Performance</b>
	Mariam Omar, Sabanci University, Turkey
12:35-12:50	<b>Oral Talk: Aluminum Silicate Organic Framework for the Removal of Industrial Organic Toxins</b>
	Huda Alyafei, Qatar University, Qatar
12:50-13:00	<b>Closing</b>

	<b>DAY – 3, 11th July, 2025 - Room B</b>
	<b>Session: Nanostructured Materials</b>
	<b>Session Chair:</b>
09:30-09:50	<b>Invited Talk: Enhanced Superballistic Transport in Antidot Graphene Superlattices</b>
	Elena Diaz Garcia, Universidad Complutense de Madrid, Spain
09:50-10:10	<b>Invited Talk: Ball Milling and Annealing Effect in Structural and Magnetic Properties of Copper Ferrite by Ceramic Synthesis</b>
	Patricia Marcela De La Presa Munoz Del Toro, Universidad Complutense de Madrid, Spain
10:10-10:30	<b>TBA</b>
	TBA
10:30-10:45	<b>Oral Talk: Highly Uniform Resistive Switching Performance in Conductive-bridge Random Access Memory via Two-dimensional Electron Gas at Oxide Interfaces</b>
	Chae Hyun Lee, The Ajou University, South Korea
10:45-11:00	<b>Oral Talk: Iron-Based MOFs and MOF Composites for Sustainable Wastewater Treatment in the Circular Economy</b>
	Victor Ramos, Universidad Carlos III de Madrid, Spain
11:00-11:30	<b>Coffee Break</b>
	<b>Session: Nanostructured Materials</b>
	<b>Session Chair:</b>
11:30-11:45	<b>Oral Talk: Ultrafast Hydrogen Sensing Technology Based on Nanoscale Metal Filaments</b>
	In Su Oh, The Ajou University, South Korea
11:45-12:00	<b>Oral Talk: High-performance Thin-film Transistors Enabled by Two-dimensional Electron Gas at Oxide Heterostructures</b>
	Sang Hyeok Lee, The Ajou University, South Korea
12:00-12:15	<b>Oral Talk: Exploration of Alternative ALD Reactions to Reduce the Resistivity of TiN Thin Films for DRAM Capacitor Electrodes</b>
	Byeong Jun Jeon, The Ajou University, South Korea
12:15-12:30	<b>Oral Talk: Automotive Textile Thermal Resistance Enhancement for High Temperature Functionalization</b>
	Jose Abreu, The University of Minho, Portugal
12:30-12:45	<b>TBA</b>
	TBA
12:45-13:00	<b>Closing</b>