

ALGHERO – SARDINIA, ITALY

SEPTEMBER 15–17, 2026

CONFAMI2026

EU-UAE CONFERENCE ON
ADVANCED MATERIALS
AND INNOVATION

Program

(as of 11/09/2026)

TUESDAY SEPTEMBER 15, 2026

08:00-08:45	Registration	
08:45-09:00	Opening Ceremony Lucia Gemma Delogu (Khalifa Univ. / Univ. of Padua, United Arab Emirates / Italy)	
	Silvia Gross (University of Padua, Italy)	
09:00-09:20	Sustainable inorganic materials chemistry: Tools and boundaries to rationally navigate the experimental parameters space	I
09:20-09:40	Anupam Prasoon (Max-Planck-Institut für Mikrostrukturphysik, Germany) Organic 2D Crystals for Electronic and Quantum Materials	I
09:40-10:00	Teresa Gatti (Politecnico di Torino, Italy) Exploring the flatland of bi-dimensional materials for energy and (opto)electronics	I
10:00-10:40	Coffee Break/Poster Session	
10:40-11:10	Husam Al Shareef (KAUST, Saudi Arabia) MXenes for Energy Harvesting	K
11:10-11:25	Micaela Pozzati (Politecnico di Torino, Italy) MXene-modified bivo4/fepo4 photoanodes for solar oxygen evolution	O
11:25-11:40	Kaitlyn Prenger (Trinity College Dublin, Ireland) Novel MXene-Transition Metal Oxide Heterostructures as Electrodes for Non-Acidic Aqueous Supercapacitors	O
11:40-11:55	Samaneh Vaez (Politecnico di Torino – DISAT, Italy) Electrolyte and Electrode Engineering of Molybdenum Carbide MXene/Few-Layer Graphene Hybrid Electrodes for High-Performance Aqueous Supercapacitor	O
11:55-12:10	Yuting Li (Khalifa University, United Arab Emirates) AI-Driven Discovery of 2D Materials for Hydrogen Energy	O
12:10-12:30	Michele Saba (Università degli Studi di Cagliari, Italy) From Excitons to Polarons to Polaritons: the Photophysics of Lead Halide Perovskites	I
	Scientific Policy Session	
12:30-12:40	Maleka Bin Tarsh (Khalifa University- RIC2D, United Arab Emirates) RIC2D: Accelerating Research, Innovation, and Commercialization in Graphene and 2D Materials	O
12:40-12:55	Enzo Tramontano (University of Cagliari, Italy) Human endogenous retroviruses: an old story for novel players in human health	I
12:55-14:05	Lunch	
14:05-14:20	Natalia Beshchasna (Fraunhofer Institute for Ceramic Technologies and Systems IKTS, Germany) Multifunctional Electrodeposited Polymer Coatings for Biomedical Applications	O
14:20-14:40	Martina Zoccheddu (Augusta University, USA) Beyond the Surface: From Immunomodulatory Nanomaterials to MXene–Biological Interactions with Single-Cell and Spatial Genomics	I
14:40-14:55	Olla Elkhatib (Khalifa University, United Arab Emirates) Extracellular vesicle–MXene nano-bio interfaces for immunomodulatory nanomedicine	O
14:55-15:10	Laura Fusco (University of Padua, Italy) Skin safety and anti-inflammatory effects of nb ₄ C ₃ mxene	O

15:10-15:25	Anastasia Konieva (University Hospital Essen, Germany) MXene-Induced Immunometabolic and Immune Responses	O
15:25-15:40	Oksana Sulaieva (Medical Laboratory CSD, Ukraine) Histopathological Insights into Biodistribution and Tissue Fate of Ti- and Nb-Based MXenes after Systemic Administration	O
15:40-15:55	Viktoriia Korniienko (University of Latvia, Latvia) Mxene-assisted led-induced photothermal antibacterial strategy against planktonic and biofilm-associated bacteria	O
15:55-16:15	Marco Orecchioni (Augusta University, USA) Label-free immunomodulatory MXenes reprogram monocyte and macrophage responses	I
16:15-16:45	Coffee Break/Poster Session	
16:45-17:05	Anna Maria Pappa (Khalifa University, United Arab Emirates) Engineering bio-hybrid bioelectronic interfaces	I
17:05-17:25	Valentina Palmieri (ISC-CNR, Italy) Engineering Bioactive Interfaces with Graphene Oxide	I
17:25-17:45	Giacomo Reina (EMPA, Switzerland) Photocatalytic activity of vanadium MXenes nanozymes in patient-derived glioblastoma spheroids and GBM-on-a-chip	I
17:45-18:00	Honorata Kraskiewicz (Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Poland) Fetuin-functionalized bovine jugular vein biomaterial as a strategy to prevent bioprosthetic valve calcification	O
18:00-18:15	Luca Malfatti (University of Sassari and INSTM, Italy) Light-activated Carbon dots with virucidal activity	O
18:15-18:30	Andrea Rubino (Politecnico di Torino, Italy) Colloidal doped metal oxide nanocrystals for light-based technologies	O
20:30	Conference Dinner Hotel Punta Negra l'Alguer/Alghero SS127bis, 07041 Alghero SS, Italia	

WEDNESDAY SEPTEMBER 16, 2026

09:00-09:30	Valeria Nicolosi (Trinity College Dublin, Ireland) Processing and applications of 2D MXene inks	K
09:30-09:50	Cinzia Casiraghi (University of Manchester, UK) Printable Electronics enabled by Supramolecular 2D Material Inks	I
09:50-10:10	Valentyn S. Volkov (XPANCEO, United Arab Emirates) Printable van der Waals Nanoparticle Inks: a Laser-Engineered Platform for Additive Nanotechnologies	I
10:10-10:30	Christian Salvatori (ESA Nanotech, Italy) GLEAM: A Platform for Controlled Laser-Induced Graphene Engineering	I
10:30-11:00	Coffee Break/Poster Session	
11:00-11:30	Yury Gogotsi (Drexel University, USA) Synthesis, Chemistry and Properties of MXenes	K
11:30-12:00	Babak Anasori (Purdue University, USA) Atomic-Scale Defect Engineering in MXenes for Emerging Functionalities	K
12:00-12:20	Igor Iatsunskyi (Adam Mickiewicz University, Poland) Advanced MXene-Polymer Hybrid Platforms for Electrochemical Biosensing Applications	I
12:20-12:40	Almira Ramanaviciene (Vilnius University, Lithuania) Nanomaterial-Based Immunosensors for Viral Biomarker Detection	I
12:40-12:55	Gloria Garcia Ortega (Institut Català de Nanociència i Nanotecnologia (ICN2), Spain) Medical-grade, top-down Graphene Oxide Quantum Dots (GO-QDs) as a Biocompatible Theranostic Platform	O
12:55-13:15	Sanjiv Dhingra (Manitoba University, Canada) Immunomodulatory MXenes for cardiac regenerative medicine	I
13:15-13:35	Arunas Ramanavicius (State Research Institute Center for Physical and Technological Sciences, Lithuania) Towards molecularly imprinted polymers for the detection of prostate cancer biomarkers	I

13:35-14:45		Lunch
14:45-15:05	Enzo Menna (University of Padua, Italy) Functionalized Carbon Nanostructures as Advanced Materials for Regenerative Medicine and Sustainable Water Remediation	I
15:05-15:25	Faisal Shahzad (Khalifa University/RIC2D, United Arab Emirates) Engineered MXene-Based Materials for Efficient Heavy Metal Removal from Water	I
15:25-15:40	Andrei Ungureanu (En&Tech Interdepartmental Centre, University of Modena and Reggio Emilia, Italy) Environmental sustainability of advanced materials: the role of life cycle assessment	O
15:40-15:55	Pradip Kumar Roy (Centre of Excellence ENSEMBLE3 Sp. z o. o., Poland) Few-Layer Sb ₂ TeSe ₂ as an Efficient Platform for Self-Powered photoelectrochemical Photodetector	O
15:55-17:05		Coffee Break/Poster Session
17:05-17:25	Hanene Ali-Boucetta (University of Birmingham, UK) Nano–Cell Signalling: Mechanistic Insights into Nanotoxicology and Safe-by-Design Nanomedicine	I
17:25-17:45	Marko Mihajlovic (University of Trieste, Italy) Peptide self-assembly in nanomedicine towards advanced nanocomposites for regeneration	I
17:45-18:05	João Nuno Moreira (University of Coimbra, Portugal) Engineering Nanomedicines for Cancer Therapy: From Tumor Targeting to Immune Modulation	I
18:05-18:25	Acelya Yilmazer (Ankara University, Turkey) Leveraging Multi-Omics to Advance Precision Cancer Nanotherapeutics	I
18:25-18:40	Dogantan Celik (Ankara University, Turkey) Modulating Neutrophils to an Antitumor Phenotype Through MQD Treatment	O
18:40-19:00	Carlo Saverio Iorio (Université Libre de Bruxelles / CREST, Belgium) Medicine Beyond Earth: Space Healthcare, Drug Manufacturing, and the Future of Human Resilience	I
19:00-20:30		Poster Session Dinner

THURSDAY SEPTEMBER 17, 2026

09:00-09:15	Maha Alhosani (Khalifa University, United Arab Emirates) Investigating the interaction of Nb ₄ C ₃ , Mo ₂ Ti ₂ C ₃ , and Ta ₄ C ₃ with extracellular vesicles for biomedical applications	O
09:15-09:30	Andrea Andolfi (Istituto Italiano di Tecnologia, Italy) Light-Driven Contraction Mechanism in Biofabricated Muscle Tissue via Non-Genetic Optostimulation	O
09:30-09:45	Fabio Marangi (Istituto Italiano di Tecnologia, Italy) Cooperative photo-switching effects on membrane potential elicit efficient cellular stimulation	O
09:45-10:00	Linda Giro (University of Padua, Italy) Immune cell uptake of nanomaterials is shaped by the molecular identity of the protein corona: a multi-omic investigation	O
10:00-10:15	Giulia Franzoni (Istituto Zooprofilattico Sperimentale della Sardegna, Italy) Biocompatibility of water-dispersible pristine graphene and graphene oxide using a close-to-human animal model: a pilot study on swine	O
10:15-10:35	Faisal Abdulla AlMarzooqi (Khalifa University, United Arab Emirates) Banana peel-derived activated carbon and layered double hydroxide integrated ultrafiltration membranes for heavy metal removal	I
10:35-11:00		Coffee Break/Poster Session
11:00-11:20	Guglielmo Lanzani (IIT, Italy) Self-assembled Conductive Fibres in Live Cells	I
11:20-11:40	Maksym Pogorielov (Latvia University, Latvia) MXene-based composite materials for targeted carrier systems	I

11:40-11:55	Davide Carboni (University of Sassari, Italy) Thermal assembly of luminescent, antimicrobial proteinoid nanostructures mediated by pyroglutamic acid: a molecular glue for self-assembled functional materials	O
11:55-12:15	Yarjan Abdul Samad (Khalifa University, United Arab Emirates) Graphene Obsidian Wood as a Space Structural Material	I
12:15-12:30	Marc Morant Giner (University of Chemistry and Technology Prague, Czech Republic) HER-active composites prepared by grounding commercial MoS ₂ with Co/Ag-based clusters in a mortar	O
12:30-12:45	Seunghyun Hong (Khalifa University, United Arab Emirates) 2DM-based Porous Scaffolds for Direct Lithium Recovery	O
12:45-13:00	Basim Abu-Jdayil (United Arab Emirates University, United Arab Emirates) Date palm waste- based aerogels for sustainable thermal insulation	O
13:00-13:15	Enrique Munoz Tavera (Pontificia Universidad Católica de Chile, Chile) Thermoelectric Transport Coefficients for Weyl Semimetals in the Family of Transition Metal Monopnictides with Dislocation Defects	O
13:15-13:30	Christoph Gadermaier (Politecnico di Milano, Italy) Modulation of ultrafast quasiparticle dynamics in two-dimensional semiconductors	O
13:30-14:00	Giulio Cerullo (Politenico di Milano, Italy) Broadband Coherent Raman Scattering Microscopy	K
14:00	Closing remarks	