

TENTATIVE PROGRAM (as of 16/10/2026)

K: Keynote lecture / I: Invited Lecture / O: Oral Contribution



Tuesday (27/10/2026)

08:00 – 08:45: *Registration*

08:45 – 09:00: *Opening*

09:00 – 09:45: **Maurizio Prato** (CIC Biomagune, Spain) K

2D Supramolecular Approach to Artificial Photosynthesis

09:45 – 10:15: **Nazario Martin** (Universidad Complutense de Madrid, Spain) I

Hacking Planarity: 3D Architectures from 2D Molecular Nanographenes

10:15 – 10:30: **Hongde Yu** (TU Dresden, Germany) O

Metal-Free Magnetism in Organic Two-Dimensional Crystals

10:30– 11:15: *Coffee Break & Posters Session*

11:15 – 11:45: **Emilio Manuel Pérez Álvarez** (IMDEA Nanociencia, Spain) I

Exfoliation and functionalization of MoS₂

11:45 – 12:15: **Renhao Dong** (The University of Hong Kong, Hong Kong) I

Two-Dimensional Polymer Electronic Materials

12:15 – 12:30: **Jiamin Sun** (KU Leuven, Belgium) O

Mechanistic Insights into Layered Growth of Imine-Linked Bilayer 2D Covalent Organic Frameworks

12:30 – 12:45: **Ling Zhang** (Dresden University of Technology, Germany) O

Single Crystals of Perylene Diimide-Based Two Dimensional Covalent Organic Frameworks

12:45 – 13:00: **Ye Yang** (Max Planck Institute of Microstructure Physics, Germany) O

Mechanically interlocked two-dimensional polymers

13:00 – 14:30: *Lunch*

14:30 – 15:15: **Manish Chhowalla** (University of Cambridge, UK) K

Metallic 2D MoS₂ for Electrochemical Applications

15:15 – 15:45: **Marco Gobbi** (Materials Physics Center (MPC), Spain) I

Galvanic Intercalation of Molecular Species into van der Waals Quantum Materials

15:45 – 16:00: **Niccolò Giaconì** (CIC nanoGUNE, Spain) O

Tuning the Magnetism of CrSBr via Molecular Intercalation

16:00– 16:30: *Posters Session I*

16:30 – 17:00: *Coffee Break & Posters Session*

17:00 – 17:30: **Cristina Gomez-Navarro** (UAM, Spain) I

Unveiling the Nature of Defects and Their Consequences on the Mechanical Response of 2D Materials by AFM

17:30 – 18:00: **Thomas Kempa** (Johns Hopkins University, USA) I

Tunable quantum emission from a molecularly programmable vdW heterostructure

20:30: Conference Dinner



Wednesday (28/10/2026)

09:00 – 09:45: Diego Peña (University of Santiago de Compostela, Spain)	K
Combining In-Solution and On-Surface Synthesis to Access Exotic Carbon-Based Nanostructures	
09:45 – 10:15: David Écija Fernández (IMDEA Nanociencia, Spain)	I
On-surface synthesis of 2D π -conjugated networks	
10:15 – 10:30: Yixuan Che (Technische Universität Dresden, Germany)	O
Precision Materials Design for Reticular Spintronics	
<i>10:30– 11:00: Coffee Break & Posters Session</i>	
11:00 – 11:30: Hyeonsuk Shin (Sungkyunkwan University (SKKU), South Korea)	I
Chemically programmable single-photon emitters in hBN via ambient basal-plane functionalization	
11:30 – 12:00: Marcelo Lozada Hidalgo (The University of Manchester, UK)	I
Field effects in electrochemical processes in 2D crystals	
12:00 – 12:30: Hermenegildo García Gómez (Universitat Politècnica de València, Spain)	I
MXenes as Heterogeneous Catalysts	
12:30 – 13:00: Alexandr Talyzin (Umeå University, Sweden)	I
In situ time-resolved XRD studies of MXene and graphene oxides: chemistry in nano-space	
<i>13:00 – 14:00: Cocktail Lunch</i>	
<i>14:00 – 14:30: Poster Session II</i>	
14:30 – 15:15: Bettina V. Lotsch (Max Planck Institute for Solid State Research (LMU), Germany)	K
Optoelectronics meets Optoionics: Energy Conversion and Light Storage in Molecular Frameworks	
15:15 – 15:30: Joaquín Soriano-López (ICMol / University of Valencia, Spain)	O
Polyoxometalate-Activated MoS ₂ for Hydrogen Evolution	
PARALLEL SESSION PhD STUDENT I	
15:30 – 15:40: Mohammad Mehmandoust (TU Dresden, Germany)	O
Microfluidic Pathways to Two-Dimensional Quantum Materials	
15:40 – 15:50: Beatriz Alba Sangrós (University of Valencia, Institute of Molecular Science, Spain)	O
Introducing Chirality in Two-Dimensional Materials: MoS ₂ Functionalized with a Chiral Metal Complex	
15:50 – 16:00: Abdul Rehman Umar (Strasbourg University, France)	O
Hierarchical Two-Dimensional Covalent Fullerene Networks for Electrical Neurotransmitter Biosensing	
16:00 – 16:10: Maria Judith Caisachana Lozada (CASUS - Helmholtz-Zentrum Dresden-Rossendorf, Germany)	O
Structural and electric effects on H isotope selectivity in graphene membranes	
16:10 – 16:20: Diyan Unmu Dzujah (Technische Universität Dresden, Germany)	O
Symmetry-based guidelines for band gap opening in graphene superlattices with periodic π -vacancy distribution	
16:20 – 16:30: Linda Feuerstein (Technische Universität Dresden, Germany)	O
Electrochemical Modulation of Laser-Induced Covalent Functionalisation of Graphene	
PARALLEL SESSION PhD STUDENT II	
15:30 – 15:40: Anu Joseph (Technische Universität Dresden, Germany)	O
In situ Raman Studies on 2D Cobalt Porphyrin-based Covalent Organic Frameworks for Electrocatalysis	
15:40 – 15:50: Marc López Mollá (ICMol / University of Valencia, Spain)	O
Covalent Surface Functionalization of Heavy Pnictogens Nanomaterials	
15:50 – 16:00: Fanny Reichmayr (Technische Universität Dresden, Germany)	O
Linking Redox-Driven Structural Reorganisations in a 2D conjugated MOF to its Catalytic Activity	
16:00 – 16:10: Diana Camila Sotelo Briceño (BCMaterials - Basque Center for Materials, Applications and Nanostructures, Spain)	O
Toward flexible and conformable thermoelectric energy harvesting based on poly(vinylidene fluoride) with Bi ₂ S ₃ and Bi ₂ Te ₃	
16:10 – 16:20: Yue Tang (University of Strasbourg, France)	O
Synthesis, characterization and nanozyme activity of cerium-doped carbon dots	
16:20 – 16:30: Muhammed Afnas Vilayatteri (Monash University, Australia)	O
Anomalous Ion Transport in 2D Graphene Oxide Nanochannels Enabled by Hydration Mimicry with Confined Amino Acids	

16:30– 17:00: *Coffee Break & Posters Session*

17:00 – 17:20: **Miguel Ángel Piqueras** (TECNOBIT - Grupo Oesia, Spain) I

Title to be defined

17:20 – 17:40: **Ester Vázquez** (University of Castilla-la Mancha, Spain) I

From Sustainable 2D Materials to Real-World Applications: Translating Research into Scalable Technologies

PARALLEL SESSION SENIORS I

17:40 – 17:55: **Dario Calvani** (Helmholtz-Zentrum Dresden-Rossendorf, Germany) O

Understanding the Catalytic Site Structure in Metal Poly(Heptazine Imide) – Crystalline Carbon Nitride

17:55 – 18:10: **Giacomo Folì** (ISOF-CNR, Italy) O

PDDA-intercalated GO composites for tunable gas sieving

18:10 – 18:25: **Zechariah Mengrani** (Queen Mary University of London, UK) O

DNA-Directed Assembly of Mixed-Dimensional MoS₂–SWCNT Heterostructures

PARALLEL SESSION SENIORS II

17:40 – 17:55: **Xianghong Niu** (Technische Universität Dresden, Germany) O

Direct Z-Scheme Photocatalytic System: Insights into the Formative Factors from Ultrafast Dynamics

17:55 – 18:10: **Zahra Hajiahmadi** (CASUS/HZDR, Germany) O

Theory-Guided Discovery of Ion-Exchanged Poly(heptazine imide) for Photoenergy Conversion and Storage

18:10 – 18:25: **Camilo Andrés Jaramillo Hernández** (Universitat de València, Spain) O

From In-Situ Mechanistic Insights to Scalable Synthesis: Topochemical Transformation of Layered Hydroxides into Nanocomposites for Energy Applications

18:25 – 18:40: **Mahabir Prasad** (Helmholtz-Zentrum Dresden-Rossendorf, Germany) O

A computational understanding on ‘Ultrannarrow nanochannels in a staggered two-dimensional polymer membrane enhance electric double-layer coverage for osmotic energy harvesting’



Thursday (29/10/2026)

09:00 – 09:45: **Thomas Heine** (TU Dresden, Germany) K

Magnetic Carbon

09:45 – 10:15: **Aurelio Mateo Alonso** (POLYMAT, University of the Basque Country, Spain) I

Extending, Distorting and Stacking Nanographenes into 1D, 2D and 3D Structures

10:15 – 10:30: **Yilyu Guo** (Technische Universität Dresden, Germany) O

Ultrafast Magnetic Transitions in Type-II Bipolar Magnetic Heterostructures

10:30– 11:00: *Coffee Break*

11:00 – 11:30: **Stephan Roche** (ICREA / ICN2, Spain) I

Artificial Intelligence enabling disruptive 2D materials design & engineering

11:30 – 12:00: **Xiaojuan Ni** (Montana State University, USA) I

Molecular Design Principles for Organic Frameworks: Insights into Topological States and Beyond

12:00 – 12:30: **Carla Boix** (University of Cambridge, UK) I

Magnetic metal-organic molecular materials as building blocks for electronic applications

12:30 – 13:00: **Joel S. Miller** (The University of Utah, USA) I

Organic-based 2-D Ferri- and Antiferromagnets

13:00 – 13:15: **Mohammadreza Daqiqshirazi** (HZDR, Germany) O

Strain-Tunable Spin Polarization in 2D Fe_nGeTe₂ and Fe₃GaTe₂: A First-Principles Route to Spintronic Materials Design

13:15 – 13:30: **Giovanni Vinai** (CNR - Istituto Officina dei Materiali (IOM), Italy) O

Self-assembled metal porphyrins and metal phthalocyanines layers for application in spinterfaces

13:30 – 14:00: **Gonzalo Abellán** (MATTECO & University of Valencia, Spain) I

Title to be defined

14:00: Closing