

# 2ND CONFERENCE ON ADVANCED MATERIALS IN SPAIN



NOVEMBER 13TH TO 15TH 2023 - ZARAGOZA  
(ARAGÓN - SPAIN)

**INMA**  
INSTITUTO DE NANOCIENCIA  
Y MATERIALES DE ARAGÓN



**Universidad  
Zaragoza**



**CSIC**  
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS



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Plan de  
Recuperación,  
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GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE CIENCIA  
E INNOVACIÓN



**GOBIERNO  
DE ARAGON**

On-line program





## WELCOME ADDRESS

The Second edition of the Advanced Materials in Spain will take place in Zaragoza from November 13 to 15, 2023 in the iconic Paraninfo building.

The Conference on Advanced Materials in Spain (AMatS) aims to be a discussion forum on the current status and perspectives of the different types of advanced materials such as:

- 1) Graphene and other 2D Materials;
- 2) Materials for Energy and Environment
- 3) Smart materials with advanced functionalities.

This edition will not only be attended by groups involved in the Complementary Program of Advanced Materials project but extends its invitation to any materials science enthusiast in general, with interest in exploring the most recent advances and sharing their knowledge and experience.

The Conference will be organized in 3 thematic sessions composed of two invited talks as well as contributed scientific communications (oral and poster). For a wider diffusion, contributions must be in English with the proposed format.



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## ORGANIZING COMMITTEES

### Scientific Committee

- Eugenio Coronado (ICMol, UV)
- Ricardo Díez (DIPC, EHU)
- Miguel Angel Rodríguez Pérez (UVA)
- Ester Vázquez Fernández-Pacheco (IRICA, UCLM)
- Jordi Arbiol (ICREA - ICN2, CSIC and BIST)
- Nazario Martín (IMDEA, UCM)
- Scott Mitchell (INMA, CSIC)
- Pilar Cea (INMA, Unizar)
- Blanca Ros (INMA, Unizar)
- Pilar Pina (INMA, Unizar)

### Conference Chairs

- Jesús SantaMaría (INMA, UNIZAR)
- Miguel Angel Rodríguez (UVA)
- Eugenio Coronado (ICMol, UV)
- Raul Arenal (INMA, UNIZAR)
- Ester Vazquez (IRICA, UCLM)
- Jesus Carrete (INMA, CSIC)
- Scott Mitchell (INMA, CSIC)
- Alodia Orera (INMA, UNIZAR)
- Elena Gálvez (INMA, CSIC)
- María Bernechea (INMA, UNIZAR)

### Organizers

- Conrado Rillo (INMA Director)
- Pilar Pina (INMA Deputy Director)
- Luis Martín-Moreno (INMA Deputy Director)
- Raquel Alicante (INMA Admin)
- Marta Giménez (INMA Admin)
- Germán Romeo (INMA Admin)



SCIENTIFIC PROGRAMME

**Monday, November 13<sup>th</sup> - LA3**

|       |                                                                                                                                                                                           |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00  | <b>Registration</b><br><i>Reception</i>                                                                                                                                                   |
| 8:45  | <b>Welcome - INSTITUTIONAL</b>                                                                                                                                                            |
| 9:00  | <b>LA3-PL1. Hybrid and supramolecular (nano)materials for biomedical applications</b><br><i>Luisa de Cola (University of Milan, Italy)</i>                                                |
| 9:40  | <b>LA3-OC1. Designer DNA-based nanomaterials for therapeutic delivery</b><br><i>Silvia Hernández (INMA, CSIC - UNIZAR, Aragón)</i>                                                        |
| 10:00 | <b>LA3-OC2. Tumor-Targeted Mesoporous Silica Nanoparticles As Vehicles Of MIR-200C-3P For Breast Cancer Treatment</b><br><i>Vicente Candela (IDM, UPV, C. Valenciana)</i>                 |
| 10:20 | <b>LA3-OC3. Self-assembly of amphiphilic block copolymers based on 2,6-diaminopyridine for application in nanomedicine</b><br><i>Miriam Abad (INMA, CSIC - UNIZAR, Aragón)</i>            |
| 10:40 | <b>LA3-OC4. Development Of New Nanomaterial-Based Detection System For Rapid Sensing Of Pathogens</b><br><i>Alba López Palacios (IDM, UPV, C. Valenciana)</i>                             |
| 11:00 | <b>Coffee break+ POSTERS</b>                                                                                                                                                              |
| 11:30 | <b>LA3-OC5. Antimicrobial Materials Based On Polyoxometalate-Peptide Covalent Hybrids</b><br><i>Rafael Martín (INMA, CSIC - UNIZAR, Aragón)</i>                                           |
| 11:50 | <b>LA3-OC6. Advanced Functional Polymeric Nanocomposites For Polluted Water Remediation</b><br><i>Javier Pinto (CellMat, Univ. of Valladolid, Castilla y León)</i>                        |
| 12:10 | <b>LA3-OC7. Using Polyoxometalate-Ionic Liquids as Multifunctional Antifouling Coatings and Water Purification Solutions</b><br><i>Scott Mitchell (INMA, CSIC - UNIZAR, Aragón)</i>       |
| 12:30 | <b>LA3-OC8. Scaffolding Silica Aerogels for Environmental Purposes: Thermal insulation and Water treatment</b><br><i>Beatriz Merillas (CellMat, Univ. of Valladolid, Castilla y León)</i> |
| 12:50 | <b>LA3-OC9. Lignin based hydrogels for ionic thermoelectric applications</b><br><i>Mario Culebras (ICMUV, C. Valenciana)</i>                                                              |

|       |                                                                                                                                                                                                                         |                                               |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 13:10 | <b>LA3-OC10. Focused Ion Beam Induced Deposition For Optimization Of Superconducting Tungsten-Based Deposits On Scanning Probe Microscopy Cantilevers</b><br><i>Amaia Sáenz-Hernández (INMA, CSIC - UNIZAR, Aragón)</i> |                                               |
| 13:30 | <b>Lunch COCKTAIL</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                    |                                               |
| 14:30 | <b>Coffee + POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                  |                                               |
| 15:00 | <b>LA3-PL2. Electron jets in quantum graphene devices</b><br><i>Herre Van der Zant ( Kavli Institute of Nanoscience, Delft University of Technology, Netherlands)</i>                                                   |                                               |
| 15:40 | <b>LA3-OC11. Curcuminoids As Molecular Platforms For Responsive And Conductive Materials</b><br><i>Arántzazu González-Campo (ICMAB, CSIC, Cataluña)</i>                                                                 |                                               |
| 16:00 | <b>LA3-OC12. Is the surface of Hofmann-like spin-crossover {Fe(pz)[Pt(CN)4]} the same as its bulk?</b><br><i>Archit Dhingra (ICMUV, C. Valenciana)</i>                                                                  |                                               |
| 16:20 | <b>LA3-OC13. Cryo Focused Ion Beam Induced Deposition: Ultrafast Growth Of Functional Materials At Low Temperatures</b><br><i>Tatiana Escalante-Quiceno (INMA, CSIC - UNIZAR, Aragón)</i>                               |                                               |
| 16:40 | <b>LA3-OC14. Ultrathin ferroelectric HfO<sub>2</sub> epitaxial films</b><br><i>Florencio Sánchez (ICMAB, CSIC, Cataluña)</i>                                                                                            |                                               |
| 17:00 | <b>Meeting of the Steering Committee</b><br><i>(Martina Bescós Room)</i>                                                                                                                                                | <b>POSTERS</b><br><i>(Amar y Borbón Room)</i> |
| 18:30 | <b>Vino Español</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                      |                                               |

## Tuesday, November 14<sup>th</sup> - LA1

|       |                                                                                                                                                                                     |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30  | <b>LA1-PL1. Large Scale Production of Monolayer Graphene: From the lab to the fab and to the consumer market</b><br><i>Vincent Bouchiat (Neel Institute, CNRS Grenoble, France)</i> |
| 9:10  | <b>LA1-OC1. Graphene technology: CVD-growth under high precursor flux and its transference</b><br><i>Alberto Bosca (ISOM, UPM, Madrid)</i>                                          |
| 9:30  | <b>LA1-OC2. Bridge engineering for atomically precise graphene-based nanoarchitectures</b><br><i>A. Mugarza (ICN2, CSIC, Cataluña)</i>                                              |
| 9:50  | <b>LA1-OC3. Scalable Processing Of Large Area MoS<sub>2</sub> Coatings By Nebulization</b><br><i>Borja Sanchez (IAdChem, UAM, Madrid)</i>                                           |
| 10:10 | <b>LA1-OC4. Fabrication of 2D materials-based nanoarchitectures via innovative CVD processes</b><br><i>Marc Cuxart (ICN2, CSIC, Cataluña)</i>                                       |
| 10:30 | <b>LA1-OC5. Toward Self-Driving Laboratory For The Design Of Multifunctional Nanocomposites Involving 2D Materials</b><br><i>Maciej Haranczyk (IMDEA, Madrid)</i>                   |
| 10:50 | <b>Coffee Break + POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                        |
| 11:20 | <b>LA1-OC6. Curcuminoids as single units and in assemblies: from nanowires in graphene devices to 2D materials</b><br><i>Nuria-Aliaga Alcalde (ICREA, CSIC, Cataluña)</i>           |
| 11:40 | <b>LA1-OC7. Graphene &amp; 2D Crystal Polaritonics Enabled By Surface Acoustic Waves</b><br><i>Jorge Pedrós (ISOM, UPM, Madrid)</i>                                                 |
| 12:00 | <b>LA1-OC8. 1D nanostructures with layered cobalt dioxide and their electrical properties</b><br><i>Simon Hetler (INMA, CSIC - UNIZAR, Aragón)</i>                                  |
| 12:20 | <b>LA1-OC9. Different Approaches To Obtain Materials Based On Mww Zeolites Layers And MgAlCe Hydrotalcites</b><br><i>Cristina Esteban (ITQ, UPV – CSIC, C. Valenciana)</i>          |
| 12:40 | <b>LA1-OC10. In Depth Investigations of Graphene Oxide Reduction via in-situ TEM</b><br><i>Raúl Arenal (INMA, CSIC - UNIZAR, Aragón)</i>                                            |
| 13:00 | <b>LA1-OC11. New tools for Materials Science research at JEMCA in ALBA Synchrotron</b>                                                                                              |



|       |                                                                                                                                                                                     |                                              |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
|       | <i>Bernat Mundet (ICN2, CSIC, Cataluña)</i>                                                                                                                                         |                                              |
| 13:20 | <b>Lunch COCKTAIL</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                |                                              |
| 14:30 | <b>Coffee + POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                              |                                              |
| 15:00 | <b>LA1-PL2. Intrinsic magnetic topological insulators in the family of 2D van der Waals compound MnBi<sub>2</sub>Te<sub>4</sub></b><br><i>Mikhail Otrokov (UPV/EHU, País Vasco)</i> |                                              |
| 15:40 | <b>Laboratory of ideas. D. Simo, F. Aguirre</b><br><i>(Pilar Sinués Room)</i>                                                                                                       | <b>Elevator pitch</b><br><i>(Aula Magna)</i> |
| 18:00 | <b>GUIDED TOUR</b><br><i>Meeting Point: Paraninfo Main Hall</i>                                                                                                                     |                                              |
| 21:00 | <b>GALA DINNER</b><br><i>Restaurante Tres Mares (P.º Echegaray y Caballero, 101, 50003 Zaragoza)</i>                                                                                |                                              |

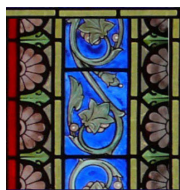


## Wednesday, November 15<sup>th</sup> - LA2

|       |                                                                                                                                                                                                                                   |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00  | <b>LA2-PL1. Battery Sustainability; Materials and Design</b><br><i>Emma Kendrick (University of Birmingham, UK)</i>                                                                                                               |
| 9:40  | <b>LA2-OC1. Scaling-up of Solid Oxide Cells for the development of high temperature electrolyzers</b><br><i>Miguel A. Laguna (INMA, CSIC - UNIZAR, Aragón)</i>                                                                    |
| 10:00 | <b>LA2-OC2. Toward Cost-Effective Magnesium Batteries: From Oxides To Sulfur As Cathode Materials</b><br><i>Teresa Lana- Villareal (IUE, Univ. de Alicante, C. Valenciana)</i>                                                    |
| 10:20 | <b>LA2-OC3. Operando Raman Spectroscopy For Redox Flow Batteries</b><br><i>Virginia Ruiz (ICCRAM, Univ. de Burgos, Castilla y León)</i>                                                                                           |
| 10:40 | <b>LA2-OC4. Novel Electrolytes For Alkaline And Alkaline-Earth Metal Batteries</b><br><i>Roberto Gómez (IUE, Univ. de Alicante, C. Valenciana)</i>                                                                                |
| 11:00 | <b>Coffee Break + POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                      |
| 11:30 | <b>LA2-OC5. Exploring Processing Effects On The Direct Recycling Of LiFePO<sub>4</sub></b><br><i>Elizabeth H. Driscoll (Univ. of Birminhan, UK)</i>                                                                               |
| 11:50 | <b>LA2-OC6. Enhanced gas separation performance (CO<sub>2</sub>/CH<sub>4</sub>) of thin film composite membrane based on Pebax and zeolitic imidazolate frameworks</b><br><i>Dalia Refaat (INMA, CSIC - UNIZAR, Aragón)</i>       |
| 12:10 | <b>LA2-OC7. Piezoelectric Paint As Energy Harvester</b><br><i>Ismael Payo (EIIA, UCLM, Castilla La Mancha)</i>                                                                                                                    |
| 12:30 | <b>LA2-OC8. Multiscale Simulation Framework In The Development Of Advanced Concrete-Based Materials With Aerogel Additives For Façade Panels In Nearly Zero Waste Energy Buildings</b><br><i>Javier Ortún (ITAINNOVA, Aragón)</i> |
| 12:50 | <b>LA2-OC9. One-Pot Synthesis Of Stable Core-Shell Perovskite Heteronanocrystals With Controlled Permeability To Halide Ions</b><br><i>Julia Pérez Prieto (ICMol, Univ. de Valencia, C. Valenciana)</i>                           |
| 13:10 | <b>LA2-OC10. Design And Synthesis Of Chalcohelices For Molecular Electronics</b><br><i>Albert Guijarro (IUSO, Univ. de Alicante, C. Valenciana)</i>                                                                               |
| 13:30 | <b>Lunch COCKTAIL</b>                                                                                                                                                                                                             |



|       |                                                                                                                                                                                                                            |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | <i>(Amar y Borbón Room)</i>                                                                                                                                                                                                |
| 14:30 | <b>Coffee + POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                     |
| 15:00 | <b>LA2-PL2. Light-matter coupling in optoelectronic materials</b><br><i>Hernán Míguez (Solar cells)</i>                                                                                                                    |
| 15:40 | <b>LA2-OC11. Semitransparent perovskite solar cells through a photonic approach</b><br><i>Rafael Sánchez (INAM, Univ. Jaume I, C. Valenciana)</i>                                                                          |
| 16:00 | <b>LA2-OC12. Uncovering the kinetics and dynamics in formamidinium lead triiodide polycrystals and their solar cell fabrication</b><br><i>Shahzada Ahmad (BCMaterials, UPV/EHU, País Vasco)</i>                            |
| 16:20 | <b>LA2-OC13. Symmetrical vs Asymmetrical Metallophthalocyanines as Hole Transporting Materials in Perovskite Solar Cells</b><br><i>Ángela Sastre-Santos (Inst. de Bioingeniería, Univ. Miguel Hernández C. Valenciana)</i> |
| 16:40 | <b>LA2-OC14. Raman Spectroscopy Of InP-InGaP Hetero-Structured Nanowires</b><br><i>Irene Mediavilla (GdS Optronlab, Univ. de Valladolid, Castilla y León)</i>                                                              |
| 17:00 | <b>LA2-OC15. Ab-Initio Thermal Transport Calculations For Crystals And Nanostructures</b><br><i>Jesús Carrete (INMA, CSIC - UNIZAR, Aragón)</i>                                                                            |
| 17:20 | <b>CLOSURE + AWARDS</b>                                                                                                                                                                                                    |
| 17:30 | <b>Removal POSTERS</b><br><i>(Amar y Borbón Room)</i>                                                                                                                                                                      |



AMatS

2ND CONFERENCE ON  
ADVANCED MATERIALS IN SPAIN

NOVEMBER 13TH TO 15TH 2023 - ZARAGOZA (SPAIN)

II Congreso Nacional de Materiales Avanzados (AMatS 2023)

|       | Mon, November 13 <sup>th</sup> (LA3)                                           | Tue November 14 <sup>th</sup> (LA1)                                                                      | Wed, November 15 <sup>th</sup> (LA2)                                    |       |
|-------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------|
| 8:00  | Registration                                                                   |                                                                                                          |                                                                         | 8:00  |
| 8:30  | 08:45 -Welcome - INSTITUCIONAL                                                 | Invited Talk LA1-PL1<br>Vincent Bouchiat<br>(Neel Institute, CNRS Grenoble, France)                      |                                                                         | 8:30  |
| 8:50  |                                                                                |                                                                                                          | Invited Talk LA2-PL1<br>Emma Kendrick<br>(University of Birmingham, UK) | 8:50  |
| 9:00  | Invited Talk LA3-PL1<br>Luisa de Cola<br>(University of Milan)                 | LA1-OC1<br>Alberto Bosca (ISOM, UPM, Madrid)                                                             |                                                                         | 9:00  |
| 9:10  |                                                                                | LA1-OC2<br>A. Mugarza (ICN2, CSIC, Cataluña)                                                             |                                                                         | 9:10  |
| 9:30  | LA3-OC1<br>Silvia Hernández (INMA, CSIC - UNIZAR, Aragón)                      | LA1-OC3<br>Borja Sánchez (IAdChem, UAM, Madrid)                                                          | LA2-OC1<br>Miguel A. Laguna (INMA, CSIC - UNIZAR, Aragón)               | 9:30  |
| 9:40  | LA3-OC2<br>Vicente Candela (IDM, UPV, C. Valenciana)                           | LA1-OC4<br>Marc Cuxart (ICN2, CSIC, Cataluña)                                                            | LA2-OC2<br>Teresa Lana- Villareal (IUE, Univ. de Alicante)              | 9:40  |
| 9:50  | LA3-OC3<br>Miriam Abad (INMA, CSIC - UNIZAR, Aragón)                           | LA1-OC5<br>Maciej Haranczyk (IMDEA, Madrid)                                                              | LA2-OC3<br>Virginia Ruiz (ICCRAM, Univ. de Burgos, Castilla y León)     | 9:50  |
| 10:00 | LA3-OC4<br>Alba Pérez Palacios (IDM, UPV, C. Valenciana)                       |                                                                                                          | LA2-OC4<br>Roberto Gómez (IUE, Univ. de Alicante, C. Valenciana)        | 10:00 |
| 10:10 |                                                                                | Coffee Break + POSTERS                                                                                   | Coffee Break + POSTERS                                                  | 10:10 |
| 10:20 |                                                                                | LA1-OC6<br>Nuria-Aliaga Alcalde (ICREA, CSIC, Cataluña)                                                  | LA2-OC5<br>Elizabeth H. Driscoll (Univ. of Birminhan, UK)               | 10:20 |
| 10:30 |                                                                                | LA1-OC7<br>Jorge Pedrós (ISOM, UPM, Madrid)                                                              | LA2-OC6<br>Dalia Refaat (INMA, CSIC - UNIZAR, Aragón)                   | 10:30 |
| 10:40 |                                                                                | LA1-OC8<br>Simon Hetler (INMA, CSIC - UNIZAR, Aragón)                                                    | LA2-OC7<br>Ismael Payo (EIIA, UCLM, Castilla La Mancha)                 | 10:40 |
| 10:50 |                                                                                | LA1-OC9<br>Cristina Esteban (ITQ, UPV - CSIC, C. Valenciana)                                             | LA2-OC8<br>Javier Ortún (ITAINNOVA, Aragón)                             | 10:50 |
| 11:00 |                                                                                | LA1-OC10<br>Raúl Arenal (INMA, CSIC - UNIZAR, Aragón)                                                    | LA2-OC9<br>Julia Pérez Prieto (ICMol, Univ. de Valencia)                | 11:00 |
| 11:20 |                                                                                | LA1-OC11<br>Bernat Mundet (ICN2, CSIC, Cataluña)                                                         | LA2-OC10<br>Albert Guijarro (IUSO, Univ. de Alicante, C. Valenciana)    | 11:20 |
| 11:30 | LA3-OC5<br>Rafael Martín (INMA, CSIC - UNIZAR, Aragón)                         |                                                                                                          |                                                                         | 11:30 |
| 11:40 | LA3-OC6<br>Javier Pinto (CellMat, Univ. of Valladolid)                         |                                                                                                          |                                                                         | 11:40 |
| 11:50 | LA3-OC7<br>Scott Mitchell (INMA, CSIC - UNIZAR, Aragón)                        |                                                                                                          |                                                                         | 11:50 |
| 12:00 | LA3-OC8<br>Beatriz Merillas (CellMat, Univ. of Valladolid)                     |                                                                                                          |                                                                         | 12:00 |
| 12:10 | LA3-OC9<br>Mario Culebras (ICMUV, C. Valenciana)                               |                                                                                                          |                                                                         | 12:10 |
| 12:20 | LA3-OC10<br>Amaia Sáenz-Hernández (INMA, CSIC - UNIZAR, Aragón)                |                                                                                                          |                                                                         | 12:20 |
| 12:30 |                                                                                | Lunch COCKTAIL                                                                                           | Lunch COCKTAIL                                                          | 12:30 |
| 12:40 |                                                                                |                                                                                                          |                                                                         | 12:40 |
| 12:50 |                                                                                |                                                                                                          |                                                                         | 12:50 |
| 13:00 |                                                                                |                                                                                                          |                                                                         | 13:00 |
| 13:10 |                                                                                |                                                                                                          |                                                                         | 13:10 |
| 13:20 |                                                                                |                                                                                                          |                                                                         | 13:20 |
| 13:30 |                                                                                |                                                                                                          |                                                                         | 13:30 |
| 14:30 |                                                                                |                                                                                                          |                                                                         | 14:30 |
| 15:00 |                                                                                |                                                                                                          |                                                                         | 15:00 |
| 15:00 | Invited Talk LA3-PL2<br>Herre Van der Zant<br>(Delft University of Technology) | Invited Talk LA1-PL2<br>Mikhail Otrokov<br>(UPV/EHU, País Vasco)                                         | Invited Talk LA2-PL2<br>Hernán Miguez<br>(ICMS-CSIC)                    | 15:00 |
| 15:40 | LA3-OC11<br>Arántzazu González-Campo (ICMAB, CSIC, Cataluña)                   | Laboratory of ideas<br><br>Daniel Simo,<br>CEO Simune Atomistics<br>Fernando Aguirre,<br>Hasten Ventures | LA2-OC11<br>Rafael Sánchez (INAM, Univ. Jaume I, C. Valenciana)         | 15:40 |
| 16:00 | LA3-OC12<br>Archit Dhingra (ICMUV, C. Valenciana)                              |                                                                                                          | LA2-OC12<br>Shahzada Ahmad (BCMaterials, UPV/EHU, País Vasco)           | 16:00 |
| 16:20 | LA3-OC13<br>Tatiana Escalante (INMA, CSIC - UNIZAR, Aragón)                    |                                                                                                          | LA2-OC13<br>Ángela Sastre (Inst. de Bioingen., Univ. M. Hernández)      | 16:20 |
| 16:40 | LA3-OC14<br>Florencio Sánchez (ICMAB, CSIC, Cataluña)                          |                                                                                                          | LA2-OC14<br>Irene Mediavilla (GdS Optronlab, Univ. de Valladolid)       | 16:40 |
| 17:00 | Meeting of the Steering Committee                                              | Elevator pitch                                                                                           | LA2-OC15<br>Jesús Carrete (INMA, CSIC - UNIZAR, Aragón)                 | 17:00 |
| 17:00 | POSTERS                                                                        |                                                                                                          | CLOSURE + AWARDS                                                        | 17:20 |
| 18:00 |                                                                                |                                                                                                          | RETIRADA DE POSTERS                                                     | 17:30 |
| 18:00 |                                                                                | GUIDED TOUR                                                                                              |                                                                         | 18:00 |
| 18:30 | VINO ESPAÑOL                                                                   |                                                                                                          |                                                                         | 18:30 |
| 21:00 |                                                                                | GALA DINNER                                                                                              |                                                                         | 21:00 |

Aula Magna

Martina Bescós Room

Josefa Amar y Borbón Room

Pilar Sinues Room

## ELEVATOR PITCH LIST

*(Aula Magna, November 14th, Tuesday, 15:40)*

|      |                                                                                                                                                                                                                                |                          |                                              |     |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------|-----|
| FP1  | Additive manufacturing of YSZ-based porous implants by Fused Filament Fabrication (FFF) for load-bearing applications                                                                                                          | María Victoria Axelrad   | UCLM                                         | LA1 |
| FP2  | Exploring new magnetoelectric multiferroics based on hybrid improper ferroelectric oxides: $\text{Ca}_3\text{Mn}_{2-x}\text{Ru}_x\text{O}_7$ and $\text{Sr}_{3-x}\text{La}_x\text{Sn}_2\text{-xM}_x\text{O}_7$ (M= Cr, Fe, Mn) | Gloria Subías            | INMA,<br>CSIC - UNIZAR                       | LA2 |
| FP3  | Oriented attachment one-pot synthesis of colloiddally stable perovskite nanocrystals                                                                                                                                           | Amalia Coro              | UAM, ICMCM                                   | LA2 |
| FP4  | Dihydroxybenzenes as a thermal energy storage material                                                                                                                                                                         | Kalith M Ismail          | CFM (CSIC-UPV/EHU)                           | LA2 |
| FP5  | Exploring Carbon Nitride Properties For Electrode In Aqueous Supercapacitors                                                                                                                                                   | Alvaro Cacicedo          | INMA,<br>CSIC - UNIZAR                       | LA2 |
| FP6  | Perylenediimides With Carboxylic Acids In The Imide Position For Energy Conversion                                                                                                                                             | José Garcés-Garcés       | Inst. de Bioingen.,<br>Univ. M.<br>Hernández | LA2 |
| FP7  | Uncovering transport dynamics in metal halide perovskites                                                                                                                                                                      | Enrique Arévalo          | UAM                                          | LA2 |
| FP8  | Cost Effective Flexible Surfaces for SERS based Detection                                                                                                                                                                      | I. Sánchez de los Santos | INMA,<br>CSIC - UNIZAR                       | LA3 |
| FP9  | Flexible Piezoelectric Nanogenerator Based on MXene-coated Electrospun PVDF Nanofibers                                                                                                                                         | Enrique Giménez          | IUTM, UPV                                    | LA3 |
| FP10 | Precision Engineering Of Crosslinked Self-Assembled Star-Shaped Polypeptide-Based Nanomedicines                                                                                                                                | María Ibáñez-Vives       | PTL & CIBERONC,<br>CIPF                      | LA3 |
| FP11 | A Biomimetic Follicle-Based Design for Engineering Reproductive Technologies                                                                                                                                                   | Carlos Martín Andreu     | UCLM                                         | LA3 |
| FP12 | DI-Block Bent-Core Amphiphiles As New Structural Units Towards The Development Of Functional Supramolecular Materials                                                                                                          | Carlota Auria-Soro       | INMA,<br>CSIC - UNIZAR                       | LA3 |
| FP13 | Towards Recyclable Multilayer Materials Through Dynamic Chemistry                                                                                                                                                              | Manuel Herrero Villar    | Univ. of Valladolid                          | LA3 |
| FP14 | Acoustic Metamaterial Based On Helmholtz Resonators For Broadband Absorption                                                                                                                                                   | Miguel A. Morcillo       | Fundación CIDAUT                             | LA3 |
| FP15 | Metal-Organic Frameworks In Nanomedicine: Dna Grafting As A Methodology For Building Colloidal & Structural Stability In Biorelevant Media                                                                                     | Anargyros Drolapas       | ICMol, Univ. de Valencia                     | LA3 |
| FP16 | Synthesis, Characterization And Antibacterial Properties Of Titanium Phosphate Nanofibers With Incorporated Silver Nanoparticles                                                                                               | Tetiana Hubetska         | CIIN-CSIC, Univ. of Oviedo                   | LA3 |
| FP17 | Materials Innovations For New Generation Of Offshore Turbine Blades - Adhesives With Induction Heating Functionality                                                                                                           | A.Chiminelli             | ITAINNOVA                                    | LA3 |


**POSTER PRESENTATION LIST**
*(Amar y Borbón Room)*

|             |                                                                                                                         |                                                                                                                                                        |     |
|-------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| P-1,<br>FP1 | Additive manufacturing of YSZ-based porous implants by Fused Filament Fabrication (FFF) for load-bearing applications   | María Victoria Axelrad, Cristina Berges, Javier Hidalgo, Gemma Herranz                                                                                 | LA1 |
| P-2         | Generation of new lamellar phases and order alteration through soft exfoliation processes of MWW-type zeolites          | <u>Jordi Torró</u> , Urbano Díaz                                                                                                                       | LA1 |
| P-3         | GRAPHENE OXIDE ON THE IMPROVEMENT OF PROPERTIES IN CEMENT MORTARS                                                       | Ángel Rodríguez, Verónica Calderón, <u>Álvaro Urbaneja</u> , Raquel Arroyo                                                                             | LA1 |
| P-4         | Highly Anisotropic Bi <sub>2</sub> S <sub>3</sub> for Polarization-Dependent Optoelectronic Device Applications         | <u>Mahesh Eledath Changarath</u> , Daniel Andrés Penares, Mauro Brotons-Gisbert, Archit Dhingra, Alejandro Molina Sánchez, Juan Francisco Sánchez Royo | LA1 |
| P-5         | Imaging Adsorption Geometries of Organic Molecules on Metallic Surfaces by an Adaptive Tunnelling Current Feedback      | <u>D. Martin-Jimenez</u> , Q. Zhong, S. Ahles, H. A. Wegner, A. Schirmeisen, D. Ebeling                                                                | LA1 |
| P-7         | 2D nanomaterials in polymeric membranes for enhanced antifouling resistance. Application to water desalination.         | <u>Andoni Moriones</u> , Carlos Téllez, José Miguel Luque-Alled, Patricia Gorgojo                                                                      | LA1 |
| P-8         | Predictive Modeling of 3D-Printability and Final Properties of Polymer Composites Incorporating 2D Materials            | <u>Burcu Ozdemir</u> , Miguel Hernández-del-Valle, Lucía Echevarría-Pastrana, Juan Pedro Fernández Blázquez, De-Yi Wang, Maciej Haranczyk              | LA1 |
| P-9         | 2D materials as a playground for exotic exciton physics                                                                 | <u>Jorge Cervantes-Villanueva</u> , Davide Sangalli, Juan Francisco Sánchez-Royo, Alberto García-Cristóbal and Alejandro Molina-Sánchez                | LA1 |
| P-10        | Nanotubes of (Sm <sub>x</sub> ,Y <sub>1-x</sub> )S-TaS <sub>2</sub> based on quaternary Misfit Layered Compounds (MLCs) | <u>Mohammad Furqan</u> ; Simon Hettler ; Raul Arenal                                                                                                   | LA1 |
| P-11        | Developing of Fe-Mg-Al catalysts for Hydrogen and CNTs production by Methane Cracking                                   | <u>D. Martín</u> , F. Cazaña, P. Tarifa E. Romeo, R. Mallada, M.A. Centeno, A. Monzón                                                                  | LA1 |
| p-          | THERMAL PROPERTIES ACROSS 2D-LAYERED MATERIALS                                                                          | <u>Emigdio Chavez-Angel</u> , Peng Xiao, Clivia Sotomayor Torres, Alexandros El Sachat                                                                 | LA1 |



|           |                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                    |     |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| P-12      | Origin of discrete donor-acceptor pair transitions in 2D Ruddlesden-Popper perovskites                                                                                                                 | <u>Setatira Gorji</u> , Marie Krecmarov, Alejandro Molina, Maria C. Asensio, Andres F. Gualdron-Reyes, Jesus Rodríguez-Romero, Hamid Pashaei-Adl, Rodolfo Canet-Albiach, Luca Schio, Massimo Tormen, Luca Floreano, Ivan Mora-Sero, Juan P. Martínez Pastor, Juan Francisco Sanchez-Royo, Guillermo Muñoz Matutano | LA1 |
| P-13      | THE ALBA LEEM-PEEM FOR ADVANCED MATERIAL CHARACTERIZATION                                                                                                                                              | <u>M. Foerster</u> , L. Aballe and M. A. Nino                                                                                                                                                                                                                                                                      | LA1 |
| P-14      | PHOTOEMISSION STUDY ON STABILITY OF TWO-DIMENSIONAL PEROVSKITES SINGLE CRYSTALS FOR OPTOELECTRONIC APPLICATIONS                                                                                        | <u>Marie Krecmarova</u> , Jesús Rodríguez-Romero, Iván Mora-Seró, Juan P. Martínez-Pastor, Maria C. Asensio, Juan F. Sánchez-Royo                                                                                                                                                                                  | LA1 |
| P-14-B    | Engineering electronic states in Bi-based single layers with step superlattices                                                                                                                        | Kevin Garcia-Diez, J.E. Ortega, J. Lobo-Checa, M. Tallarida, A. Mugarza                                                                                                                                                                                                                                            | LA1 |
| P-15, FP2 | Exploring new magnetoelectric multiferroics based on hybrid improper ferroelectric oxides: $\text{Ca}_3\text{Mn}_{2-x}\text{RuxO}_7$ and $\text{Sr}_{3-x}\text{LaxSn}_2\text{-xMxO}_7$ (M= Cr, Fe, Mn) | <u>Gloria Subías</u> , Vera Cuartero, Sara Lafuerza, David Gracia, J. Herrero-Martín, J. A. Rodriguez-Velamazán, Inés Puente-Orench, J. L. García-Muñoz and J. Blasco                                                                                                                                              | LA2 |
| P-16, FP3 | Oriented attachment one-pot synthesis of colloiddally stable perovskite nanocrystals                                                                                                                   | <u>Amalia Coro</u> , Ferry Prins, Beatriz H. Juárez                                                                                                                                                                                                                                                                | LA2 |
| P-17, FP4 | Dihydroxybenzenes as a thermal energy storage material                                                                                                                                                 | <u>Kalith M Ismail</u> , Tomas S. Northam de la Fuente, Mattia Gaboardi, Alberto Otero-de-la-roza, Pedro B. Coto, Felix Fernandez-Alonso                                                                                                                                                                           | LA2 |
| P-18, FP5 | Exploring Carbon Nitride Properties For Electrode In Aqueous Supercapacitors                                                                                                                           | <u>Álvaro Cacicedo</u> , M. Pilar Lobera, María Bernechea                                                                                                                                                                                                                                                          | LA2 |
| P-19, FP6 | Perylenediimides With Carboxylic Acids In The Imide Position For Energy Conversion                                                                                                                     | <u>José Garcés-Garcés</u> , Fernando Fernández-Lázaro, Ángela Sastre-Santos                                                                                                                                                                                                                                        | LA2 |
| P-20, FP7 | Uncovering transport dynamics in metal halide perovskites                                                                                                                                              | <u>Enrique Arévalo</u> , Ferry Prins                                                                                                                                                                                                                                                                               | LA2 |
| P-21      | Investigation of Structural and Electronic Properties of $\text{NaMgH}_3$ for Hydrogen Storage                                                                                                         | Brahim Bahloul y Khatir Babesse                                                                                                                                                                                                                                                                                    | LA2 |
| P-22      | HYDROGEN EMBRITTLEMENT MECHANISMS OF A 2205 DUPLEX STAINLESS STEEL                                                                                                                                     | L.B. Peral, A. Díaz, R. Rodríguez-Aparicio, C. Rodríguez, <u>J.M. Alegre</u> , I.I. Cuesta                                                                                                                                                                                                                         | LA2 |
| P-23      | Fabrication and Characterization of Calcium Cobaltite and Calcium Manganite-Based Thermoelectric Module for Sustainable Energy Generation                                                              | <u>Parisa Amirkhizi</u> , M. A. Madre, M. A. Torres, A. Sotelo, A.V. Kovalevsky, Sh. Rasekh                                                                                                                                                                                                                        | LA2 |



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|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| P-24 | NEW MATERIALS FOR FATIGUE ASSESSMENT OF COMPOSITE TIDAL TURBINE BLADES                                                                                                                                  | <u>Susana Calvo</u> , Rafael Rodríguez, José Manuel Royo, Clara Valero, Daniel Cáceres                                                                             | LA2 |
| P-25 | A MULTI-LEVEL THEORETICAL APPROACH FOR THE CHARGE TRANSPORT CHARACTERIZATION IN PROMISING HOLE TRANSPORT MATERIALS                                                                                      | <u>Alberto Fernández-Alarcón</u> , Manuel Pérez-Escribano, Enrique Ortí, Juan Aragón, Jesús Cerdá, Joaquín Calbo                                                   | LA2 |
| P-26 | THERMOELECTRIC STUDY OF THE POLYMERIC SYSTEM FORMED BY POLYVINYLIDENE FLUORIDE (PVDF) AND PHOSPHORIC ACID (H <sub>3</sub> PO <sub>4</sub> ) FOR A FUTURE IMPLEMENTATION IN A HIGH TEMPERATURE FUEL CELL | <u>M.Buendía</u> , V.H Zapataa                                                                                                                                     | LA2 |
| P-27 | REDOX ACTIVE NANOCRYSTALS AND ELECTROLYTE TO FOR A HIGH ENERGY AQUEOUS SUPERCAPACITOR                                                                                                                   | <u>María Bernechea</u> , Sergio Aina, Adam Slesinski, Sylwia Sroka, Justyna Piwek, Krzysztof Fic, María Pilar Lobera, Elzbieta Frackowiak                          | LA2 |
| P-28 | PSEUDOCAPACITY AND INTERCALATION IN AQUEOUS SODIUM ION ENERGY STORAGES: INVESTIGATION DURING OPERATING OF 2D NaMnO <sub>2</sub>                                                                         | <u>Andrii Boichuk</u> , Tetiana Boichuk, Mahesh Eledath Changarath, Marie Krečmarová, Rafael Abargues, Pablo P. Boix, Juan P.Martinez-Pastor, Juan F. Sanchez-Royo | LA2 |
| P-29 | FUNCTIONAL 2D Na-Mn-O SYSTEMS FOR HIGH PERFORMANCE AND LOW COST SODIUM ENERGY STORAGES                                                                                                                  | <u>Tetiana Boichuk</u> , Andrii Boichuk, Rafael Abargues, Mahesh Eledath Changarath, Marie Krečmarová, Juan F. Sanchez-Royo, Juan P.Martinez-Pastor                | LA2 |
| P-30 | Optical Properties and Fano Resonance Behavior in Silicon Nanowires with p-n Junctions: Mapping the Transition                                                                                          | <u>Hinojosa Vanessa</u> , Kabir Sulca, Irene Mediavilla, Jorge Serrano, Thierry Baron, Juan Jiménez                                                                | LA2 |
| P-31 | ACOUSTIC MONITORING OF WIND GENERATOR BLADE MACHINING ULTRASHORT PULSE LASERS                                                                                                                           | <u>J. Rivera-Sahún</u> , J.R. Beltrán, G.F. de la Fuente, E. Martínez, L.A. Angurel                                                                                | LA2 |
| P-32 | Polymer Coatings Based on Nanoencapsulated Phase Change Materials for Latent Heat Storage                                                                                                               | Inés Adam-Cervera, Luis F. Jiménez-Hernández, Jose Huerta-Recasens, Mario Culebras, Clara M. Gómez, <u>Rafael Muñoz-Espí</u>                                       | LA2 |
| P-33 | Caesium Bismuth perovskites: From bulk to Nanocrystals materials for optoelectronics applications                                                                                                       | James Martin, Muhammed PU Haris, Shahzada Ahmad, Samrana Kazim                                                                                                     | LA2 |
| P-34 | UPCONVERSION LUMINESCENCE IN A DYE-LANTHANIDE MOLECULAR SYSTEM                                                                                                                                          | <u>Rita B. Cevallos-Toledo</u> , Delia Bellezza, Juan Ferrera-González, Angelo Guissani, Enrique Ortí, María González-Bejar, Julia Pérez-Prieto                    | LA2 |
| P-35 | Control of electrical response of Halide Perovskite Optoelectronic devices by modification of buffer layers and metal contacts                                                                          | Antonio Guerrero and Juan Bisquert                                                                                                                                 | LA2 |





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| P-36       | Electrochemistry for biomass valorization and energy storage                                                                               | Camen Mejuto Nieblas, Francisco Fabregat-Santiago, Elena Mas-Marz6                                                                    | LA2 |
| P-37       | Relaxed requirements for viscous electron flow                                                                                             | Jorge Estrada-6lvarez, Francisco Dom6nguez-Adame and Elena D6az                                                                       | LA2 |
| P-38       | Controlled fabrication of Nb-based dayem bridge Josephson Junctions for highly-replicable SQUIDs                                           | <u>Jorge P6rez-Bail6n</u> , Carolina del R6o, David Garc6a-Pons, Javier Ses6, Fernando Luis and Mar6a Jos6 Mart6nez-P6rez             | LA3 |
| P-39, FP8  | Cost Effective Flexible Surfaces for SERS based Detection                                                                                  | S6nchez de los Santos, I; Pires, A.; Pereira A; Guti6rrez Rodrigo, S ; Slipets, R.; Hern6ndez J.; Rodr6guez, I; Mallada, R; Pina, M.P | LA3 |
| P-40, FP9  | Flexible Piezoelectric Nanogenerator Based on MXene-coated Electrospun PVDF Nanofibers                                                     | Isabel Murcia-Jimenez; Arturo Barjola-Ru6z; Oscar Sahuquillo; <u>Enrique Gim6nez</u>                                                  | LA3 |
| P-41, FP10 | Precision Engineering Of Crosslinked Self-Assembled Star-Shaped Polypeptide-Based Nanomedicines                                            | <u>Mar6a Ib6n6ez-Vives</u> , Esther Masi6, Inmaculada Conejos-S6nchez, Victor Sebastian-Cabeza, Mar6a Medel and Mar6a J. Vicent       | LA3 |
| P-42, FP11 | A Biomimetic Follicle-Based Design for Engineering Reproductive Technologies                                                               | <u>Carlos Mart6n</u> , Irene S6nchez, Sonia Merino, Ester V6zquez                                                                     | LA3 |
| P-43, FP12 | DI-Block Bent-Core Amphiphiles As New Structural Units Towards The Development Of Functional Supramolecular Materials                      | <u>Carlota Auria-Soro</u> , Alfonso Martinez-Felipe, Amin Sharifi Haddad, M. Blanca Ros                                               | LA3 |
| P-44, FP13 | Towards Recyclable Multilayer Materials Through Dynamic Chemistry                                                                          | K. N6n6ez, <u>M. Herrero</u> , C. Labrador, M.Trigo, S. Vallejos, J.M. Garc6a J.C. Merino                                             | LA3 |
| P-45, FP14 | Acoustic Metamaterial Based On Helmholtz Resonators For Broadband Absorption                                                               | Arranz Garc6a, Pablo, <u>Morcillo L6pez</u> , <u>Miguel 6ngel</u> , Merino Senovilla, Juan Carlos , Fern6ndez Pe6a, Mar6a Teresa      | LA3 |
| P-46, FP15 | Metal-Organic Frameworks In Nanomedicine: Dna Grafting As A Methodology For Building Colloidal & Structural Stability In Biorelevant Media | <u>Anargyros Drolapas</u> , Javier Hern6ndez Gil, Jorge Gonz6lez Garcia                                                               | LA3 |
| P-47, FP16 | Synthesis, Characterization And Antibacterial Properties Of Titanium Phosphate Nanofibers With Incorporated Silver Nanoparticles           | <u>Tetiana Hubetska</u> , Olena Khainakova, Bel6n Cabal, Natalia Kobylinska, Adolfo Fern6ndez                                         | LA3 |
| P-48, FP17 | Materials Innovations For New Generation Of Offshore Turbine Blades - Adhesives With Induction Heating Functionality                       | A.Chiminelli, S.Roche, M.Lizaranzu, M.Canales, G.Ibarz a S.Termin6, T. Kosanovic, C.A. Charitidis                                     | LA3 |
| P-49       | ENHANCING HYDROLYTIC RESILIENCE: ORGANOCATALYSTS IN SINGLE-COMPONENT SMART POLYURETHANE ADHESIVES FOR DECORATIVE INSULATION FACADES        | <u>Saul Vallejos</u> , Miriam TRIGO-L6PEZ, Haritz SARDON, Jose Manuel GONZALEZ-MARTIN, Sara                                           | LA3 |



GONZALEZ-MORENO, José M. GARCÍA

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| P-50 | HOW SILVER NANOWIRES CAN IMPROVE THE PERFORMANCE OF ELECTROCHEMICAL BIOSENSORS                                       | <u>M.L Rodriguez-Mendez</u> , C. Salvo-Comino, C. Pérez-González, F. Martin-Pedrosa C. Garcia-Cabazon                                                                               | LA3 |
| P-51 | PREVENTING MICROBIALLY - INFLUENCED CORROSION USING POLYOXOMETALATE - IONIC LIQUIDS                                  | <u>Mariella Malefioudaki</u> , Archismita Misra, Andrea Koerdt, Rafael Martín-Rapún, Scott G. Mitchell                                                                              | LA3 |
| P-52 | Surface Stabilisation of the High-Spin State of Fe(II) Spin-Crossover Complexes                                      | <u>Archit Dhingra</u> , Alejandro Martínez Serra, Maráa Carmen Asensio, José Antonio Real, and Juan Francisco Sánchez Royo                                                          | LA3 |
| P-53 | CERAMIC SCAFFOLDS OBTAINED THROUGH CERAMIC STEREOLITHOGRAPHY WITH POTENTIAL APPLICATION IN BONE TISSUE REGENERATION. | <u>Carolina Duque Uribe</u> , Claudia Patricia García                                                                                                                               | LA3 |
| P-54 | SMART BONDLINES USING ULTRASONIC GUIDED WAVE INSPECTION                                                              | Andrea Calvo-Echenique, Clara Valero, Mario Sánchez, Agustín Chiminelli                                                                                                             | LA3 |
| P-55 | GROWTH AND CHARACTERIZATION OF NOVEL IR1-XCOXO2 THIN FILMS                                                           | <u>M.A. Laguna-Marco</u> , J.Herrero-Albillos, M. Rueda-Jimenez, M.H. Aguirre                                                                                                       | LA3 |
| P-56 | Structure-property relationships in the antimicrobial activity of POM-peptide hybrids                                | <u>Paula Novella-Rodríguez</u> , Pilar Romero, Rafael Martín-Rapún, Scott G. Mitchell                                                                                               | LA3 |
| P-57 | ANALYSIS OF THE STRUCTURE, FUNCTION, AND USE OF PLASTICIZERS AND PVC MEMBRANES IN POTENTIOMETRIC SENSORS             | <u>Coral Salvo Comino</u> , Luis Eduardo Alonso Pastor, Stefano Pettinelli, Clara Perez Gonzalez, Patricia Najera Morales, Miguel Angel Rodriguez Perez, Maria Luz Rodriguez-Mendez | LA3 |
| P-58 | Study of new materials for electromagnetic shielding in the frequency range of 5G technology                         | <u>Adrián Suarez</u> , Jose Torres, Enrique Giménez, Arturo Barjola-Ruíz, Andrea Amaro, Roberto Herraiz, Pedro A. Martínez, Begoña Galindo, Pedro Galvez                            | LA3 |
| P-59 | ENCAPSULATION OF COSMETIC ADDITIVES IN THERMORESISTANT MATERIALS FOR DEVELOPMENT OF FUNCTIONAL TEXTILE FIBERS        | <u>Cristina Pina</u> , César Rubio, Elena Piera, Miguel A. Caballero, Carlos Téllez                                                                                                 | LA3 |
| P-60 | METAL-ORGANIC FRAMEWORKS IN SUSTAINABLE 3D-PRINTED DEVICES FOR ORGANIC CONTAMINANTS EXTRACTION                       | <u>José Manuel Herrero-Martínez</u> , Alejandro Gil-Aparicio, Enrique Javier Carrasco-Correa                                                                                        | LA3 |
| P-61 | Optimizing the protein corona of PEI-coated mesoporous silica nanoparticles for efficient gene transfection          | <u>Miguel Gisbert-Garzarán</u> , María Natividad Gómez-Cerezo, Daniel Lozano, Miguel Manzano, María Vallet-Regí                                                                     | LA3 |
| P-62 | EVALUATION OF PROTEIN CORONA IN BONE REGENERATION                                                                    | <u>Natividad Gómez Cerezo</u> , Miguel Gisbert-Garzarán, Miguel Manzano, María Vallet-                                                                                              | LA3 |



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|------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| P-63 | THIN FILM NANOCOMPOSITE (TFN) MEMBRANES INCORPORATING FeMn NANOPARTICLES FOR WATER DESALINATION                           | <u>Lucía Cano</u> , José Miguel Luque, Patricia Gorgojo, Joaquín Coronas, Carlos Téllez, Jesús Antonio Fuentes, Gerardo Goya                                                                        | LA3 |
| P-64 | Poly (methyl methacrylate) foaming in scCO <sub>2</sub> and water                                                         | <u>Redondo, A.</u> , García, P., Martín-de-León, J, Cantero, D.                                                                                                                                     | LA3 |
| P-65 | Controlling magnetism by applying an electric field                                                                       | <u>Miguel Ciria</u> , Maria Grazia Proietti and José I. Arnaudas                                                                                                                                    | LA3 |
| P-66 | Magnetostatic spin waves in shaped ferromagnets                                                                           | <u>Xavier del Arco Fargas</u> , David García Pons, Jorge Perez Bailón , María José Martínez Pérez y David Zueco.                                                                                    | LA3 |
| P-67 | Engineering remote spin-spin interactions by superconducting circuit design                                               | <u>Carolina del Río</u> , Jorge Pérez-Bailón, Sebastián Roca, David Rodríguez, Marina Calero de Ory, Daniel Granados, David Zueco, María José Martínez-Pérez, Alicia Gómez Gutiérrez, Fernando Luis | LA3 |
| P-68 | SYNTHESIS, ELECTROCHEMICAL AND PHOTOLUMINESCENT PROPERTIES OF ALKALINE EARTH-TETRAZOL COORDINATION COMPLEXES AND POLYMERS | <u>Mohamed Abdellatif Bensegueni</u> , Yeddiou Belkis selsabil                                                                                                                                      | LA3 |
| P-69 | Simulaciones de un micro posicionador y diseño de PCB para la medición de SQUIDS                                          | <u>Alex Francisco Estupiñán López</u> , Carolina del Rio Bueno, David García Pons, Javier Sesé y María José Martínez Pérez.                                                                         | LA3 |
| P-70 | CARBON DOTS AS PHOTOACTIVE SENSITIZERS                                                                                    | <u>Jose L. Hueso</u> , Ainhoa Madrid, Gema Martinez, Javier Bonet-Aleta, Ana MartínPardillos, Pilar Martin-Duque, Jesus Santamaria                                                                  | LA3 |
| P-71 | BIOPOLYAMIDE COMPOSITES FOR FUSED FILAMENT FABRICATION: GLASS FIBRE AND NANOCCLAY                                         | <u>M. Herrero</u> , K. Núñez, L.E. Pastor, F. Lizalde-Arroyo, J.C. Merino, M.A. Rodríguez                                                                                                           | LA3 |
| P-72 | The Design of Polypeptide-Based Nanoconjugates as Advanced Theranostics                                                   | <u>Maria Medel</u> , Esther Martínez, Amina Benaicha, Snežana Đorđević, Inmaculada Conejos-Sanchez, María J. Vicenta                                                                                | LA3 |

## GENERAL INFORMATION

### Venue



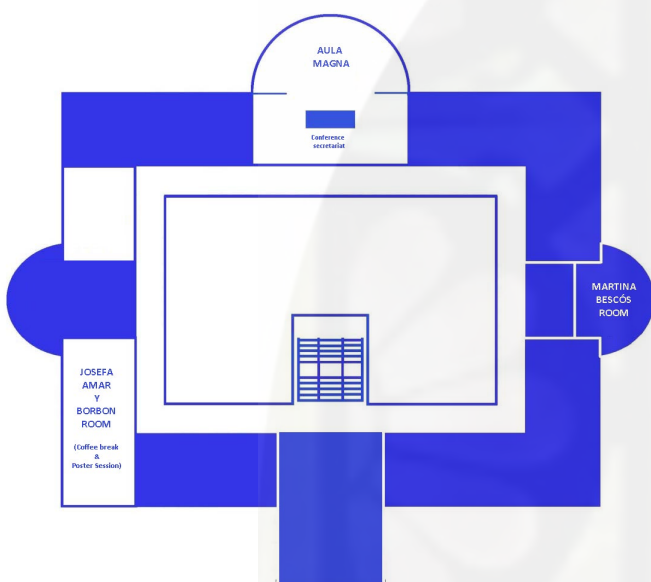
**Paraninfo Building**  
Basilio Paraiso Square  
50.004 – Zaragoza (SPAIN)

### Conference Dates

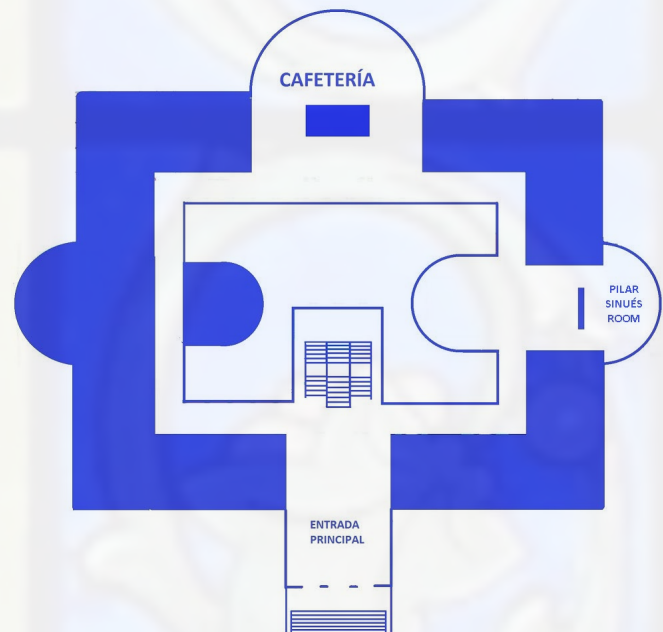
From November 13<sup>th</sup> to 15<sup>th</sup> 2023

### Conference Rooms

The conference will be held on the Aula Magna, Martina Bescos room, Pilar Sinués room and Josefa Amar y Borbon room.



First Floor



Ground Floor



### Technical Secretariat

The Technical Secretariat will be located at the entrance of the conference room during the conference opening hours.

Participants are requested to register here to receive a program, name badge and other registration materials.

E-mail: [amatszaragoza@unizar.es](mailto:amatszaragoza@unizar.es)

Phone: +34 876 55 34 52

### Coffe Breaks

Coffee breaks will be served in the Amar y Borbón Room (1st floor)

- Monday, November 13<sup>th</sup>: 11:00h to 11:30h and 14:30h to 15:00h
- Tuesday, November 14<sup>th</sup>: 10:50h to 11:20h and 14:30h to 15:00h
- Wednesday, November 15<sup>th</sup>: 11:00h to 11:30h and 14:30h to 15:00h

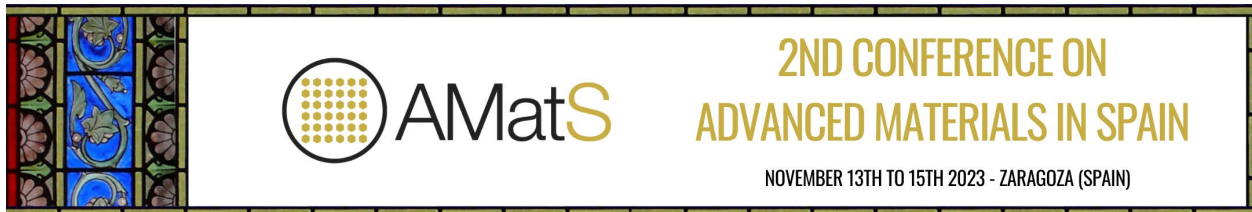
### Social Events

- Guided Tour  
Date: Tuesday, November 14<sup>th</sup> (18:00h)  
The meeting point is at the main entrance of the Paraninfo Building.
- Conference Dinner  
Date: Tuesday, November 14<sup>th</sup> (21:00h)  
Location: **Restaurante Tres Mares**, P.º Echegaray y Caballero, 101, 50003 Zaragoza  
How to get there:



Please do not forget to bring your conference dinner ticket to the restaurant.

If you have indicated that you have any special dietary requirements please make your self known to the waiter assigned to your table.



## WIFI

WIFI is available in the conference room. The name of wifi network is “**paraninfo**” and password is “**nynedero**”.

## Participation Certificates

Participation certificates can be obtained at the registration desk. If you have any questions please do contact the Technical Secretariat.

## Poster and Oral Communication Rules

### Oral Presentations

The conference room will be equipped with a projector and laptop. Presenters are encouraged to bring their talk on a memory stick and to use the laptop provided. The speakers who have not been able to send their presentations in advance are kindly requested to download them by themselves during the time scheduled for your presentation (20 minutes)

### Poster Presentations

Presenters should put up posters on the board number (check the program booklet) designated at the first scheduled poster sesión (November 13<sup>th</sup>, 11:00h) Posters must be removed at the end of the conference (November 15<sup>th</sup>, 17:30h). The organisers will not be held liable for any lost or damaged posters.

All presenters are encouraged to stand at their poster panels during the poster session. Material to fix posters to the panels will be available in the poster area.

### ElevatorPitch

INMA Institute is organizing the first Flash Poster/Elevator Pitch-Advanced Materials competition during the AMatS23 event on November 15. This contest gives the opportunity to conference attendees with a poster contribution to have the full attention of the audience for 3 minutes to share a 'trailer' of their poster. In a few slides you should let the participants know the most relevant things about you and your research: the issue you are trying to solve, what have you found, your proposed solution, why is that important, and/or your methodology.

- Timing must be strictly enforced, a slight buzzing sound at 2 minutes and 30 seconds will warn that the end is near. A stronger buzzing sound will end the presentation.

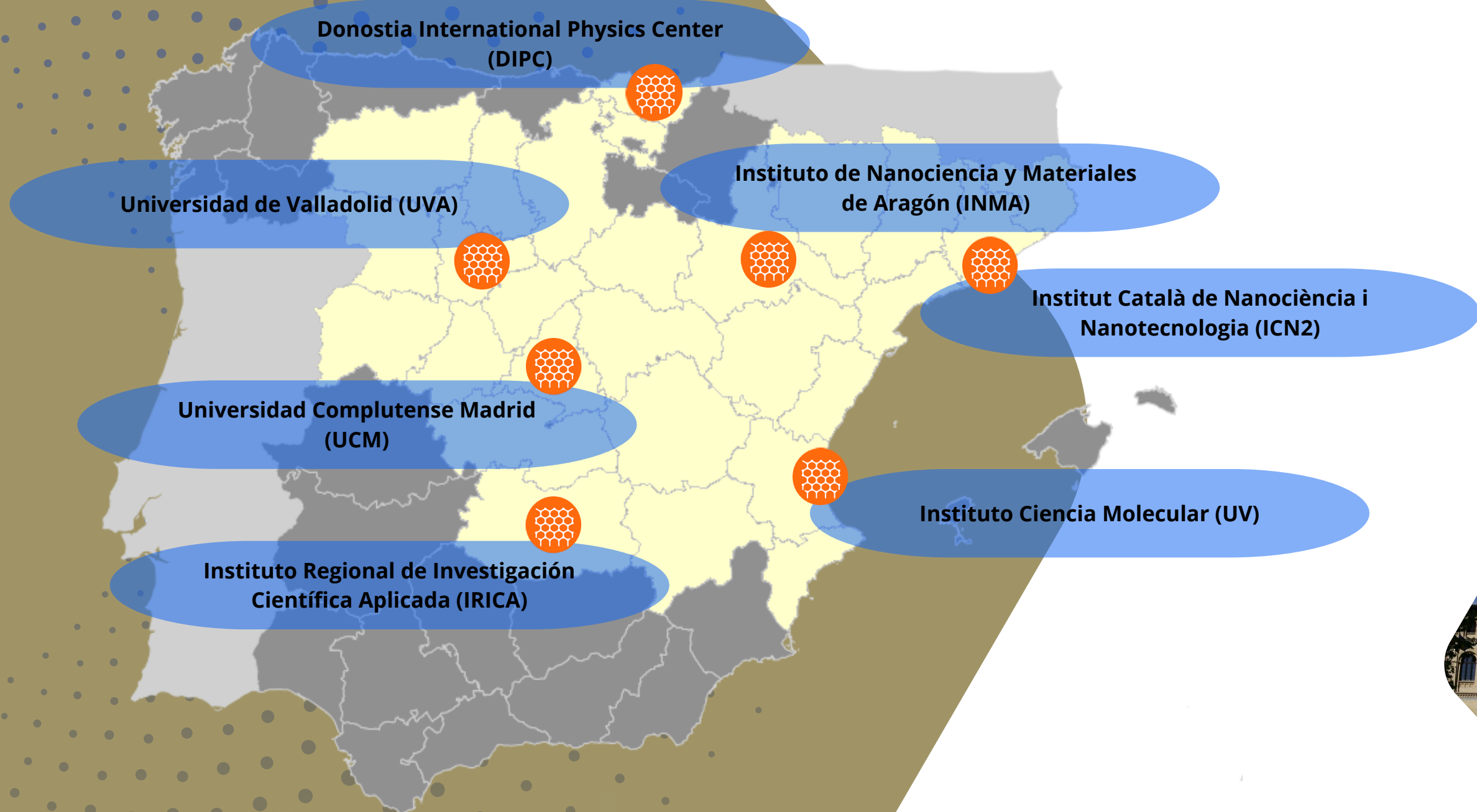
- Later, the public will anonymously vote through a link (QR) to a google form. In case of a tie the chairman will have the casting vote. The most voted interventions will be awarded at the closing ceremony.



# 2ND CONFERENCE ON ADVANCED MATERIALS IN SPAIN



NOVEMBER 13TH TO 15TH 2023 - ZARAGOZA  
(ARAGÓN - SPAIN)



Venue

Paraninfo Universidad de Zaragoza  
Address: Pza. Basilio Paraíso, 4  
Zaragoza (Spain), 50005



Universidad  
Zaragoza



CSIC



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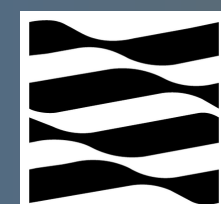


Plan de  
Recuperación,  
Transformación  
y Resiliencia



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE CIENCIA  
E INNOVACIÓN



GOBIERNO  
DE ARAGON