

Virtual European School on Molecular Nanoscience

Invited lectures are recorded and already available online. You can watch them prior to their discussion. Invited lectures **discussion**, **round table discussion** with invited speakers and student's **Oral communications** will be organised in a real time videoconference according to the following schedule.

Oral communications **abstracts** can be found in the last part of this document.

[Access here to the videoconference room](#)

Videoconference schedule

Wednesday June 3rd

9:30-10:15 Welcome & Seminar: Invited lectures discussion

Eugenio CORONADO- ICMol- Universitat de València

Introduction to Molecular Nanoscience

Discussion of their lectures with **Toribio Fernández, Nazario Martín & Josep Puigmartí**

Toribio FERNÁNDEZ OTERO- Universidad Politécnica de Cartagena

How we can replicate and quantify biological functions?

Nazario MARTÍN - Universidad Complutense de Madrid

Bottom-up Synthesis of (Chiral) Nanographenes

Josep PUIGMARTÍ- ETH Zurich (CH)

Micro- and nano-fluidic technologies for chemistry and materials science

10:15-11:15 Round table discussion with the previous speakers and with:

Núria ALIAGA ALCALDE- Institut de Ciència de Materials de Barcelona-CSIC

Alicia FORMENT- ICMol- Universitat de València

Mónica GIMÉNEZ MARQUÉS - ICMol- Universitat de València

Ángela SASTRE SANTOS - Universidad Miguel Hernández

11:15-11:30 Break

11:30-13:00 Students oral communications

Mirela ENCHEVA - Universidad Miguel Hernández

Toxicity and cellular internalization of water-soluble imidazolium- and pyridinium-containing Perylenediimide Salts

Modesto GONZÁLEZ-RODRÍGUEZ – Universidad de La Laguna

Hydrogen production by water splitting technique using (g-C₃N₄)_x(CdS)_{1-x} as photocatalyst

Clara PÉREZ GONZÁLEZ- Universidad de Valladolid

Design and development of a potentiometric e-tongue with nanomaterials for the dairy industry

Alfonso GONZÁLEZ – Universidad de Valladolid

Langmuir-Blodgett Biosensors based on Substituted Metallic Phthalocyanines and the Influence of the Enzyme-Mediator Interaction in the Electrochemical Detection of Galactose

Jesús CASES - ICMol- Universitat de València

Encapsulation of proteins in MOFs by biomineralization

David HERRERO - Universidad Miguel Hernández

Silicon Phtalocyanine-Based Surface Functionalized Metal-Organic Frameworks as Active Materials in Optical Cavities

13:00-13:30 Final discussion

Thursday June 4th

9:30-10:15 Seminar: Invited lectures discussion

Discussion of the following lectures:

Andrés CASTELLANOS - Instituto de Ciencia de los Materiales de Madrid-CSIC

Tutorial on devices based on 2d materials

Alicia FORMENT- ICMol- Universitat de València

Overview about MoS₂ exfoliation & functionalization in solution

J Ignacio PASCUAL- CIC NanoGUNE

Π -magnetism in graphene nanostructures

Diego PEÑA- CIQUS-Universidad de Santiago de Compostela

Combining Organic Synthesis with Surface Science: from Insoluble Molecules to Graphene Materials

10:15-11:15 Round table discussion with the previous speakers and with:

Gonzalo ABELLÁN- ICMol- Universitat de València

Núria ALIAGA ALCALDE- Institut de Ciència de Materials de Barcelona-CSIC

Alek DEDIU- University of Bologna (IT)

Guillermo MÍNGUEZ- ICMol- Universitat de València

Ángel RUBIO - Max Planck Institute for the Structure and Dynamics of Matter (DE)

11:15-11:30 Break

11:30-13:00 Students oral communications

Tamara DE ARA – Universidad de Alicante

STM Study on Dithia[7]Helicenes and Organic Solvents on Au(111) Surface

Yelko DEL CASTILLO HERNÁNDEZ- Universidad de Alicante

Quantum transport in graphene nanocontacts

Marta ALCARAZ MEGÍAS- ICMol- Universitat de València

Synthesis and Characterization of Few-Layer Hexagonal Antimonene Nanosheets via Colloidal Approach

Marta VEGAS GARCÍA - ICMol- Universitat de València

Comparison between top-down and bottom-up synthetic approaches in production of antimonene for both cell internalization and cell viability

María CASTILLO ORENES - Universidad Miguel Hernández

Phtalocyanines-Spirofluorene Systems as Hole Transporting Materials in Perovskite Solar Cells

Ana M. IGUAL MUÑOZ- ICMol- Universitat de València

Wide-Bandgap Inorganic Perovskite synthesized through sublimation methods for solar cell applications

Abhyuday PALIWAL - ICMol- Universitat de València

Semi-transparent metal thin-film electrode-based perovskite solar cells

13:00-13:30 Final discussion

Friday June 5th

9:30-10:15 Seminar: Invited lectures discussion

Discussion of the following lectures:

Samuel MAÑAS VALERO- ICMol- Universitat de València

Molecular nanomagnetism and spintronics

Núria ALIAGA ALCALDE- Institut de Ciència de Materials de Barcelona-CSIC

Hybrid nanodevices based on FLG

Francisco RIVADULLA - CIQUS-Universidad de Santiago de Compostela

Local manipulation of oxygen ions in functional oxides

Eliseo RUIZ - Universitat de Barcelona

Improving Slow Spin Relaxation Properties by Encapsulation

10:15-11:15 Round table discussion with the previous speakers and with:

Sally BROOKER – Otago University (NZ)

Selvan DEMIR - Michigan State University (USA)

Roberta SESSOLI- Firenze University (IT)

Michael SHATRUK – Florida State University (USA)

11:15-11:30 Break

11:30-13:00 Students oral communications

Rafael DELGADO-GARCÍA- Universidad de Castilla La Mancha

Shape-related effects on a single ferromagnetic nanoparticle: A micromagnetic approach

Ruben TURO-CORTÉS - ICMol- Universitat de València

One- vs two-step Spin Crossover modulation through host-guest chemistry in amino-functionalized 2D Hofmann-type coordination polymers

Pedro ESQUERDO TEROL-Universidad de Castilla La Mancha

Hole Trapping Dynamics in Covellite CuS Nanodisks

Cristina GARCÍA PÉREZ– Universidad Autónoma de Madrid

Hybrid Superconducting Nanowires Single-Photon Detectors

Raquel NARANJO ALCÁZAR - ICMUV- Universitat de València

Selective Transport Metal Oxides

13:00-13:30 Final discussion and conclusions

Chairman:

- **Eugenio CORONADO** - ICMol- Universitat de València

Virtual moderators:

- **Francisco ESCRIG ESCRIG**- ICMol- Universitat de València
- **Manuel PÉREZ GARCÍA** - ICMol- Universitat de València

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