

February 07–09, Lisboa (Portugal)

TENTATIVE PROGRAM (as of 30/01/2018)

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



WEDNESDAY (07/02/2018)

08:00 – 09:00: Registration

09:00 – 09:15: Opening Ceremony- Welcome and Introduction.

09:15 – 09:45: **Rogério Gaspar** (University of Lisbon, Portugal) K
Integrative healthcare challenges and the emergence of convergence in Nanomedicine: from health sciences to health care

09:45 – 10:15: **Bruno Sarmiento** (University of Porto, Portugal) K
Functional nanomedicines for modulation the interaction with mucosal barriers

10:15– 11:00: Coffee Break / Poster Session & Exhibition

11:00 – 11:30: **Ana Grenha** (University of Algarve, Portugal) K
Polysaccharide nanoparticles: Unveiling applications in mucosal drug delivery

11:30 – 12:00: **Lluís F. Marsal** (Universitat Rovira i Virgili, Spain) K
Recent advances in nanoporous anodic alumina for sensing and drug delivery applications

12:00 – 12:30: **Maria Cristina Bonferoni** (University of Pavia, Italy) K
Nanoparticle systems based on hydrophobically modified chitosan

12:30 – 13:00: **Catarina Silva** (Universidade Lusófona, Portugal) K
Advances and current approaches of photoactivated functionalized nanoparticles in cancer targeting treatment

13:00 – 13:15: **Ana Gomez Varela** (International Iberian Nanotechnology Laboratory, Portugal) O
New lipoplex formulation to efficiently transfect human fibroblast: Fluorescence Cross Correlation Spectroscopy as tool for lipoplex characterization

13:15 – 14:15: Cocktail Lunch / Poster Session & Exhibition

14:15 – 14:45: Poster Session & Exhibition

14:45 – 15:15: **José Crecente** (University of Santiago de Compostela, Spain) K
Modulating the immune system through nanotechnology

15:15 – 15:45: **Hanne Mørck Nielsen** (University of Copenhagen, Denmark) K
Conjugation to cell-penetrating peptides influences their membrane interaction and safety

15:45 – 16:15: **Jose Guilherme Vilhena Albuquerque d'Orey** (Universidad Autónoma de Madrid, Spain) I
Atomistic understanding of the mechanical properties of bio-molecules

16:15– 16:45: Coffee Break / Poster Session & Exhibition

16:45 – 17:15: **Lifeng Liu** (INL, Portugal) K
Development of Earth-Abundant Electrocatalysts for Efficient and Durable Water Splitting

17:15 – 17:30: **Isilda Amorim** (International Iberian Nanotechnology Laboratory, Portugal) O
Ternary cobalt-nickel phosphide nanowire catalysts for electrochemical oxygen and hydrogen evolution in alkaline media

17:30 – 17:45: **Xuecheng Chen** (West Pomeranian University of Technology, Poland) O
Synthesis of Nanocarbon from waste Polymer and Potential Application in Electrochemical Energy Storage

- 17:45– 18:00: **Shrabani Panigrahi** (CENIMAT/i3N, Portugal) O
Imaging the Charge Carrier Distribution Inside Solar Cell Using Kelvin Probe Force Microscopy
- 18:00 – 18:15: **Francisco Gontad** (University of Vigo, Spain) O
Development of new coatings from marine bioceramics and silver nanoparticles by pulsed laser deposition
- 18:15 – 18:45: **Raquel Verdejo** (CSIC, Spain) K
Polymer nanocomposites: from thermosets to elastomeric matrices



THURSDAY (08/02/2018)

- 09:00 – 09:30: **Jose Hugo Garcia** (ICN2, Spain) I
Tailoring Spin Dynamics through Proximity Effects in Graphene/Transition Metal Dichalcogenide Heterostructures
- 09:30 – 10:00: **Fèlix Casanova** (CIC nanoGUNE, Spain) K
Graphene-based heterostructures as spintronic devices
- 10:00– 10:15: **Eduardo Castro** (Instituto Superior Tecnico, Portugal) O
Dilute Magnetism in Graphene
- 10:15 – 10:30: **Bruno Amorim** (CeFEMA, Instituto Superior Técnico, Universidade de Lisboa, Portugal) O
General theoretical description of photoemission spectroscopy of van der Waals heterostructures
- 10:30 – 11:00: *Coffee Break / Poster Session & Exhibition*
- 11:00 – 11:30: **Artur Moreira Pinto** (Eindhoven University of Technology, The Netherlands) I
Graphene-based materials and their polymer composites for flexible electronics and biomedical applications
- 11:30 – 11:45: **Pedro Costa** (King Abdullah University of Science and Technology, Saudi Arabia) O
Rational design of graphene-based adsorbents for carbon dioxide uptake
- 11:45 – 12:00: **Javier Martinez-Rodrigo** (Universidad Politécnica de Madrid / ISOM, Spain) O
Graphene Silicon-Heterojunction Solar Cells
- 12:00 – 12:15: **Marcus Worsley** (Lawrence Livermore National Laboratory, United States) O
3D-Printed Graphene-Based Aerogel Electrodes for Energy-Related Applications
- 12:15 – 12:30: **Nicolas F. Martinez** (ScienTec Iberica, Spain) O
Advanced nano-electrical characterization of solar cells and 2-d materials with atomic force microscopy
- 12:30 – 12:45: **Jérôme Cayssol** (Université de Bordeaux, LOMA, France) O
Ballistic transport in irradiated graphene
- 12:45 – 13:00: **Gabino Rubio-Bollinger** (UAM and IFIMAC, Spain) O
Electronic transport and photoresponse of single- and few-layer MoS2 vertical devices
- 13:00 – 14:30. *Lunch*
- 14:30 – 14:50: **Antonio Correia** (Phantoms Foundation, Spain) I
"Graphene and 2D Materials" EUREKA Cluster: Fostering European Competitiveness
- 14:50 – 15:20: **Cristina Freire** (University of Porto, Portugal) I
Graphene nanocomposites in chemical, energy related electrocatalysis and sensing
- 15:20 – 15:50: **André Godinho Luz** (Infinite Foundry, Portugal) I
Cloud based supercomputing for realistic nanotech simulations
- 15:50 – 16:20: **Pedro Alpuim** (INL, Portugal) I
Highly target-specific graphene devices for biomedical applications
- 16:20 – 17:00: *Coffee Break / Poster Session & Exhibition*
- 17:00 – 17:30: **Mario G. Silveirinha** (University of Lisbon, Portugal) K
Topological photonic systems
- 17:30 – 18:00: **Aires Ferreira** (University of York, UK) K
Charge-spin conversion in atomically-thin van der Waals heterostructures
- 18:00 – 18:15: **Ana G. Silva** (International Iberian Nanotechnology Laboratory, Portugal) O
Bioimaging of exo - or endocytosis with interference microscopic imaging

18:15 – 18:30: **Josep Ferre-Borrull** (Universitat Rovira i Virgili, Spain) O
Optical monitoring of surface modifications in nanoporous materials

20:30: *Conference Dinner (Restaurante Varanda de Lisboa / Praça Martim Moniz, nº 2; 100-341 Lisboa)*



FRIDAY (09/02/2018)

09:00 – 09:15: **João Braz** (CeFEMA, Instituto Superior Técnico, Universidade de Lisboa, Portugal) O

Valley polarized magnetic state in hole-doped mono layers of transition metal dichalcogenides

09:15 – 09:30: **David Botequim** (Instituto Superior Técnico, Portugal) O

Fluorescence Enhancement of Labeled Oligonucleotides Using Plasmonic Gold Nanorods Toward Biosensing Applications

09:30 – 09:45: **Rute Nunes** (I3S, Portugal) O

Efavirenz-loaded poly (ethylene oxide)-modified nanoparticles as potential rectal anti-HIV microbicides

09:45– 10:00: **Laura Pol** (Universitat Rovira i Virgili, Spain) O

Engineered Nanoporous Anodic Alumina Micro and Nanoparticles for Biomedical Applications

10:00 – 10:15: **Osiris Redondo Herrero** (Universidad Rey Juan Carlos, Spain) O

Anti-icing and de-icing graphene nanoparticles reinforced epoxy coatings

10:15 – 10:30: **Virginia Carnevali** (University of Trieste, Italy) O

Evolution of moiré' structures of graphene adlayers on Ni(100) surface

10:30 – 11:15: *Coffee Break / Poster Session & Exhibition*

11:15 – 11:30: **Miguel Vitorino** (Universidade de Lisboa, Portugal) O

Direct measurement of the nucleation time of a water nanobridge

11:30 – 11:45: **Nitinkumar Batra** (King Abdullah University of Science and Technology, Saudi Arabia) O

Current-induced structural changes in stressed silver nanowires

11:45 – 12:00: **Soraia Fernandes** (INL, Portugal) O

Covalent Organic Frameworks as a New Tool for the Capture of Hazardous Compounds from Water

12:00 – 12:15: **Isaac Montoya Baños** (University of the Basque Country, Spain) O

Temperature evolution of antiferromagnetic domains in patterned exchange bias systems

12:15 – 12:30: **Fatema Yahya Mohamed Saeed** (University of Trieste, Italy) O

Self-assembled monolayer films of Iron phthalocyanines on thin alumina films: characterization and properties

12:30 – 12:45: **Paula Parreira** (INEB/i3S- Instituto de Engenharia Biomédica/Instituto de Investigação e Inovação em Saúde; Universidade do Porto, Portugal) O

Bactericidal nanostructured surfaces with high impact against Helicobacter pylori

12:45 – 13:15: **Paulo Ferreira** (INL, Portugal) K

Understanding the Surface Structure of Li_{1-x}[Mn₂]O₄ by Aberration-Corrected STEM and EELS

13:15: Closing and nanoPT2019 announcement