

**Sunday, 10 July**

*Fonseca Palace*

**18:00** Registration

**20:00** Welcome party

**Chairmen/Chairwomen**

**Monday, 11<sup>th</sup> Room A**

Prof. Eduardo Marques 9:00-11:00 h

Dr. Isabel Pastoria 12:00-13:15 h

Dr. Andrés Guerrero 15:00-16:45h

Dr. Jordi Esquena 17:30-19:00 h

**Tuesday, 12<sup>th</sup> Room A**

Prof. Artur Valente 9:00-11:00 h

Dr. Julia Maldonado 12:00-13:15 h

Prof. Pablo Taboada 15:00-17:00 h

**Wednesday, 13<sup>th</sup> Room A**

Prof. Tito Trindade 9:00-11:00 h

Dr. Juan José Giner 12:00-14:00 h

**Monday, 11<sup>th</sup> Room B**

Dr. Gerardo Prieto 10:15-11:00 h

Prof. María José Gálvez 12:30-13:15 h

Dr. Nuno Basílio 16:15-16:45 h

Dr. Anna Laromaine 17:30-19:00 h

**Tuesday, 12<sup>th</sup> Room B**

Prof. Alberto C. Pais 10:15-11:00 h

Dr. Marlene Lucio 12:30 h-13:15 h

Prof. Elena Junquera 16:00-17:00 h

**Wednesday, 13<sup>th</sup> Room B**

Prof. Juan de Vicente 10:15-11:00 h

Prof. José P. Farinha 12:30-13:15 h

Monday, 11<sup>th</sup> July

Faculty of Psychology

8:30 Registration

Room A

8:45 Open Ceremony

9:00 Plenary 1: Prof. Andreas Fery ( Institute for Polymer Research Dresden)

From bioinspired structure formation to particle-based metamaterials

9:45 Invited 1: Dr. Sara Fateixa (U. of Aveiro)

Exploring interface effects on 2D-materials supported nanometals for optical biosensing

Room A

Room B

10:15 **Dr. Joana R. Martins** (U. of Coimbra): Photonic protein-based hydrogels for sensing applications

**Dr. Alberto Pardo** (3B's): Combining magnetically- and matrix-assisted 3D Bioprinting strategies to fabricate tendon biomimetic constructs

10:30 **Dr. Sarah De Marchi** (U. of Vigo): Plasmonic nanorattles for in situ SERS imaging of pH variations in bacterial colonies

**Dr. Fernando Martínez-Pedrero** (U. Complutense de Madrid): Transport of magnetic colloidal particles adsorbed at fluid interfaces

10:45 **Prof. Tito Trindade** (U. of Aveiro): Dendritic plasmonic nanostructures for surface-enhanced Raman spectroscopy

**Dr. David Serantes** (U. of Santiago de Compostela): Magnetic anisotropy in relation to nanoparticle agglomeration and hyperthermia

11:00 Coffee Break+Poster

12:00 Invited 2: Dr. Leonardo Scarabelli (ICMAB-CSIC)

Direct Surface Growth of Plasmonic Nanoparticles for the preparation of plasmonic ordered arrays

Room A

Room B

12:30 **Miss Rebeca Fortes-Martín** (U. of Postdam): Water-in-oil microemulsions as soft-templates for the interfacial assembly of nanoparticles

**Dr. Álvaro Gallo-Cordova** (I. of Materials Science, Madrid): Iron oxide colloidal mesocrystals: from their non-classical formation mechanism to their application in environmental Remediation

12:45 **Dr. Ana Belén Bonhome Espinosa** (U. of Granada): Exploiting liquid-liquid phase separation to compartmentalise stimuli-responsive nanoparticles within droplets

**Dr. Ana L. Daniel-da-Silva** (U. of Aveiro): Surface modification of magnetic nanomaterials with biopolymers for water treatment

13:00 **Dr. Andrés Guerrero-Martinez** (U. Complutense de Madrid): Colloidal metal nanoparticles under ultrafast laser pulses

**Mr. Celso E. D. Cardoso** (U. of Aveiro): Magnetic nanoparticles for the recovery of phosphorus from wastewaters: a solution for pulp and paper mills

13:15 Lunch

15:00 Plenary 2: Dr. Luisa Durães (U. of Coimbra)

Customizing the Surface Chemistry of Silica Aerogels for Water Cleaning

**Monday, 11<sup>th</sup> July**

**15:45 Invited 3: Dr. Ana Rita Oliveira-Rodrigues (U. of Minho)**

Development of magnetic/plasmonic lipid-based nanosystems for controlled drug delivery

**Room A**

**Room B**

**16:15 Dr. Anna Laromaine** (U. Autónoma de Barcelona): Colloids, biopolymers, and their interface evaluated on *C. elegans*

**Dr. Carlos Alberto Gracia Fernández** (TA Instruments): Interfacial Rheology, new trends in rotational rheometry

**16:30 Dr. Francisco José Ostos** (U. of Seville): Biocompatible MOFs as vehicles for enhancing the therapeutic effect of antiretroviral drugs in the HIV treatment

**Dr. Pablo F. Garrido** (U. of Santiago de Compostela): Heat of bubble formation: surface tension and adsorption in Isothermal Titration Calorimetry

**16:45 Coffee Break+Poster**

**Room A**

**Room B**

**17:30 Dr. Juan J. Giner-Casares** (U. of Córdoba): Interfacial Supramolecular Assembly at Air/Liquid Interfaces

**Dr. Natalia Hassan** (U. Técnica Metropolitana, Chile): Shape and size effect of nanoparticles in their interaction with plasma proteins by microfluidic devices

**17:45 Miss Joana N. Martins** (Associated Laboratory for Green Chemistry, Caparica): Light-Controlled Counterion Activation of the Transport of Arginine-Rich Peptides across synthetic phospholipidic membranes

**Mr. Pablo Graván** (U. of Granada): Effect of biomimetic coatings on the nanoparticle-cell interactions: a comparative study of particles camouflaged with polymers, proteins, polysaccharides, or cell membranes

**18:00 Dr. Miguel Ángel Fernández-Rodríguez** (U. of Granada): Trapping microgels in bulk and at water/oil interfaces with optical-tweezers

**Dr. Vicente Domínguez-Arca** (U. of Santiago de Compostela): New cationic DPPC liposomes doped with gemini surfactants. Properties and possible applications

**18:15 Prof. Francisco Javier M. Ruiz-Cabello** (U. of Granada): Replication and wetting analysis of Lotus-like and Petal-like plants

**18:30 Dr. Bárbara Abreu** (U. of Porto): Advanced 1D/2D nanocomposites assembled via colloid chemistry and their electrocatalytic activity towards energy-related oxygen reactions

**18:45 Dr. Lucía Labrador-Páez** (U. Complutense de Madrid): Exploring single-nanoparticle dynamics at high temperature by optical tweezers

New opportunities for European funding Spain-Portugal Euroregion

**19:15**

**Meeting GECl (Room A)**

Tuesday, 12<sup>th</sup> July

Faculty of Psychology

Room A

9:00 Plenary 3: Prof. Helmut Cölfen (U. of Konstanz)

Analytical ultracentrifugation in colloid and soft matter analysis: new insight by a classical technique

9:45 Invited 4: Dr. Ermelinda M. S. Maçôas (U. of Lisboa)

Photoluminescence of 0D carbon nanomaterials from nanographenes to graphene quantum dots and carbon nanodots

Room A

10:15 Prof. José Paulo Farinha (U. of Lisboa): Photonic pigments assembled from polymer nanoparticles: dye-free bright colors

Room B  
Dr. Arturo Moncho-Jordá (U. of Granada): Controlling the structure, phase behavior and dynamics of soft colloids by active interaction switching

10:30

Miss Nadesh Fiuza Maneiro (U. of Vigo): Recent progress of chiral semiconductors

Dr. Irene Adroher-Benitez (U. of Grenoble): Modeling the adsorption of copolymers on heterogeneous surfaces and the stability of polymer coatings for cosmetic applications

10:45 Mr. Gianluca Utzeri (U. of Coimbra): Confidor removal study: assessment of macro- and micro microscopic interactions

Prof. Antonio Manuel Puertas (U. of Almería): Colloidal systems and financial markets

11:00

Coffee Break+Poster

12:00 Invited 5: Dr. Ilaria Armenia (INMA,CSIC-UNIZAR)

Nanobiocatalysis: opportunities for remote enzymatic control by nanuactuation

Room A

12:30 Prof. Rafael Muñoz-Espí (U. of Valencia): Nanoencapsulation of Phase Change Materials in Polymer Coatings for Thermal Energy Storage

Room B

Prof. Jorge M. C. Marques (U. of Coimbra): Energy landscapes and thermodynamics of colloidal clusters modeled with isotropic potentials

12:45 Dr. Jordi Esquena (I. of Advanced Chemistry of Catalonia): Water-in-water (w/w) emulsions prepared by low-agitation methods

Dr. Antonio Topete (U. of Guadalajara): Microfluidics-Assisted Conjugation of Chitosan-Coated Polymeric Nanoparticles with Antibodies: Significance in Drug Release, Uptake, and Cytotoxicity in

13:00 Dr. Bruno Medronho (U. of Algarve): Microrheology of novel cellulose stabilized oil-in-water emulsions

Prof. Juan de Vicente (U. of Granada): Rheology of Magnetic Colloids in Unsteady Triaxial Fields

13:15

Lunch

Symposium Prof. María da Graça Miguel

15:00 Prof. Eduardo Marques (U. of Porto)

A tribute to María Miguel: scientific, academic and personal legacy

15:15 Plenary 4: Prof. Tommy Nylander (U. of Lund)

Polymer-surfactant interactions-controlling structures, interactions and process

Room A

16:00 Prof. Alberto Canelas Pais (U. of Coimbra): Molecular simulation and the behavior of polyelectrolytes in solution and at interfaces

Room B

Dr. Guillermo Gonzalez-Rubio (U. of Konstanz): Analytical Ultracentrifugation for Simultaneous Characterization of Compositional and Colloidal Properties of Multicomponent Nanoparticles

16:15 Dr. María del Carmen Morán (U. of Barcelona): Therapeutic Applications of Stimulus Triggered Delivery Systems

Dr. Ana Belén Jódar-Reyes (U. of Granada): Dynamic Light Scattering and Nanoparticle Tracking Analysis: Complementary Nanoparticle Characterization Techniques

Tuesday, 12<sup>th</sup> July

**Room A**

**16:30** *Dr. Rita Dias* (Norwegian University of Science and Technology): Impact of charge in disordered peptide tails on PAMAM-DNA binding

**16:45** *Dr. Dmitriy Moreira (U. of Porto)* : Amphiphiles as building blocks for the assembly of smart delivery vectors and advanced nanocomposites

**Room B**

*Mr. Osvaldo Beltrán* (U. of Santiago de Compostela): Biomimetic artificial nanocells for atherosclerosis treatment

*Dr. Aixa Aguilera-Garrido* (U. of Granada): Solid lipid nanoparticles from natural plant-derived sources as drug nanocarriers for treatment of pancreatic cancer

**17:00**

**Social Programme**

**21:00**

**Dinner**

**Wednesday, 13<sup>th</sup> July**

**Faculty of Psychology**

**9:00** Plenary 5: Prof. Verónica de Zea Bermúdez (U. of Tras os Montes e Alto Douro) Solar energy harvesting, conversion and management materials for architectural glazing

**9:45** Invited 6: Dr. Demian Levis (U. of Barcelona) Phase behaviour of colloidal spinners and model chiral fluids

**Room A**

**Room B**

**10:15** **Prof. Artur J. M. Valente** (U. of Coimbra): A visually responsive paper for anticounterfeiting application

**Dr. Niccolo Caselli** (U. Complutense de Madrid): Hydrodynamic crystals on surfactant-functionalized water surface

**10:30** **Miss Lara González-Cabaleiro** (U. of Vigo): MOFs Based Biosensor for Detection and Quantification of HER2 and EGFR

**Miss Berta Martínez-Prat** (U. of Barcelona): Selection rules and scaling regimes in active nematic turbulence

**10:45** **Miss Akmaral Sulemeanova** (U. of Coimbra): Paper-based SERS sensor for detection of nucleolin

**Dr. Horacio López-Menéndez** (U. Complutense de Madrid): A novel framework to characterize nuclear compaction gradients at the interface between lamina layer and chromatin

**11:00** **Coffee Break+Poster**

**12:00** Keynote: Prof. Roque Hidalgo (U. of Granada) A historical approach to the colloidal and interface science in Spain. The past is a foreign country

**Room A**

**Room B**

**12:30** **Dr. Rubén Ahijado-Guzmán** (U. Complutense de Madrid): Plasmonic Nanoparticles for the Label-Free Imaging of Dynamic Protein - Membrane Interactions

**Dr. Julia Maldonado-Valderrama** (U. of Granada): Encapsulation of curcumin in Liquid Lipid Nanocapsules and in-vitro digestibility

**12:45** **Dr. Óscar F. Silvestre** (CIC biomaGUNE): Hybrid gold-nanodiamond particles for advanced optical imaging

**Dr. Isabel S. Oliveira** (U. of Porto): Stimuli-responsive hydrogels for the delivery of an antimicrobial protein

**13:00** **Dr. Sergio Rodal-Cedeira** (U. Vigo): Rod-shaped gold/silver nanorattles with tunable optical properties from visible to mid-IR region

**Dr. Rui M. A. Domingues** (3B's): Direct 3D Writing of Human Tendon In Vitro Models Within a Self-Assembled Fibrillar Shell Matrix

**13:15** Plenary 6: Prof. Carmen Álvarez-Lorenzo (U. of Santiago de Compostela) Oligo- and poly-saccharides as components of syringeable and 3D printed scaffolds for regenerative medicine

**14:00** Closing ceremony & Lunch