

APRIL 4 - MORNING

Opening Session

9:15

Manuel Minas da Piedade (Conference Chair)
Joaquim Faria (SPQ President)

9:30

PL1 Reiko Oda
Transferring chiral information: between molecules and mesoscopic objects
Chair: José N. Canongia Lopes

Room 1

Chair: Tito Trindade

Room 2

Chair: Ermelinda Eusébio

10:15

OC1.1 Ivo J. V. Martins
The optimization of the synthesis of fluorescent carbon dots using a systematic approach

OC.21 Bruno D. A. Pinheiro
Study on the volatility of four dichlorinated benzonitriles

10:30

OC1.2 Tiago A. G. Duarte
Novel ionanofluids based on silk-derived carbon dots

OC2.2 Anna Drzewicz
Role of intermolecular interactions in the phase situation of the asymmetric para-terphenyl

10:45

OC1.3 Beatriz R. M. A. Raimundo
Study of deep cavity cavitand encapsulation of fluorescent dyes in aqueous media

OC2.3 Luís M. C. Moreira
Further evidence for an increased electrophilic solvent assistance in 1-X-adamantane vs. 2-X-2-methylpropane solvolyses (X = Cl, Br, I)

11:00

Break

11:15

OC1.4 Luis A. A. F. C. Branco
Magnetic and Luminescent Ionic Liquids as specific probes for neurodegenerative diseases

OC2.4 Miroslaw Gałazka
Studies on electrode polarization effect and a transient chain in dielectric materials

11:30

OC1.5 Maria J. A. A. Martins
Influence of intramolecular excited-state complex formation on the chiroptical properties of small molecules

OC2.5 Daniel F. V. Matias
Assessment of the stability of tramadol hydrochloride-celecoxib co-crystal and amorphous nanoparticles

11:45

OC1.6 João Avó
Nanomaterials with thermally-activated delayed fluorescence: a new class of optical probes and ¹O₂ sensitizers

OC2.6 Joana M. N. P. S. Martins
Detecting two distinct analytes with a single dye: A ternary host:guest complex with orthogonal recognition units

12:00

IL1 Ermelinda Maçoas
Optical properties and applications of 0D carbon nanomaterials
Chair: Rui Borges dos Santos

APRIL 4 - AFTERNOON

14:00 **PL2** Luis Arnaut
Case studies of medical practices emerging from fundamental science
 Chair: Jorge Parola

14:45 **IL2** Paulo Ferreira
Understanding proton exchange membrane fuel cells by ad-vanced transmission electron microscopy
 Chair: Manuela Silva

15:15 **Sponsored Talk:** PARALAB (João Carvalheira)
Thermal Analysis and Rheology of Batteries
 Chair: João Paulo Leal

Room 1

Chair: Rosa Perestrelo

Room 2

Chair: Verónica Bermudez

15:25 **OC1.7** Oleksandr Tomchuk
Polydispersity analysis of nanoparticulate systems by small-angle scattering: modified PDI approach

OC2.7 Inês G. Silva
Natural eutectic mixtures of sodium salt as electrolytes for supercapacitors

15:40 **OC1.8** Clara S. B. Martins
Vibrational microspectroscopy for the discrimination of breast cancer cell lines

OC2.8 Hugo Cruz
Eutectic systems as sustainable electrolytes for energy storage devices

15:55 **OC1.9** Natércia C. T. Martins
Chitosan coated papers as sustainable platforms for SERS detection

OC2.9 Daniela R. Pinheiro
How to recover and improve an electrochromic device

16:10

Break

16:20

Poster Session
 Gather Platform

APRIL 5 - MORNING

9:30

PL3 Michael Graetzel

Molecular photovoltaics and the rise of perovskite solar cells

Chair: Rui Fausto

Room 1

Chair: Margarida Bastos

Room 2

Chair: Maria da Soledade Santos

10:15

OC1.10 Pedro F. L. Ferreira*High performing method for plasmid DNA clarification and RNA capture using pristine multi-walled carbon nanotubes*OC2.10 Alexandre C. P. M. Alves*Ionic liquid films as confinement media for silver nanoparticle*

10:30

OC1.11 Luís P. Silva*Novel chemiluminescent coelenterazine analogs for self-activating photodynamic therapy of cancer*OC2.11 João P. M. Afonso*Fatty acids-based eutectic solvents liquid membranes for removal of sodium diclofenac from water*

10:45

OC.1.12 Raquel O. Cristóvão*Antileukemic biopharmaceuticals purification using carbon xerogels*OC2.12 Artur F. M. Farinha*Effects of ionic liquids on the nucleation and growth of organic films*

11:00

Break

11:15

OC1.13 Maria C. M. Sequeira*Adipates as new phase change material: seeking for a low temperature energy storage system*OC2.13 Bárbara C. M. Jesus*Evaluation of eutectic solvents for the extraction of phenolic compounds invasive brown seaweeds: COSMO-RS and experimental studies*

11:30

OC114 Victoria Corregidor*Materials characterization using a nuclear microprobe and ion beam techniques*OC2.14 Pedro C. Rosado*Exploring PBP2a in MRSA β -lactam resistance*

11:45

OC1.15 Miguel D. Costa*Physical-chemical characterization of the surface of the leaves of *Camellia sasanqua*, *Camellia reticulata* and *Rhododendron ponticum**OC2.15 Amílcar D. Prata*Using DFT to design new organic electron transfer systems: redox potentials and free energy calculations*

12:00

IL3 Carlos Pereira

Electrochemical interfaces: from fundamentals to application

Chair: Manuela Silva

APRIL 5 - AFTERNOON

14:00

Poster Session

Gather Platform

Room 1

Chair: José Richard Gomes

Room 2

Chair: João Paulo Ramalho

15:15

OC1.16 João A. Baptista*Probucol solid forms via crystallization from solutions -the same but not quite the same*OC2.16 Gonçalo V. S. M. Carrera*Comprehensive chemoinformatic approach on the melting point profile of organic molecules*

15:30

OC1.17 Ana L. C. Brandão*FTIR studies of human skeletal remains from the roman city of Augusta Emerita (Merida, Spain)*OC2.17 Alexandre R. V. Pinto*Nanoscale graphene oxide models for the adsorption of biological molecules*

15:45

OC1.18 Pedro M. C. Matias*Triazine porous organic polymers for dye adsorption*OC2.18 Filipe M. C. M. Menezes*QMSAR: an energy decomposition analysis for large (bio)molecular systems*

16:00

Break

16:15

PL4 Michele Parrinello*The physics of catalysis*

Chair: Alexandre Magalhães

17:00

IL4 Célia Fonseca Guerra*Discovering in silico the uniqueness of hydrogen bonding*

Chair: Jorge Marques

17:30

Awards and Closing Session