

2nd Chem&Biochem Students Meeting

15th July 2022 | Faculty of Sciences, University of Lisbon (C8)

Final Program

Morning session

8:00 – 9:00 | Event Registration

9:00 – 9:15 | Formal Opening

Manuel Minas da Piedade | FCUL Chemistry and Biochemistry Department president

António Jorge Parola | SPQ – Portuguese Society of Chemistry

9:15 – 10:15 | Plenary Session I

PL1. Pedro Góis | Faculty of Pharmacy (ULisbon), iMed.Ulisboa - New Chemistries for Stimuli-Responsive Targeting Drug Conjugates

10:15 – 11:00 | Coffee break + Poster Session

11:00 – 12:00 | Oral Session I

O1. Sónia Santos - The O-demethylation of 4-alkylguaiacols by Cytochrome P450 AgcAEP4

O2. Jorge João - Purification of small heat shock protein nanocages: development of a chromatographic strategy

O3. Miriam Colaço - Kinetic and thermodynamic studies of synthetic receptor-ligand complexes in water

04. Nuno Oliveira - Novel US-CpHMD Protocol to Study the Protonation-Dependent Mechanism of the ATP/ADP Carrier

12:00 - 13:00 | Flash Pitches

- F1. Ricardo M. Silva Development and simulation of a purification platform based to deliver clinical-grade mesenchymal stem/stromal cell-derived extracellular vesicles
- F2. Ana R. Reis Electrochemical growth of Fe-MOF-74-type films
- F3. Susana Parreiras Design, production and characterization of antiviral proteins targeting SARS-CoV-2
- F4. Claúdio C. Fernandes Use of Hansen Solubility Parameters (HSPs) to investigate the solubility behavior of Hydrophilic and Hydrophobic NADES
- **F5. Marta Batista** Studying glycerol permeability through aquaporin from Plasmodium falciparum for the development of new antimalarial therapies
- **F6. Catarina Nascimento** On the Role of Polyphenols in the Hydration and Aggregation of Parkinson's Disease Related Peptides
- **F7. Beatriz Lopes** Understanding the molecular basis for human mitochondrial glutamyl-tRNA synthetase (hERAS2) deficiency – from recombinant protein production to structural characterization
- **F8. Duarte B. Clemente** *Preparation of oxygenated metabolites of agrochemical active ingredients*
- **F9. Alexandre Coelho** Development of a machine learning-based pipeline able to predict genes associated with diseases and cell processes using interpretable network embeddings
- F10. Luís C. Almeida Tailoring polydopamine and polynorepinephrine coatings for bacterial laccase based phenolic biosensor

13:00 – 14:15 | Lunch break

Afternoon session

14:15 – 15:15 | Plenary Session II

PL2. Inês Figueira | Medical School (UNovaLisboa) - Roadmap from blood to brain: low molecular weight phenolic metabolites as promising compounds against neurodegeneration

15:15 - 16:15 | Oral Session II

- **O5.** Sara Rosa A Machine Learning approach to optimise mRNA vaccines production
- O6. Ana C. Rocha Improving the reliability of oil spill identification by the accurate simulation of diagnostic ratios
- **07.** Bruno Calçada Towards a framework to unify in silico methods for endocrine disruptors identification: a machine learning model to predict thyroid peroxidase inhibition
- **O8.** Adhan Pilon Iron-cyclopentadienyl compounds with phosphane and N-based ligands show strong activity against a broad panel of human cancer cell lines

16:15 – 17:00 | Coffee break + Poster Session

17:00 – 18:15 | Round Table

Communication of Science : The challenges of the new generations of scientists

Adriano Cerqueira | Antena 1 / FCSH-UNL Joana Lobo Antunes | FCSH-UNL / IST-UL Vera Novais | Jornal Observador

18:15 – 18:30 | Closing Session & Awards

Coordinations of FCUL PhD in Chemistry and Biochemistry

Moderator: Marta Santos (FCUL)

Chair: Nuno Neng (FCUL)

Chair: António Figueira (FCUL)

Chair: Andreia Valente (FCUL)