

## LIST OF COMMUNICATIONS

### Plenary Lectures

#### PL1. Diana Aga

*Mind the Fluorine Gap: Analytical Methods for Unmasking PFAS and Closing Fluorine Mass Balance in Environmental Samples*

#### PL2. Boris Mizaikoff

*Probing the World with Good Vibrations*

#### PL3. António Rangel

*Flow-based systems as convenient tools for sample processing in environmental monitoring*

### Keynote Lectures

#### KN1. Rosário Domingues

*Advanced Lipidomics Analytical Solutions to Uncover the Value-Added Potential of Algae for Sustainable Bioproducts*

#### KN2. Tiago Rosado

*From Plasma to Oral Fluid: Advancing Non-Invasive Drug Monitoring in Clinical and Forensic Toxicology*

#### KN3. Ricardo Bettencourt da Silva

*Democratisation of the evaluation of the measurement uncertainty*



## Oral Communications

### OC1. Jorge Pereira

*Streamlining Analytical Workflows with  $\mu$ SPEed: Advanced Miniaturized Sample Preparation for Bioactive Compounds Extraction and LC-MS Integration*

### OC2. Rodrigo Pelixo Silva

*Monitoring Endocrine-Disrupting Compounds in Surface Waters: A Validated SPE and GC-MS/MS Approach*

### OC3. Joana Leal

*Mass spectrometry hyphenated techniques as essential tools to bioproduct exploration and valorization*

### OC4. Diana Cunha

*Innovative analytical approaches for biopharmaceuticals evaluation*

### OC5. Diana Lopes

*Seasonal variation of lipid content and fatty acid profiles in outdoor cultivated *Limnospira platensis* and *Microchloropsis gaditana**

### OC6. Rita Abreu

*Validation and application of a Near-Infrared Spectroscopy Method for Rapid Evaluation of Wine Quality*

### OC7. Ana L. Silva

*Strategies for viral nucleic acid sensing using fluorescent carbon and semiconductor quantum dots*

### OC8. Stephanie Morais

*Chestnut Honey Authentication by Electrochemical Genosensing*

### OC9. Ana Moreira

*Advanced extraction and analytical characterization of sustainable ingredients produced by an innovative biorefinery approach for *Ulva* sp.*



**OC10. Ana Rita Loureiro**

*Experimental Design for the Synthesis Optimization of Aqueous AgCuSe-Cys Nanocrystals*

**OC11. Pedro Matias**

*Integrated analytical and remediation strategy for multi-class antibiotics in water using HPLC-DAD and novel porous organic polymers*

**OC12. Mafalda Pereira**

*A flow method for monitoring potential cadmium and lead contamination in water*

**OC13. Miguel Neves**

*The Relationship Between Biomolecular Structure and Function for Advancing Biosensor Applications*

**OC14. Andreia Silva**

*Sirolimus Exposure During Breastfeeding: A Clinical Evaluation*

**OC15. Eliana Fernandes**

*Microelectrode-Based Electrochemical Biosensors for Real-Time Monitoring of Neurometabolic Markers*

**OC16. Ivana H. Šrámková**

*Nanofibrous SPE of NSAID in natural waters using 3D-printed sorbent holder prior HPLC analysis*

**OC17. Joseany Almeida**

*Poly(Nile blue)-ternary deep eutectic solvent films on carbon nanotube modified screen printed electrodes for hydroquinone and catechol*

**OC18. Francisca Ferreira**

*In-situ monitoring of nitrate levels in water samples using a specially designed microfluidic paper-based device*

**OC19. Tiago Conde**

*Characterization of isoprostanoids profile in auto- and heterotrophically grown *Chlorella sorokiniana**

**OC20. Carina Vieira**

*Do-It-Yourself Laser-Induced Graphene Electrodes for Assessment of CYP3A4 Catalysis*



## Flash Communications

30<sup>th</sup> March

### **FL1|P1. Karol Kubacki**

*Application of gold nanoparticles for the determination of gentamicin using a smartphone as a detection system*

### **FL2|P2. Rita Gouveia**

*Continuously stirred tank system employing laccase-modified biochar composites for diclofenac removal from wastewater*

### **FL3|P3. Beatriz Suordem**

*SPE-LC-MS/MS method for chiral and achiral azole fungicides: Optimization, drinking water monitoring and risk assessment spectrometry hyphenated techniques as essential tools to bioproduct exploration and valorization*

### **FL4|P4. Leonor Barroca**

*Monitoring Fluoroquinolones in Environmental Water Samples through an optimized and Validated Stereoselective SPE-LC-MS/MS Method*

### **FL5|P5. Beatriz Valadares**

*Magnetic TiO<sub>2</sub>/CQDs photocatalysis for sustainable antibiotics degradation in water*

### **FL6|P6. Luís Ferreira**

*From Recycled Graphite to Smart Concrete: Chemistry for the Future of Construction and a Sustainable Economy*

### **FL7|P7. Inês Quintela**

*EU-Relevant Micropollutants in Drinking Water: A SPE-LC-MS/MS Monitoring and Risk Assessment*



31<sup>st</sup> March

**FL8|P28. Anna Bonczyk**

*Electrochemical sensor dedicated to the analysis of  $\Delta^9$ -THC Optimization, Electrochemical behavior and Validation*

**FL9|P29. Mariana Neves**

*Drying method matters: analytical assessment of lipids, pigments and carbohydrates preservation in *Fucus vesiculosus*, *Gracilaria gracilis* and *Ulva* sp.*

**FL10|P30. Michelle Castanheira**

*Label-free impedimetric DNA-based sensor for the *Aspergillus fumigatus* detection*

**FL11|P31. Arine Trindade**

*Chemical characterization of essential oils from *Lavandula luisieri* (Rozeira) Rivas Mart.*

**FL12|P32. Inês Pereira**

*Design and Evaluation of a Disposable Lactate Biosensor for Point-of-Care Diagnostics*

**FL13|P33. João Pereira**

*Seasonal Variability in the Lipid Composition of *Microchloropsis gaditana* grown outdoors*

**FL14|P34. Raquel Teixeira**

*Size exclusion flow-based low-pressure chromatographic approach for the molecular weight in protein hydrolysates*



## Poster Communications

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**P8. Ana Machado**

*Operational envelopes for trace cadmium selective retention columns under field relevant conditions*

**P9. Raquel Mesquita**

*Monitoring stress levels with salivary alpha-amylase determination through a paper-based microfluidic analytical device*



**P10. Luís Passarinha**

*Dopamine and 3-Methoxytyramine Quantification by HPLC with Fluorescence Detection*

**P11. Nswadi Kinkela**

*Regional Variation in the Chemical Composition of the Essential Oils of *Lippia alba* and *Lippia multiflora* in Uíge Province, Angola*

**P12. Marta Barbosa**

*Towards Greener Sample Preparation Analytical Methods: Monitoring of Emerging Azole Antifungals in Water*

**P13. Bruno Castro**

*Aniline N-oxide rearrangement: an unexpected reactivity to afford an ortho-functionalized aniline*

**P14. Matilde Rodrigues**

*Bioactive Phenolic Compounds from Bell Pepper (*Capsicum annuum* L.) Aerial Parts with Prospective Application as Plant Biostimulants*

**P15. Andreia Silva**

*Exploring the Phenolic Composition of Broa and Breads: A Comparative Study*

**P16. Maria Cristina Antunes**

*Characterization of biscuits enriched with teas and microalgae*

**P17. Ricardo Silva**

*Identification of microplastics by micro-ATR-FTIR: Statistically sound assessment of identification criteria robustness*

**P18. Manuela Machado**

*Metabolite Profiling of Post-Biotics Obtained from Fish By-Products*

**P19. Érika Sousa**

*Effect of stabilizing agents on Ag<sub>2</sub>Te Quantum Dots for SEIRA-Based Detection of Venlafaxine*

**P20. Eduardo Costa**

*Bioactive Phenolics from Aromatic Plants: Chemical Signatures and Anti-Inflammatory Effects on Intestinal Cells*



**P21. Maria João Nunes**

*LC-MS/MS Based Screening of PFAS in Different Water Matrices: Method Development, Validation and Application*

**P22. Tomás Barros**

*Simultaneous quantification of Ag and Cu release from dry thin-film electrodes for biopotential monitoring*

**P23. Michelle Castanheira**

*Label-free impedimetric DNA-based sensor for detection of the CYP2D6\*10 polymorphism associated with antiepileptic drug metabolism*

**P24. Stephanie Morais**

*Liposome-mediated Electrochemical Genosensor for the detection of CYP2D6 (rs1065852) Single-Nucleotide Polymorphism*

**P25. Sara Silva**

*Comparative Proximate and Phenolic Characterization of Winemaking Sediments*

**P26. Inês Dias**

*Water sampling strategy for the quantification of iron, copper, zinc in dynamic aquatic systems*

**P27. Carina Vieira**

*Do-It-Yourself Laser-Induced Graphene Electrodes for Assessment of CYP3A4 Catalysis*

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*Size exclusion flow-based low-pressure chromatographic approach for the molecular weight in protein hydrolysates*

**P35. Leonor Barroca**

*Analytical methods for the determination of organic micropollutants in drinking water: A literature review in the scope of Directive 2020/2184*

**P36. Joana Leal**

*Efficiency of montmorillonite and modified montmorillonite in the adsorption of Paralytic Shellfish Poisoning toxins*

**P37. Luís Passarinha**

*HPLC-DAD Determination of salvinatorin A in the *Salvia divinorum* for in vitro oral bioavailability assessment*

**P38. Raquel Mesquita**

*A bi-parametric paper-based sensor for Al(III) and Fe(III) monitoring in well waters*

**P39. Matilde Rodrigues**

*Phenolic Extract of Eggplant (*Solanum melongena* L.) Aerial Biomass as a Potential Source of Metabolites for Interspecific Metabolite Transfer*

**P40. Guilherme Pinto**

*SEIRA-Based Detection of Venlafaxine in Water using Silver Selenides as Signal Enhancers*

**P41. Ricardo Silva**

*Evaluating the uncertainty from weighted quadratic regressions by weighted simulations*



**P42. Jorge Pereira**

*Development and Optimization of a Semi-Automated Micro-Solid-Phase Extraction Method,  $\mu$ SPEed, Coupled with UHPLC-PDA for Antibiotic Residue Analysis in Wastewater*

**P43. Rodrigo Pelixo Silva**

*Monitoring the activity of laccase covalently immobilized on SPIONs for the removal of endocrine disruptors from surface waters*

**P44. Maria Cristina Antunes**

*Nutritional and functional properties of gluten-free biscuits*

**P45. Melissa Giacomet Mezzalina**

*Multicomponent method to assess organic micropollutants in vegetation and soil*

**P46. Tânia Ribas**

*Overcoming traditional water sampling through analyte sampling and preparation in water monitoring*

**P47. Nuno Ratola**

*Development of a method to assess volatile methylsiloxanes in coastal microplastics and sand*

**P48. Nelson Silva**

*Analytical chemistry in the control of the environmental impact of lithium mines*

**P49. Oliwia Świerczyna**

*Application of a smartphone as a detection system in two-component analysis for the determination of silicates and phosphates*

**P50. Gercílio Chichava**

*Physicochemical Profile of Artisanal Distilled Beverages*

**P51. Maria João Nunes**

*LC-MS/MS Method Development and Validation for the Determination of Selected Human and Veterinary Pharmaceuticals in Water Matrices*

**P52. Fien Geens**

*Identification of potential biomarkers for chronic kidney disease using MS1 and MS2 data from untargeted metabolomics experiments*



**P53. Érika Sousa**

*Magnetic carbon applied in solar heterogeneous photo-Fenton in a flow system for the degradation of antibiotics in surface water*

**P54. Tiago Parracho**

**P55. Marta Otero**

*Magnetic Regenerable Waste-Based Activated Carbon for an Efficient Removal of Trace Concentrations of Sulfamethoxazole from Wastewater*

