

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 μ 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

30th 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

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 TiO₂/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



31st March

FL8|P28. Anna Bonczyk

Electrochemical sensor dedicated to the analysis of Δ^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

FL15|P35. Oliwia Świerczyna

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



Poster Communications

30th March

P1|FL1. Karol Kubacki

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

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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 Ag₂Te 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. Sara Fernandes

Development and validation of an HPLC method for simultaneous quantification of multiple anticoagulants in human plasma

31st March

P28|FL8. Anna Bonczyk

Electrochemical sensor dedicated to the analysis of Δ^9 -THC Optimization, Electrochemical behavior and Validation

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

P35|FL15. Oliwia Świerczyna

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

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, μ 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. Leonor Barroca

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

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

Synthesis and application of silver nanoparticles for colourimetric detection of ciprofloxacin

