



XXV Cross-border Meeting on Sensors and Biosensors

Thursday, 30th September 2021

PROGRAM

09:00h **Welcome**

09:15h **Aptamers and MIPs**

- Guillaume Daufouy (UPVD), “Development of Real Time Detection and Quantification Tools for Bacterial Spores Responsible of Food Spoilage – SPORES QUANTUM”
 - Xhensila Shkemi (URV), “Gold Nanoparticles Aptamer Assay for Nandrolone Detection”
 - Anna Herrera-Chacon (UAB), “Biomimetic MIP-Based Electronic Tongue for Biogenic Amine Sensing”
 - Nerea de Mariscal-Molina (ICN), “Electrosynthesis of MIP for the Detection of Kynurenic Acid for ACLF”
-

09:55h **Questions (moderator: Meritxell Rovira (CNM))**

10:15h Materials

- Franc Paré (UAB), “Single-Walled Carbon Nanotube-Based Sensor for Direct Amperometric H₂S Detection”
 - Alexandre Moreno Diaz (CNM), “Fibroin Functionalization of ISFETs for the Production of Long-Life (Bio)Sensors”
 - Maria A. Tapia (UB), “Bismuthene-Based Sensors for the Voltammetric Determination of Metal Ions”
 - Laura A. Uribe (URV), “Cyclodextrins as Supramolecular Antidotes: Inclusion Complexes of Veratridine Neurotoxin with Different Cyclodextrins Enhance Cell Viability in Neuroblastoma 2-a Cells”
-

10:55h Questions (moderator: Jose Marrugo-Ramírez (ICN))

11:15h Coffee Break

11:45h Fabrication techniques

- María Jesús Ortiz-Aguayo (UAB), “Thyroid Hormones Determination by Inkjet Printing Sensing Platforms Based on Graphene Hybrid Nanobiomaterials”
 - Massimo Urban (ICN), “Challenges and Opportunities of Inkjet Printing with a Consumer Setup for Biosensing Application”
-

12:05h Magnetic beads

- Melania Mesas (UAB), “Magneto-Actuated Immunoassay and Magneto-Actuated Electrochemical Immunosensor for Enhancing the Detection of *Legionella pneumophila* Retained in Filters
 - Greta Gaiani (IRTA), “Biosensor for the Detection of the Ciguatoxin-Producing Species *Gambierdiscus australes* and *Gambierdiscus excentricus*”
-

12:25h Questions (moderator: Xhensila Shkemi (URV))**12:45h Transduction strategies**

- Chloé Aymard (UPVD), “Development of a New Electrochemical Immunosensor for a Rapid and Sensitive Detection of Enrofloxacin in Meat Samples”
 - Zaida Herrero-Medina (URV), “Strategies to Increase the Efficiency of Photosynthetic Microorganism-Based Biophotovoltaic Cells”
 - Mounira Alkassar (IRTA), “Electrochemical Detection of Viable Neuroblastoma (Neuro-2a) Cells Using a Tetrazolium Salt”
 - Cansu Pinar Yenice (URV), “Carborane- or Metallacarborane-Linked Nucleotides for Redox Labeling. Orthogonal Multipotential Coding of all Four DNA Bases for Electrochemical Analysis and Sequencing”
 - Aude Gandar (UPVD), “Spectroelectrochemical Quantification of Sunscreens”
-

13:35h Questions (moderator: Arnau Pallarès (UAB))

13:55h Lunch Break

15:00h **Poster session** (facilitators: Antonio Calvo (UAB), Clara Pérez (UB), Laura A. Uribe (URV), Mireia Burdó (CNM) and Chloé Aymard (UPVD))

15:30h **Lateral and vertical flow assays**

- Jennifer Marfà (UAB), “Biomimetic Polymers as Test Line in Nucleic Acid Lateral Flow Assays”
 - Liming Hu (ICN), “Selection and Characterization of Bioreceptors to Develop Nanoparticle-Based Lateral-Flow Immunoassays under COVID-19 Pandemic”
 - Mireia Bernuz (UAB), “Interferon Gamma Detection in Nucleic Acid Lateral Flow of Activated Lymphocytes”
 - Arnau Pallarès-Rusiñol (UAB), “Vertical Flow Assay for Exosomes Characterization Based on their Intrinsic Enzyme Activity”
-

16:10h Questions (moderator: Greta Gaiani (IRTA))

16:30h **Microsystems and devices**

- Elena Alberto Serrano (UAB), “Disposable Analytical Microdevice for Home Monitoring of Urea in Blood”
- Meritxell Rovira (CNM), “Validation of a Flow System for the Simultaneous Quantitative Analysis of Several Target Analytes in Sweat Samples”
- Alex Pascual-Esco (UAB), “Automatic Warning Microanalyser for Heavy Metals Monitoring in Natural Waters”

- Josune J. Ezenarro (CNM), “Screw-Like Photonic Sensor for in-Line Biofilm Monitoring in Water Networks”
 - Beatriz Rebollo-Calderón (UAB), “Point-of-Care Microanalyzer for Monitoring Metabolic Hereditary Diseases”
 - Mireia Burdó-Masferrer (CNM), “16s rRNA Hybridisation Assay for the Detection of Escherichia coli with a Portable and Automated Lab-on-a-Chip Platform”
-

17:30h Questions (moderator: Núria Serrano (UB))

18:00h **Prizes** (jury: Mar Puyol (UAB), Thierry Noguer (UPVD), Cecilia Jiménez-Jorquera (CNM), Cristina Ariño (UB) and Mònica Campàs (IRTA))

18:10h **Closure**

REGISTRATION

[Registration here](#)