



## Program draft v2.0

### Wednesday, 6<sup>th</sup> of May 2026

**19:30-21:00 – Welcoming reception**

### Thursday, 7<sup>th</sup> of May 2026

**09:00-09:30 - Welcome and introduction to the Water Safety Symposium**

Symposium Organizing Committee: Jonas Gurauskis, Scott Mitchell, Filomena Silva  
Mayor of Benasque: D. Manuel Mora

**09:30-10:00 - Opening lecture: Science, policy and innovation for safeguarding Pyrenean water resources under global change**

Enrique Navarro - Instituto Pirenaico de Ecología - IPE-CSIC, Spain

**10:00 - Session 1: Science for policy**

**Chair: Alba De Martino**

**10:00-10:30 - Invited lecture: From Science to Regulation, bridging the gap**

Blanca Serrano - European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC), Belgium

**10:30-10:50 - Oral presentation: From water management to water resilience: a cross-sector innovation perspective**

María Benito Fernández – Cluster for the Efficient Use of Water – ZINNAE, Spain

**10:50-11:30 - Round table: Science for policy: Valuing the Water Cycle as a Global Common Good**

Moderator: Alba De Martino, plus invited participants

**COFFEE BREAK**

**12:00 - Session 2: Water resources**

**Chair: Ana María Lopez Sabirón**

**12:00-12:20 - Oral presentation: UPSTREAM - circular and bio-based solutions for the ultimate prevention of plastics in rivers integrated with elimination and monitoring technologies**

Ana María Lopez Sabirón – AITIIP Technological Center, Spain



**12:20-12:40 – Oral presentation: Rotating disk electrode enriched with nanoparticles for the detection of ultratrace amounts of bisphenol A in tap water**

Nimat Shama - Vlaamse Instelling voor Technologisch Onderzoek – VITO, Belgium

**12:40-13:00 – Oral presentation: Advancing bio-based and biodegradable as more sustainable solutions to mitigate plastic and microplastic pollution in European river systems**

Ana María Lopez Sabirón – AITIIP Technological Center, Spain

**13:00-13:20 – Oral presentation: Beyond classical treatment, permanent degradation of OMP with UVC-H<sub>2</sub>O<sub>2</sub>**

Kaspar Groot Kormelinck - Van Remmen UV-Technology, The Netherlands

## **LUNCH BREAK**

**15:00 - Session 3: Emerging contaminants and Challenges**

**Chair: Stefania Federici**

**15:00-15:30 - Invited lecture: Characterizing and tracing micro and nano-plastics**

Stefania Federici - University of Brescia, Italy

**15:30-15:50 – Oral presentation: Emerging contaminants in the industry (micro-, nano-plastics): tendencies and challenges for enforcement**

María Alicia Cardete García - Repsol Techlab, Spain

**15:50-16:10 – Oral presentation: Tracking Microplastics in Rivers: Modeling Transport and Environmental Fate**

Pablo Vallés – Aragon Institute of Engineering Research – I3A, Spain

**16:10-16:30 – Oral presentation: Spatial and temporal variability of microplastics in a lacustrine network in northern Spain**

Inés de la Parra Muñoz - Instituto Pirenaico de Ecología – IPE-CSIC, Spain

## **COFFEE BREAK**

**17:00- Session 3 (cont.): Emerging contaminants and Challenges**

**Chair: Patrick Allard**

**17:00-17:30 - Invited lecture: PFAS: novel toxicity mechanisms based on their surfactant properties**

Patrick Allard - University of California, Los Angeles (UCLA), United States of America

**17:30-17:50 – Oral presentation: Current challenges in PFAS analysis: from sample preparation to regulatory compliance**

Jana Kovacova – ALS, Czech Republic

**17:50-18:10 – Oral presentation: From urban wastewater to rivers: insights into the behaviour of pharmaceutical and antibiotic residues in the POCTEFA territory**

Samuel Moles – University of Zaragoza, Spain



**18:10-18:30 – Oral presentation: Modelling the transport and fate of emerging contaminants in shallow water flows**

Mario Morales-Hernández – University of Zaragoza, Spain



**Friday, 8<sup>th</sup> of May 2026**

**09:00 - Session 4: Advanced Materials for Water Purification**

**Chair: Sara Rojas Macías**

**09:00-09:30 - Invited lecture: Metal Organic Frameworks (MOFs) for water purification**

Sara Rojas Macías - University of Granada, Spain

**09:30-09:50 – Oral presentation: Continuous photocatalytic removal of acetonitrile using biocompatible Fe-MOFs**

Jonathan Machí-Hernández – University of Granada, Spain

**09:50-10:10 – Oral presentation: Development of thin-film nanocomposite membranes with Metal-Organic Frameworks for PFAS removal from drinking water**

Nabila Putri - Instituto de Nanociencia y Materiales de Aragón – INMA-CSIC, Spain

**10:10-10:30 – Oral presentation: Enzyme engineering for programmable immobilization on polyoxometalate-ionic-liquid-coated ceramic scaffolds for BHET removal from wastewater**

Mariana Armendariz - Center for Cooperative Research in Biomaterials- CIC biomaGUNE, Spain

**10:30-10:50 – Oral presentation: Polyoxomolybdate-Based Hybrid Materials as Antimicrobial Surfaces to Prevent Biocolonization in Water Systems**

Mariella Malefioudaki - Instituto de Nanociencia y Materiales de Aragón – INMA-CSIC, Spain

**COFFEE BREAK**

**11:30 – Session 5: Smart Devices and Sensors**

**Chair: Jonas Gurauskis**

**11:30-12:00 - Invited lecture: From Linear to Circular: Upcycling industrial by-products into sustainable Silicon Carbide (SiC) membranes for wastewater treatment**

Victor Candelario – University of Sevilla, Spain

**12:00-12:20 – Oral presentation: Design and computational fluid dynamic optimization of spiral passive filters for micro and nanoplastic separation in wastewater treatment**

Jesús Antonio Fuentes García - Instituto de Nanociencia y Materiales de Aragón – INMA-CSIC, Spain

**12:20-12:50 – Oral presentation: MOFs & COFs: next generation materials for water remediation**

Pedro.García De Santos - Institutos Madrileño de Estudios Avanzados – IMDEA, Spain

**12:50-13:10 – Oral presentation: Porous inorganic membranes functionalized with POM-ILs for the removal of micro- and nanoplastics from water**

Nicolás Gracia-Vallés - Instituto de Nanociencia y Materiales de Aragón – INMA-CSIC, Spain



## LUNCH BREAK

### **15:00 - Session 6: Sustainable and Energy Efficient Approaches**

**Chair: Scott G. Mitchell**

#### **15:00-15:30 - Invited lecture: Developing microbial approaches for plastic remediation**

Eva C. Sonnenschein - Swansea University, United Kingdom

#### **15:30-15:50 – Oral presentation: Recovery of Phosphorus and Magnesium from wastewater using biochar obtained through pyrolysis of paper and pulp industry sludge**

Saínza Arufe – Fundación CETIM, Spain

#### **15:50-16:10 - Oral presentation: Metal-organic framework based biopolymeric membranes for metals recovery from polluted waters**

Roberto Fernández de Luis - Basque Center for Materials, Applications & Nanostructures, Spain

#### **16:10-16:30 – Closing of the Water Safety Symposium**

Symposium Organizing Committee: Jonas Gorauskis, Scott Mitchell, Filomena Silva

