



**Sunday, November 24, 2024**

**13:00 - 17:00**

*World of Wine  
Central Square*

**Walking Tour through Historic Places of Vila Nova de Gaia and Porto, Social Event 1**  
*or*

**Visit to one of the World of Wine Museums, Social Event 1**  
*In the case of bad weather conditions (Rainy day)*



**Monday, November 25, 2024**

**07:30 - 08:30**

*Lobby*

**Registration**

**08:30 - 09:15**

*Room Nasoni*

**Opening Ceremony**

**Vitor Vilar**, *Host and Chair, Faculty of Engineering of the University of Porto, Portugal*  
**Baltazar de Castro**, *Director of REQUIMTE, Faculty of Sciences of the University of Porto, Portugal*  
**Fernando Pereira**, *Director of the Department of Chemical and Biological Engineering, Faculty of Engineering of the University of Porto, Portugal*  
**Joaquim Faria**, *Director of LSRE-LCM, Faculty of Engineering of the University of Porto, Portugal*  
**Margarida Quina**, *Director of CERES, University of Coimbra, Portugal*  
**Miguel Lemos**, *Chairman/CEO, Águas de Gaia, Portugal*

**09:15 - 10:30**

*Room Nasoni*

**Workshop on Publishing Perspectives: Q&A in Chemical and Environmental Engineering Publishing**

Chaired by **Suresh Pillai**, *Atlantic Technological University, Ireland*

09:15 - 09:45

**How to Become a Successful and Responsible Author: Editor Perspectives**  
**Despo Fatta-Kassinou**  
*University of Cyprus, Cyprus*

09:45 - 10:00

**Elsevier's Article Transfer Service and Its Impact on Environmental and Chemical Engineering Journals**  
**Giovanni Palmisano**  
*Khalifa University, United Arab Emirates*

10:00 - 10:30

**Round Table Discussion**

**10:30 - 11:00**

*Lobby*

**Poster session & Coffee break (sponsored by Elsevier) & exhibition**

**Monday, November 25, 2024 (cont.)****11:00 - 12:30** *Room Nasoni***Workshop on European Directives on Drinking Water, Water Reuse and Urban Wastewater Treatment**Chaired by **Loïc Charpentier** (Water Europe, Belgium) and **Susana Rodrigues** (ERSAR, Portugal)

11:00 - 11:15

**EU Directive on Drinking Water: News and Challenges****Susana Rodrigues***Entidade Reguladora dos Serviços de Águas e Resíduos (ERSAR), Portugal*

11:15 - 11:30

**Water Reuse in EU: Regulation on Minimum Requirements and JRC Guidelines on Risk Management Plan****Loïc Charpentier***Water Europe, Belgium*

11:30 - 11:45

**EU Directive on Urban Wastewater Treatment: News and Challenges****Maria João Rosa***Laboratório Nacional de Engenharia Civil, Portugal*

11:45 - 12:00

**On the Overall situation of Poly- or Perfluoroalkyl substances (PFASs) including Fluoropolymers****Bruno Ameduri***Institute Charles Gerhardt (CNRS), France*

12:00 - 12:30

**Round Table Discussion****12:30****Winter School Official Photo** *WOW Main Square***12:30 - 14:00****Lunch Break** *Lobby Atkinson***14:00 - 15:15** *Room Nasoni***High-Throughput Methodologies for the Determination of DBPs, CECs, PFAS, Microplastics, ARB and ARGs**Chaired by **Félix Hernández**, University Jaume I, Spain

14:00 - 14:15

**Targeted and Non-targeted Analysis of Disinfection Byproducts in Drinking Water****Maria José Farré***Catalan Institute for Water Research, Spain*



**Monday, November 25, 2024 (cont.)**

- 14:15 - 14:30      **Analytical Methodologies for Contaminants of Emerging Concern (CECs), including Per-/poly-FluoroAlkylated Substances (PFASs)**  
**José Benito Quintana**  
*University of Santiago de Compostela, Spain*
- 14:30 - 14:45      **Challenges and Methodologies for Sampling and Determination of Microplastics in Wastewaters, Inland Surface Waters, and Marine Waters**  
**Maria Augusta de Sousa/Juan Santos Echeandía**  
*Águas e Energia do Porto, Portugal/Spanish Institute of Oceanography, Spain*
- 14:45 - 15:00      **Methodologies for the Determination of Antibiotic-Resistant Bacteria (ARB) and Antibiotic-Resistance Genes (ARGs) in Environmental Samples**  
**Olga Nunes**  
*Faculty of Engineering of the University of Porto, Portugal*
- 15:00 - 15:15      **Real-Time Monitoring**  
**Rogério Nunes Nogueira**  
*Instituto de Telecomunicações, Portugal*
- 15:15 - 16:00**      **Environmental and Health Impacts and Prevention Measures**  
 *Room Nasoni*      Chaired by **Paola Verlicchi**, University of Ferrara, Italy
- 15:15 - 15:30      **Ecotoxicology of Contaminants of Emerging Concern: Key Challenges and Approaches**  
**Miguel Santos**  
*Interdisciplinary Centre of Marine and Environmental Research, Portugal*
- 15:30-15:45      **Understanding DBPs: Ranking, Environmental Impacts and Associated Health Risks**  
**Daniela Meilmann**  
*DHVMED, Israel*
- 15:45 - 16:00      **Back to Basics: Key Principles and Approaches in Environmental Risk Assessment**  
**Vera Homem**  
*Faculty of Engineering of the University of Porto, Portugal*
- 16:00 - 16:30**      **Coffee break & Posters & Exhibition**  
 *Lobby*
- 16:30 - 18:00**      **Technologies for Control of DBPs, CECs, PFAs, Microplastics, ARB and ARGs**  
 *Room Nasoni*      Chaired by **Salomé Soares**, Faculty of Engineering of the University of Porto, Portugal



**Monday, November 25, 2024 (cont.)**

- 16:30 - 16:45      **Ozone Fundamentals**  
**Sylvie Baig**  
*Suez, France*
- 16:45 - 17:00      **Ozone and Advanced Oxidation Processes – Key Features**  
**Sylvie Baig**  
*Suez, France*
- 17:00 - 17:15      **Hybrid Adsorption/Membrane Processes for Controlling Organic Contaminants of Emerging Concern in Urban Water Treatment**  
**Maria João Rosa**  
*Laboratório Nacional de Engenharia Civil, Portugal*
- 17:15 - 17:30      **Adsorption Processes for the Removal of Contaminants of Emerging Concern and Disinfection By-Products**  
**Dario Frascari**  
*University of Bologna, Italy*
- 17:30 - 17:45      **Biological Removal and Recovery of Micro/plastics**  
**Maria Reis**  
*NOVA School of Science & Technology, Portugal*
- 17:45 - 18:00      **Nature-Based Solutions - Natural and Constructed Wetlands to Remove Pollutants and Potentiate Water Reuse**  
**Marisa Almeida**  
*Interdisciplinary Centre of Marine and Environmental Research, Portugal*
- 18:00 - 19:00**      **CFD, LCA/LCC and Digitalization**  
 *Room Nasoni*      Chaired by **Susana Gonzalez Blanco** (CETAQUA, Spain) and **Domenico Santoro** (USP Technologies, Canada)
- 18:00 - 18:15      **Seeing the Light, the Microbes, and the Dead Zones: Computational Fluid Dynamics (CFD) for Advanced Disinfection and Oxidation Process Analysis**  
**Domenico Santoro**  
*USP Technologies, Canada*
- 18:15 - 18:30      **Life Cycle Thinking Applied to Drinking Water Treatment**  
**Rafael Laurenti**  
*IVL Swedish Environmental Research Institute, Sweden*



**Monday, November 25, 2024 (cont.)**

- 18:30 - 18:45      **Digitalization in the Water Sector: Development of a Reliable Real-Time Virtual Trihalomethane Sensor Solution for Drinking Water Facilities**  
**Susana Gonzalez Blanco**  
*CETAQUA, Spain*
- 18:45 - 19:00      **Digitalization in the Water Sector**  
**Lydia Vamvakeridou-Lyroudia**  
*University of Exeter, United Kingdom*
- 19:00 - 20:00      **Porto de Honra (Welcome Drink)**  
**Women's Engineering Tuna of the University of Porto**  
(TUNAFE – Tuna Feminina de Engenharia da Universidade do Porto), Social Event 2  
 *Looby*



**Tuesday, November 26, 2024**

- 08:00 - 10:30**      **Workshop on Wastewater Treatment and Reuse - Part I**  
 *Room Nasoni*      Chaired by **Maria João Rosa** (LNEC, Portugal) and **Célia Manaia** (Universidade Católica Portuguesa, Portugal)
- 08:00 - 08:20      **Water Reuse Strategies in Portugal**  
**Nuno Brôco**  
*Águas do Tejo e Atlântico, Portugal*
- 08:20 - 08:30      **Status Implementation of EU Reuse Regulation 2020/741 in Germany - Wastewater Reuse for Agriculture and Urban Irrigation**  
**Achiem Ried**  
*Xylem, Germany*
- 08:30 - 08:40      **The Reuse of Reclaimed Water in Italy: Polishing Treatments, Destination, Risk Assessment**  
**Paola Verlicchi**  
*University of Ferrara, Italy*
- 08:40 - 08:50      **Challenges Associated with Wastewater Treatment and Reuse in Brazil**  
**Camila Amorim**  
*Federal University of Minas Gerais, Brazil*
- 08:50 - 09:00      **Overview of the EU-India Collaboration on Water Treatment Technologies**  
**Suresh Pillai**  
*Atlantic Technological University, Ireland*
- 09:00 - 09:10      **Reclaimed Water Distribution: Chlorine Decay Modelling and Case Study Application**  
**B-WaterSmart - H2020**  
**Rui Viegas**  
*Laboratório Nacional de Engenharia Civil, Portugal*



**Tuesday, November 26, 2024 (cont.)**

- 09:10 - 09:20 **Innovative Strategies for Industrial Wastewater Reuse: A Case Study and Practical Approaches**  
**Sérgio Silva**  
*ADVENTECH, Portugal*
- 09:20 - 09:30 **An Overview of Project GIATEX - Intelligent Water Management in the Textile and Clothing Industry** [GIATEX - PRR](#)  
**Fernando Pereira**  
*Faculty of Engineering of the University of Porto, Portugal*
- 09:30 - 09:40 **Closed-Loop Water Systems in Textile Industrial Districts: Orchestrated Removal of Emerging Pollutants from Textile Wastewater** [CASCADE - Life](#)  
**Beatrice Cantoni**  
*Politecnico di Milano, Italy*
- 09:40 - 09:50 **AWARE - Aquaponics from Wastewater Reclamation** [AWARE - Horizon Europe](#)  
**Célia M. Manaia**  
*Universidade Católica Portuguesa, Portugal*
- 09:50 - 10:00 **Advancing Water Purification: PANIWATER's Innovations in Tackling Contaminants of Emerging Concern for Safe Irrigation and Drinking Water** [PANIWATER - India-EU H2020](#)  
**Despo Fatta-Kassinou**  
*University of Cyprus, Cyprus*
- 10:00 - 10:10 **Anaerobic Processes Combined with Membranes to Ensure Water Reuse and Net Energy Production**  
**Nicolás Morales**  
*Aqualia, Spain*
- 10:10 - 10:30 **Round Table Discussion**
- 10:30 - 11:00** **Poster Session & Coffee Break & Exhibition**  
 *Lobby*
- 11:00 - 12:30** **Workshop on Wastewater Treatment and Reuse - Part II**  
 *Room Nasoni*  
Chaired by **Nuno Brôco**, Águas do Tejo e Atlântico, Portugal



**Tuesday, November 26, 2024 (cont.)**

- 11:00 - 11:10      Wastewater Regeneration by the Solar Photo-Fenton Process: From the Lab to the Plant. LIFE ULISES & LIFE PHOENIX projects      [ULISES & PHOENIX - LIFE](#)  
**José Luis Casas**  
*University of Almería, Spain*
- 11:10 - 11:20      Demonstrating the Control of Pharmaceutical Compounds in Large Activated Sludge Wastewater Treatment Plants      [Fitting - LIFE](#)  
**Catarina Silva**  
*Laboratório Nacional de Engenharia Civil, Portugal*
- 11:20 - 11:30      Potential of Decentralized Wastewater Treatment for Preventing the Spread of Antibiotic Resistance, Organic Micropollutants, Pathogens and Viruses      [PRESAGE - WaterJPI](#)  
**Francisco Omil**  
*University of Santiago de Compostela, Spain*
- 11:30 - 11:40      Control, Treatment and Reduction of Microplastics and Emerging Pollutants in Urban Wastewater and the Transboundary Coastal Environment - The BlueWWater Project and Rede NOR-WATER – POCTEP  
[BlueWWater and Rede NOR-WATER – INTERREG POCTEP](#)  
**Patricia Quinta Pérez**  
*CETMAR, Spain*
- 11:40 - 11:50      Transnational Strategy for the Detection and Prevention of Water Pollution by PFAS  
[ALERT-PFAS – INTERREG SUDOE](#)  
**João M. M. Araújo**  
*NOVA School of Science and Technology, Portugal*
- 11:50 - 12:00      Advancing Municipal Wastewater Disinfection with Novel Disinfectants and Advanced Process Control Strategies  
**Domenico Santoro**  
*USP Technologies, Canada*
- 12:00 - 12:10      Effluent Ozonation in Urban Wastewater Treatment Plants – A Growing Opportunity To Exploit Synergies in the Activated Sludge Process  
**Jan Mante**  
*Air Liquide, Germany*
- 12:10 - 12:20      The Issues of Using Oxygen from Electrolysis for Ozone Generation  
**Arnaldo Oliveira Araújo**  
*Air Liquide, Portugal*



**Tuesday, November 26, 2024 (cont.)**

- 12:20 - 12:30      **Preserving Fresh Produce Quality: The Crucial Role of Process Water**  
**Camilla Khrulova**  
*Arrow Lake AB, Sweden*
- 12:30 - 14:00**      **Lunch Break**  
 *Lobby Atkinson*
- 14:00 - 16:00**      **Co-Creation Workshop: Future Challenges in Drinking Water Sector - Public  
Engagement, Communication and Raising Awareness - Part I**  
 *Room Nasoni*  
Chaired by **Rui Martins** (University of Coimbra, Portugal) and **Maria José Farré** (ICRA, Spain)
- 14:00 - 14:15      **ZeroPollution4Water Cluster – Goals, Challenges and projects involved**  
**Loïc Charpentier**, *Water Europe, Belgium*  
**Rui Martins**, *University of Coimbra, Portugal*
- 14:15 - 14:30      **The Regulatory Approach to Disinfection By-Products**  
**Luís Simas**  
*Entidade Reguladora dos Serviços de Águas e Resíduos (ERSAR), Portugal*
- 14:30 - 14:40      **Upgrading Water Treatment Plants to Comply with the DBPs Standards Introduced by the  
Directive (EU) 2020/2184**  
**Paolo Roccaro**  
*University of Catania, Italy*
- 14:40 - 14:50      **The Perfect Balance on Improving Water Quality by Reducing Bioproduct, while CAPEX Drops  
Down and Operations in Disinfection Benefits**  
**Vincenzo Rocca**  
*Lutz Jesco GmbH, Portugal*
- 14:50 - 15:00      **O<sub>3</sub>+BAF (Biological Activated Filter) to make Fewer Disinfection Byproducts**  
**Cristian Carboni**  
*De Nora Water Technologies Italy S.r.l., Italy*
- 15:00 - 15:10      **Ozone Strong Water, an Innovative Side-Stream Injection Technology for Ozone Applications  
as Micropollutant Abatement and Disinfection**  
**Jan Mante**  
*Air Liquide, Germany*
- 15:10 - 15:30      **DBPs - A Showcase from Around the World: Prevention Measures and Practices**  
**Daniela Meilmann**  
*DHVMED, Israel*





**Tuesday, November 26, 2024 (cont.)**

- 15:30 - 16:00      **Unravelling Consumers' Awareness and Engagement with Residential Water Quality: The Case of Disinfection By Products (DBPs)**  
**Evangelos Pournaras**  
*University of Leeds, UK*
- 16:00 - 16:30**      **Poster Session & Coffee Break & Exhibition**  
 *Lobby*
- 16:30 - 17:30**      **Co-Creation Workshop: Future Challenges in Drinking Water Sector - Public Engagement, Communication and Raising Awareness - Part II**  
 *Room Nasoni*  
Chaired by **Rui Martins** (University of Coimbra, Portugal) and **Maria José Farré** (ICRA, Spain)
- 16:30 - 17:15      **RoundTable Discussion**  
Topics to be Discussed: Technologies for DPBs; Preventive Measures; Public Engagement (How to Increase the Acceptance of Tap Water)  
Discussion Facilitators: **Rui Martins; Evangelos Pournaras; Luísa Durães; Daniela Meilman; Luís Simas; Loïc Charpentier; Maria José Farré; Beatrice Cantoni; Paolo Roccaro; Jaume Cotoí; Miguel Lemos; Jan Mante; Cristian Carboni; Vincenzo Rocca**
- 17:15 - 17:30      **Take-Home Messages**
- 17:30 - 17:50**      **Awards Ceremony and Final Remarks**  
*Ana Pereiro, Host and Chair, NOVA University Lisbon, Portugal*  
*João Araújo, Host and Chair, NOVA University Lisbon, Portugal*  
*Luísa Durães, Host and Chair, University of Coimbra, Portugal*  
*Rui Martins, Host and Chair, University of Coimbra, Portugal*  
*Rita Lado, Local Organizing Committee, Faculty of Engineering of the University of Porto, Portugal*  
*Susana Seabra, Host and Chair, Sociedade Portuguesa de Inovação, Portugal*  
*Vítor Vilar, Host and Chair, Faculty of Engineering of the University of Porto, Portugal*
- 18:00 - 20:00**      **Visit to Ferreira Wine Cellars, Social Event 3**  
 *Lobby*
- 20:00 - 02:00**      **Dinner at Sancho Panza (Cais de Gaia) & Drink at Galerias (Porto), Social Event 4**  
 *Ferreira Wine Cellars or WOW Main Square*