Time	08/07/2024 (Monday)		
10:00 – 11:00	**Conference Registration** (Hallway)		
11:00 – 12:15	**Opening Ceremony** (S.C.003) **Welcome** by Michiel Van Tendeloo and Tim Van Winckel in name of the Organising Committee **Welcome** by prof. Ronny Blust, Vice Rector Research of the University of Antwerp **Keynote** by prof. Ilse Smets (KU Leuven) "Activated sludge bioflocculation research: from failures to flocs"		
12:15 – 13:00	**Partner talks** (S.C.003) **PIDPA** **Sweco**		
13:00 – 13:45	**Lunch** (Hallway)		
13:45 – 14:30	**Posters** (Hallway)		
Room	S.C.001	S.C.002	S.C.003
Session	**1. Water Quality Analysis and Monitoring I** ***Chair: Janelcy Alferes***	**2. Nutrient removal and recovery** ***Chair: Siegfried Vlaeminck***	**3. Modelling and simulation** ***Chair: Saba Daneshgar***
14:30 – 15:00	**Water quality monitoring: challenges, opportunities and best practices** Janelcy Alferes	**To nitrify or not to nitrify: Routes to sustainably manage nitrogen in wastewater** Siegfried Vlaeminck	**Transition of urban water system modelling to digital twin applications** Saba Daneshgar
15:00 – 15:20	**Water chemistry analysis using variable selection methods and industrial cooling water data sets** Chamanthi Jayaweera (*UGent*)	**Combined phosphorus and EPS recovery from aerobic granular sludge WWTPs** Nouran Bahgat (*Wetsus*)	**Dynamic modelling of ion exchange for a smart and resource-efficient operation** Daniel Illana González (*UGent*)
15:20 – 15:40	**Towards an optimal coagulant dosage model: describing the size distribution dynamics in jar tests** Diogo Abreu (*UGent*)	**Ammonia recovery from real reject water via a combination of bipolar membrane electrodialysis and electrodialysis reversal** Iosif Kaniadakis *(TUDelft)*	**Design activated sludge bioreactor with minimal N2O emissions and best effluent quality** Simon Ducchi (*AM-Team*)
15:40 – 16:00	**Evaluating the efficacy of several extraction kits for genomic DNA isolation from periphyton microbial communities used for water quality monitoring** Lena Brouwir *(CEBEDEAU)*	**A novel thermophilic nitritation process for sustainable nitrogen removal** Mingsheng Jia (*UGent*)	**Is model selection relevant to predict denitrification performance in WRRFs?** David Fernandes del Pozo (*UGent*)
16:00 – 16:20	**Size exclusion chromatography-total organic carbon analysis for natural organic matter in fresh waters: method validation and application** Elien Laforce *(UGent)*	**Nitrogen removal from source-separated urine with partial nitritation/anammox in a rotating biological contactor** Iris De Corte (*UAntwerpen*)	**Modeling Anaerobic digester for enhancing mixing performances** Simon Ducchi (*AM-Team*)
16:20 - 16:45	**Walk to Opening Reception**		
16:45 – 19:45	**Opening reception** (Lokeend: Generaal Belliardstraat 11, 2000 Antwerpen)		

Time	09/07/2024 (Tuesday)		
08:30 – 09:00	**Conference Registration** (Hallway)		
Room	S.C.001	S.C.002	S.C.003
Session	**4. Process Control and Optimization** ***Chair: Kimberly Solon***	**5. Innovative technologies** ***Chair: Michel Caluwé***	**6. Advanced Processes for (Waste)Water Treatment** ***Chair: Pieter Naert***
09:00 – 09:30	**[R]evolutionizing Wastewater Treatment: The Journey, Insights, and Opportunities in Process Control** Kimberly Solon	**From practice to theory: Advancements in Aerobic Granular Sludge Systems** Michel Caluwé	**The potential of electrochemical technologies for advanced water treatment – a practical perspective** Pieter Naert
09:30 – 09:50	**Control of purple bacteria in raceway-pond reactors: how to deal with lake of knowledge of operators using model predictive control** Ali Moradvandi (*TUDelft*)	**Granulation of industrial activated sludge by application of microbial selection and effect of variable OLR on sludge properties** Mokhtiar Ahmed (*UAntwerpen*)	**Integrated spectral based monitoring, optimization and control of the combined ozonation and powdered activated carbon adsorption process to remove organic micropollutants from secondary effluent** Tao Zhang (*UGent*)
09:50 – 10:10	**Impact of feeding strategies on aerobic granulation** Zehao Li (*UAntwerpen*)	**LUCAS ® AGS technology: unraveling the impact of different feeding strategies while treating brewery wastewater** Núria Mata Calabuig (*Waterleau*)	**Pilot plant operation for the micropollutant removal in wastewater by coupling photo-Fenton and GAC filtration processes** Paula Núñez Tafalla (*University of Luxembourg*)
10:10 – 10:30	**Nitrification optimization in a trickling filter through CO2 stripping reduction** Patricia Gutiérrez Lozano *(UAntwerp)*	**Exploring Simultaneous Nitrification, Denitrification, and Phosphorus Removal for the Sustainable Treatment of Carbon-Limited Potato-Processing Wastewater** Johanna Korte (*UAntwerpen*)	**Designing a full-scale ozonation reactor supported by Computational Fluid Dynamics for minimal bromate formation and maximal micropollutants removal** Simon Ducchi (*AM-Team*)

10:30 – 10:50	**Harvesting Solutions: Optimizing Phosphate and Nitrogen Removal in an SBR Cycle for Potato Processing Wastewater Treatment** Jana Weyns (*UAntwerpen*)	**Effect of feeding strategy on aerobic granular sludge formation in the treatment of brewery wastewater** Haixin Duan (*UAntwerpen*)	**Desalting and concentrating sugar solutions using a combination of electrodialysis and reverse osmosis at pilot-scale** Monique Woen (*Lenntech*)
10:50 – 11:20	**Break** (Hallway)		
Room	S.C.001	S.C.002	S.C.003
Session	**7. Water Quality Analysis and Monitoring II** ***Chair: Emile Sylvestre***	**8. Membrane Technology and Filtration Processes** ***Chair: Marjolein Vanoppen***	**9.Water Reuse and Recycling** ***Chair: Sam Van Nevel***
11:20 - 11:50	**Leveraging regulatory monitoring data for quantitative microbial risk assessment (QMRA)** Émile Sylvestre	**Membranes for circularity: Paving the path to sustainability** Marjolein Vanoppen	**Large scale industrial water reuse** Sam Van Nevel
11:50 – 12:10	**Rapid alternative parameters for HPC22 to determine the microbial water quality after repairs in the drinking water distribution system** Frits van Charante (*KWR*)	**Towards a Unified Framework for Modelling of Bipolar Membrane Electrodialysis for resource recovery processes** Gaétan Herold *(UGent)*	**Novel MABR-MBR combination to remove organics for competitive local water reuse** Marijn Timmer (*UAntwerpen*)
12:10 – 12:30	**Keeping it clean: How to improve data quality and quantity for WRRF** Frie Van Bauwel (*VITO*)	**Characterization of disinfection by-product precursors from natural organic matter through a novel membrane fractionation** Karlien Dejaeger *(UGent)*	**Generational Radical Rethinking of Water Sector Paradigms** Janine de Wit (*KWR*)
12:30 – 12:50	**Modular platform for preserving and preparing water samples for low abundance viable microbe detection** Hetty KleinJan (*CEBEDEAU*)	**Effect and mechanism of solution flow rate during interfacial polymerization on the performance of hollow fiber membranes** Lianshuai Tan (*UGent*)	**Sterile gel entrapment setups for fundamental wastewater treatment research** Laurens Parret *(KULeuven)*
12:50 – 13:10	**Surface water pollution in Ecuador and the Galapagos Islands: two case studies** Thi Kim Dung Pham *(UGent)*	**Reverse Osmosis Membrane Modification with Novel Polymers: Rejection of Small Neutral Organic Micropollutant for Water Reuse** Mei An *(UGent)*	**On-site light greywater treatment using a vertical-flow constructed wetland for the removal of personal care products and water reuse in a Luxembourgish public school** Fernanda Cristina *Muniz Sacco (University of Luxembourg)*
13:10 – 13:55	**Lunch** (Hallway)		
13:55 – 14:15	**Posters** (Hallway)		
	Parallel workshops (participation in accordance with registration form)		
Room	**S.C.002**	**S.C.101**	**S.C.102**
14:15 - 16:15	**Trends in the water sector**	**Sustainability**	**How to handle data + statistics**
16:15 - 17:15		**Circular economy**	**Water Quality**
17:15 – 17:30	**Preparation for a city walk**		
17:30 – 19:30	**Guided city walk**		

19:30 – 22:30	**Conference Dinner** (Hof van Liere / Universiteitsclub)

Time	10/07/2024 (Wednesday)		
09:30 – 10:00	**Conference Registration (Hallway)**		
Room	S.C.001	S.C.002	S.C.003
Session	**10. Pathogen Control and Microbial Ecology** ***Chair: Jorien Favere***	**11. Water Policy and Governance** ***Chair: Marjolein Vanoppen***	**12. Resource Recovery and Circular Economy I** ***Chair: Ralph Lindeboom***
10:00 – 10:30	**Bringing online microbial monitoring from research to practice** Jorien Favere	**Waterreuse, balancing risk and opportunities** Kris Van den Belt	**Frugal engineering solutions for nutrient, energy and water recovery from negative value waste(water)** Ralph Lindeboom
10:30 – 10:50	**Investigating quorum quenching bacteria as novel probiotic biofilm biocontrol** Lena Brouwir (*CEBEDEAU*)	**Impact of Personalized Online Courses on the Professional Development of Water Treatment Plant Operators: An Experimental Study in Ecuador** Martín Bustamante-León (*UGent*)	**Selective recovery of valuable organic acids from complex microbial fermentation through adsorption** Lingshan Ma (*UGent*)
10:50 – 11:10	**Ice slurry pigging technology in drinking water distribution system: from flow mechanisms to pipelines cleaning application** Jiamin Hu (*UGent*)	**Fostering Acceptance of Alternative Drinking Water Sources: The Nexus of Morality and self-efficacy** Estefanya Vazquez (*UGent*)	**Timing is everything – Changes of Urine Composition within 24 hours** Nele Kirkerup *(EAWAG)*
11:10 – 11:30	**Optimised FISH analysis for multiple species in cryosectioned aggregates: a co-culture gel entrapment case-study** Hannah Vanhoof *(KULeuven)*	**WaterValue: Unraveling Price Perceptions and Value Experiences in Domestic Tap Water Consumption** Lien Dieleman (*UAntwerpen*)	**Lipid hydrolysis quantification 2.0: an improved high-throughput protocol for activated sludge flocs and granules** Toon Coelmont (*KULeuven*)
11:30 – 11:50	**Pilot-scale study: Impact of temperature and water source on drinking water bulk and biofilm microbiome** Fien Waegenaar (*UGent*)	**Proposing solutions to address water reuse within the new European legal framework – the LëtzREUSE project approach** Irene Salmerón (*TR-Engineering)*	**Enzymatic pretreatment of fat, oil and grease-rich wastewater for the enhancement of anaerobic digestion processes** Gilles Quabron (*CEBEDEAU*)
11:50 - 12:35	**Lunch** (Hallway)		
12:35 - 13:00	**Posters** (Hallway)		
Room	S.C.001	S.C.002	S.C.003
Session	**13. Wastewater Treatment Technologies** ***Chair: Jan Dries***	**14. Micropollutants and emerging contaminants** ***Chair: Amanda Larasati***	**15. Resource Recovery and Circular Economy II** ***Chair: Paul Roeleveld***
13:00 – 13:30	**It's the Biology, stupid! Challenges and opportunities in industrial wastewater engineering** Jan Dries	**Addressing emerging organic contaminants beyond the tap** Amanda Larasati	**With resource recovery towards a self-sustaining treatment of wastewater** Paul Roeleveld
13:30 – 13:50	**Next-generation continuous-flow SBR technology for municipal wastewater treatment** Paula Carrera (*UGent*)	**Biological micropollutant removal: Contributions of new and established microorganisms in ozone - activated carbon filters** Daniel Moderall Sperling *(UAntwerpen)*	**Halophilic Purple Phototrophic Bacteria for Sustainable Mussel Wastewater Treatment and Microbial Protein Production** Luis Allegue (*UAntwerpen*)
13:50 – 14:10	**Tackling oily industrial wastewater – a membrane comparison study** Johanna Hinrichs (*Lenntech*)	**Screening of (various) PFAS removal technologies for industrial wastewater treatment** Bartel Devos (*UGent*)	**Creating a positive business case around nitrogen recovery from digested sludge centrate** Francis Meerburg (*Aquafin*)
14:10 – 14:30	**Per and poly-fluoroalkyl substances removal from Industrial wastewater** Srishti Singh (*UAntwerpen*)	**Sustainable micropollutants removal from water with biological activated carbon filtration and ozonation** Helena Verloo (*Royal HaskoningDHV*)	**From WWTP effluent to irrigation water in the fruit region** Emilia Liégeois (*VITO*)
14:30 – 14:50	**Regeneration of Magnetic Powdered Activated Carbon for the Removal of Organic Pollutants from Secondary Wastewater Effluents** Zoé Béalu (*University of Kaiserslautern-Landau*)	**The family of forever PFAS chemicals in industrial bio-effluent: a struggle to say goodbye to PFAS** Michel Clauwé (*Waterleau*)	**Digestate fractionation by dynamic membrane filtration coupled with coagulation and flocculation for water reuse and nutrient valorization** Aldo Betancourt Sanchez (*Toulouse Biotechnology Institute*)
14:50 – 15:10	**Break** (Hallway)		
15:10 – 16:40	**Closing Ceremony** (S.C.003) **Closing keynote speech by** Emilie Courtens (Ekopak) " Innovations and Challenges for Sustainable Industrial Water Supply " **Best presentation & poster awards**		