

## MONDAY September 13th

<b>01:45 - 2:30pm</b>	<b>OPENING CEREMONY</b>	
<b>2:30 - 3:15pm</b>	<b>KEYNOTE SPEAKER</b>	<i>Dr. Natasa Atanasova (University of Ljubljana)</i>
	<b>Water in a Circular City: The Potential of Nature-based Solutions</b>	
	<b>Chair: Günter Langergraber</b>	
<b>3:15 - 3:30pm</b>	<b>COFFEE BREAK</b>	
<b>3:30 - 4:45pm</b>	<b>PARALLEL SESSIONS</b>	
	<b>Role and functioning of wetlands and other nature-based solutions in urban settings (S11.1A)</b>	<b>Wetland plants ecophysiology and invasiveness (T3)</b>
	<b>Chair: Natasa Atanasova</b>	<b>Chair: Jacques Brisson</b>
3:30pm	Extreme weather layer as a tool for NBS implementation for climate city adaptation  <i>Magdalena Gajewska</i>	Evaluation of antioxidant enzymes activity of <i>Phragmites australis</i> and <i>Typha domingensis</i> during the phytoremediation of an aquatic ecosystem  <i>Dalila Haddaji</i>
3:45pm	Effect of cold climate conditions on municipal wastewater treatment in constructed wetlands: result of field and pilot scale study  <i>Elisangela Heiderscheidt</i>	Eco-toxicological study on <i>Eleocharis Palustris</i> and <i>Heliconia Psittacorum</i> exposure to lignocellulosic residues used within biofiltration technologies  <i>Cristina Alejandra Villamar Ayala</i>
4:00pm	Treatment of Greywater from Tourism using Full-Scale Constructed Wetland: A Study Case in Bali, Indonesia  <i>Mayang Christy Perdana</i>	Estimation of the propagule bank dynamics in stormwater wetlands as a tool for an accurate management  <i>Eloise Lenormand</i>
4:15pm	CW application in urban water management. Concept, design, showcases  <i>Heribert Rustige</i>	Structure of root-associated fungal communities in TW microcosms  <i>Katharina Tondera</i>
4:30pm	Mangroves as a nature-based solution for coastal water eutrophication in Macao, SAR, China  <i>Karen Arano Tagulao</i>	
		<b>Workshop</b>  <b>Treatment wetlands and water reuse: from potential to implementation</b>
<b>4:45 - 5:15pm</b>	<b>COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<b>5:15 - 5:45pm</b>	<b>POSTER FLASH PRESENTATIONS</b>	
	<b>Chair: Bernhard Pucher</b>	
	Vertical Gardens: Towards the sustainability of water usage for food production in cities <i>Patrícia Alves</i>	
	Hybrid biofilter performance for the grey wastewater treatment from mining camps <i>Cristina Alejandra Villamar Ayala</i>	
	Constructed wetland as ecological tool to foster the circular management of rice farming <i>Elena Comino</i>	
	Horizontal subsurface wetland for dairy farm wastewater treatment: a sustainable model based on circular economy <i>María Celeste Schierano</i>	
	Municipal wastewater post-treatment in wetland reduces nutrients and fecal bacteria in a cold climate <i>Josefiina Ruponen</i>	
	Floating treatment wetlands (FTW) at microcosm scale for the removal of Cr(iii) and Cr(vi) <i>Gisela Alfonsina Di Luca</i>	
	Shaping constructed wetland from an eco- to intensified-wastewater treatment technique: two updated approaches <i>Yaqian Zhao</i>	
	Integrated farming for sustainable development and innovative biotechnologies for management artificial wetlands in region of Maghat Satpura tigers reserve in India <i>Tadeusz Zaba</i>	
<b>5:45 - 6:00pm</b>	<b>COFFEE BREAK</b>	
<b>6:00 - 7:15pm</b>	<b>PARALLEL SESSIONS</b>	
	<b>Role and functioning of wetlands and other nature-based solutions in urban settings (S11.1B)</b>	<b>Evapotranspiration systems (T10)</b>
	<b>Chair: Anacleto Rizzo</b>	<b>Chair: Tjasa Griessler Bulc</b>
6:00pm	Direct water reuse of restaurant wastewater through combination of vertical flow constructed wetland and membrane based drinking water system  <i>Fida Hussain Lakho</i>	Willow evapotranspiration systems for treatment of on-site wastewater – performance and greenhouse gas emissions  <i>Laurence Gill</i>
6:15pm	Diagnosing trace metals contamination in ageing stormwater constructed wetlands by portable X-ray fluorescence analyzer  <i>Eloise Lenormand</i>	Performance and salt accumulation in zero-discharge willow system in sub-mediterranean climate  <i>Darja Istenič</i>
6:30pm	Operation of an elevated vertical flow constructed wetland filled with lava sand to treat light greywater at low temperatures  <i>Carlo Morandi</i>	Seasonal dynamics in the water balance and vegetation growth in an evapotranspirative willow system  <i>Solvei Jensen</i>
6:45pm	Treatment of phosphorus- and algae-rich surface water with a combination of micro screen and filtration wetland  <i>Heribert Rustige</i>	Year -round retain of nutrients in willow wetland purifying sewage water in cold climate conditions  <i>Heini Postila</i>
7:00pm	The influence of salinity, Pb and As doses on nitrogen and phosphorus removal by <i>Equisetum Hyemale "Robustum"</i> under hydroponic microcosms simulating floating treatment wetlands  <i>Ewa Wojciechowska</i>	
<b>7:15 - 7:45pm</b>	<b>COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	

## TUESDAY September 14th

<b>12:45 - 2:00pm PARALLEL SESSIONS</b>	
<p style="text-align: center;"><b>How can nature-based solutions and wetland systems contribute to the transition to a circular society (S12.1A)</b></p> <p><b>Chair: Diederik Rousseau</b></p>	<p style="text-align: center;"><b>Agricultural diffuse pollution management and treatment with nature-based solutions (S6.1a)</b></p> <p><b>Chair: Margit Kõiv-Vainik</b></p>
<p>12:45pm Constructed wetlands as multifunctional nature-based solution: a collaborative project for territorial development</p> <p><u><i>Cristina Calheiros</i></u></p>	<p>New Zealand guidelines for constructed wetland treatment of diffuse run-off from pastoral farms</p> <p><u><i>Chris C. Tanner</i></u></p>
<p>1:00pm The potential of nature-based solutions to address the water-energy-food nexus (W-E-F Nexus)</p> <p><u><i>Pedro Carvalho</i></u></p>	<p>Nature-based solutions for nutrient pollution control in agricultural regions: a literature-based review</p> <p><u><i>Anacleto Rizzo</i></u></p>
<p>1:15pm Decentralised circular economy of wastewater with nature-based solution in lesvos island: insight from the start-up of H2020 HYDROUSA project HYDRO1 full-scale plant</p> <p><u><i>Fabio Masi</i></u></p>	<p>WETKIT – Wetland toolkit for hydrological ecosystem services</p> <p><u><i>Pia Geranmayeh (Kynkänniemi)</i></u></p>
<p>1:30pm Aerated wetlands as pre-treatment for mild desalination process at Dow Terneuzen</p> <p><u><i>Dion van Oirschot</i></u></p>	<p>INSPA: A spatial tool to support implementation of artificial wetland in agricultural drained catchment.</p> <p><u><i>Julien Tournebize</i></u></p>
<p>1:45pm Examples and case studies of nature-based solutions for water circularity in different climatic and social contexts</p> <p><u><i>Alexandros Stefanakis</i></u></p>	
<b>2:00 - 2:30pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<p><b>2:30 - 3:15pm KEYNOTE SPEAKER <i>Dr. Gilles PINAY (CNRS France)</i></b></p> <p><b>Diffuse nitrogen pollution control: Moving from riparian zone to headwater catchment approach</b></p> <p><b>Chair: Thomas Hein</b></p>	
<b>3:15 - 3:30pm COFFEE BREAK</b>	
<b>3:30 - 4:45pm PARALLEL SESSIONS</b>	
<p style="text-align: center;"><b>How can nature-based solutions and wetland systems contribute to the transition to a circular society (S12.1B)</b></p> <p><b>Chair: Alexandros Stefanakis</b></p>	<p style="text-align: center;"><b>Agricultural diffuse pollution management and treatment with nature-based solutions (S6.1b)</b></p> <p><b>Chair: Shubiao Wu</b></p>
<p>3:30pm Hydrothermal processing for biomass conversion from wetland engineered wastewater treatment systems (Willow-Salix viminalis)</p> <p><u><i>Andrés C. Acosta</i></u></p>	<p>Internal phosphorus loading in agricultural free water surface wetlands</p> <p><u><i>Pia Geranmayeh (Kynkänniemi)</i></u></p>
<p>3:45pm Vertical-flow constructed wetlands for urban wastewater treatment and reuse for the irrigation of crops</p> <p><u><i>Suhad Almuktar</i></u></p>	<p>The impact of vegetation development and flow rate on phosphorus retention in in-stream constructed wetlands treating agricultural runoff</p> <p><u><i>Keit Kill</i></u></p>
<p>4:00pm Processing of beach wrack in reed beds system to close the nutrient cycle</p> <p><u><i>Katarzyna Kofecka</i></u></p>	<p>Effects of macrophytes and substrate biochar addition on the performance of treatment wetland mesocosms in glyphosate removal</p> <p><u><i>Margit Kõiv-Vainik</i></u></p>
<p>4:15pm Human health risk assessment for the ingestion of food crops irrigated with reclaimed water – feasibility study for water reuse</p> <p><u><i>Josephine Vosse</i></u></p>	<p>Effects of plants and biochar on the performance of treatment wetland for removal of pesticide chlorantraniliprole from agricultural runoff</p> <p><u><i>Margit Kõiv-Vainik</i></u></p>
<p>4:30pm Production of high value bio-resources from treatment wetland biomass</p> <p><u><i>Marco Rodríguez-Dominguez</i></u></p>	<p>Treatment of dairy wastewater with horizontal sub-surface flow constructed wetland in Sicily (Italy) - Seasonal efficiency and influence of vegetation</p> <p><u><i>Mario Licata</i></u></p>
<b>4:45 - 5:15pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<p><b>5:15 - 5:45pm POSTER FLASH PRESENTATIONS</b></p> <p><b>Chair: Alba Canet-Martí</b></p>	
<p>Swine wastewater treatment in a VF constructed wetland: effect of hydraulic retention time and high ammonium nitrogen concentration</p> <p><u><i>Adelaide Almeida</i></u></p> <p>In depth insight of nitrogen removal in French VFCW with various configurations</p> <p><u><i>Kevin Maciejewski</i></u></p> <p>Effect of increasing hydraulic loading rate and bed depth reduction on nitrogen removal in VF wetlands operated under arid climates</p> <p><u><i>Ismael L. Vera Puerto</i></u></p> <p>Phosphorus accumulation in a free water surface wetland discharging into the Baltic sea</p> <p><u><i>Manuela Watschka</i></u></p> <p>Retention of reactive phosphorus from agricultural tile drains with filter materials</p> <p><u><i>Lipe Renato Dantas Mendes</i></u></p> <p>Phosphate removal from synthetic solution using sand/zvi column filtration system</p> <p><u><i>Pauline Lanet</i></u></p> <p>Effects of nutrients (P and N) on tolerance and root morphometry of Typha Domingensis pers. in floating wetland systems</p> <p><u><i>Maria de las Mercedes Mufarrege</i></u></p>	
<b>5:45 - 6:00pm COFFEE BREAK</b>	

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## TUESDAY September 14th, continued

6:00 - 7:15pm	PARALLEL SESSIONS	
	<p style="text-align: center;"><b>Nature based solutions as the missing link to close water and nutrient cycles in cities (S12.2)</b></p> <p><b>Chair: Marco Hartl</b></p>	<p style="text-align: center;"><b>Aerated system (T10)</b></p> <p><b>Chair: Otto Stein</b></p>
6:00pm	<p>Suitability of greywater for irrigation purpose of urban green infrastructures</p> <p><i>Michael Gräf</i></p>	<p>Phyto-air system for effluent polishing: effect of controlled aeration on cod and nitrogen removal</p> <p><i>Hafiz Khan</i></p>
6:15pm	<p>High phosphorus removal and standing stock in a free water surface constructed wetland in Brazil: hydraulic retention time and macrophyte management influence</p> <p><i>Tatiane Jesus</i></p>	<p>Effect of carbon dosing on denitrification in an aerated constructed wetland receiving high hydraulic load</p> <p><i>Hafiz Khan</i></p>
6:30pm	<p>Technical solutions and benefits of introducing rain gardens, Gdańsk case study</p> <p><i>Magda Kasprzyk</i></p>	<p>Pollutant removal in an aerated vertical flow wetland treating raw domestic wastewater</p> <p><i>Ania Morvannou</i></p>
6:45pm	<p>Biochar in city tree substrates – an element for closing water and nutrient cycles in cities?</p> <p><i>Andreas Schönborn</i></p>	<p>Evapotranspiration in aerated and non-aerated subsurface flow treatment wetlands</p> <p><i>Scott Wallace</i></p>
7:00pm	<p>Eco design applied to environmental sanitation using an integrated system composed of microalgae and constructed wetlands as a cleaner technology for the treatment of urban effluents</p> <p><i>Elizandro Oliveira Silveira</i></p>	<p>Intensified French treatment wetlands: Full-scale feedback of a compact solution to treat nitrogen</p> <p><i>Alain Petitjean</i></p>
7:15pm	<p>Reuse of aerated wetland effluent on Belgian campsite</p> <p><i>Mireille Martens</i></p>	<p>Influence of airflow, material type and dripline density on gas transfer and bubble pathways in aerated vertical flow treatment wetlands</p> <p><i>Luc Séranne</i></p>
7:30 - 8:00pm	COFFEE BREAK AND Q/A TABLES FROM LAST SESSION	

## WEDNESDAY September 15th

<b>12:45 - 2:00pm PARALLEL SESSIONS</b>	
<p style="text-align: center;"><b>Increase process understanding of TW types (T10)</b></p> <p><b>Chair: Pascal Molle</b></p>	<p style="text-align: center;"><b>The role of wetlands in pollutant management at the catchment scale (T5)</b></p> <p><b>Chair: Gwenael Imfeld</b></p>
<p>12:45pm Introducing the French system in the Czech Republic – the good, the bad, and the ugly</p> <p><i>Vit Rous</i></p>	<p>Formulation of processes behind pesticides dissipation in ponds: State of the art</p> <p><i>Aya Bahi</i></p>
<p>1:00pm French vertical flow treatment wetlands: definition and characterization of the biomantle</p> <p><i>Nicolas Forquet</i></p>	<p>Pond efficiency for pesticide mitigation: evidence from a one-year field hydrochemical survey in an agricultural catchment</p> <p><i>Betty Chaumet</i></p>
<p>1:15pm Monitoring biofilm growth in lab-scale HSSF-CW – the bioclogging phenomenon</p> <p><i>Ana Galvão</i></p>	<p>Quantifying flow pathways and evapotranspiration on raised bogs</p> <p><i>Shane Regan</i></p>
<p>1:30pm French vertical constructed wetland intensified with physico-chemical phosphorus removal: Performances at large scale and enriched Fe-P sludge management</p> <p><i>Joelle Paing</i></p>	<p>Unveiling pesticide degradation in a stormwater wetland by compound-specific isotope analysis</p> <p><i>Tetyana Gilevska</i></p>
<p>1:45pm Treatment and reuse of highly loaded rumery effluents in tropical climate, by combination of activated sludge and vertical flow treatment wetlands</p> <p><i>Stéphanie Prost-Boucle</i></p>	<p>Nitrogen and phosphorus retention in large river floodplains: Where to address their water quality functions in the Danube river basin?</p> <p><i>Martin Tschikof</i></p>
<b>2:00 - 2:30pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<b>2:30 - 3:15pm VIRTUAL FIELDTRIPS</b>	
<b>3:15 - 3:30pm COFFEE BREAK</b>	
<b>3:30 - 4:45pm PARALLEL SESSIONS</b>	
<p style="text-align: center;"><b>Measurement techniques (T10)</b></p> <p><b>Chair: Carlos Arias</b></p>	<p style="text-align: center;"><b>Biogeochemical cycling of carbon and nutrients (T1)</b></p> <p><b>Chair: Jan Vymazal</b></p>
<p>3:30pm A new tool for evaluating organic matter transport in infiltration areas for treated wastewater?</p> <p><i>Laura Delgado-Gonzalez</i></p>	<p>Influence of operational parameters on long-term phosphorus removal in pilot-scale constructed wetlands</p> <p><i>Valentina Carrillo</i></p>
<p>3:45pm Push-pull tests for in-situ determination of oxygen consumption in horizontal subsurface flow constructed wetlands</p> <p><i>Flor Louage</i></p>	<p>Performance intensification of constructed wetland technology: A sustainable solution for treatment of high strength industrial wastewater</p> <p><i>Nazeemah Nurmahomed</i></p>
<p>4:00pm Real-time bod monitoring of treatment wetlands using microbial biosensors</p> <p><i>Boram Kim</i></p>	<p>Analysis of nitrogen transformations within the first stage of a vertical flow treatment wetland receiving high strength domestic wastewater in a cold climate</p> <p><i>Stephanie Ayotte</i></p>
<p>4:15pm Metal(loid) mobility, speciation and fractionation examined by sediment pore water profiling</p> <p><i>Henning Schroeder</i></p>	
<p>4:30pm Hydraulic measurement and improvement of flow characteristics in coal mine water treatment lagoons</p> <p><i>Vasiliki Ioannidou</i></p>	
<b>4:45 - 5:15pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<b>5:15 - 5:45pm POSTER FLASH PRESENTATIONS</b>	
<p><b>Chair: Verena Germann</b></p> <p>Evaluation of the removal efficiency of a constructed wetland to purify wastewater from the wet mill of coffee, cauca, Colombia</p> <p><i>Angela Sofia Gomez Lopez</i></p> <p>Effect of using HF wetlands planted with <i>Zantedesia Aethiopica</i>, <i>Cyperus Longus</i>, and filled with a rubble and macadamia nutshell substrate</p> <p><i>Anh Bui</i></p> <p>Effect of hydraulic conditions in PFR reactors using bio-electrochemical processes to influence greenhouse gas emission</p> <p><i>Annegret Budach</i></p> <p>Dissolved organic matter biodegradation on a landscape profile of the southern taiga bog complex (western Siberia)</p> <p><i>Tatiana Raudina</i></p> <p><i>Typha latifolia</i>: phytoremediation potential, bioaccumulation, biomass and bioenergy production</p> <p><i>Hassana Ibrahim Mustapha</i></p> <p>HCH removal in biochar-amended artificial wetland beds</p> <p><i>Aday Amirbekov</i></p> <p>Assessment of hch biodegradation in surface water and sediment at the Hájek site in Czechia</p> <p><i>Jan Nemecek</i></p>	
<b>5:45 - 6:00pm COFFEE BREAK</b>	

**Workshop**

**Application of constructed wetlands on a farm level - project WATERAGRI**

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## WEDNESDAY September 15th, continued

6:00 - 7:15pm	PARALLEL SESSIONS		
	<b>Advancement in modeling of TW and the need of further development (T9)</b>	<b>Calling attention to explore effective edge-of-field treatment systems for agricultural drainage management (S6.2)</b>	<b>New developments and industrial applications at different scales (T7)</b>
	<b>Chair: Nicolas Forquet</b>	<b>Chair: Fabio Masi</b>	<b>Chair: Scott Wallace</b>
6:00pm	Escherichia Coli removal in treatment wetlands: A study on the decay mechanisms and mathematical modelling  <i>Carmen Hernández-Crespo</i>	Nutrient removal in woodchip bioreactors with different designs  <i>Finn Plauborg</i>	Uptake, translocation and accumulation efficiency of perfluoroalkyl acids by constructed wetlands treating spiked solutions and wastewater treatment plant effluent  <i>Alessandro Pellizzaro</i>
6:15pm	Development of predictive models and a decision support tool for the removal efficiency of emerging organic contaminants based on design and operational parameters of constructed wetlands  <i>Huma Ilyas</i>	Subsurface flow constructed wetlands for treatment of agriculture drainage  <i>Jan Vymazal</i>	Fate and Effect of Per- and Polyfluoroalkyl Substances in Treatment Wetland Mesocosms  <i>Arman Poonja</i>
6:30pm	Design-support in PANDA for the supplementary treatment of nitrate in treatment plant effluents  <i>Tamás Gábor Pálffy</i>	We need more effort to explore effective edge-of-field treatment systems for drainage management  <i>Shubiao Wu</i>	Phytoscreening of HCH waste isomers by broadleaf trees  <i>Pavel Hrabák</i>
6:45pm	Numerical modelling: A jackknife for implementing nature-based solutions in cities?  <i>Bernhard Pucher</i>	Low-cost filter systems with iron-coated sand to reduce phosphorus loss from drained agricultural fields  <i>Hui Xu</i>	Developing and designing enhanced FTWS for agri-food tertiary treatment through a pilot-scale experiment  <i>Rita Abi Hanna</i>
7:00pm	Optimising P-k-C* model for organic removal performance on H-CWS in Mediterranean climate  <i>Delia Ventura</i>		Study the potential of constructed wetland for tuning pre-treated olive mill wastewater after one step lime precipitation  <i>Adelaide Almeida</i>
7:15pm	Simulation of denitrification in a constructed wetland with the tis model: methodology and perspectives  <i>Julien Tournebize</i>		
<b>7:30 - 8:00pm</b>	<b>COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>		
<b>8:00 - 9:00pm</b>	<b>IWA Young Water Professional Social Gathering</b>		

## THURSDAY September 16th

<b>11:00 - 12:00pm</b>	<b>IWA Young Water Professional Workshop</b>	
<b>12:45 - 2:00pm</b>	<b>PARALLEL SESSIONS</b>	
	<b>Green walls for wastewater treatment (S11.2A)</b>	<b>Micropollutants (T7)</b>
	<b>Chair: Marco Hartl</b>	<b>Chair: Katharina Tondera</b>
12:45pm	Green walls: a constructed wetland – driven technology for wastewater treatment  <i>Olivia Addo-Bankas</i>	Retention soil filter as post treatment step to remove micropollutants from sewage treatment plant effluent  <i>Thomas Ter Laak</i>
1:00pm	Treatment of surfactant-rich laundry wastewater with a green wall system  <i>Nadine Antenen</i>	Quantification of micropollutant removal mechanisms in vertical-flow constructed wetlands: Outcome of the 'EMISÛRE' project  <i>Hana Brunhoferova</i>
1:15pm	Greywater treatment through green wall: durability and design evaluation  <i>Elisa Costamagna</i>	Distribution and transformation of micropollutants in the sediment-water interface  <i>Lars Duester</i>
1:30pm	Treating greywater in an indoor horizontal flow green wall  <i>Darja Istenič</i>	Resilience test of an aerated horizontal flow wetland: removal of micropollutants and biological effects  <i>Nadine A. Sossalla</i>
1:45pm	Green walls - water balance analysis for five species of ornamental plants  <i>Karolina Matej-Lukowicz</i>	Activated carbon for enhanced micropollutant removal in constructed wetlands: Saturation or biological regeneration?  <i>Thomas Wagner</i>
	<b>Workshop</b>	
	<b>WaS CWetlandsdata - Towards the "Constructed Wetlands Knowledge Platform" for sustainable development"</b>	
<b>2:00 - 2:30pm</b>	<b>COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<b>2:30 - 3:15pm</b>	<b>KEYNOTE SPEAKER <i>Dr. Kela Weber (RMC, Canada)</i></b> <b>Microbial Communities in Treatment Wetlands: Expanding the Dimensionality of our Understanding</b> <b>Chair: Bernhard Pucher</b>	
<b>3:15 - 3:30pm</b>	<b>COFFEE BREAK</b>	
<b>3:30 - 4:45pm</b>	<b>PARALLEL SESSIONS</b>	
	<b>Green walls for wastewater treatment (S11.2B)</b>	<b>Pharmaceuticals &amp; Microplastics (T7)</b>
	<b>Chair: Darja Istenič</b>	<b>Chair: Boram Kim</b>
3:30pm	Hydroponic systems with edible plants for greywater treatment and organic micropollutant removal  <i>Esther Mendoza</i>	Bioaugmented constructed wetlands with <i>Trichoderma</i> spp. for mitigating antibiotic resistance spreading  <i>Dorde Tadic</i>
3:45pm	Development of a multifunctional Living Wall system for the treatment and use of greywater  <i>Bernhard Pucher</i>	Microplastics removal in different types of wetlands treating municipal wastewater  <i>Lina Büngener</i>
4:00pm	Green wall feeding systems for greywater treatment: Challenges and design indications from hydraulic simulations  <i>Anacleto Rizzo</i>	Removal and effects of polystyrene microplastic in a lab-scale vertical flow constructed wetland  <i>Wenbo Liu</i>
4:15pm	Total value wall: A green wall for grey water treatment and recycling  <i>Diederik Rousseau</i>	Photodegradation of pharmaceuticals in Wastewater treatment wetlands  <i>Tarek Aziz</i>
4:30pm	Recycled filling media in green walls for greywater treatment  <i>Ana Galvão</i>	Effect of arbuscular mycorrhizal fungi on pharmaceuticals removal in constructed wetland  <i>Bo Hu</i>
	<b>Workshop</b>	
	<b>LIFEPOPWAT, development of "Wetland+" technology, a new treatment tool for the removal of HCH and its transformation compounds</b>	
<b>4:45 - 5:15pm</b>	<b>COFFEE BREAK AND Q/A TABLES FROM LAST SESSION</b>	
<b>5:15 - 5:45pm</b>	<b>POSTER FLASH PRESENTATIONS</b> <b>Chair: Katie Kearney</b>	
	Constructed wetlands to remove priority substances and contaminants of emerging concern: A case study for aquaculture effluents <i>Ana M. Gorito</i>	
	Antibiotic resistance genes removal by different constructed wetland configurations <i>Ana María Leiva</i>	
	Constructed wetlands for the treatment of cyanotoxins: initial results <i>Alba Martínez I Quer</i>	
	A lab-scale study on the fate and removal of microplastics in vertical flow constructed wetlands <i>Qintong Wang</i>	
	Removal and distribution of diclofenac and sulfamethoxazole in unsaturated and partially-saturated constructed wetlands and the occurrence of sulfonamide resistance genes <i>Adam Sochacki</i>	
	Comparing the performance of four macrophytes in FTW microcosm study for the removal of potentially toxic elements (As, Cu, Cd, and Pb) <i>Nicole Nawrot</i>	
	Alkylphenols and chlorophenols removal in vertical flow constructed wetlands: Looking at microbial community response <i>Marisa Almeida</i>	
<b>5:45 - 6:00pm</b>	<b>COFFEE BREAK</b>	

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## THURSDAY September 16th, continued

6:00 - 7:15pm		PARALLEL SESSIONS	
		<b>Approaches Behaviour of priority and emerging pollutants (T7)</b>  <b>Chair: Pedro Carvalho</b>	<b>The future of our freshwater wetlands: Analyzing impacts of degradation and restoration on the interactions of multiple ecosystem services (S13)</b>  <b>Chair: Martin Tschikof/Risper Onike</b>
6:00pm		Sustainable phytoremediation of an old pyrite mine surroundings boosted by biochar amendment: a case study at São Domingos mine (Portugal)  <i>Renata Ferreira</i>	Multi-Ecosystemic services provided by artificial wetland receiving agricultural subsurface drained water  <i>Julien Tournebize</i>
6:15pm	<b>Workshop</b>  <b>COST Action "Circular Cities" Green Wall Cluster</b>  <b>Vertical Space Exploration Social, Financial and</b>	Removal of persistent organic pollutants by a 3-step system: Anaerobic digester, vertical flow constructed wetland and different post-treatments  <i>Marta Sanchez Nunez</i>	Native macrophytes as metal biomonitors in peri-urban wetlands  <i>Hernan Hadad</i>
6:30pm	<b>Legislative Barriers and Solutions for the Launch of Green Walls for Wastewater Treatment in the Built Environment</b>	Feasibility of vertical flow constructed wetlands to remove emerging contaminants from secondary effluent wastewater: The 'EMISÛRE' project approach  <i>Silvia Venditti</i>	Unveiling the transversal connectivity of natural landscapes to wetlands: Case of western Balkans  <i>Artan Hysa</i>
6:45pm		Constructed wetland as a barrier against antimicrobial resistance spread- case study from rural catchment in south-west England.  <i>Franciszek Bydalek</i>	free-water surface wetland significantly improves quality of hyper-eutrophic lake water  <i>Ryan Pierce</i>
7:00pm			Biochar: Natural viable technology for metal decontamination  <i>A V Meera</i>
7:15 - 7:45pm		COFFEE BREAK AND Q/A TABLES FROM LAST SESSION	

12:45 - 2:00pm PARALLEL SESSIONS		
<b>MFC and Modified TWs (T8)</b>	<b>Carbon sequestration and greenhouse gas emissions (T2)</b>	
<b>Chair: Jaime Nivala</b>	<b>Chair: Gabriele Weigelhofer</b>	
12:45pm Removal of nitrogen compounds and greenhouse gases mitigation in real-scale met-based treatment wetlands (METLAND)	Stable isotopes ( $\delta^{13}C$ , $\delta^{15}N$ ) and membrane fatty acids of microbial communities are indicators of the drainage history of European fens	
<i>Carlos A. Ramirez-Vargas</i>	<i>Miriam Gross-Schmoelders</i>	
1:00pm Denitrification, anammox and to lesser extent nitrification are the main processes for nitrogen removal in constructed wetland-microbial electrochemical systems	Influence of land-use change and season on soil greenhouse gas emissions from a tropical wetland in Kenya	
<i>Sharvari Sunil Gadegaonkar</i>	<i>Risper Ondiek</i>	
1:15pm UV light disinfection of sewage treatment by constructed wetlands	Effects of clogging on vegetation development and CO <sub>2</sub> emission in a Mediterranean horizontal flow constructed wetland	
<i>Yenifer González</i>	<i>Alessandro Sacco</i>	
1:30pm New biosensor for in-situ monitoring of treatment wetland well-function	Water level management for peatlands enhancing their carbon sink function	
<i>Boram Kim</i>	<i>Shokoufeh Salimi</i>	
1:45pm Bioenergy generation and nutrient removal in integrated vertical-flow constructed wetland – microbial fuel cells as affected by substrate type and plant		
<i>Fei Zhong</i>		
2:00 - 2:30pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION		
2:30 - 3:15pm <b>KEYNOTE SPEAKER</b> <i>Dr. Myrto Nikolakopoulou</i> <b>Unravelling The Functional Role of Emergent Macrophytes in Nature-Based Solutions (NbS) for the management of nutrient pollution in Freshwater Ecosystems</b> <b>Chair: Gabriele Weigelhofer</b>		
3:15 - 3:30pm COFFEE BREAK		
3:30 - 4:45pm PARALLEL SESSIONS		
<b>Molecular and microbial advances related to pollutant fate, disposal and removal in wetlands (T8)</b>	<b>Sludge Treatment (T10)</b>	
<b>Chair: Kela Weber</b>	<b>Chair: Dion van Oirshot</b>	
3:30pm Metagenomic and stable isotope analyses on microbial nitrogen removal pathways in hybrid constructed wetlands treating raw sewage	Treatment of industrial sludge in a mobile pilot sludge treatment wetland system in Louisiana	
<i>Yunv Dai</i>	<i>France Guertin</i>	
3:45pm Seasonal variations in microbial community function and activity in different treatment wetland designs	Greenhouse treatment of four sludge types in a sludge treatment reed bed pilot	
<i>Anbareen Farooq</i>	<i>Steen Nielsen</i>	
4:00pm Fate of glyphosate in planted-gravel filter microcosms with stable isotopic approach	Hanningfield sludge treatment reed beds – 10 years experience with full-scale treatment of water works sludge	
<i>Yuying Jing</i>	<i>Steen Nielsen</i>	
4:15pm Multiphase study to investigate the heterogeneity of the microbial community associated with microbial activity in different treatment wetland designs	Practical experiences in the transfer of Sludge Treatment Wetland Technology from Denmark to Brazil	
<i>Daniele D Silveira</i>	<i>Heike Hoffmann</i>	
		<b>Workshop</b>  <b>Setting full sail towards future resilient cities: Strategies to apply NBS to close water and nutrient cycles within the green-blue-grey infrastructure</b>
4:45 - 5:15pm COFFEE BREAK AND Q/A TABLES FROM LAST SESSION		
5:15 - 6:00pm CLOSING CEREMONY		



