

Sunday, 8th September 2019

10:00 – 10:30	Registration IWA RR 2019		
10:30 – 13:30	PRE-CONFERENCE WORKSHOPS		
	<p>WORKSHOP 1 TOWARDS CIRCULAR CITIES Chair: Günter Langergraber, COST Action CA17133 (A) <u>Room Theatre</u></p>	<p>WORKSHOP 2 <u>EXPERIENCES WITH STRATEGY AND IMPLEMENTATION OF RESOURCE RECOVERY FROM WATER: CREATING (NEW) VALUE CHAINS AND ECONOMICS</u> Chair: Olaf Van der Kolk, CEO Aquaminerals (NL); Ludwig Hermann, ESPP – IWA (D); Ilje Pikaar, University of Queensland (AUS) <u>Room 6</u></p>	<p>WORKSHOP 3 SUPER-W: RESOURCE RECOVERY FROM WASTEWATER: EMERGING TECHNOLOGIES & CONCEPTS Chair: Gijs Du Laing, Ghent University (B); Korneel Rabaey, Ghent University (B) <u>Room Auditorium</u></p>
13:30 – 14:30	Light lunch		
14:30 – 15:30	Young Water Professionals (YWP) MEET UP / ice-breaking event for YWP (Room 6)		
15:00 – 16:30	Registration IWA RR 2019		
16:30 – 17:00	Welcome speech by KEY ITALIAN WATER STAKEHOLDERS (Room Auditorium - audio-video connection to Room Theatre)		
17:00 – 18:30	<p>CONFERENCE OPENING - PLENARY SESSION Chairs: Francesco Fatone (IT) and Ilje Pikaar (AU) THE ROLE OF RESOURCE RECOVERY FROM WATER WITHIN A CIRCULAR ECONOMY Diane D'Arras, IWA President RESOURCE RECOVERY IN EU FUNDED WATER PROJECTS - Evdokia Achilleos, European Commission - EASME</p> <p>PLENARY PRESENTATIONS RESOURCE RECOVERY FROM WATER: THE PAST, (success stories and lessons learned), THE PRESENT (current innovations), THE FUTURE (water 2050 and beyond – how will it look like?) Mark Van Loosdrecht, TU Delft (NL) and Willy Verstraete, Ghent University (B)</p> <p>IWA RESOURCE RECOVERY Award Ceremony</p>		
18:30	Welcome cocktail – co-sponsored by ECOMONDO		

Monday, 9th September 2019

8:00 – 9:00	Registration IWA RR 2019		
9:00 - 13:00	MORNING SESSION		
9:00 – 9:30	<p>PLENARY PRESENTATION 20 YEARS OF SUCCESSFUL BUSINESS IN RESOURCE RECOVERY FROM WATER Olaf Van Der Kolk, Aquaminerals (NL) <i>Chair: Bruce Jefferson (UK)</i> (Room Auditorium - audio-video connection to Room Theatre)</p>		
9:30 – 13.00	<p>Session 1 NUTRIENTS RECOVERY AND REUSE <i>Chairs: Bruce Jefferson, Isaac Owusu-Agyeman (YWP)</i> Room Auditorium</p>	<p>Session 2 PHOSPHORUS RECOVERY: NOVEL TECHNOLOGIES <i>Chairs: Cees Buisman, Thomas Prot (YWP)</i> Room 6</p>	<p>Session 3 VALUE ADDED PRODUCTS AND BIOPOLYMERS RECOVERY <i>Chairs: Mark van Loosdrecht, Ruizhe Pei (YWP)</i> Room Theatre</p>
9:30 – 9:50	<p>KEYNOTE Water Reclamation and Nutrients Recovery Facilities in the Chinese Framework Xia Huang, Tsinghua University (CN)</p>	<p>KEYNOTE Biologically Induced Struvite Production in Wastewater Ana Soares, Cranfield University (UK)</p>	<p>KEYNOTE From Research to Full Scale Practice in Biopolymers Recovery Rene Rozendal, PAQUES (NL)</p>
09.50-11.05	<p>Building an Operational Framework for Nitrogen Recovery via Electrochemical Stripping Matthew J. Liu, Boon Siong Neo, William A. Tarpeh</p>	<p>Iron-reducing Biocathode for Phosphorus Remobilization from FeP Complexes Contained in Wastewater Sludge Donya Sun, Xi Chen, Xiaoyuan Zhang, Peng Liang, Xia Huang</p>	<p>Self-extinguishing Property of Biopolymers Recovered from Waste Aerobic Granular Sludge Yuemei Lin, Kim Nam</p>
10.05-10.20	<p>Nutrient Recovery from Wastewaters Using Novel Nano-enhanced Adsorptive Media Ownby Miles, Ed Weinberg, Celine Vaneekhaute</p>	<p>Phosphorus Recovery from Sewage Sludge - P Leaching Behaviour from Various Types of Post-precipitated Tertiary Sludge Marlena Monea, Volker Preyl, Carsten Meyer, Heidrun Steinmetz, Harald Schoenberger, Asya Drenkova-Tuhtan</p>	<p>WWTP Biorefinery for Polyhydroxyalkanoates (PHAs) Recovery from Cellulosic Primary Sludge Vincenzo Conca, Cinzia Da Ros, Nicola Frison, Anna Laura Eusebi, Francesco Fatone</p>

10.20-10.35	Enhanced Ammonia Recovery from Wastewater by Nafion Membrane with Highly Porous Honeycomb Nanostructure and Its Mechanism in Membrane Distillation <i>Alicia An</i>	Phosphorus Stripping of Bio-P Sludge and Enhanced Nutrient Recovery <i>Blanca M. Gonzalez Silva, Dag B. Fiksdal, Chunbo He, Sveinung Sægrov, Stein W Østerhus</i>	Producing Polyhydroxyalkanoates in HRAP Retrofitted for Wastewater Treatment with Phototrophic Purple Bacteria <i>Joana Fradinho, Juliana Almeida, Estaban Serrano, Adrian Oehmen, Enrique Lara, Maria Reis</i>
10.35-10.50	Tailored Polymer Hydrogels for Main-stream Ammonium Recovery from Domestic Wastewater <i>Heidy Cruz, Jeremy Guest, Adrian Oehmen, Willy Verstraete, Bronwyn Laycock, Ilje Pikaar</i>	Newly Developed Materials for Phosphorus Removal Recovery and Reuse in Decentralized Wastewater Treatment <i>Solvei Jensen, Frances Helen Blaikie, Helmer Soehoel, Juan A. Alvarez, Hans Brix, Carlos Arias</i>	An Urban Biorefinery for Food Waste and Biological Sludge Conversion into Polyhydroxyalkanoates and Biogas <i>Giulia Moretto, Francesco Valentino, David Bolzonella, Paolo Pavan, Mauro Majone</i>
10.50-11.05	Nitrogen Recovery from Process Water of Digested Sludge Dewatering with Membrane Contactors <i>Lea Richter, Marc Wichern, Markus Grömping, Ulrich Robecke, Jens Haberkamp</i>	Optimization of a Pilot Bioacidification Reactor to Increase the Potential for Recovery of Phosphorus from Municipal Wastewater Sludge <i>Srdana Kolakovic, Jorge M.M. Santos, Maria A.M. Reis</i>	Combined Wastewater Treatment and Bioflocculant Recovery <i>Victor Ajao, Harry Bruning, Huub Rijnaarts, Hardy Temmink</i>
11:05-11:30	Morning coffee and presentation of EU projects concerning water and resource recovery (Room Grecale)		
11:30-13:00	<i>Chairs: Celine Vaneekhaute, Sajid Hussain (YWP)</i> <u>Room Auditorium</u>	<i>Chairs: Giorgio Mannina, Saba Daneshgar (YWP)</i> <u>Room 6</u>	<i>Chairs: Rene Rozendal, Victor Ajao (YWP)</i> <u>Room Theatre</u>
11.30-11.45	Nitrogen Recovery Using a Membrane Contactor: Modelling Nitrogen and pH Evolution <i>Guillermo Noriega-Hevia, Joaquín Serralta, Luis Borrás, Aurora Seco, José Ferrer</i>	Adsorption-Desorption Mechanism and Kinetic Study of Synthesized Iron Doped Zeolite for Phosphate in Aqueous Phase <i>Md Saifuddin, Kwang Soo Kim</i>	Rapid and Selective (Electro)catalytic Removal and Recovery of Sulfide from Wastewater <i>Natalia Sergienko, Jelena Radjenovic</i>
11.45-12.00	Nitrogen Up-concentration from Mainline and Sidestream Effluent in WWTPs for Fertilizer Valorization <i>Álvaro Mayor Pillado, Silvia López Palau, Gabriel López Calvet, Lucía Prieto, Alicia Gadea, César Valderrama, Jose Luís Cortina, Irene Mozo Anibarro</i>	Struvite Production by Using Raw Seawater - How to Improve the Economy and Keep the Product Quality? <i>Sin Shaddel, Stein Østerhus</i>	Sulfur Recovery in Biomethane Upgrading Plant <i>Davide Ravezzani, Ottavia Burzi, Luca Pedrazzi, Davide Scaglione</i>
12.00-12.15	Sustainable Ammonia Recovery from Source-separated Urine Using Isothermal Membrane Distillation <i>Ngai Yi Yip</i>	Role of Iron in Phosphorus Immobilization in a Novel VUCT-MBR System for Sewage Treatment <i>Shaoyu Deng, Jingbao Tian, Jiaqi Liu, Lingyue Wang, Xiang Cheng</i>	Salt and Humic Substances Recovery as A Solution to Anion Exchange Brine Management <i>Elisabeth Vaudevire, Isaac Daniel</i>
12.15-12.30	Resource Recovery from Wastewater: INCOVER Project <i>Juan Alvarez, Christina Avila, Ana Pasqual, Rocio Pena, Santiago Gomez, Luz Herrero</i>	Critical Conditions of Struvite Growth and Recovery Using Hydrocyclone in Novel Struvite Crystallization Pilot Plant	Biotechnological Removal of H₂S Under Haloalkaline Conditions

		<u>Nari Park</u> , Hyangyoun Chang, Yeojun Jang, Hyunman Lim, Jinhong Jung, Weonjae Kim	<u>Karine Kiragosyan</u> , Magali Picard, Jelmer Dijkstra, Pieter van Veelen, Johannes Klok, Pawel Roman, Albert J.H. Janssen
12.30-12.45	Membrane-based Nitrogen Recovery from Livestock Wastewater: A Pilot Plant Study <u>Beatriz Molinuevo-Salces</u> , Berta Riaño, David Hernández, Matías B Vanotti, Mari Cruz García-González	Mathematical Model Application for Phosphorus Removal and Recovery Prediction in Continuous Flow Fixed-bed Columns <u>Daniel Dias</u> , João Ribeiro, Jorge Santos, Samuela Guida, Giorgia Rubertlli, Ana Soares, Adrian Oehmen	FAMEs Estolides and Methyl-10-Hydroxystearate: Sewage Sludge as Possible Source of Biodiesel and Bio-lubricants of New Generation <u>Carlo Pastore</u> , Luigi di Bitonto
12.45-13.00	Ammonium Recovery and Conversion Path by the Immobilization of <i>Scenedesmus obliquus</i> in Alginate Beads from Biogas Slurry Xiang Liu, Kaijun Wang, <u>Jinyuan Ma</u>	Cometabolic Production of Unusual Poly-β-Hydroxyalkanoates Using Enhanced Biological Phosphorus Removal Process in Sequencing Batch Reactors Chencheng Le, Li Wang, <u>Yan Zhou</u>	Cyrene™ as a New Bioderived Green Solvent for Membrane Preparation Alberto Figoli, Tiziana Marino, Antonio Molino, Francesca Russo, <u>Francesco Galiano</u>
13:00-14:30	Lunch, poster presentation and lunch presentation of the <i>European and Italian Sustainable Phosphorus Platform</i> (Room Grecale)		
14:30-18:00	AFTERNOON SESSION		
14:30-15:00	PLENARY PRESENTATION <i>SUSTAINABILITY ASSESSMENT FOR RESOURCE RECOVERY FROM WATER</i> Jeremy Guest, University of Illinois at Urbana-Champaign (USA) <i>Chair: Ana Soares (UK)</i> (Room Auditorium - audio-video connection to Room Theatre)		
15:00-18:00	Session 4 NUTRIENTS RECOVERY AND REUSE <i>Chairs: Ana Soares, William Tarpeh (YWP)</i> <u>Room Auditorium</u>	Session 5 PHOSPHORUS RECOVERY: PILOT, DEMO AND FULL-SCALE TECHNOLOGIES <i>Chairs: Julian Sandino, Claydon Mumba Kanyunge (YWP)</i> <u>Room Theatre</u>	Session 6 ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY ASSESSMENT <i>Chairs: Jeremy Guest, Antoine Brison (YWP)</i> <u>Room 6</u>
15:00-15:20	Nutrient Upcycling from Wastewater Treatment: Technical and Non-Technical Roadmap Maria Albuquerque, Celine Bouchereau, Erik Bundgaard, Marisa Cunha, Ana Bisinella, <u>Bruno Tisserand</u>	KEYNOTE Self-sustaining Sludge Smouldering: Towards On-Site Complete Sludge Destruction and P Recovery Jose Torero, University College (UK)	Life Cycle Assessment of Material Recovery from Municipal Wastewater: Circular Economy with Environmental Benefits? <u>Christian Remy</u> , Jennifer Misiukas, Carljin Lahaye, Zivco Jucnic-Zonta, Juan Baeza, Nicola Frison, Bruno Ferreira, Gorostegi Guerra, Sergio Salas, Joan Jorda, Luis Enriques

15.20-15.35	High-solid Thermophilic Anaerobic Digestion with Ammonia and Phosphate Recovery Masanobu Takashima, Junichi Yaguchi	Ash2Phos -- Clean Commercial Products from Sludge Ash <u>Yariv Cohen</u> , John Svärd	Environmental and Economic Assessment of Solar-assisted Thermal Energy Recovery from Wastewater <u>Ivan Muñoz</u> , Francisco Portillo, Sabina Rosiek, Javier Francisco, Iñaki Acasuso, Valentina Piergrossi, Marco Disanctis, Silvia Chimienti, Claudio Di Iaconi
15.35-15.50	Pilot Scale Studies on Nutrient and Biochar Recovery from Wastewater and Sewage Sludge <u>Laura Rossi</u> , Aino Kainulainen	4 Years of Phosphorus Recovery at WWTP Amsterdam West <u>Alex Veltman</u> , Jacquélien de Schutter	Life Cycle Assessment of Nutrient Recovery from Wastewater - Current Practices and Insights <u>Ka Leung Lam</u> , Ljiljana Zlatanović, Jan Peter van der Hoek
15.50-16.05	Fractionating Various Nutrient Ions for Phosphate Recovery from Swine Wastewater Using Selective Electrodialysis <u>Zhi-Long Ye</u> , Boudewijn Meeschaert, Shaoh Chen, Karel Ghyselbrecht, Xin Ye, Annick Monballiu, Luc Pinoy	Thermochemical P-Recovery from Sewage Sludge Ash <u>Schaaf Tanja</u> , Ulbrich Julian, Orth Andreas	The Economics Behind the Combination of AnMBR and FO Technologies for Municipal Wastewater Treatment <u>Sergi Vinardell</u> , Sergi Astals, Joan Mata-Álvarez, Joan Dosta
16:05-16:30	Afternoon coffee and presentation of WAREG – European Water Regulators – <i>Andrea Guerrini (President)</i> (Room Grecale)		
16:30-18:00	<i>Chairs: Claudio Di Iaconi, Cinzia Da Ros (YWP)</i> <u>Room Auditorium</u>	<i>Chairs: Ludwig Hermann, Alessia Foglia (YWP)</i> <u>Room Theatre</u>	<i>Chairs: Olaf van der Kolk, Giulia Cipolletta (YWP)</i> <u>Room 6</u>
16.30-16.45	Optimised Nutrient Recovery from Biogas Digestate by Solid/liquid Separation and Membrane Treatment <u>Sandra Rosenberger</u>	The Inhibitory Effects of Free Nitrous Acid and Free Ammonia on the Aerobic Phosphorous Utilization Rate <u>Dimitris Andreadakis</u> , Constantinos Noutsopoulos, Gerasimos Ragkiskatos, Kyriaki Argyropoulou, Theodora V. Missirli, Daniel Mamais, Simos Malamis	Circular Economy in Water Sector and Italian Regulation Activities <u>Andrea Guerrini</u>
16.45-17.00	Nutrient Recovery from the Perspective of the Flemish Wastewater Utility <u>Bart Saerens</u> , Francis Meerburg, Marjoleine Weemaes	Phosphorus and Ammonia Removal and Recovery through Ion Exchange (IEX) Process at Demonstration Scale <u>Samuela Guida</u> , Georgia Rubertelli, Bruce Jefferson, Ana Soares	Novel Financing Strategies to Simultaneously Advance Sanitation and Agriculture Through Nutrient Recovery <u>Hannah Lohman</u> , John Trimmer, David Katende, Muwonge Mubasira, Maria Nagirinya, Fred Nsereko, Noble Banadda, Jeremy Guest
17.00-17.15	Reusable Magnetic Sorbent Materials for Advanced Wastewater Treatment and Nutrient Recovery <u>Asya Drenkova-Tuhtan</u> , Carsten Meyer, Caleb Inskeep, Karl Mandel, Thomas Ballweg, Michael Schneider, Carsten Gellermann, Heidrun Steinmetz	Chemical vs. Biological Phosphorus Removal: Full-scale Process Optimisation for Resources Saving <u>Laura Menoni</u> , Gergio Bertanza, Roberta Pedrazanni	Integration of Statistical Monitoring and Life Cycle Assessment to Evaluate the Sustainability Behavior of WWTPs Peyo Stanchev, Vasileia Vasilaki, Francesco Fatone, <u>Evina Katsou</u>

17.15-17.30	Hydrothermal Carbonization (HTC) for the Nutrient and Energy Recovery from Digested Sewage Sludge <u>Anna Hämäläinen</u> , Jukka Rintalla, Marika Kokko, Viljami Kinnunen, Tuomo Hilli	Mainstream SCEPPHAR Configuration for Integrating P and PHA Recovery in the Water Line of WWTPs <u>Oriol Larriba</u> , Zivko Juznic-Zonta, Borja Solis, Juan Baeza, Albert Guisasola	Evaluation and Cost-efficiency of On-site Wastewater Reuse Systems <u>Darja Istenič</u> , Nataša Atanasova, Aleksandra Krivograd Klemenčič, Franja Prosenec, Tjasa Griessler Bulc
17.30-17.45	High Efficiency Phosphorus Recovery and Sewage Sludge Valorization via Hydrothermal Carbonization <u>Gianni Andreottola</u> , Maurizio Volpe, Luisa Mariafioti, Luca Fiori	Boosting the P Extraction from the Sludge by Rearranging the Sludge Line in a WWTP Ramón Barat, Miguel Roldán, José Ferrer, Nuria Martí, Teresa Alvaríño, Francisco Javier Navarro	Life Cycle Assessment and Cost-Benefit Analysis of a Multi-Step Process of Olive Mill Wastewater Valorization through Polyphenol Adsorption and Anaerobic Digestion Dario Frascari, Tjerk Wandenaar, Emmanuel Oertlè, Atef Jaouani, Davide Pinelli
17.45-18.00	Simultaneous Nitrogen Removal and Phosphorous Recovery in Anoxic and Microaerobic Biofilm Systems <u>Francesco Di Capua</u> , Francesca Iannacone, Francesco Granata, Rudy Gargano, Francesco Pirozzi, Giovanni Esposito	Phosphorus Recovery and Management in Alto Tregviano Servizi: From Pioneer Struvite Recovery to Current Regional Strategies Alberto Piasentin, Luca Giroto, Matteo Tartini, Roberto Durigon, Pierpaolo Florian	Measuring the Circularity Potential of an Eco-friendly Touristic Facility in a Mediterranean Island Chrysanthi-Elisabeth Nika, Peyo Stanchev, <u>Evina Katsou</u>
Evening	Young (and “not so Young”) Water Professional event (San Servolo garden)		

Tuesday, 10th September 2019

9:00-13:00	MORNING SESSION		
9:00-9:30	PLENARY PRESENTATION ENHANCED METHANE RECOVERY AND APPLICATION IN WRRFS Ziguo Yuan, University of Queensland (AUS) <i>Chair: Korneel Rabaey (BE)</i> (Room Auditorium - audio-video connection to Room Theatre)		
9:30-13:00	Session 7 URINE VALORIZATION AND WATER REUSE <i>Chairs: Korneel Rabaey, Prithvi Simha (YWP)</i> <u>Room Theatre</u>	Session 8 ENHANCED ANAEROBIC TREATMENT <i>Chairs: Siegfried E. Vlaeminck, Çağrı Akyol (YWP)</i> <u>Room Auditorium</u>	Session 9 VFA AND ORGANICS RECOVERY AND REUSE <i>Chairs: Lars Angenent, Juan Castilla-Archilla (YWP)</i> <u>Room 6</u>

9:30-9:50	<p>KEYNOTE The Beneficiation of Urine and Faecal Fractions from Urine-Diversion Double-Vault Toilets (UDDTs) in Ethekwini Municipality South Africa Sudhir Pillay, Water Research Commission (SA)</p>	<p>KEYNOTE Enhanced Anaerobic Treatment as Core of the WRRFs: Pilot and Full Scale Experiences Bruce Jefferson, Cranfield University (UK)</p>	<p>KEYNOTE Cellulose Recovery and Carbon Upgrading by Integrating Microsieving and Fermentation Technologies in Wastewater Treatment Plants: A Plant-Wide Modeling Study Santoro Domenico, Trojan Technologies (CA)</p>
9.50-10.05	<p>Achieving Nutrient Resource Efficiency through Urine Separation Processing and Reuse: A Comprehensive Study <u>Nancy Love</u>, Glen Daigger</p>	<p>Efficient Utilization of Regional Biomass with Intensive Digestion System Using Sludge Solubilisation and Solid Oxide Fuel Cell <u>Manabu Matsuhashi</u>, Ryoichi Maeda, Haruo Miyake, Yusuke Shiratori, Atsushi Tajima</p>	<p>Volatile Fatty Acids Production: Effect of Bacterial Community under Various Operational Conditions <u>Merve Atasoy</u>, Zeynep Cetecioglu GuroI</p>
10.05-10.20	<p>Safe Production of Microbial Protein from Urine Mark Dodds, Yifeng Zhang, Elena Toressi, Monika Skadborg, Barth F. Smets, <u>Borja Perez Valverde</u></p>	<p>Innovative Ex-situ Biological Biogas Upgrading Using Immobilized Biomethanation Bioreactor (IBBR) Katie Baransi-Karkab, Mahdi Hassanen, Sharihan Muhsein, Nidal Massalha, <u>Isam Sabbah</u></p>	<p>Targeting Specific Volatile Fatty Acid Production through pH Shifts During Protein Fermentation <u>Riccardo Bevilacqua</u>, Alberte Regueira, Miguel Mauricio-Iglesias, Marta Carballa, Juan M. Lema</p>
10.20-10.35	<p>Green Walls Optimized for Treatment and Reuse of Greywater <u>Fabio Masi</u>, Alice Caruso, Elisa Magna, Silvia Fiore, Francesca Demichelis, Ana Galvao, Janoa Pisoeiro, Anacleto Rizzo, Luca Ridolfi, Fulvio Boano</p>	<p>High Rate Immobilized Anaerobic System Treating Wastewater - Evaluation and Simulation at a Pilot-scale System <u>Isam Sabbah</u>, Daniel Dias, Jorge Ribeiro, Mahdi Hassanin, Morad Massalha, Jorge Santos, Nedal Massalha, Salva Shmulevich, Avi Aharoni, Adrian Oehmen</p>	<p>Biorefinery Pilot Plant for VFAs and Nutrients Recovery from Agro-waste Material Simone Nortilli, Edoardo Rigetti, <u>Nicola Frison</u>, David Bolzonella</p>
10.35-10.50	<p>Improvement of Water Quality Through BAC Filtration in a Water Reclamation Plant Laura Palli, Stefano Fiaschi, Michelle Allocca, Vittoria Viviani, Claudio Lubello, <u>Riccardo Gori</u>, Roberto Camissa, Donetella Fibbi</p>	<p>Free Nitrous Acid Pre-treatment of Waste Activated Sludge Enhances Efficiency and Rheological Behaviour of Anaerobic Sludge Digester <u>Jia Meng</u>, Huijuan Li, Shoan Shrestha, Min Zheng, Haoran Duan, Jason Dwyer, Shihu Hu, Zhiguo Yuan</p>	<p>Pilot Scale Acidogenic Fermentation of Microsieved Cellulosic Sludge for Short Chain Fatty Acids Production <u>Cinzia Da Ros</u>, Nicolas Frison, Vincenzo Conca, Anna Laura Eusebi, Francesco Fatone</p>
10.50-11.05	<p>Removal of Micropollutants from Wastewater by Rapeseed Simultaneous Biosorption <u>Irina Morosanu</u>, Carmen Teodosiu, Daniela Fighir, Carmen Paduraru</p>	<p>Long Term Operation of Anaerobic Municipal Wastewater Treatment of Low-loaded Wastewater for Fertigation Purposes <u>Alessia Foglia</u>, Çağrı Akyol, Anna Laura Eusebi, Giulia Cipolletta, Nicola Frison, Stefania Gorbi, Francesco Fatone</p>	<p>Direct Membrane Filtration of Municipal Wastewater by Ceramic Flat-sheet Membranes for Recovery of Organic Matter <u>Katsuki Kimura</u>, Megumi Kato</p>
11:05-11:30	<p>Morning coffee and pitch of EU projects concerning water and resource recovery (Room Grecale)</p>		

11:30-13:00	<i>Chairs: Glen Daigger, Miriam Otoo Room Theatre</i>	<i>Chairs: Isam Sabbah, E. Gozde Ozbayram (YWP) Room Auditorium</i>	<i>Chairs: Peter Vale, Angel Estevez Alonso (YWP) Room 6</i>
11.30-11.45	Evaluation of Design Wastewater Treatment Plant Tertiary Process for Water Reuse with the Application of Modelling Tool Paolo Cirello, Giancarlo Cecchini, Mario de Mola, Emilia Bernardini, <u>Barbara Biagi</u>	Non-ideal Mixing Model of Anaerobic Digestion: Linking the CFD Model and ADM1 <u>Yohannis Mitiku Tobo</u> , Jan Bartacek, Ingmar Nopens	Hydrothermal Carbonization of Sewage Sludge: Process Optimization by Response Surface Methodology Monica Puccini, <u>Andrea Tasca</u> , Gemma Mannarino, Anna Raspolli Galletti, Sandra Vitolo, Ricardo Gori
11.45-12.00	An Integrated Wastewastewater Management Approach to Increase Wastewater Reuse in Mediterranean Regions <u>Giuseppe Mancini</u> , Antonella Luciano, Paolo Viotti, Debora Fino	Exploring Forward Osmosis for Production of Reclaimed Water and Concentrated Wastewater for Anaerobic Treatment <u>Federico Ferrari</u> , Ignasi Rodriguez-Roda, Maijte Puijan, Gaetan Blandin	Pretreatment and Process Optimization for Brewery Spent Grain Conversion into Chemical Building Blocks <u>Juan Castilla-Archilla</u> , Stefano Papirio, Piet N.L. Lens
12.00-12.15	Recovery of Ammonia from Urine with an Open-loop Hollow Fiber Membrane Contactor Junhui Zhang, Mengfei Xie, Haoxiang Yu, <u>Dan Qu</u>	Long-term Performance of Two Pilot Scale Anaerobic Reactors for Thermal Hydrolyzed Sludge Digestion under Mesophilic and Thermophilic Conditions Zhan Chen, Wei Li, Jiawei Wang, <u>Xianghua Wen</u>	Selective Separation of Organics and Inorganics by Ion-Exchange Membranes <u>Lingshan Ma</u> , Leonardo Gutierrez, Muhammad Waqas, Emile Cornelissen, Marjolein Vanoppen, Arne Verliefde
12.15-12.30	Application of Membrane Distillation for Optimal Fertilizer Recovery from Human Urine Mekdimu Damtie, Federico Volpin, Minwei Yao, Leonard Tijjing, Yun-Chul Woo, June-Seok Choi, Ho-Kyong Shon	Intensifying Energy Recovery via Biological <i>in situ</i> Biogas Upgrading by Means of Hydrogenotrophic Methanogenesis in WWTP <u>Viola Corbellini</u> , Francesca Malpei	Pathogen Inactivation and Resource Recovery from Sanitation Waste Through In-situ Accumulation of Carboxylic Acids Lauren Harroff, Janice Liotta, Dwight Bowman, <u>Largus Angenent</u>
12.30-12.45	Urine Dehydration Technology for Recycling Nutrients in a Public Dry Sanitation System <u>Prithvi Simha</u> , Jenna Senecal, Caroline Karlsson, Riikka Malila, Eeva Liisa Viskari, Björn Vinnerås	Full-scale Anaerobic Co-digestion of Sludge and Organic Waste: Rovereto Four-year Experience <u>Cristina Cavinato</u> , Filomena Ardolino, Giovanni Gatti, Gian Paolo Mattuzzi, Franco Cecchi	Impact of Advanced Separation Technologies on the Fermentation Products of Municipal Sludge <u>Antoine Brison</u> , Nicolas Derlon
12.45-13.00	Enabling Resource Recovery by In-Sewer Treatment and Microbial Ecology-based Engineering: Water Re-Use Starts Now in the Sewer Nouha Klai, Lisha Guo, Domenico Santoro, Dominic Frigon	Blend Quality and Logistics Optimization of Anaerobic Codigestion in a Real Multi-Plant Case Study <u>David Palma</u> , Marta Verdaguer, Manel Poch, M.À. Cugueró-Escofet	Anaerobic Co-digestion of Sewage Sludge and External Organic Waste: Strategy to Shift Production from Biogas to Volatile Fatty Acids <u>Isaac Owusu-Agyeman</u> , Ezbieta Plaza, Zeynep Cetecioglu Gurol
13:00-14:30	Lunch, poster presentation and WATER EUROPE speech concerning “Water oriented Living Labs” Andrea Rubini (Water Europe) “Developing soft skills as core strategy to secure and speed up water related innovation in industries and utilities” Anita D’Agnolo Valla (InnoSuccess) (Room Grecale)		

14:30-18:00 AFTERNOON SESSION			
14:30-15:00	<p align="center">PLENARY PRESENTATION RESOURCE RECOVERY FROM WATER: OPPORTUNITIES FOR DEVELOPING COUNTRIES Miriam Otoo, International Water Management Institute (LK) <i>Chair: Guenter Langergraber (AT)</i> (Room Auditorium - audio-video connection to Room Theatre)</p>		
15:00-18:00	<p align="center">Session 10 BIOPOLYMERS AND VALUE-ADDED PRODUCTS RECOVERY: NOVEL TECHNOLOGIES <i>Chairs: Mauro Majone, Vincenzo Conca (YWP)</i> <u>Room Theatre</u></p>	<p align="center">Session 11 ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY ASSESSMENT <i>Chairs: Ger Bergkamp, Giuseppe Mancini</i> <u>Room 6</u></p>	<p align="center">Session 12 ROAD TO BIOREFINERY AND WRRF IMPLEMENTATION <i>Chairs: Guenter Langergraber, Emel Topuz (YWP)</i> <u>Room Auditorium</u></p>
15:00-15:20	<p align="center">Valorisation of Complex Wastewater for the Production of PHA Alba Roibás-Rozas, Lucia Argiz, Alba Predouso, Angeles Val Del Rio, Almudena de Hospido, Anuska Corral Mosquera</p>	<p align="center">Evaluating Construction Industry Views on Recovered Cellulose as a Component of Building Materials Elaine Gallagher, Caitriona Shannon, Heather Smith</p>	<p align="center">KEYNOTE Full Scale Biorefinery and Territorial Strategy for Resource Recovery and Reuse: The Case of CAP Holding Italy Andrea Lanuzza, CTO, CAP Holding (I)</p>
15.20-15.35	<p align="center">Recovery of ALE (Alginate-like Exopolymer) from Aerobic Granular Sludge and Application as Phosphorus Adsorbent Patricia Dall'Agnol, <u>Nelson Libardi</u>, Jessica Xavier, Rejane Helena Ribeiro Da Costa</p>	<p align="center">The Sustainability of Microbial Protein as Feed Ingredient - A Comparative Life Cycle Assessment of Three Growth Metabolisms with Soybean Meal Marc Spiller, Maarten Muys, Myrsini Sakarika, Gustavo Papini, Matthias Buyle, Siegfried E. Vlaeminck</p>	<p align="center">Compounds of Interest in Wastewater from Food Processing Industries: H2020 AFTERLIFE Project Andrea Martos Dominguez, Santiago Perez Rodriguez, Nicola Frison, <u>Maria Lopez Abelairas</u></p>
15.35-15.50	<p align="center">Optimization of a PHA Production Process with Nitrifying Surplus Activated Sludge via Dissolved Oxygen Control <u>Angel Estevez-Alonso</u>, Ruizhe Pei, Robbert Kleerebezem, Mark van Loosdrecht</p>	<p align="center">From Waste to Self-healing Concrete: A New Value Chain for Polyhydroxyalkanoates <u>Chris Vermeer</u>, Emanuele Rossi, Robbert Kleerebezem, Henk Jonkers, Jelmer Tamis</p>	<p align="center">CoRe Water: From WWTP to a Sustainable Water and Resource Factory <u>Kees Roest</u>, Julian Sierra Muñoz, Lex van Dijk, Annie Polman, Hans Ramaekers, Alexander Hendriks, Emile Cornelisen</p>
15.50-16.05	<p align="center">Influence of Wastewater Composition and Bioaggregates Types on the Properties of Alginate-like Exopolymers <u>Cássio Moraes Schambeck</u>, Lukas Boni, Peter Fischer, Elisabeth Girbal-Neuhauser, Yolaine Bessière, Paul</p>	<p align="center">Cost of Sericin Recovery from Silk Effluents Tolga Pilevneli, Merve Gencturk, Ulku Yetis, <u>Goksen Capar</u></p>	<p align="center">Chemically Enhanced Primary Treatment: Shall We Pay More Attention to Bio-sourced Coagulants to Maximize CH₄ Production? <u>Florent Chazarenc</u>, Fatima Ezzahraa El Messaoud</p>

	Etienne, Rejane Helena Ribeiro da Costa, Nicolas Derlon		
16:05-16:30	Afternoon coffee and pitch of EU projects concerning water and resource recovery (Room Grecale)		
	<i>Chairs: Cristina Cavinato, Nicola Frison (YWP)</i> Room Theatre	<i>Chairs: Vanessa Parravicini, Matia Mainardis (YWP)</i> Room 6	<i>Chairs: Anna Laura Eusebi, Christian Remy</i> Room Auditorium
16.30-16.45	Biopolymers Recovered from Waste Anammox Granular Sludge as Paper-Coating Additives to Enhance Water and Grease Resistance Cuijie Feng , Tommaso Lotti, Francesca Malpei	Integrated Sustainability Assessment of Wastewater Treatment Plants as Local Energy Suppliers Peter Lichtenwoehrer , Florian Kretschmer, Guenter Langergraber, Georg Neugebauer	Water Recovery and Reuse, Between Opportunities and Barriers: The Integrated Fusina Project (PIF) Patrizia Ragazzo , Cristiano Franzoi, Andrea Razzini
16.45-17.00	Extraction and Characterisation of Polyhydroxybutyrate Biologically Synthesised Using Mixed Microbial Cultures Dario Presti, Gabriella Montiel-Jarillo, Diego Morales-Urrea, Giorgio Mannina, Edgardo Contreras, Julián Carrera, María Eugenia Suárez Ojeda	Developing a Market Place for Water in the Circular Economy: The NextGen Approach Christos Makropoulos	Enabling Next Generation Resource Recovery Julian Sandino , Samuel Jeyanayagam
17.00-17.15	Impact of Influent Suspended Solids on Granulation and Production of Gel-forming Polymers in an Aerobic Granular Sludge Reactor Treating Brewery Wastewater Flinn De Vleeschauwer , Michel Caluwe, Jan Dries	Comparative Cost Estimations of Full-scale Phosphorus-recovery Processes in German Wastewater Treatment Plants Lea Conzelmann , Fabian Kraus, Christian Remy	Upgrading of a Wastewater Treatment Plant to Resource Recovery Dines Thornberg , Nick Ahrensberg, Jeanette Agertved
17.15-17.30	Extracellular Polymeric Substances (EPS) from Anammox Granular Sludge as Biosorbent for Heavy Metals Removal Benedetta Pagliaccia , Tommaso Lotti, Emiliano Caretti, Mirko Severi, Deborah Berti, Claudio Lubello	Thermal Energy Recovery Within Sewage Treatment Process Marco De Sanctis, Valentina Piergrossi, Guido Valerio Altieri, Sabina Rosiek, Francisco Portillo, Francisco Javier Battles, Javier Martinez Del Rio, Iñaki Acasuso, Claudio Di Iaconi	Using Monte Carlo Based Simulation Optimization for the Design and Optimization of Wastewater Resource Recovery Facilities Resul Al, Chitta Ranjan Behera, Gürkan Sin
17.30-17.45	Exploring Resource Recovery Potentials for the Aerobic Granular Sludge Treatment Process Philipp Kehrein , Mark van Loosdrecht, Patricia Osseweijer, Jo de Wulf, Marianna Garfi, John Duque Posada	Drinking Water Distribution Networks: An Emerging Resource for Thermal Energy Recovery Jawairia Imtiaz Ahmad , Sara Giorgi, Ljiljana Zlatanovic, Gang Liu, Gertjan Medema, Jan Peter Van Der Hoek	Hydrothermal Carbonization as a Suitable Process for Resource Recovery and Enhancement of Biogas Production from Sewage Sludge Gemma Mannarino, Monica Puccini, Andrea Salimbeni, Massimo Aiello, Simone Caffaz, Riccardo Gori
17.45-18.00	Recovery Potentials from Aerobic Granular Sludge Treating Low C/N Real Municipal Wastewater Riccardo Campo , Emiliano Carretti, Debora Berti, Simone Caffaz, Claudio Lubello, Tommaso Lotti	Waste-to-Resource Transformation – Computer-aided Systems Modelling of Waste Resource Recovery Miao Guo	Micro-sieving of Municipal Wastewater Improves Effluent Quality Energy Balance and Clarification Capacity of WWTPs

Nicolas Derlon, Ken Lüding, Markus Behl, Benno Maissen, Tobias Krast, Simone Buetzer, Alexandra Fumasoli

Evening

GALA DINNER

Wednesday, 11th September 2019

9:00-11:00		MORNING SESSION	
9:00 – 9:30		<p align="center">PLENARY PRESENTATION BRINGING WATER INNOVATION TO CIRCULAR ECONOMY MARKET Paul O’callaghan, BlueTech Research (IRL) Chair: Willy Verstraete (BE) (Room Auditorium - audio-video connection to Room Theatre)</p>	
9:30 – 11:00	<p align="center">Session 13 SMART PLANT SESSION Chairs: Francesco Fatone, Evina Katsou Room Theatre</p>	<p align="center">Session 14 PROTEIN AND VALUE-ADDED PRODUCTS RECOVERY: NOVEL TECHNOLOGIES Chairs: Willy Verstraete, Ilje Pikaar Room Auditorium</p>	<p align="center">Session 15 GOVERNANCE AND REGULATION Chairs: Kees Roest, Heather Smith Room 6</p>
9:30 – 09:50	<p align="center">Recovery and Valorisation of Cellulose from Wastewater - The Road to Circularity Pim Marcellis, Coos Wessels, Carlijn Lahaye</p>	<p align="center">KEYNOTE Polymer Grade Succinic Acid Production from Organic Waste: The PERCAL Project Pipeline Korneel Rabaey, Ghent University (B)</p>	<p align="center">KEYNOTE Barriers and Opportunities for a Circular Economy of Phosphorus in the Baltic Sea Region Karina Barquet, Stockholm Environment Institute (S)</p>
09:50-10:05	<p align="center">Exploring the Integration of EBPR at Low SRT and DO in an A-stage System for COD and P Removal Claudio Scalia, Congcong Zhang, Giorgio Mannina, Albert Guisasola, Juan Baeza</p>	<p align="center">Purple Phototrophic Bacteria - Biofilm Technology for Microbial Protein Production Tim Hulsen, Samuel Stegman, Paul Jensen, Damien Batstone</p>	<p align="center">The Politics of a Transition Towards a Circular Economy in the Dutch Wastewater System Kasper Ampe, Erik Paredis, Lotte Asveld, Patricia Osseweijer, Thomas Block</p>
10:05-10:20	<p align="center">Nitrogen Removal via Nitrite from Thermally Hydrolysed and Digested Reject Water Evangelos Statoris, Constantinos Noutsopoulos, Daniel Mamais, Nikolaos Petalas, Simos Malamis</p>	<p align="center">Economic Potential of Brewery Effluent Treatment with Maximized Heterotrophic Microbial Protein Production Gustavo Papini Gomes de Sousa, Maarten Muys, Marc Spiller, Francis Meerburg, Siegfried Vlaeminck</p>	<p align="center">HOUSEFUL - Innovative Water Energy Material and Nutrient Cycles for the Housing Sector Maria Wirth, Gaetano Bertino, Johannes Kissler, Roman Grunner</p>

10:20-10:35	Modelling of a Novel Side-stream Technology Combining Short-cut Nitrogen Removal and Bioplastic Recovery <u>João Ribeiro</u> , Vincenzo Conca, Jorge Santos, Daniel Dias, Nilay Sayi-Ucar, Cinzia Da Ros, Adrian Oehmen	Power-to-Protein: Next Step Towards Consumable Single Cell Proteins from Waste Water and Renewable Hydrogen <u>Frank Oesterholt</u> , Luc Palmen, Willy Verstraete, Jos Boere	Time to Stop Flushing Potable Water with Our Faeces & Urine - A National Water Strategy Based on Resource Recovery from Re-Engineered Toilets Jayan Bhagwan, Valerie Naidoo, <u>Sudhir Pillay</u>
10:35-10:50	Trade-offs Between Environmental and Operational Parameters in SCENA Process Vasileia Vasilaki, Vincenzo Conca, Nicola Frison, Francesco Fatone, <u>Evina Katsou</u>	Biological Upgrading of Biogas and Production of Single Cell Proteins <u>Jeanette Madsen</u> , Jacob Kragh Andersen, Nick Ahrensberg, Panagiotis Tsapekos	Impact and Opportunities for the Urban Water Cycle of the 'Fully Circular in 2050' Target of the Netherlands - Circular Water 2050 <u>Kees Roest</u> , Laura Snip, Luc Palmen, Ben Römgens, Andrew Sergrave, Henk-Jan Alphen
10:50-11:05	Environmental Technology Verification of the Full-Scale Short-Cut Enhanced Nutrients Abatement (SCENA) Process Vincenzo Conca, <u>Nicola Frison</u> , Cinzia Da Ros, Matteo Tartini, Alberto Piasentin, Anna Laura Eusebi, Francesco Fatone	Towards More Sustainable Food Chain: Microbial Protein Production from Catalytically of Biologically Fixed CO₂ <u>Myrsini Sakarika</u> , Pieter Candry, Ramon Ganiguè, Korneel Rabaey	Decentralised Water and Waste Treatment in View of Resource Recovery <u>Stijn Van Hulle</u>
11:05 – 11:30	Morning coffee and presentation of the EU PRIMA Initiative (Room Grecale)		
11:30 – 13:00	Session 16 METALS RECOVERY <i>Chairs: Juan Antonio Baeza, Giovanni Esposito</i> <u>Room 6</u>	Session 17 MICROALGAE-BASED PROCESSES <i>Chairs: Tim Hulsen, Alice Botturi (YWP)</i> <u>Room Theatre</u>	Session 18 HIGH VALUE CHEMICALS/MATERIALS RECOVERY <i>Chairs: Simos Malamis, David Bolzonella</i> <u>Room Auditorium</u>
11:30 – 11:45	Membrane Electrolysis for Separation of Cobalt from Terephthalic Acid in Industrial Wastewater <u>Rui Gao</u> , Xochitl Dominguez-Benetton, Jeet Varia, Bernd Mees, Gijs, Du Laing, Korneel, Rabaey	Application of Microalgae for Wastewater Treatment and Recovery of Bioenergy and High-value Bioproducts <u>Larissa Arashiro</u> , Ivet Ferrer, Diederik P.L. Rousseau, Stijn W.H. Van Hulle, Marianna Garfi	Photoelectrocatalytic Production of Hydrogen and Commodity Chemicals from Desalination Brine Linchao Mu, <u>William A. Tarpeh</u>
11:45 – 12:00	Detection Removal and Recovery of Metals from Water Sludge and Fly Ash <u>Kees Roest</u> , Edwin Buijzer, Luc Palmen, Julian Muñoz Sierra	Recovery and Recycling of Nutrients from Wastewater with Algae Maja Berden Zrimec, Ana Cerar, Borut Lazar, Matej Slapnik, Lara Resman, Rok Mihelič, <u>Robert Reinhardt</u>	Production of N-caproate from Food Waste Without pH Control: Consecutive Lactate Formation and Chain Elongation <u>Carlos Contreras Davila</u> , Cees Buisman, David Strik

12:00 – 12:15	Towards Lithium Selective Membranes: Crownether Containing Poly-Electrolyte Multilayer Membranes <u>Mohammad Kazemabad</u> , Arne Verliefde, Emile R. Cornelissen, Arnout D’Haese	Integration of Microalgae Culturing as a Side-stream Process into Wastewater Treatment Plants: An LCA Evaluation Lucia Rigamonti, Camilla Tua, <u>Elena Ficara</u>	A Potential P Fertilizer – Biochar Produced by EBPR Sludge Tingting Qian, <u>Yan Zhou</u>
12:15 -12:30	An Integrated Approach for HCl and Metals Recovery from Waste Pickling Solutions: Pilot Plant Design and Operations <u>Rosa Gueccia</u> , Daniel Winter, Serena Randazzo, Andrea Cipollina, Giorgio Domenico Micale, Joachim Koschikowski, Florian Gross	Use of Microalgae Grown on Fish Tank Residual Nutrients as Feed for Copepods to Enable Circular Bio-economy in Aquaculture <u>Borja Valverde Pérez</u> , Lars A. Ahrens, Anette M. Christensen, Carlos O. Letelier-Gordo	Advanced Composting and Bio-drying as an Opportunity to Recover Material and Energetic Resources from Sludges <u>Nagore Guerra</u> , Mabel Mora, Lara Pelaz, Jonatan Ovejero, Laia Llenas, Belèn Puyuelo, Joan Colón, Sergio Ponsá
12:30 – 13:00	OFFICIAL CLOSING of the conference (concluding remarks organizing committee + award for YWPs best poster and/or presentation) (Room Auditorium - audio-video connection to Room Theatre)		
13:00 – 13:45	Presentations and voting for the next conference		
POST CONFERENCE WORKSHOPS			
14:00 – 18:00	WORKSHOP 1 <u>6TH MIXED CULTURE PHA WORKSHOP – DAY 1</u>		WORKSHOP 2 <u>H2020 WATER INNOVATIONS FOR SUSTAINABLE IMPACT IN INDUSTRIES AND UTILITIES</u>
	Chairs: Mauro Majone, La Sapienza University of Rome (I); Alan Werker, Wetsus (NL) <u>Università Ca’ Foscari, Venice</u>		Chairs: H2020 projects SMART-Plant (Francesco Fatone), HYDROUSA (Simos Malamis), NextGen (Jos Frijns / Christos Makropoulos), Project-O (Ilaria Schiavi) – co-organized by European Commission - EASME (Evdokia Achilleos) <u>Room Theatre</u>

Thursday, 12th September 2019

9:00 - 17:00	TECHNICAL VISITS TO FUSINA TREATMENT PLANT AND RESOURCE RECOVERY SITES IN TREVISO PROVINCE
9:00 - 12:00	Technical Visit 1 – Fusina (co-organized and supported by water utility VERITAS SpA)
12:00 - 13:00	Lunch Break
14:00 - 17:00	Technical Visit 2 – Treviso Province (co-organized with water utility Alto TREVIGIANO Servizi srl)



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POSTER PRESENTATIONS

Code	Title	Author(s)
P001	Nitrogen Recovery from Blackwater Using Bioelectrochemical Systems	Marti Aliaguilla, Eduard Borrás, Daniele Molognoni, Pau Bosch-Jimenez, Maria del Pilar Bernícola, Júlia García-Montaño, Sonia Sanchis
P002	Can We Benefit from Hydroxylamine and Hydrazine Generating in Anammox Reactors?: The Possible Use in Nanobiotechnology Applications	Bilge Alpaslan Kocamemi, Esra Erdim
P003	Wastewater Reuse for Agricultural Purposes: A Case Study	Eleonora Aneggi, Alessandro Moretti, Daniele Goi
P004	Evaluating the Potential Production of Bio-based Products from Waste Streams	Merve Atasoy, Zeynep Cetecioglu Gurol
P005	Avoiding Eutrophication in Small Water Bodies: An Hydrogenotrophic Approach	Raquel Barbosa, Tom Sleutels, Nico Bonn, Willy Verstraete
P006	Pilot-scale Treatment of Combined Sewage Overflows (CSOs) and Its Further Possible Agricultural	Alice Botturi, Saba Daneshgar, Francesco Fatone, Anna Laura Eusebi
P007	Enhancement of Sludge Solubilisation by Carbon Nanotube-coated Vessel Applied Microwave Irradiation	Kyeong Hwan Kang, Jenghyeon Kim, Hyeonjin Jeon, Imgyu Byun
P008	Enhancement of the Direct Lipid Extraction Yield From Wet Algae by Optimization of the Microwave Irradiation Conditions	Hyeonjin Jeon, Junghyeon Kim, Kyeong Hwan Kang, Imgyu Byun
P009	Enhancement of the Microwave Energy Efficiency by the Adaption of a Reflective-wave Circulating Unit	Junghyeon Kim, Hyeonjin Jeon, Kyeong Hwan Kang, Imgyu Byun
P010	Anaerobic Digestion of Leather Pickling Wastewater and Leachate Mixture: Effect of Salinity on Reactor Performance	Monica Carvalheria, Bruno Oliveria, A. Maria Sampaio, Joana Cassidy, Catarina S.S. Oliveria, Maria A.M. Reis

P011	Selecting a Photo-Enhanced Biological Phosphorous Removal System Starting from Conventional Wastewater Treatment Plant Sludge	Virgina Carvalho, Elisabete Freitas, Joana Fradinho, Adrian Oehmen, Maria Reis
P012	Impact of Elevated CO ₂ Partial Pressure on the Thermodynamics and Kinetics of Syntrophic Propionate Oxidation	Pamela Ceron, Ralph Lindeboom, Korneel Rabaey, Jules van Lier
P013	Phosphorus Recovery from Excess Sludge through Alkaline Fermentation: Studies for Pilot-scale Design	Sevil Coşgun, Büşra Kunt, Neslihan Semerci
P014	Aerobic Capture of Organic Carbon for Anoxic Nitrogen Removal via Intracellular PHA Storage in a Novel Two-stage SBR Process Treating Sewage	YouWei Cui, Chang Lin Jin
P015	Pilot-Scale Study of Phosphate Precipitation Process from Synthetic Aerobic Sludge	Saba Daneshgar, Armando Buttafava, Arianna Callegari, Andrea G. Capodaglio
P016	Phosphorus Recovery on Apatite Filters: Developing a Mechanistic Model	Laura Delgado, Denise Blanc, Mathieu Gautier, Stéphane Troesch, Pascal Molle
P017	Design And Optimisation of Integrative Process Systems for Resource Recovery From Wastewater	Alex Durkin, Miao Guo
P018	Phosphate Recovery from Wastewater Using Porous Calcium Silicate Hydrate Derived from Carbide Slag	Dexin Fang, Zhuyao Fang, Fangying Ji
P019	Phosphorus Removal by a Sequence Batch Moving Bed Biofilm Process	Abaynesh B. Fanta, Sveinung Sægrov, Stein V. Østerhus
P020	Solar Drying as a Nature-based Approach for Nutrients Recovery from Digested Animal Manures	Lluís Morey, Victor Riau, Laura Tey, Carme Biel, Angel Porta, Joan Soler, Belén Fernández
P021	The Role of Fermentative Hydrogen as Electron Donor in Bioelectrochemical Systems for Nutrient Recovery	Steffen Georg, Inigo de Eguren Cordoba, Tom Sleutels, Philipp Kuntke, Annemiek ter Heijne, Cees J. N. Buisman
P022	Tools for the Selective Production of Purple Bacteria in Raceway Reactors as Source of Microbial Protein	Abbas Alloul, Damian Adamczyk, Siegfried Vlaeminck
P023	The Effect of Free Nitrous Acid and Free Ammonia Sludge Pre-treatment on Energy Recovery from High Rate Activated Sludge and Partial Nitrification Process	Angelica GuePero Calderon, Haoran Duan, Min Zheng, Shihu Hu, Zhiguo Yuan

P024	(Bio-)electrochemical Technologies for Resource Recovery In Wastewater Treatment Wetland Systems	Marco Hartl, Marianna Garfi, Jaume Puigagut, Diederik Rousseau, Gijs Du Laing
P025	Low Phosphorus Effluent Concentrations at the Wastewater Treatment Plants Using Nanoparticle Modified Materials	Marek Holba, Lenka Hoferková
P026	Short Branch Chain Fatty Acid Production from Methanol by an Open Culture Enrichment	Shengle Huang, Ramon Ganigué, Robbert Kleerebezem, Korneel Rabaey
P027	Iron-reducing Biocathode for Phosphorus Remobilization from FeP Complexes Contained in Wastewater Sludge	Dongya Sun, Xi Chen, Xiaoyuan Zhang, Peng Liang, Xia Huang
P028	Enhanced Nitrogen Removal Using Corncob as Carbon Source and Biofilm Carrier: Performance and Microbial Shift	Liping Huang, Jiangyu Ye, Hongwei Xiang, Jianhua Jiang
P029	Diffusion Gradients in Thin Films as a Potential Monitoring Tool to Assess Trace Metal Bioavailability in Anaerobic Digestion	Aleksandra Ilic, Gjis Du Laing, Jan Bartacek
P030	Profiled Membranes: A Novel Approach to Mitigate Internal Concentration Polarization in Forward Osmosis	Morez Jafari, Arnout D'haese, Mark van Loosdrecht, Cristian Picioreanu
P031	Novel and Reusable Amine-functionalized Magnetic Demulsifier for Separation of Oil-water Emulsion	Kyung-Joo Kim, Jun-Won Jang
P032	Enhanced Removal of Endocrine Disrupting Chemicals (EDCs) from Urban Wastewaters for Reuse Purposes	Özlem Karahan Özgün, Ayşe Dudu Allar Ekmek, Tuğba Ölmez Hancı, Serdar Doğruel, İsmail Koyuncu, Ceren Eropak, Suna Çınar, Onur Kiraz, Ercan Çitil, Aybala Koç Orhon
P033	Unraveling the Critical Operational Parameters of Volatile Fatty Acids Production from Food Waste	Kasra Khatami, Merve Atasoy, Özge Eyice, Maximilian Lüdtke, Christian Barasel, Zeynep Cetecioglu Gurol
P034	Ion-exchange Resins for Metals Recovery (Cu And Zn) from Acidic Mine Waters	Xanel Vecino, Monica Reig, Julio López, Oriol Gilbert, César Valderrama, Jose Luis Cortina
P035	Recent Developments in Ammonia Recovery Using Electrochemical Systems	Philipp Kuntke, Maria Rodrigues, Tom Sleutels, Annemiek Ter Heijne, Hubertus (Bert) V.M. Hamelers, Cees J.N. Buisman
P036	Anaerobic Sludge Digestion in Circular Economy: Single-stage versus Two-stage Temperature-phased Systems	Iryna Lanko, Ivet Ferrer, Pavel Jenicek
P037	Steering Microbiomes Towards New Biochemical Production: Iso-caproate	Kasper Leeuw, David Strik, Cees Buisman

P038	Characterizing the Organic Matter in LB-EPS and TB-EPS of Aerobic Granular Sludge Using Parallel Factor (PARAFAC) Analysis	Dong Li, Shirul Zhang
P039	Preparation of Granular Adsorbent from Backwashing Iron Sludge and Its Arsenic Removal Performance	Dong Li, Hulping Zeng
P040	Production of Se-enriched Duckweed on (waste)water as an Alternative Protein Source for Animal Feed or Micronutrient Fertilizer	Jun Li, Lila Otero-Gonzalez, Piet Lens, Gijs Du Laing
P041	Characteristics of Algal Organic Matter and Its Fouling Behaviour with Forward Osmosis Filtration	Tian Li, Wanzhu Zhang, Bingzhi Dong, Weiyang Li
P042	Analysis of Performances of An Upflow Anaerobic Filter for Domestic Sewage Treatment and Methane Recovery	Bin Cui, Xiu Liu, Zhongqi Zhou
P043	Evaluation of a Nanofiltration Membrane on Metal Valorisation from Acidic Mine Waters	Julio López Rodríguez, Mònica Reig, Xanel Vecino, Oriol Gibert, César ValdePama, Jose Luis Cortina
P044	Cultivation of Anoxygenic Purple Bacteria for Polyhydroxyalkanoate Production on Industrial Wastewater	Safae Sali, Udeogu Onwusogh, Sunifar Parilakathoottu, Hamish R. Mackey
P045	The Role of Valorization of Resources of MSW Materials for Circular Economy Context: Progress, Challenges, and Perspectives: Critical Review	Teklit Gebregiorgis
P046	Protecting Water Resources by Implementation Water Safety Plans	Mohammad Reza Mohebbi, Sogol Oktaie, Kooshar Azam Vaghef, Ahmad Montazeri
P047	A Temperature-assisted Cyclic Process with Tailor-made Carbon Microtubes for the Removal of Antibiotics from Water	Mojtaba Mohseni, Kristof Demeestere, Gijs Du Laing, Süleyman Yüce, Matthias Wessling
P048	New Insights in Sulfur Precipitate Formation and Sedimentation	Annemerel R. Mol, Renata D. van der Weijden, Johannes B.M. Klok, Cees J.N. Buisman
P049	Metal Recovery by Ion-Exchange Resins from Municipal Incinerated Bottom Ash	Monica Reig, Xanel Vecino, Julio López, Oriol Gilbert, César Valderrama, Jose Luis Cortina
P050	Recovery of EPS from Aerobic Granular Sludge	Mathijs Oosterhuis, Eline van der Knaap, Eddie Koorneef

P051	The Dependency of the Methanogenic Pathway of Anaerobic Granules on Their Characteristics	Isaac Owusu-Agyeman, Özge Eyice, Zeynep Cetecioglu Gurol, Elzbieta Plaza
P052	Acid-ethanolysis Of Sewage Sludge: A Viable Route to Produce Fine Chemicals from an Exhausted Biomass	Carlo Pastore, Luigi di Botonto
P053	Evaluation of Biopolymers Produced by Selected Mixed Cultures from Sieving Residues as Flocculants for Urban Wastewater Treatment	Paul Etienne, Jean Noël Louvet, Ana Morgado-Ferreira, Mansour Bounouba, Elise Blanchet, Dores Cirne, Yolaine Bessière
P054	Survivability Of PHA After Mixed Culture Accumulation	Ruizhe Pei, Angel Estevez-Alonso, Robbert Kleerebezem, Mark C.M. van Loosdrecht, Alan Werker
P055	Boosting Vivianite Recovery from Digested Sludge by Increased Iron Dosing	Thomas Prot, Wokke Wijdeveld, Leon Korving, A. Iulian Dugulan, Kees Goubitz, Mark C.M. van Loosdrecht
P056	Nutrient Removal from Wastewater in Small-Scale PVA-Gel Based IFAS System	Ankur Rajpal, Nilesh Tomar, Yuu Ukai, Absar Ahmad Kazmi
P057	Biotechnological Approach for the Valorization of Synthetic Lignin Wastewater in a Bioelectrochemical System by Pseudomonas Putida KT2440	Juan Ramirez, Lars Blank, Koneel Rabaey, Miriam Rosenbaum
P058	Selecting a PHA Accumulating Mixed Microbial Culture Using Fermented Wastewater from a Sweets Manufacturing Industry	Catarina Rangel, Nídia Lourenço, Gilda Carvalho, Maria A.M. Reis
P059	Integrating Advanced Oxidation Processes with Biofiltration for Direct and Indirect Potable Reuse in Apulia Italy	Oronzo Santoro, Tiziano Pastore, Ida Vinci, Domenico Santoro
P060	Use Of Multi Criteria Decision Making Technique in Selection of Appropriate Household Water Treatment Technology	Supriya Savalkar, M. Mansoor Ahammed
P061	Quantification of Sustainability Index for the Resource Recovery Technologies Based on the Recovered Resource and Wastewater Stream	Emel Topuz, Irem Ozturk, Didem Okutman Tas,
P062	Conversion of Sewage Sludge and OFMSW Mix to Hydrogen Gas by Thermophilic Anaerobic Co-digestion	Vinay Tyagi, Carlos J. Álvarez-Gallego, Luis Isidoro Romero García
P063	Rethinking Wastewater as a Resource for Irrigation: The Case for Musanze Prison Rwanda	Djalila Umutangampundu

P064	Rainwater Harvesting And Reuse In Old Towns Preserving Resources And Cultural Heritage	Nadia Ursino, Luca Pozzato
P065	Lab-scale Selection of Lipid Accumulating Bacterium <i>Microthrix parvicella</i> from Wastewater Activated Sludge for Biodiesel Production	Marie Louise Uwizeye, Joachim Hansen, Silvia Venditti, Zuzana Frkova
P066	Phosphate Adsorption by Iron Coated Sand Granules as End-of-pipe Solution for the Purification of Drainage Water	Pieter Van Aken, Nico Lambert, Raf Dewil
P067	Phosphate Recovery from Iron Coated Sand Granules by Alkaline Desorption	Pieter Van Aken, Nico Lambert, Raf Dewil
P068	Which Performance for a Combined C and N Valorisation in Anaerobic Digestion Through Sidestream Ammonia Stripping?	Fabien Vedrenne, Jacques Robert, Nicolas Baffaleuf, Aude Fourcans, Karim Helmi, Jesus-Andrès Cacho Rivero
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