3RD IWA Resource Recovery Conference 2019

Sunday, 8th September 2019

10:00 – 10:30	**Registration IWA RR 2019**		
10:30 – 13:30	**PRE-CONFERENCE WORKSHOPS**		
	WORKSHOP 1 **TOWARDS CIRCULAR CITIES** **Chair:** Günter Langergraber, COST Action CA17133 (A)	**WORKSHOP 2** **EXPERIENCES WITH STRATEGY AND IMPLEMENTATION OF RR FOR WATER. CREATING NEW VALUE CHAINS AND ECONOMICS** **Chair:** Olaf Van der Kolk, CEO Aquaminerals (NL); Ludwig Hermann, ESPP – IWA (D); Ilje Pikaar, University of Queensland (AUS)	**WORKSHOP 3** **SUPER-W: RESOURCE RECOVERY FROM WASTEWATER: EMERGING TECHNOLOGIES & CONCEPTS** **Chair:** Gijs Du Laing, Ghent University (B); Korneel Rabaey, Ghent University (B)
13:30 – 14:30	Light lunch		
14:30 – 15:30	**Young Water Professionals (YWP) MEET UP / ice-breaking event for YWP**		
15:00 – 16:30	**Registration IWA RR 2019**		
16:30 – 17:00	Welcome speech by **KEY ITALIAN WATER STAKEHOLDERS**		
17:00 – 18:30	**CONFERENCE OPENING - PLENARY SESSION** Chairs: Francesco Fatone (IT) and Ilje Pikaar (AU) **RESOURCE RECOVERY FROM WATER CYCLE AND POTENTIAL FOR CIRCULAR ECONOMY** Diane D'Arras, IWA President **RESOURCE RECOVERY IN EU FUNDED WATER PROJECTS** - Evdokia Achilleos, European Commission - Easme **PLENARY PRESENTATION** **PAST (developed technologies to full scale) PRESENT (currently working on) FUTURE (2020 – Visions to 2050) OF RESOURCE RECOVERY FROM WATER CYCLE** Mark Van Loosdrecht, TU Delft (NL) and Willy Verstraete, Ghent University (B) **IWA RESOURCE RECOVERY Award Ceremony**		
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	**PLENARY PRESENTATION** ***20 YEARS OF BUSINESS IN RESOURCE RECOVERY FROM WATER*** Olaf Van Der Kolk, Aquaminerals (NL)		
9:30 – 13.00	**Session 1** **NUTRIENTS RECOVERY AND REUSE**	**Session 2** **PHOSPHORUS RECOVERY: NOVEL TECHNOLOGIES**	**Session 3** **VALUE ADDED PRODUCTS AND BIOPOLYMERS RECOVERY**
9:30 – 9:50	**KEYNOTE** **Nutrients Recovery and Water Reclamation Facilities in the Chinese Framework** Xia Huang, Tsinghua University (CN)	**KEYNOTE** **Biologically Induced Struvite Production in Wastewater** Ana Soares, Cranfield University (UK)	**KEYNOTE** **From Research to Full Scale Practice in Biopolymers Recovery** Rene Rozendal, PAQUES (NL)
09.50-11.05	**Identifying and Overcoming Rate-Limiting Steps for Electrochemical Nitrogen Stripping from Wastewater** William Tarpeh, Matthew Liu	**Thermochemical P-Recovery from Sewage Sludge Ash** Schaaf Tanja, Ulbrich Julian, Orth Andreas	**Self-extinguishing Property of Biopolymers Recovered from Waste Aerobic Granular Sludge** Yuemei Lin, Kim Nam
10.05-10.20	**Nutrient Recovery from Wastewaters Using Novel Nano-enhanced Adsorptive Media** Ownby Miles, Ed Weinberg, Celine Vaneeckhaute **(to be confirmed)**	**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	**Producing Polyhydroxyalkanoates in HRAP Retrofitted for Wastewater Treatment with Phototrophic Purple Bacteria** Joana Fradinho, Juliana Almeida, Estaban Serrano, Adrian Oehmen, Enrique Lara, Maria Reis
10.20-10.35	**Enhanced Ammonia Recovery from Wastewater by Nafion Membrane with Highly Porous Honeycomb Nanostructure and Its Mechanism in Membrane Distillation** Alicia An	**Phosphorus Stripping of Bio-P Sludge and Enhanced Nutrient Recovery** Blanca M. Gonzalez Silva, Dag B Fiksdal, Chunbo He, Sveinung Sægrov, Stein W Østerhus	**WWTP Biorefinery for Polyhydroxyalkanoates (PHAs) Recovery from Cellulosic Primary Sludge** Vincenzo Conca, Cinzia Da Ros, Nicola Frison, Anna Laura Eusebi, Francesco Fatone
10.35-10.50	**Tailored Polymer Hydrogels for Main-stream Ammonium Recovery from Domestic Wastewater** Heidy Cruz, Jeremy Guest, Adrian Oehmen, Willy Verstraete, Bronwyn Laycock, Ilje Pikaar	**Newly Developed Materials for Phosphorus Removal Recovery and Reuse in Decentralized Wastewater Treatment** Solvei Jensen, Frances Helen Blaikie, Helmer Soehoel, Juan A. Alvarez, Hans Brix, Carlos Arias	**An Urban Biorefinery for Food Waste and Biological Sludge Conversion into Polyhydroxyalkanoates and Biogas** Giulia Moretto, Francesco Valentino, David Bolzonella, Paolo Pavan, Mauro Majone

10.50-11.05	**Nitrogen Recovery from Process Water of Digested Sludge Dewatering with Membrane Contactors** Lea Richter, Marc Wichern, Markus Grömping, Ulrich Robecke, Jens Haberkamp	**(to be confirmed)**	**Effect of Dimethyl Disulfide on the Recovery of Elemental Sulfur During Biological H_2S Removal** Karine Kiragosyan, Magali Picard, Jelmer Dijkstra, Pieter van Veelen, Johannes Klok, Pawel Roman, Albert J.H. Janssen
11:05-11:30	**Morning coffee and pitch of EU PRIMA Program**		
11.30-11.45	**Nitrogen Recovery Using a Membrane Contactor: Modelling Nitrogen and pH Evolution** Guillermo Noriega-Hevia, Joaquín Serralta, Luis Borrás, Aurora Seco, José Ferrer	**Adsorption-Desorption Mechanism and Kinetic Study of Synthesized Iron Doped Zeolite for Phosphate in Aqueous Phase.** Kwang Kim, Saifuddin Md	**Rapid and Selective (Electro)catalytic Removal and Recovery of Sulfide from Wastewater** Natalia Sergienko, Jelena Radjenovic
11.45-12.00	**Nitrogen Up-concentration from Mainline and Sidestream Effluent in WWTPs for Fertilizer Valorization** Álvaro Mayor Pillado, Silvia López Palau, Gabriel López Calvet, Lucía Prieto, Alicia Gadea, César Valderrama, Jose Luís Cortina, Irene Mozo Anibarro	**Struvite Production by Using Raw Seawater - How to Improve the Economy and Keep the Product Quality?** Sin Shaddel, Stein Østerhus	**Sulfur Recovery in Biomethane Upgrading Plant** Davide Ravezzani, Ottavia Burzi, Luca Pedrazzi, Davide Scaglione
12.00-12.15	**Sustainable Ammonia Recovery from Source-separated Urine Using Isothermal Membrane Distillation** Ngai Yi Yip	**Role of Iron in Phosphorus Immobilization in a Novel VUCT-MBR System for Sewage Treatment** Shaoyu Deng, Jingbao Tian, Jiaqi Liu, Lingyue Wang, Xiang Cheng	**Salt and Humic Substances Recovery as A Solution to Anion Exchange Brine Management** Elisabeth Vaudevire, Isaac Daniel
12.15-12.30	**Ammonium Recovery and Conversion Path by the Immobilization of Scenedesmus Obliquus in Alginate Beads from Biogas Slurry** Xian Liu, Kaijun Wang **(to be confirmed)**	**Iron-reducing Biocathode for Phosphorus Remobilization from FeP Complexes Contained in Wastewater Sludge** Donya Sun, Xi Chen, Xiaoyuan Zhang, Peng Liang, Xia Huang	**Combined Wastewater Treatment and Bioflocculant Recovery** Victor Ajao, Harry Bruning, Huub Rijnaarts, Hardy Temmink
12.30-12.45	**Membrane-based Nitrogen Recovery from Livestock Wastewater: A Pilot Plant Study** Beatriz Molinuevo-Salces, Berta Riaño, David Hernández, Matías B Vanotti, Mari Cruz García-González	**Critical Conditions of Struvite Growth and Recovery Using Hydrocyclone in Novel Struvite Crystallization Pilot Plant** Nari Park, Hyangyoun Chang, Yeoju Jang, Hyunman Lim, Jinhong Jung, Weonjae Kim	**FAMEs Estolides and Methyl-10-Hydroxystearate: Sewage Sludge as Possible Source of Biodiesel and Bio-lubricants of New Generation** Carlo Pastore, Luigi di Bitonto
12.45-13.00	**Resource Recovery from Wastewater: INCOVER Project** Juan Alvarez, Christina Avila, Ana Pasqual, Rocio Pena, Santiago Gomez, Luz Herrero	**Mathematical Model Application for Phosphorus Removal and Recovery Prediction in Continuous Flow Fixed-bed Columns** Daniel Dias, João Ribeiro, Jorge Santos, Samuela Guida, Giorgia Rubertlli, Ana Soares, Adrian Oehmen	**(to be confirmed)**
13:00-14:30	**Lunch, poster presentation and lunch presentation of the European and Italian Sustainable Phosphorus Platform**		

14:30-18:00	AFTERNOON SESSION		
14:30-15:00	**PLENARY PRESENTATION** ***SUSTAINABILITY ASSESSMENT FOR RESOURCE RECOVERY FROM WATER*** Jeremy Guest, University of Illinois at Urbana-Champaign (USA)		
15:00-18:00	**Session 4** **NUTRIENTS RECOVERY AND REUSE**	**Session 5** **PHOSPHORUS RECOVERY: PILOT, DEMO AND FULL-SCALE TECHS**	**Session 6** **ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY ASSESSMENT**
15:00-15:20	**Nutrient Upcycling from Wastewater Treatment: Technical and Non-Technical Roadmap** Maria Albuquergue, Celine Bouchereau, Erik Bundgaard, Marisa Cunha, Ana Bisinella, Bruno Tisserand	**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?** Christian Remy, Jennifer Misiukas, Carlijn 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** Yariv Cohen, John Svärd	**Environmental and Economic Assessment of Solar-assisted Thermal Energy Recovery from Wastewater** Ivan Muñoz, Francisco Portillo, Sabina Rosiek, Javier Francisco, Iñaki Acasuso, Valentina Piergrossi, Marco Disanctis, Silvia Chimienti, Claudio Di Aconi
15.35-15.50	**Pilot Scale Studies on Nutrient and Biochar Recovery from Wastewater and Sewage Sludge** Laura Rossi, Aino Kainulainen	**4 Years of Phosphorus Recovery at WWTP Amsterdam West** Alex Veltman, Jacquelien de Schutter	**Life Cycle Assessment of Nutrient Recovery from Wastewater - Current Practices and Insights** Ka Leung Lam, Ljiljana Zlatanović, Peter-Jan van der Hoek
15.50-16.05	**Fractionating Various Nutrient Ions for Phosphate Recovery from Swine Wastewater Using Selective Electrodialysis** Zhi-Long Ye, Boudewijn Meeschaert, Shaoho Chen, Karel Ghyselbrecht, Xin Ye, Annick Monballiu, Luc Pinoy	**Energy Savings and Phosphorus Recovery in Sewage Treatment Plants** Rudolf Bogner, Davide Perduca	**The Economics Behind the Combination of AnMBR and FO Technologies for Municipal Wastewater Treatment** Sergi Vinardell, Sergia Astals, Joan Mata-Álvarez
16:05-16:30	**Afternoon coffee and pitch of EU projects concerning water and resource recovery**		

16.30-16.45	**Optimised Nutrient Recovery from Biogas Digestate by Solid/liquid Separation and Membrane Treatment** Sandra Rosenberger	**The Inhibitory Effects of Free Nitrous Acid and Free Ammonia on the Aerobic Phosphorous Utilization Rate** Dimitris Andreadakis, Constantinos Noutsopoulos, Gerasimos Ragkiskatos, Kyriaki Argyropoulou, Theodora V. Missirli, Daniel Mamais, Simos Malamis	**Integration of Statistical Monitoring and Life Cycle Assessment to Evaluate the Sustainability Behavior of WWTPs** Peyo Stanchev, Vasileia Vasilaki , Francesco Fatone, Evina Katsou
16.45-17.00	**Nutrient Recovery from the Perspective of the Flemish Wastewater Utility** Bart Saerens, Francis van Meerburg, Marjoleine Weemaes	**Phosphorus and Ammonia Removal and Recovery through Ion Exchange (IEX) Process at Demonstration Scale** Samuela Guida, Georgia Rubertelli, Bruce Jefferson, Ana Soares	**Evaluation and Cost-efficiency of On-site Wastewater Reuse Systems** Darja Istenič
17.00-17.15	**Reusable Magnetic Sorbent Materials for Advanced Wastewater Treatment and Nutrient Recovery** Asya Drenkova-Tuhtan, Carsten Meyer, Caleb Inskeep, Karl Mandel, Thomas Ballweg, Michael Schneider, Carsten Gellermann, Heidrun Steinmetz	**Comparative Cost Estimations of Full-scale Phosphorus-recovery Processes in German Wastewater Treatment Plants** Lea Conzelmann, Fabian Kraus, Christian Remy	**Novel Financing Strategies to Simultaneously Advance Sanitation and Agriculture Through Nutrient Recovery** Hannah Lohman, John Trimmer, David Katende, Muwonge Mubasira, Maria Nagirinya, Fred Nsereko, Noble Banadda, Jeremy Guest
17.15-17.30	**Hydrothermal Carbonization (HTC) for the Nutrient and Energy Recovery from Digested Sewage Sludge** Anna Hämäläinen, Jukka Rintalla, Marika Kokko, Viljami Kinnunen, Tuomo Hilli **(to be confirmed)**	**Mainstream SCEPPHAR Configuration for Integrating P and PHA Recovery in the Water Line of WWTPs** Oriol Larriba, Zivko Juznic-Zonta, Borja Solis, Juan Baeza, Albert Guisasola	**Blend Quality and Logistics Optimization of Anaerobic Codigestion in a Real Multi-Plant Case Study** David Palma, Marta Verdaguer, Manel Poch, M.À. Cugueró-Escofet **(to be confirmed)**
17.30-17.45	**High Efficiency Phosphorus Recovery and Sewage Sludge Valorization via Hydrothermal Carbonization** Gianni Andreottola, Maurizio Volpe, Luisa Mariafioti, Luca Fiori **(to be confirmed)**	**Boosting the P Extraction from the Sludge by Rearranging the Sludge Line in a WWTP** Ramón Barat, Miguel Roldán, José Ferrer, Nuria Martí, Teresa Alvariño, 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	**(to be confirmed)**	**Chemical vs. Biological Phosphorus Removal: Full-scale Process Optimisation for Resources Saving** Laura Menoni, Gergio Bertanza, Roberta Pedrazanni	**Measuring the Circularity Potential of an Eco-friendly Touristic Facility in a Mediterranean Island** Chrysanthi-Elisabeth Nika, Peyo Stanchev, Evina Katsou
Evening	**Young (and "not so Young") Water Professional event**		

Tuesday, 10th September 2019

9:00-13:00	MORNING SESSION		
9:00-9:30	**PLENARY PRESENTATION** ***ENHANCED METHANE RECOVERY AND APPLICATION IN WRRFS*** Zighuo Yuan, University of Queensland (AUS)		
9:30-13:00	**Session 7** **URINE VALORIZATION AND WATER REUSE**	**Session 8** **ENHANCED ANAEROBIC TREATMENT**	**Session 9** **VFA AND ORGANICS RECOVERY AND REUSE**
9:30-9:50	**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 (ZA)	**KEYNOTE** **Enhanced Anaerobic Treatment as Core of the WRRFs: Pilot and Full Scale Experiences** Bruce Jefferson, Cranfield University (UK)	**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)
9.50-10.05	**Achieving Nutrient Resource Efficiency through Urine Separation Processing and Reuse: A Comprehensive Study** Nancy Love, Glen Daigger	**Efficient Utilization of Regional Biomass with Intensive Digestion System Using Sludge Solubilisation and Solid Oxide Fuel Cell** Manabu Matsuhashi, Ryoichi Maeda, Haruo Miyake, Yusuke Shiratori, Atsushi Tajima	**Volatile Fatty Acids Production: Effect of Bacterial Community Under Various Operational Conditions** Merve Atasoy, Zeynep Cetecioglu Gurol
10.05-10.20	**Safe Production of Microbial Protein from Urine** Mark Dodds, Yifeng Zhang, Elena Toressi, Monika Skadborg, Barth F. Smets, Borja Perez Valverde	**Innovative Ex-situ Biological Biogas Upgrading Using Immobilized Biomethanation Bioreactor (IBBR)** Katie Baransi-Karkab, Mahdi Hassanen, Sharihan Muhsein, Nidal Massalha, Isam Sabbah	**Recovery of Volatile Fatty Acid Generated in Anaerobic Reactor by Adsorption in a Fixed Bed Column Filled with a Hybrid Molecularly Imprinted Polymer** Bruno Baêta, Sergio Aquino, Marina Tonnuci, Oscar Adarme, Cesar Tarley, Ana Fideles **(to be confirmed)**
10.20-10.35	**Green Walls Optimized for Treatment and Reuse of Greywater** Fabio Masi, Alice Caruso, Elisa Magna, Silvia Fiore, Francesca Demichelis, Ana Galvao, Janoa Pisoeiro, Anacleto Rizzo, Luca Ridolfi, Fulvio Boano	**High Rate Immobilized Anaerobic System Treating Wastewater - Evaluation and Simulation at a Pilot-scale System** Isam Sabbah, Daniel Ort Braude College Dias, Jorge Ribeiro, Mahdi Hassanin, Morad Massalha, J. Santos, Nedal Massalha, Salva Shmulevich, Abraham Aharoni, Adrian Oehmen,	**Targeting Specific Volatile Fatty Acid Production through PH Shifts During Protein Fermentation** Riccardo Bevilacqua, Alberte Regueira, Miguel Mauricio-Iglesias, Marta Carballa, Juan M. Lema

10.35-10.50	**Improvement of Water Quality Through BAC Filtration in a Water Reclamation Plant** Laura Palli, Stefano Fiaschi, Michelle Allocca, Vittoria Viviani, Claudio Lubello, Riccardo Gori, Roberto Camissa, Donetella Fibbi	**Free Nitrous Acid Pre-treatment of Waste Activated Sludge Enhances Efficiency and Rheological Behaviour of Anaerobic Sludge Digester** Jia Meng, Huijuan Li, Shoan Shrestha, Min Zheng, Haoran Duan, Jason Dwyer, Shihu Hu, Zhiguo Yuan	**Biorefinery Pilot Plant for VFAs and Nutrients Recovery from Agro-waste Material** Simone Nortilli, Edoardo Rigetti, Nicola Frison, David Bolzonella
10.50-11.05	**Removal of Micropollutants from Wastewater by Rapeseed Simultaneous Biosorption** Carmen Teodusio, Irina Morasanu, Carmen Paduraru	**Anaerobic MBR for Biogas Production from Concentrated Raw Municipal Wastewater Produced During Sewer Mining** Federico Ferrari, Ignasi Rodriguez-Roda, Maijte Puijan	**Pilot Scale Acidogenic Fermentation of Microsieved Cellulosic Sludge for Short Chain Fatty Acids Production** Cinzia Da Ros, Nicolas Frison, Vincenzo Conca, Anna Laura Eusebi, Francesco Fatone
11:05-11:30	**Morning coffee and pitch of EU projects concerning water and resource recovery**		
11.30-11.45	**Evaluation of Design Wastewater Treatment Plant Tertiary Process for Water Reuse with the Application of Modelling Tool** Paolo Cirello, Giancarlo Chechinni, Mario de Mola, Emilia Bernardini, Barbara Biagi	**Non-ideal Mixing Model of Anaerobic Digestion: Linking the CFD Model and ADM1** Yohannis Mitiku Tobo, Jan Bartacek, Ingmar Nopens	**Hydrothermal Carbonization of Sewage Sludge: Process Optimization by Response Surface Methodology** Monica Puccini, Andrea Tasca, Gemma Mannarino, Anna Raspolli Galletti, Sandra Vitolo, Ricardo Gori **(to be confirmed)**
11.45-12.00	**An Integrated Waste-wastewater Management Approach to Increase Wastewater Reuse in Mediterranean Regions** Giuseppe Mancini, Antonella Luciano, Paolo Viotti, Debora Fino	**Exploring Forward Osmosis for Production of Reclaimed water and Concentrated Wastewater for Anaerobic Treatment** Federico Ferrari, Ignasi Rodriguez-Roda, Maijte Puijan, Gaetan Blandin **(to be confirmed)**	**Pretreatment and Process Optimization for Brewery Spent Grain Conversion into Chemical Building Blocks** Juan Castilla-Archilla, 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, Dan Qu	**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, Xianghua Wen	**Selective Separation of Organics and Inorganics by Ion-Exchange Membranes** Lingshan Ma, Leonardo Guiterez, Muhammad Waqas, Arne Verliefde
12.15-12.30	**Application of Membrane Distillation for Optimal Fertilizer Recovery from Human Urine** Mekdimu Damtie, Federico Volpin, Minwei Yao, Leonard Tijing, Yun-Chul Woo, June-Seok Choi, Ho-Kyong Shon	**Intensifying Energy Recovery via Biological *in situ* Biogas Upgrading by Means of Hydrogenotrophic Methanogenesis in WWTP** Viola Corbellini, Francesca Malpei	**Pathogen Inactivation and Resource Recovery from Sanitation Waste Through In-situ Accumulation of Carboxylic Acids** Lauren Harroff, Janice Liotta, Dwight Bowman, Largus Angenent
12.30-12.45	**Urine Dehydration Technology for Recycling Nutrients in a Public Dry Sanitation System** Simha Prithvi	**Full-scale Anaerobic Co-digestion of Sludge and Organic Waste: Rovereto Four-year Experience** Cristina Cavinato, Filomena Ardolino, Giovanni Gatti, Gian Paolo Mattuzzi, Franco Cecchi	**Impact of Advanced Separation Technologies on the Fermentation Products of Municipal Sludge** Antoine Brison, 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	**(to be confirmed)**	**Anaerobic Co-digestion of Sewage Sludge and External Organic Waste: Strategy to Shift Production from Biogas to Volatile Fatty Acids** Isaac Owusu-Agyeman, Ezbieta Plaza, Zeynep Cetecioglu
13:00-14:30	**Lunch, poster presentation and WATER EUROPE speech concerning "Water oriented Living Labs" "Developing soft skills as core strategy to secure and speed up water related innovation in industries and utilities"**		

14:30-18:00	AFTERNOON SESSION		
14:30-15:00	**PLENARY PRESENTATION** ***RESOURCE RECOVERY FROM WATER: OPPORTUNITIES FOR DEVELOPING COUNTRIES*** Miriam Otoo, International Water Management Institute (LK)		
15:00-18:00	**Session 10** **BIOPOLYMERS AND VALUE-ADDED PRODUCTS RECOVERY: NOVEL TECHNOLOGIES**	**Session 11** **ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY ASSESSMENT**	**Session 12** **ROAD TO BIOREFINERY AND WRRF IMPLEMENTATION**
15:00-15:20	**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	**Evaluating Construction Industry Views on Recovered Cellulose as a Component of Building Materials** Heather Smith, Cranfield University (UK); Elaine Gallagher, Cranfield University (UK)	**KEYNOTE** **Full Scale Biorefinery and Territorial Strategy for Resource Recovery and Reuse: The Case of CAP Holding Italy** Andrea Lanuzza, CTO, CAP Holding (I)
15.20-15.35	**Recovery of ALE (alginate-like Exopolymer) from Aerobic Granular Sludge and Application as Phosphorus Adsorbent** Patricia Dall´Agnol, Nelson Libardi, Jessica Xavier, Rejane Helena Ribeiro Da Costa	**Integrated Sustainability Assessment of Wastewater Treatment Plants as Local Energy Suppliers** Peter Lichtenwoehrer, Florian Kretschmer, Guenter Langergraber, Georg Neugebauer	**Compounds of Interest in Wastewater from Food Processing Industries. H2020 AFTERLIFE Project** Andrea Martos Dominguez, Santiago Perez Rodriguez, Nicolas Frison, Maria Lopez Abelairas
15.35-15.50	**Optimization of a PHA Production Process with Nitrifying surplus Activated Sludge Via Dissolved Oxygen Control** Angel Estevez-Alonso, Ruizhe Pei, Robbert Kleerebezem, Mark van Loosdrecht	**From Waste to Self-healing Concrete: A New Value Chain for Polyhydroxyalkanoates** Chris Vermeer, Emanuele Rossi, Robbert Kleerebezem, Henk Jonkers, Jelmer Tamis	**CoRe Water: From WWTP to a Sustainable Water and Resource Factory** Kees Roest, Julian Sierra Muñoz, Lex van Dijk, Annie Polman, Hans Ramaekers, Alexander Hendriks, Emile Cornelisen

15.50-16.05	**Influence of Wastewater Composition and Bioaggregates Types on the Properties of Alginate-like Exopolymers** Cássio Moraes Schambeck, Lukas Boni, Peter Fischer, Elisabeth Girbal-Neuhauser, Yolaine Bessière, Paul Etienne, Rejane Helena Ribeiro da Costa, Nicolas Derlon	**Cost of Sericin Recovery from Silk Effluents** Tolga Pilevneli, Merve Gencturk, Ulku Yetis, Goksen Capar **(to be confirmed)**	**Chemically Enhanced Primary Treatment: Shall We Pay More Attention to Bio-sourced Coagulants to Maximize CH_4 Production?** Florent Chazaren, Fatima Ezzahraa El Messaoud
16:05-16:30	**Afternoon coffee and presentation of Aqua Publica Europea and EurEau associations**		
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	**Economic Evaluation of Sewage Sludge Usage as Manure Using Regional Economic Cyclical Model** Satoshi Akao, Takuya Ezaki, Takanobu **Katsumi (to be confirmed)**	**Integrated Project of Fusina for Resource Recovery in Lagoon of Venice: History, Challenges and Implementation** Patrizia Ragazzo and co-authors (VERITAS)
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 MarketPlace for Water in the Circular Economy: The NextGen Approach** Christos Makropoulos **(to be confirmed)**	**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	**Waste-to-Resource Transformation – Computer-aided Systems Modelling of Waste Resource Recovery** Miao Guo	**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, Tomasso 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** 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 of Biopolymers from Aerobic Granular Sludge Treating Low C/N Real Municipal Wastewater as Soil Conditioner** Riccardo Campo, Emiliano Carretti, Debora Berti, Simone Caffaz, Claudio Lubello, Tomasso Lotti	**Resource Recovery Efficiency of Urban Sanitation Systems** Tayebeh Zinati Shoa, Matthias Barjenbruh, Alexander Wriege-Bechtold **(to be confirmed)**	**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	**PLENARY PRESENTATION** ***BRINGING WATER INNOVATION TO CIRCULAR ECONOMY MARKET*** Paul O'callaghan, BlueTech Research (IRL)		
9:30 – 11:00	**Session 13** **SMART PLANT SESSION**	**Session 14** **PROTEIN RECOVERY: NOVEL TECHNOLOGIES**	**Session 15** **GOVERNANCE AND REGULATION**
9:30 – 09:50	**Recovery and Valorisation of Cellulose from Wastewater - The Road to Circularity** Pim Marcellis, CirTec (NL); Coos Wessels, CirTec (NL)	**KEYNOTE** **Towards Practical Implementation of Microbial Protein Production from Wastewater** Korneel Rabaey, Ghent University (B)	**KEYNOTE** **Barriers and Opportunities for a Circular Economy of Phosphorus in the Baltic Sea Region** Karin Barquet, Stockholm Environment Institute (S)
09:50-10:05	**Exploring the Integration of EBPR at Low SRT and DO in an A-stage System for COD and P Removal** Claudi Scalia, Giorgio Mannina, Albert Guisasola, Juan Baeza	**Purple Phototrophic Bacteria - Biofilm Technology for Microbial Protein production** Tim Hulsen, Samuel Stegman, Paul Jensen, Damien Batstone	**The Politics of a Transition Towards a Circular Economy in the Dutch Wastewater System** Kasper Ampe, Erik Paredis, Lotte Asveld, Patricia Osseweijer, Thomas Block
10:05-10:20	**Nitrogen Removal via Nitrite from Thermally Hydrolysed and Digested Reject Water** Evangelos Statiris, Constantinos Noutsopoulos, Daniel Mamais, Nikolaos Petalas, Simos Malamis	**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	**HOUSEFUL - Innovative Water Energy Material and Nutrient Cycles for the Housing Sector** Maria Wirth, Gaetano Bertino, Johannes Kisser, Roman Grünner
10:20-10:35	**Modelling of a Novel Side-stream Technology Combining Short-cut Nitrogen Removal and Bioplastic Recovery** João Ribeiro, 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** Frank Oesterholt, 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, Sudhir Pillay **(to be confirmed)**
10:35-10:50	**Trade-offs Between Environmental and Operational Parameters in SCENA Process** Vasileia Vasilaki, Vincenzo Conca, Nicola Frison, Francesco Fatone, Evina Katsou	**Biological Upgrading of Biogas and Production of Single Cell Proteins** Jeanette Madsen, 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** Kees Roest, Laura Snip, Luc Palmen, Ben Römgens, Andrew Sergrave, Henk-Jan Alphen **(to be confirmed)**

10:50-11:05	**Environmental Technology Verification of the Full-Scale Short-Cut Enhanced Nutrients Abatement (SCENA) Process** Vincenzo Conca, Nicola Frison, 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 CO_2** Myrsini Sakarika, Pieter Candry, Ramon Ganiguè, Korneel Rabaey	**Decentralised Water and Waste Treatment in View of Resource Recovery** Stijn Van Hulle
11:05 – 11:30	**Morning coffee and presentation of the WAREG – European Water Regulators**		
11:30 – 13:00	**Session 16** **METALS RECOVERY**	**Session 17** **MICROALGAE-BASED PROCESSES**	**Session 18** **HIGH VALUE CHEMICALS/MATERIALS RECOVERY**
11:30 – 11:45	**Membrane Electrolysis for Separation of Cobalt from Terephthalic Acid in Industrial Wastewater** Rui Gao, 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** Larissa Arashiro, Ivet Ferrer, Diederik P.L. Rousseau, Stijn W.H.Van Hulle, Marianna Garfi	**Photoelectrocatalytic Production of Hydrogen and Commodity Chemicals from Desalination Brine** William Tarpeh, Linchao Mu
11:45 – 12:00	**Detection Removal and Recovery of Metals from Water Sludge and Fly Ash** Kees Roest, Edwin Buijzer, Luc Palmen, Julian Muńoz Sierra **(to be confirmed)**	**Simultaneous nitrogen removal and phosphorous recovery in anoxic and microaerobic biofilm systems** Nilesh Badgujar, Francesco Di Capua, Stefano Papirio, Francesco Pirozzi, Piet Lens, Giovanni Esposito **(to be confirmed)**	**Production of N-caproate from Food Waste Without pH Control: Consecutive Lactate Formation and Chain Elongation** Carlos Contreras Davila, Cees Buisman, David Strik,
12:00 – 12:15	**Towards Lithium Selective Membranes: Crownether Containing Poly-Electrolyte Multilayer Membranes** Mohammad Kazemabad, Arne Verliefde, Emile R. Cornelissen, Arnout D'Haese	**LED-Enhanced High Rate Algal Pond for Bioresource Recovery from High-strength Wastewaters** Andrés Torres-Franco, Lucas Barros, Mateus Freitas, Lucas Vaselle de Castro, Ricardo Passos, Fabiana Passos, Cleber Figueredo, César Mota **(to be confirmed)**	**A Potential P Fertilizer – Biochar Produced by EBPR Sludge** Tingting Qian, Yan Zhou
12:15 -12:30	**(to be confirmed)**	**Integration of Microalgae Culturing as a Side-stream Process into Wastewater Treatment Plants: An LCA Evaluation** Lucia Rigamonti, Camilla Tua, Elena Ficara **(to be confirmed)**	**Advanced Composting and Bio-drying as an Opportunity to Recover Material and Energetic Resources from Sludges** Nagore Guerra, Mabel Mora, Lara Pelaz, Jonatan Ovejero, Laia Llenas, Belèn Puyuelo, Joan Colón, Sergio Ponsá

12:30 – 13:00	**OFFICIAL CLOSING of the conference** (conclusions and goodbye speeches of organizers + award for YWPs best poster and/or presentation)	
13:00 – 13:45	Presentations and voting for the next conference	
14:30 – 18:00	**POST CONFERENCE WORKSHOPS**	
	WORKSHOP 1 **6TH MIXED CULTURE PHA WORKSHOP – DAY 1** **Chairs:** Mauro Majone, La Sapienza University of Rome (I); Alan Werker, Wetsus (NL)	**WORKSHOP 2** **H2020 WATER INNOVATIONS FOR SUSTAINABLE IMPACT IN INDUSTRIES AND UTILITIES** **Chairs:** H2020 projects SMART-Plant, Hydrousa, NextGen, Project-O – co-organized by EC-EASME

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)