

TUESDAY September 1st		
Opening session Keynotes: Success stories in Nutrient removal from around the world - Finnish case (Kristian Sahlstedt & Ari Kangas) - Melbourne (Jenelle Watson) - USA (Belinda Sturm)		
Networking break		
NITROGEN	PHOSPHORUS	PROCESS DEVELOPMENT
<u>12.15 – 13.45 Nitrogen conversions</u>  Influence Of Hydroxylamine On Aerobic And Anaerobic Ammonium Oxidation. Aina Soler-Jofra (The Netherlands, Delft University of Technology); Julio Pérez; Mark van Loosdrecht Nitrotoxa Are Important Nitrite Oxidizers In Activated Sludge Systems Min Zheng (Australia, The University of Queensland); Siqi Li; Gaofeng Ni; Jun Xia; Shihu Hu; Yanchen Liu; Zhiguo Yuan; Xia Huang Bacterial Microdiversity And Activity In Partial Nitritation-anammox Biofilms Carolina Suarez (Sweden, University of Gothenburg); David Gustavsson; Malte Hermansson; Frank Persson What Governs The Competition Between Heterotrophic Denitrification And Dissimilatory Nitrate Reduction To Ammonium? Mingsheng Jia (Belgium, Ghent University); Mari Winkler; Eveline Volcke Dissimilatory Nitrite Reduction To Ammonium (DNRA) Favours Anammox In mainstream Biofilm-based Systems At High Influent COD/NO <sub>2</sub> -N Nina Roothans (The Netherlands, Delft University of Technology); Francesc Corbera Rubio; David Weissbrodt; Cristian Picioareanu; Mark C M van Loosdrecht; Michele Laurenzi Mathematical Modelling Of Comammox Process In The Mainstream Biological Nitrogen Removal Systems Lu, Xi (Poland, Gdansk University of Technology); Mehrani, Mohamad-Javad; Kowal, Przemysław; Małkinia, Jacek	<u>12.15 - 13:45 Full-scale P recovery</u>  Phosphorous Recovery From Hydrochar Originated From Sewage Sludge: Process Optimization By Response Surface Methodology Riccardo Gori (Italy, University of Florence); Gemma Mannarino; Monica Puccini; Sandra Vitolo; Andrea Salimbeni; Andrea Luca Tasca; Massimo Aiello Thermal Treatment Of Sewage Sludge -- A Way For Safe Phosphorus Recycling? Petri Nissinen (Finland, Pöyry Finland Oy); Rauni Karjala; Noora Rantanen; Saijariina Toivikko; Mari Heinonen; Petri Tuominen Phosphorus Recovery From Digested Sewage Sludge Using The Stuttgart Process: large-scale Operating Experience With A Mobile Plant Marlena Monea (Germany, University of Stuttgart); Carsten Meyer; Asya Drenkova-Tuhtan; Volker Preyl; Martin Bouche; Rudolf Turek; Harald Schoenberger Recycle Sewage Sludge Ash By Recovering Phosphorus And Recycling The Ash Residue As Cement In Concrete Led, Katrine (Denmark, Rambøll); Cohen, Yariv; Stiernström, Sara; Ottosen, Lisbeth; Ottosen, Anita; Thornberg, Dines Demonstrating Full Scale Resource Recovery From Domestic Wastewater Melita, Sanna (The Netherlands, LeAF BV); Bisschops, Iemke; Kjerstadius, Hamse; Demolder, Lieven; Morales Pereira, Nicolás; Chatzopoulos, Paraschos	<u>12:15 - 13:45 Innovative processes</u>  Nitrification In A Sequencing Moving Bed Biofilm Reactor (SMBBR) With Zeolite As Biomass Carrier: Effect Of Sulfide And Organic Matter Cesar Huilliniir (Chile, Universidad de Santiago de Chile); Vivian Fuentes; Giovanni Esposito; Silvio Montalvo; Lorna Guerrero Biological N And P Removal From Municipal Wastewater In Compact MBBR Romain Lemaire (France, Veolia Technical & Performance Department); Guillaume Scherpereel; Sofia Lind; Kim Sorensen; Hugues Humbert Full-Scale MABR Technology Demonstration At The Ejby Mølle WRRF Nerea Uri Carreño (Denmark, VCS Denmark); Timothy Constantine Demonstration Of Combined Anammox And N-DAMO Process For Both Mainstream And Sidestream Nitrogen Removal From Real Wastewater Zhuan Khai Lim (Australia, The University of Queensland); Tao Liu; Jianhua Guo; Zhiguo Yuan; Shihu Hu Post-treatment Of Anaerobic Effluents Using Sponge-bed Trickling Filter: Experimental Assessment And Modelling Thiago Bressani Ribeiro (Brazil, Federal University of Minas Gerais); Paulo Almeida; Carlos Chernicharo; Eveline Volcke Biopolymers Production From Wastewater: Potential To Produce Polyhydroxyalkanoates In Biological Nutrient Removal Systems Viviane Runa (United Kingdom, University of Bath); Ana B. Lanham; Simon Bengtsson
Networking break		
NITROGEN	PHOSPHORUS	PROCESS DEVELOPMENT
<u>14:00 - 15:30 Lessons learned of deammonification</u>  Mainstream Partial Denitrification/Anammox: Results From Operation In A Full-Scale Deep-Bed Filter Stephanie Klaus (USA, Virginia Tech, Hampton Roads Sanitation District); Mike Parsons; Charles Bott A Comparative Evaluation Of Sidestream Single-stage Deammonification Process With Different Feeding Strategies Taeho Lee (Republic of Korea, Pusan National University); Jeongmi Kim; Lucky Caesar Direstiyani; Taewon Kwon; Soyeon Jeong; Yeonju Kim; Jaecheul Yu Insight Into The Enrichment Of Anammox Bacteria Linking To Microbial Aggregation In Partial Nitritation-anammox (PN/A) Process Jialin Li (China, Beijing University of Technology); Yongzhen Peng; Liang Zhang; Xiyao Li; Qiong Zhang; Shenhua Yang; Shuai Li A Decade Of ANITA Mox, What Have We Learned? Magnus Christensson (Sweden, Veolia Water Technologies - Anokaldnes); Maria Piculell; Brandy Nussbaum; Frederic Veuillet; Romain Lemaire Fate Of Phosphorus In Centrate And Mainstream MBBR Deammonification Systems Bilge Alpaslan Kocamemi (Turkey, Marmara University); Esra Erdim; Sumeyye Celik; Bugra Senol; Sena Yetgin; Fatmanur kakirman	<u>14:00 - 15:30 Chemical P removal</u>  Tertiary Phosphorus Removal To Extremely Low Levels Thomas Fundneider (Germany, Technische Universität Darmstadt); Luz Alejo; Susanne Lackner Wisdom Of The Crowd: Ensemble Methods To Forecast Extremely Low Levels Of Phosphorus In Advanced Wastewater Treatment Luz Alejo (Germany, Technische Universität Darmstadt); Thomas Fundneider; John Atkinson; Susanne Lackner Ensuring Resilience Of Chemical Phosphorus Removal: National Study On Alternatives In Short And Long Term In Finland Maija Vilpanen (Finland, Pöyry Finland Oy); Kristian Sahlstedt; Saijariina Toivikko; Mari Heinonen; Johanna Sahlstedt; Jyrki Hakola	<u>14:00 - 15:30 Microbial protein</u>  Power-to-Protein: Carbon Fixation With Renewable Electric Power To Feed The World Mishra, Akanksha (Germany, University of Tübingen); Nthuga, Jean Nepomuscene; Mollitor, Bastian; Angenent, LARGUS Raceway Reactors To Produce Microbial Protein On Wastewater: Control Tools To Select For Purple Bacteria Abbas Alloul (Belgium, University of Antwerp); Radu Giurgiu; Marta Cerruti; David Weissbrodt; Siegfried Vlaeminck Photohydrogenotrophic Cultivation Of Purple Bacteria: Decoupling Microbial Protein Production From Arable Land-use Janne Spanoghe (Belgium, University of Antwerp); Wannes Van Beeck; Katharina Ost; Siegfried Vlaeminck The Production Of Single Cell Protein From Biogas Slurry With High Ammonia Nitrogen By Screened Nectaromyces Rattus Li, Dong (China, Chinese Academy of Science); Zhou, Pan; Ao, Tianjie; Liu, Xiaofeng Recovery Of Residual Resources For Protein Production - The FUBAF Project Angelidaki, Irini (Denmark, DTU Environment); Tsapekos, Panagiotis; Andersen, Jacob Kragh; Blum, Jan-Michael; Madsen, Jeanette Agertved; Ahrensberg, Nick Environmental Performance Of Microbial-protein Based Feed In Relation To Planetary Boundaries Borja Valverde-Pérez (Denmark, Technical University of Denmark); Valentina Pusateri; Willy Verstraete; Carlos Zamalloa; Ewoud De Gussem; Mikolaj Owsianiak
Networking break + posters		
NITROGEN	PHOSPHORUS	ENERGY AND GHG
<u>16:00 - 17:30 Nitrogen removal in extreme conditions (PANEL)</u>  Linking Low-temperature Conditions With Nitrogen And Emerging Micropollutants Removal From Wastewater Antonina Kruglova (Finland, Aalto University); Anna Mikola; Riku Vahala The Dynamics Of Nitrite Formation Via Nitrification In The Drinking Water Distribution Systems Pirjo-Liisa Rantanen (Finland, Aalto University); Tuula Laakso; Riku Vahala; Ilkka Mellin; Merja Ahonen; Minna Keinänen-Toivola	<u>16:00 - 17:30 P recovery end-products</u>  Crystal Growth Characteristics To Determine Optimal Recovery Cycle In Pilot-scale Struvite Crystallization Plant Nari Park (Republic of Korea, University of Science and Technology); Hyangyoung Chang; Yeoung Jang; Miratul Maghfiroh; Weonjae Kim Pilot-scale Recovery Of The Iron-phosphate Mineral Vivianite From Anaerobically Digested	<u>16:00 - 17:30 Energy optimization (PANEL)</u>  Aligning Energy Optimized Nutrient Removal With The UN's Sustainable Development Goals Julian Sandino (USA, Jacobs Engineering); Per Nielsen The Effect Of Air Valve Positioning On Energy Use And Nitrogen Removal In Full-Scale Activated Sludge Process. Diego Rosso (USA, University of California); Sam Reifsnnyder; Manel Garrido-Baserba; Francesca Cecconi

<p>Modeling And Experimental Study Of NOB Wash-out At Low Temperature From An Activated Sludge System MJ Mehrani (Poland, Gdansk University of Technology); Dominika Sobotka; Przemek Kowal; Slawomir Ciesielski; Jacek Makinia</p> <p>Autotrophic Denitrification At Aerobic And Low Temperature Condition Was Found In Pseudomonas Sp. Y39-6: Proposing a new way for groundwater treatment Duoying Zhang (China, Heilongjiang University); Ye Bai; Yaxi Han; Yanlong Zhang; Dandan Zhao; Weimin Zeng; Hong Lei; Liqiang Jing</p> <p>Application Of Glucose For Improving NH4+-N Removal In Source Water By Immobilized Nitrifiers At Low Temperature Zejia Zheng (China, Harbin Institute of Technology); Weiguang Li</p> <p>Mainstream anammox nitrogen removal by switching flows with sidestream Zekker, I. (Estonia, University of Tartu); Rikmann, E.; Artemchuk, O.; Jaagura, M.; Tenno, T.</p>	<p>Sewage Sludge Using Magnetic Separation Wokke Wijdeveld (The Netherlands, Wetsus); Thomas Prot; Gustas Sudintas; Leon Korving; Philipp Kuntke; Peter Rem; Mark van Loosdrecht</p> <p>Significance Of Fe(III) Reduction And Consequence On Phosphate Binding Capacities Erika Varga (France, Université de Toulouse); Mansour Bounouba; Imre Takacs; Mathieu Sperandio</p> <p>Recovery Of Phosphate As Hydroxyapatite From Semiconductor Wastewater Jhychern Liu (Taiwan, National Taiwan University of Science and Technology); Chia-Wei Hsu</p>	<p>Model-based Evaluation Of A Novel Process Scheme For Combined Nitrogen Removal And Energy Recovery Mingsheng Jia (Belgium, Ghent University); Kimberly Solon; Daan Vandeplassche; Harisankar Venugopal; Eveline Volcke</p> <p>Increasing Oxygen Transfer Efficiency Through Sorption Enhancing Strategies Diego Rosso (USA, University of California); Manel Garrido-Baserba; Haydee De Clippeleir; Ahmed Al-Omari</p> <p>The Journey To Energy Positive Nutrient Removal Through Operations Lead Continuous Improvement Per Nielsen (Denmark, VCS Denmark); Ib Pedersen; Carsten Steen; Soren Eriksen; Mads Leth</p> <p>Side-Stream Treatment With Membrane Aerated Biofilm Reactors -- The Simple, Robust And Energy Efficient Path Coutts, Daniel (Italy, SUEZ Water Technologies and Solutions); Di Pofi, Moreno; Baumgarten, Sven; Guglielmi, Giuseppe; Peeters, Jeff; Houweling, Dwight</p>
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<p>WEDNESDAY September 2nd</p> <p>P recovery keynotes</p> <ul style="list-style-type: none"> <li>- Swiss platform (Anders Nättorp)</li> <li>- Swedish platform (Klara Westling)</li> <li>- Discussion</li> </ul>		
<p>Networking break</p>		
<p>NITROGEN</p>	<p>PHOSPHORUS</p>	<p>RESOURCE EFFICIENCY</p>
<p>12:15 - 13:45 <u>Mainstream anammox</u></p> <p>Feasible Nitrogen Removal From The WWTP Mainstream In A Two-stage Partial Nitritation-anammox Pilot Plant Alba Pedrouso (Spain, Universidad de Santiago de Compostela); Angeles Val del Rio; Nicolas Morales; Jose Ramon Vazquez-Padin; Frank Rogalla; Jose Luis Campos; Anuska Mosquera-Corral</p> <p>Media Selection For Partial Denitrification -- Anammox Polishing Filters: Balancing Anammox Enrichment And Retention With Filtration Function Rahil Fofana (USA, DC Water &amp; Sewer Authority); Haydee De Clippeleir; Kimberly Jones; Jeseth Delgado-Vela; Sudhir Murthy; Ahmed Al-Omari; Charles Bott; Bernhard Wett; Christine deBarbadillo; Huu Huynh; Bo Peng</p> <p>One-stage Mainstream Deammonification Achieved In An Integrated Fixed-film Activated Sludge System: Experience To Overcome NOB Adaptation Zhiyao Wang (Australia, The University of Queensland); Min Zheng; Shihu Hu; Ahmed Al-Omari; Haydee De Clippeleir; Zhiguo Yuan</p> <p>Managing Substrate Availabilities To Enhance PdN-anammox Polishing Within A Single Sludge Mainstream Short-cut N System Tri Le (USA, Jacobs engineering); Rahil Fofana; Arash Massoudieh; Sudhir Murthy; Bernhard Wett; Christine DeBarbadillo; Charles Bott; Ahmed Al-Omari; Haydee De Clippeleir</p> <p>Long-term Operation And Process Characterization Of An Up-flow Anammox Sludge Bed Reactor At Mainstream Conditions. Xenia Juan Diaz (Spain, Universitat Autònoma de Barcelona); Julio Perez; Julian Carrera</p>	<p>12:15 - 13:45 <u>P recovery I</u></p> <p>Removal And Recovery Of Recalcitrant Phosphorus Species Such As Dissolved Organo-phosphonates From Domestic And Industrial Wastewater Effluents Asya Drenkova-Tuhtan (Estonia, Tallinn University of Technology; Germany, University of Stuttgart); Eduard Rott; Carsten Meyer; Ralf Minke; Michael Schneider; Karl Mandel</p> <p>Phosphorus Recovery From Supernatant Of Anaerobic Digester Using Calcined Eggshells Antônio Benetti (Brazil, Federal University of Rio Grande do Sul); Rafael Fritzen</p> <p>Fractionalization Of Phosphorus Removal In Hydroxyapatite Crystallization Process For Wastewater Effluent Hyangyoung Chang (Republic of Korea, University of Science and Technology); Nari Park; Yeojun Jang; Miratul Maghfiroh; Weonjae Kim</p> <p>RAVITA - Phosphorus Recovery Directly From Wastewater Kati Blomberg (Finland, Helsinki Region Environmental Services Authority); Laura Rossi; Paula Lindell</p> <p>Efficient Sorption Of Phosphate From Domestic Wastewater Via In-situ Generated Magnetite Nanoparticles Miriam Ruth Grace Yap Gabon (Australia, The University of Queensland); Bogdan C. Donose; Sirajus Salehin; Zhiguo Yuan; Ilje Pikaar</p>	<p>12:15 - 13:45 <u>Urine treatment</u></p> <p>Development Of Decentralized Urine Treatment And Nutrient Recovery Facility For Fertilizer Production Dyllon Randall (South Africa, University of Cape Town); Tinashe Chipako</p> <p>Membrane Aerated Nitrification Preceded By Bio-anodic COD Removal Yields Maximum Nitrogen Recovery From Urine Jolien De Paepe (Belgium, Ghent University; Spain, Universitat Autònoma de Barcelona); Kim De Paepe; Francesc Gòdia; Korneel Rabaey; Siegfried E. Vlaeminck; Peter Clauwaert</p> <p>Combined Electro-oxidation And Electro-concentration For Source-separated Urine Treatment And Nitrogen Capture As Solid Without Chemical Addition Johannes Jermakka (Finland, Tampere University); Pablo Ledezma; Stefano Freguia; Marika Kokko</p> <p>Nutrient Recovery From Source-separated Urine With Microalgae In A Pilot-scale Open Raceway Pond – experience from three consecutive years Aino-Maija Lakaniemi (Finland, Tampere University); Kirsi Järvi; Sonja Saarnio; Ilmari Laaksonen; Marianna Granatier; Pritha Chatterjee; Praveen Ramasamy; Marika Kokko; Jukka Rintala</p> <p>Nitrogen And Phosphorus Recovery From Urine And Digestate By Struvite Formation And Transmembrane Chemisorption Irene Gonzalez Salgado (France, Université de Toulouse); Mathieu Sperandio; Xavier Lefebvre; Evrard Mengelle; Mansour Bounouba; Simon Dubos; Christelle Guigui; Emmanuel Trouvé; Olivier Lorain</p>
<p>Networking break + posters</p>		
<p>14:00 - 15:30 <u>Deammonification (PANEL)</u></p> <p>The Optimization Of Partial Nitrification For Achieving The Post Treatment Of Anaerobically Treated Effluent Using Anammox Process. Mirza, Mohammad Waqqas (India, Jamia Millia Islamia); Paulo Sergio Lourenco de Freitas; D'Silva, Tinku Casper; Ahmed, Ishteyaque; Gaur, Rubia Zahid; Khan, Abid Ali; Lew, Beni</p> <p>Assessment Of The Inhibitory Effect Of Pre-AD Thermal Hydrolysis On The Anammox Activity In Side-stream Anammox Processes Lucia Argiz Montes (Spain, Universidad de Santiago de Compostela); Alba Pedrouso; José Vázquez-Padin; Nicolás Morales; Anuska Mosquera-Corral; Angeles Val del Rio</p> <p>Effects Of Organic Carbon And Ammonium Concentrations On Autotrophic Nitrogen Removal In Anammox Systems And Potential Microbial Interactions Guangxue Wu (China, Tsinghua University); Tianqi Zhang</p> <p>Impact Of An Anaerobic Startup On A Partial Nitritation Anammox Membrane Aerated Biofilm Reactor For Mainstream Nitrogen Removal Brett Wagner (USA, University of Michigan); Glen T. Daigger; Nancy G. Love</p> <p>Insight Into The Effect Of Influent Substrate On Nitrogen Removal And Microbial Community Of An Anammox Biofilm Reactor Lingjie Liu (China, Tianjin University); Fen Wang; Min Ji</p>	<p>14:00 - 15:30 <u>P recovery II (PANEL)</u></p> <p>Tailoring Magnetic Biochars For Phosphorous Removal Oleksii Tomin (Finland, Aalto University); Roza Yazdani; Mikko Makela; Riku Vahala</p> <p>Using Fe3O4/GO Nanocomposites To Remove PO43- By Magnetic Seeding Aggregation And Separation Process From Wastewater Shihcheng Kuo (Taiwan, National Chung Hsing University); Chungying Lu</p> <p>Phosphate Removal And Recovery From Wastewater With Industrial Sidestreams Emma-Tuulia Nurmestien (Finland, University of Oulu); Sari Tuomikoski; Janne Pesonen; Milla Huhta; Ulla Lassi</p> <p>Mössbauer Spectroscopy: An Exotic Essential Tool To Characterize And Monitor Iron Oxide Based Adsorbents Applied To Phosphate Recovery Carlo Belloni (The Netherlands, TU Delft / Wetsus); Leon Korving; Iulian, A. Dugulan; Ekkes, H. Brück; Geert-Jan Witkamp</p> <p>Phosphorus Recovery From Digested Chemical P Removal Sludge Using Acid Solubilisation And Adsorption With Bio-based Materials Juho Uzkuurt Kaljunen (Finland, Aalto University); Roza Yazdani; Anna Mikola</p> <p>Electrochemical Recovery Of Magnesium Ammonium Phosphates From Wastewater In Presence Of Chloride Ion Under Varied PH Conditions Sultana, Ruhi (USA, University of Arkansas); Greenlee, Lauren</p> <p>Synergistic Recovery Of Phosphorus And Amino Acids From Swine Manure Using Fruit Wastes Vanotti, Matias (USA, US Department of Agriculture); Szogi, Ariel; Moral, Raul</p>	<p>14:00 - 15:30 <u>NRR in rural areas and natural waters</u></p> <p>On-site Rural Domestic Sewage Treatment With Loofah Sponge Carrier Anaerobic Baffled Reactor (LF-CABR) Jing-Han Wang (China, Dalian University of Technology)</p> <p>Phosphate Removal And Recovery From Point And Non-point Sources Using Novel Nanoenhanced Adsorptive Media Xavier Foster (Canada, Université Laval); Miles Ownby; David-Alexandre Desrosiers; Céline Vaneckhaute</p> <p>Lake Restoration By Withdrawal Of Hypolimnetic Water -- Novel Method To Recover Sedimentary Phosphorus As A Circular Economical Resource Leena Nurminen (Finland, University of Helsinki); Juha Niemistö; Soila Silvonen; Tom Jilbert; Anne-Mari Aurola; Ismo Malin; Matti Kotakorpi; Jukka Horppila</p> <p>Enhanced Farm-scale P And N Recirculation Through Downstream Processing Of Pig Slurry Based Digestate Elina Tampio (Finland, Natural Resources Institute Finland); Erika Winqvist; Kai Huovinen; Antti Grönroos; Sari Luostarinen</p>

<p>Operational Experience And Lessons Learned On Treatment Of Dewatering Reject Liquors From Thermally Hydrolysed And Anaerobically Digested (THP-MAD) Biosolids -- Two Case Studies  Driessen, Willie J.B.M. (The Netherlands, Paques Technology bv); van Veldhoven, Jan-Evert.T.A.; Janssen, Mark P.A.; Went, Charlotte; Hobbs, Elliot; van Loosdrecht, Mark C.M  Granulation Of Ammonia-oxidizing Bacteria For Optimization Of Two-stage Partial Nitrification/Anammox Process.  Liberzon, Jonathan (USA, Tomorrow Water); Jung, Minki; Oh, Taeseok; Jung, Kyungbong; Kim, Jaemin; Kim, Sungpyo  Mainstream Anammox Robustness At Bench And Pilot Scale  Hausherr, Damian (Switzerland, Eawag); Niederdorfer, Robert; Morgenroth,Eberhard; Joss, Adriano</p>	<p>Phosphorus Recovery From Excess Sludge Via Alkaline Fermentation And Struvite Biomineralization By B.antiqum  Semerci, Neslihan (Turkey, Marmara University); Coşgun, Sevil; Kara,Büşra</p>	
Networking break		
NITROGEN	PHOSPHORUS	RESOURCE EFFICIENCY
<p><u>16:00 - 17:30 Nitrogen recovery I</u></p> <p>Electrochemical Stripping Configurations For Recovery Of Ammonia-Based Fertilizer And Disinfectant  Anna Kogler (USA, Stanford University); William Chow; William Tarpeh  Efficient Nitrogen Removal And Recovery From Reject Water By Combining Electroconcentration And Stripping  Veera Koskue (Finland, Tampere University); Pablo Ledezma; Toni Varila; Henrik Romar; Ulla Lassi; Stefano Freguia; Marika Kokko  Nitrogen Recovery Using Membrane Contactors: Optimization And Economical Aspects Of The Technology.  Joaquín Serralta (Spain, Universitat Politècnica de Valencia); Guillermo Noriega-Hevia; Aurora Seco; José Ferrer  Stack Design Of FCDI Cell For Simultaneously Ammonia Recovery And Utilization From Concentrated Solution  Kuo Fang (China, Tsinghua University)  Ammonium Removal By Metakaolin-based Geopolymers From Municipal And Industrial Wastewaters And Its Sequential Recovery By Air-stripping Technique  Tatiana Samarina (Finland, Kajaani University of Applied Sciences); Esther Takaluoma</p>	<p><u>16:00 - 17:30 Biological P removal</u></p> <p>Performance And Microbial Community Analysis Of Simultaneous Enhanced Biological Phosphorus Removal And Semi-nitrification (EBPR-SN) Combining With Anammox Process  Chuansheng Yuan (China, Beijing University of Technology); Yongzhen Peng; Bo Wang; Tiantian Hu  Increase In PAO Bacteria Metabolism In A WWTP By Improving Mechanical Mixing And Anaerobic Phase In An Orbal Reactor  Feliu Sempere (Spain, Global Omnium); Pau Granell; M<sup>a</sup>José Tárrega; Sandra Lopez; Sergi Lloret; Gloria Fayos  Achieving Combined Partial Nitrification And Biological Phosphorus Removal In A Sidestream Sludge Treatment System  Xuanyu Lu (Australia, The University of Queensland); Haoran Duan; Adrian Oehmen; Gilda Carvalho; Liu Ye  Phosphorous Management Through Enhanced Assimilation And Biological P Removal In High-rate Activated Sludge Systems  Howard Truong (USA, Northwestern University, DC Water); Tim Van Winckel; Nam K Ngo; Paul Roots; Siegfried E. Vlaeminck; Belinda Sturm; Arash Massoudieh; Charles Bott; Christine deBarbadillo; George Wells; Haydee De Clippeleir  Simultaneous Removal Of Carbon, Nitrogen And Phosphorus In Continuous Single-stage Moving Bed Biofilm Reactors (MBBRs) Under Microaerobic And Intermittent Aeration Conditions  Iannacone, Francesca (Italy, University of Cassino and Southern Lazio); Di Capua, Francesco; Granata, Francesco; Gargano, Rudy; Esposito, Giovanni</p>	<p><u>16:00 - 17:30 Process control</u></p> <p>Carbon And Energy Management In High-rate Contact-stabilization Through Dynamic Oxygen Uptake Rate Control  Khoa Nam Ngo (USA, DC Water, The Catholic University of America); Tim Van Winckel; Arash Massoudieh; Belinda Sturm; Charles Bott; Siegfried Vlaeminck; Benhard Wett; Ahmed Al-omari; Sudhir Murthy; Haydee De Clippeleir  DO/TAN And FA Based Process Control For Mainstream Partial Nitrification  Maciej Kowalski (Canada, University of Manitoba); Tanner Devlin; Alessandro di Biase; Jan Oleszkiewicz  Membrane Reciprocation For Fouling Control At A Pilot-scale AnMBR  Zhuan Khai Lim (Australia, The University of Queensland); Jianhua Guo; Zhiguo Yuan; Shihu Hu  Soft-sensor Application For Fault Detection Of Ammonium Sensor In WRRFs  Diego Rosso (USA, University of California); Francesca Cecconi; Yuichi Ito; Reza Sobhani  Development Of Soft Sensors For Online Monitoring Of Wastewater Treatment Systems  Claudia Galinha (Portugal, Universidade Nova de Lisboa); João Crespo</p>

THURSDAY September 3rd		
<b>Keynotes:</b> New challenges in NRR – Sustainable WWTPs - Climate change (Antti-Ilari Partanen) - Sustainable WW (Siegfried Vlaeminck) - Danish case (Per Henrik Nielsen) - Finnish case (Mirva Levomäki) Poster and presentation awards		
Networking break		
NITROGEN	PHOSPHORUS	PROCESS DEVELOPMENT
<b>12:15 - 13:45 Nitrogen recovery II (PANEL)</b>  Chemical Pretreatment Of Sludge Biochars To Maximize Ammonia Recovery From Concentrated Wastewater Aubrey Beckinghausen (Sweden, Mälardalen Högskola); Yajun Chen; Monica Odlare Occurrence Of Organic Nitrogen In Post-fermentation Leachates From Agricultural Biogas Plants Krzysztof Czerwionka (Poland, Gdansk University of Technology); Anna Wilinska; Jacek Palige; Otton Roubinek Nitrate Removal And Recovery By Capacitive Deionization (CDI) Olga Pastushok (Finland, LUT University); Feiping Zhao; Deepika Ramasamy; Mika Sillanpää Ammonia Removal And Recovery From Low Strength Municipal Wastewater By Powder Resin Kuo Fang (China, Tsinghua University); Nitrate Removal And Recovery From Municipal Wastewater By Electrodialysis Technology Rubaba Mohammadi (Finland, Lappeenranta-Lahti University of Technology); Deepika Ramasamy Lakshmi; Mika Sillanpää Ammonia Removal And Recovery From Digestate Using Gas-permeable Membrane Technology Marques, R. (Portugal, University of Coimbra); Molinuevo-Salces, B.; Hernández, D.; Riaño, B.; Vanotti, M.B.; Quinta-Ferreira, R.; Garcia González, M. On-site Membrane-based Nitrogen Recovery From Livestock Wastewaters Molinuevo-Salces, Beatriz (Spain, Agricultural Technological Institute of Castilla y León); Riaño, Berta; Hernández, David; Vanotti, Matias B.; Garcia-González, Mari Cruz Multistage Membrane Configuration For Nutrient Recovery As Fertilizer Anari, Zahra (USA, University of Arkansas); Greenlee, Lauren	<b>12:15 - 13:45 NPK recovery</b>  NPHarvest - Novel Nitrogen And Phosphorus Recovery Process: Pilot Scale Field Experiments And Future Prospects Juho Uzkuurt Kaljunen (Finland, Aalto University); Maria Valtari; Anna Mikola; Irene Konola; Anne-Mari Aurola; Nuutti Lehtikujja Controlling P And N Balances Using HTC Combined With Wet Oxidation Peter Axegård (Sweden, Green Technology AB) HTC In Recovering Nutrients From Digested Municipal Sewage Sludge Anna Hämäläinen (Finland, Tampere University) Assessment Of The Possibility Of Nutrients Recovery From Post-fermentation Leachates In A Two-stage Technology (Deammonification / Struvite Precipitation) Krzysztof Czerwionka (Poland, Gdansk University of Technology); Agnieszka Tuszynska The Effect Of Initial Loading On Ammonium And K Removal From Anaerobic Digestate Through Ion Exchange Fatemeh Sadrzadeh (Turkey, Istanbul Technical University); Mahmut Altinbas; Bilsen Beler Baykal	<b>12:15 - 13:45 Aerobic granular sludge</b>  Full-Scale Experience In The Implementation Of Induced Granulation Via WAS Hydrocyclones In An Advanced Nutrient Removal Facility Adrienne Willoughby (Canada, Jacobs); Tim Constantine; Julian Sandino; Nerea Uri; Lise Havsteen; Per Henrik Nielsen Operational Strategies To Obtain Partial Nitrification And Nitrifying Granular Biomass From A Conventional Activated Sludge Xenia Juan Diaz (Spain, Universitat Autònoma de Barcelona); Julio Perez; Julian Carrera Evaluation Of Two Different Granular Sludge Reactor Configurations For The Treatment Of Freshwater Aquaculture Streams Sergio Santorio (Spain, Universidade de Santiago de Compostela); Ana T. Couto; Ángeles Val del Río; Catarina L. Amorim; Luz Arregui; Paula M.L. Castro; Anuska Mosquera-Corral Phosphorus Biosorption Models For ALE (alginate-like Exopolymer) Beads Recovered From Aerobic Granular Sludge Patricia Dall Agnol (Brazil, Federal University of Santa Catarina); Nelson Libardi; Jéssica Xavier; Eduarda Coradini; Rejane Costa The Key Role Of Diffusion In Simultaneous Nitrification And Denitrification By Aerobic Granular Sludge Lenno van den Berg (The Netherlands, Delft University of Technology); Catherine Kirkland; Mark van Loosdrecht; Merle de Kreuk
Networking break		
<b>14:00 - 15:30 N2O mechanisms</b>  Wolinella Succinogenes As A Possible Sink For Nitrous Oxide (N2O) In Wastewater Treatment Plants Philipp Bunse (Germany, Technische Universität Darmstadt); Annika Vera Pidde; Sascha Hein; Jörg Simon; Susanne Lackner Mainstream Shortcut Nitrification-denitrification Causing Massive N2O Emissions In A Continuous Activated Sludge Process Anna Kuokkanen (Finland, Helsinki Region Environmental Services Authority); Kati Blomberg Nitrous Oxide And Gas Transfer In Full-Scale Activated Sludge Basins Shanna Myers (Finland, Aalto University); Kati Blomberg; Anna Kuokkanen; Anna Mikola; Diego Rosso The Impact Of N2O On The Ecophysiology Of N2O-reducing Enrichments Michele Laurenzi (The Netherlands, Delft University of Technology); Francesc Corbera Rubio; Nina Roothans; Nadieh de Jonge; Savanna Browne-Wilkinson; Karel Olavarria Gamez; Jeppe Lund Nielsen; David Weissbrodt; Martin Pabst; Mark van Loosdrecht How Does KLa Regulate N2O Generation Via Nitrification In Partial Nitrification-anammox Process? Xinmin Zhan (Ireland, National University of Ireland); Songkai Qiu; Yuansheng Hu; Lujun Chen; Rui Liu Long-term Impact Of Influent Organics On N2O Emissions In One-stage Anammox Granular Sludge Reactor Wan, Xinyu (Belgium, Ghent University); Laurenzi, Michele; Jia, Mingsheng; Volcke, Eveline	<b>14:00 - 15:30 Microbial ecology in NRR process development</b> The Microbiome Of Nutrient Removal Plants Across The World Per Nielsen (Denmark, Aalborg University); Morten Dueholm; Kasper Andersen; Marta Nierychlo; Mads Albertsen; Vibeke Rudkjøbing Structure Of The Microbial Community In Constructed Wetlands With Different Processes Kharitonov, S (Russia, Moscow State University, Russian Academy of Sciences); Shchegolkova, N.; Michel, P.; Maciejewski, K.; Gautier, M.; Gourdon R. Deciphering The Diversity Of Filamentous Bacteria Across The World Marta Nierychlo (Denmark, Aalborg University); Lisette Thomsen; Francesca Petriglieri; Zivile Kondrotaitė; Caitlin Singleton; Morten Dueholm; Kasper Skytte Andersen; Mads Albertsen; Vibeke Rudkjøbing; Per Halkjær Nielsen Influence Of Microbial Community Composition On Activated Sludge Floc Properties And Dewaterability Susan Hove Hansen (Denmark, Aalborg University); Marta Nierychlo; Chenjing Jiang; Per Halkjær Nielsen 5 min panel presentations: Microbial Biogeographic Patterns Of Oxygen-limited Biofilms And Its Implication On Mainstream Partial Nitrification And Anammox Jia Meng (China, Harbin Institute of Technology; Australia, The University of Queensland); Jing Zhao; Jianzheng Li; Shihu Hu; Zhiguo Yuan; Min Zheng Identification Of Unique Nitrifying Communities In Activated Sludge And Incorporation Into Process Design Leon Downing (USA, Black & Veatch); Eric Redmond; Colin Fitzgerald; George Wells A Challenging Hunt For Nitrifying Bacteria - A Case Example From Viikinmäki WWTP Maija Vilpanen (Finland, Aalto University / Pöyry Finland Oy); Anna Mikola; Marlene Mark Jensen; Jane Fowler; Antonina Kruglova; Anna Kuokkanen; Barth F. Smets	<b>14:00 - 15:30 Carbon balance</b>  Achieving Simultaneously Methane Fermentation And Low-carbon Denitrogenation In Sewage Mainstream By Integrating Anaerobic Membrane Bioreactors With Nitrification-anammox Zhen Lei (China, Xi'an University of Architecture and Technology); Shuming Yang; Rong Chen Anaerobic Treatment Of Forward Osmosis Concentrate Obtained During Water Recovery From Municipal Wastewater Maite Pijuan (Spain, Catalan Institute for Water Research); Soraya Zahedi; Federico Ferrari; Gaetan Blandin; Jose Luis Balcazar Optimization Of Free Nitrous Acid Pre-Treatment Conditions For Improving Anaerobic Digestion Of Waste Activated Sludge Angelica Guerrero Calderon (Australia, The University of Queensland); Haoran Duan; Shihu Hu; Zhiguo Yuan 5 min panel presentations: Production Of Volatile Fatty Acids From Sewage Sludge And Food Waste For Denitrification: Closing The Loop For Wastewater Treatment Plants Isaac Owusu-Agyeman (Sweden, KTH-Royal Institute of Technology); Andriy Malovanyy; Christian Baresel; Elzbieta Plaza; Zeynep Cetecioglu Guroi Wastewater Tailored For Treatment - Combining Pre-filtration With Primary Sludge Fermentation In Pilot Scale Elin Ossiansson (Sweden, VA SYD); Michael Cimbritz; Frank Persson; Simon Bengtsson; David Gustavsson Carbon Footprint Analysis Of Co-fermentation Of Distillery Residue With Waste Activated Sludge Mojtaba Maktabifard (Poland, Gdansk University of Technology); Ewa Zaborowska; Monika Zubrowska-Sudol; Krzysztof Czerwionka
Networking break + posters		
<b>16:00 - 17:30 N2O mitigation</b>  Monitoring GHG Emissions From WWTP: Experiences And Challenges Of Quantifying N2O And CH4 In Full-scale Systems	<b>16:00 - 17:30 Future WWTPs</b> Demonstration Of Practical Mainstream Deammonification Schemes Balancing Treatment Efficiency With Complexity And Cost	<b>16:00 - 17:30 Microalgae (PANEL)</b>  Assessment Of Microalgae Growth In Different Anaerobic Digestate Of Piggery Effluent Adriana Oliveira (Brazil, Federal University of Viçosa); Paula Assemany; Maria Lucia Calijuri

<p>Maite Pijuan (Spain, Catalan Institute for Water Research); Adrian Rodriguez-Caballero; Anna Ribera-Guardia  Long-term Modelling Of Nitrous Oxide Emissions From Full-scale Nitrifying Biological Aerated Filters  Ahlem Filali (France, Irstea, UR PROSE); Justine Fiat; Jean Bernier; Vincent Rocher; Sylvie Gillot; Mathieu Spérando  Reducing Nitrous Oxide Emissions From A Full-scale Wastewater Treatment Plant  Haoran Duan (Australia, The University of Queensland); Ben Van den Akker; Ben Thwaite; Lai Peng; Yuting Pan; Bing-Jie Ni; Shane Watt; Zhiguo Yuan; Liu Ye  Full-scale Testing Of N2O Mitigation Strategies At The Viikinmäki WWTP  Kati Blomberg (Finland, Pöyry Finland Oy); Anna Kuokkanen  Nutrient Removal Efficiencies Govern Yearly N2O Production Rates On Wastewater Treatment Plants  Wenzel Gruber (Switzerland, Eawag); Luzia Von Kaenel; Lucien Biolley; Andrin Moosmann; Liliane Vogt; Manuel Luck; Eberhard Morgenroth; Daniel Braun; Adriano Joss</p>	<p>Mojolaoluwa Ladipo-Obasa (USA, DC Water and Sewer Authority / The George Washington University); Huu Huynh; Nicole Forney; Hange Chen; Rumana Riffat; Bernhard Wett; Christine deBarbadillo; Charles Bott; Haydee De Clippeleir  Designing A Resource-efficient Nutrient Removal Process With Ambitious Treatment Targets: The Blominmäki WWTP Case  Henri Haimi (Finland, FCG Design and Engineering Ltd); Anna Kuokkanen; Jarmo Antikainen; Kalle Kiisto  Carbon-lean Nitrogen Removal With The Mainstream Anammox System (MAS) As Stepping Stone For Energy-positive Sewage Treatment  Michiel Van Tendeloo (Belgium, University of Antwerp); Dries Seuntjens; Bert Bundervoet; Nathalie Carlier; Isabel Dekker; Hans Mollen; Etteke Wypkema; Joop Colsen; Siegfried E. Vlaeminck  Full Scale Nutrient Removal In The Hias Process  Torgeir Saltnes (Norway, Hias IKS); Gjermund Sørensen; Sondre Eikås  Predicting Nitrification Fluxes In MABRs: Modeling And Experimental Studies  Perez-Calleja, Patricia (USA, University of Notre Dame); Clements, Emily; Nerenberg, Robert</p>	<p>Application Of Nordic Microalgal-bacterial Consortia For Nutrient Removal And Wastewater Remediation  Rebecca Wicker (Finland, University of Eastern Finland); Amit Bhatnagar  Closing The Nutrient Loop With Algae: Integrative Algae - Greenhouse Production Platform  João Salazar (Finland, University of Turku); Dimitar Valev; Juha Nakkinen; Sema Sirin; Yagut Allahverdiyeva-Rinne  Algal Biomass From Wastewater: Soil Phosphorus Diffusion  Jackeline Castro (Brazil, Federal University of Viçosa); Maria Lúcia Calijuri; Edson Marcio Mattiello; Vinicius Ribeiro; Paula Peixoto Assemany  Microalgae Production And Nutrient Removal Of Domestic Sewage In A Hybrid Reactor  Thiago Silva (Brazil, Federal University of Viçosa); Leticia Assis; Jamily Teixeira; Lucia Calijuri  Simultaneous Harvesting And Pelletization Of The Microalgae Euglena Gracilis With The Filamentous Fungi Pleurotus Ostreatus.  Danielle Bansfield (Finland, Finnish Environment Institute, Aalto University); Jonna Piiparinen; Kristian Spilling; Anna Mikola  Inclined Attached Reactors In Microalgae Production And Nutrient Removal From Domestic Sewage  Leticia de Assis (Brazil, Federal University of Viçosa); Maria Lúcia Calijuri; Lais Febroni; Larissa Nascimento  Nutrient Recovery And Biofertilizer Potential Of Microalgae Grown In Various Wastewaters  Jonna Piiparinen (Finland, Finnish Environment Institute); Lauri Arvola; Annakaisa Elo; Jussi Huotari; Teo Kanninen; Jarkko Nummela; Kristian Spilling; Tiina Tulonen</p>
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POSTER ROOMS			
NITROGEN	PHOSPHORUS	PROCESS DEVELOPMENT	RESOURCE RECOVERY
<p>A Comparative Evaluation Of Sidestream Single-stage Deammonification Process With Different Feeding Strategies  Taeho Lee (Republic of Korea, Pusan National University); Jeongmi Kim; Lucky Caesar Direstiyani; Taewon Kwon; Soyeon Jeong; Yeonju Kim; Jaecheul Yu  Autotrophic Denitrification With S0 As An Electron Donor: Kinetic Of The Process At Different S0/N-NO3- Ratio Using S0 Powder.  Cesar Huillín (Chile, Universidad de Santiago de Chile); Lidarsi Acosta; Diana Yañez; Silvio Montalvo; Lorna Guerrero  An Enhanced A2/O System For The Treatment Of Printing And Dyeing Wastewater  Long-Fei Ren (China, Shanghai Jiao Tong University); Kai Chen; Jiahui Shao  Novel External Extractive Membrane Bioreactor For Phenol-laden Saline Wastewater Treatment  Jiahui Shao (China, Shanghai Jiao Tong University); Long-Fei Ren; Yiliang He  Nitrogen Removal Performance In Single-chamber Electrochemical Biofilm Reactor According To Electrode Size, Reactor Volume, And HRT  Jaecheul Yu (Korea, Pusan National University); Taeho Lee  Nutrient Removal Optimization By Advanced Mixing Control Strategy In A Multi Stages  Process Comprising Membrane Aerated Biofilm Reactor And Aerated Volume  Michal Kisra (Israel, Fluence); Ronen Shechter; Yedidya Heffes  Achieving Stable Nitrite Accumulation By Waste Activated Sludge Fermentation Products  Addition  Jinjin Liu (China, Beijing University of Technology); Yongzhen Peng; Shengjie Qiu; Shuying Wang; Qiong Zhang  Light As A Control Factor For Partial Nitrification Using Raw Wastewater  Dongjin Ju (Korea, Samjin Precision); Yunbin Hwang; Kihak Park; Wonsang Yun; Keugtae Kim</p>	<p>Application Of SeDAF (Sedimentation&amp;Flotation) Process For Phosphorus Removal In Advanced Wastewater Treatment  Jinhong Jung (Korea, Korea Institute of Civil Engineering and Building Technology); Yeolju Jang ; Hyangyoung Chang; Nari Park; Hyunman Lim; Kwangho Ahn; WeonJae Kim  Ash2Phos -- Clean Commercial Products From Sludge Ash  Yariv Cohen (Sweden); Yariv Cohen; Patrik Enfalt; John Svård  Phosphorous Removal And Recovery Options For Tuas WRP  Kenny Tan (Singapore, Jacobs Engineering); Joel Rife; Colin Newbery; Tim Constantine  A Meta-analysis Of The Efficacy And Efficiency Of Approaches For Phosphorus Removal From Complex Wastewater In Presence Of Organic Compounds  Exhaussee Boukaka (Australia, Southern Cross University); Andrew Rose; Dirk Erler; Terry Rose  Microwave Assisted Acid Hydrolysis Of Waste Activated Sludge: Characterization Of Different Phosphorus Species For Possible Recovery  Sabina Bec (Finland, Lappeenranta-Lahti University of Technology); YuRi Park; Chaker M. Necibi; Mika E.T. Sillanpää  Performance Evaluation Of Coloumn Type Sequencing Batch Reactor For Enhanced Biological Phosphorous Removal  Izharul Farooqi (India, Aligarh Muslim University); Farrukh Basheer; Mohd Siddiqui  Developing A Novel Treatment Train For Nutrient Recovery From Digestate Combining  Ammonia Recovery And Membrane Bioreactors  Nicolas Cormier (Canada, Université Laval); Céline Vaneekhaute  Application Of Central Composite Design For Improving Sludge Dewaterability And  Nutrients Content After Acid Pre-treatment  Jannatul Rumky (Finland, LUT University); Anjan Deb; Deepika Lakshmi Ramasamy; Mika Sillanpää</p>	<p>Enhancing Nitrogen And Phosphorus Removal In An Intermittently Aerated Sequencing Batch Reactor (IASBR) Using Real-time Control (RTC) Strategies  Peter Leonard (Ireland, National University of Ireland); Sean Mulligan; Eoghan Clifford; Xinmin Zhan  Novel Two-stage Combined Process Of Endogenous Denitrification And Phosphorus Removal (EPDPR) With Anammox For Simultaneous Treatment Of Municipal And Nitrate Wastewaters  Xiaoxia Wang (China, Qingdao University); Ji Zhao; Deshuang Yu; Yuanyuan Miao; Guanghui Chen  The Contribution Of Activated Sludge And Biofilm To SND In A Plant-scale IFAS System  Zhixuan Yin (China, Qingdao University of Technology); Deming He; Xuejun Bi; Fei Wen  Influence Of A Slow Anaerobic Feeding On The Formation And Performance Of Granular Sludge Treating Industrial Dairy Wastewater  Thomas Dobbeleers (Belgium, University of Antwerp); Marc Feyaerts; Jan Dries  N2O Production Pattern And AOB-NOB Competition During Nitrification Test Under Limited DO Concentration At Low Temperature  Mehdi SharifShourjeh (Poland, Gdansk University of Technology); Jakub Drewnowski; Przemysław Kowal  Selected Consortium Of Bacteria For The Bioaugmentation Of Activated Sludge Treatment Exposed To A Nickel Spill  Feliu Sempere (Spain, Global Omnium Group); Juan Francisco Martínez-Blanch; Silvia Segarra; Gloria Fayos; Nùria Oliver; María José Tárrega  Achieving Nitrite Production With Primary Sludge As The Carbon Source  Liangliang Shi (China, Beijing University of Technology); Xiyao Li; Qiong Zhang; Yongzhen Peng  Meta-omics Microbial Analysis Of A Multi-benefit Subsurface Wastewater Treatment Wetland In SF Bay  Emily Gonther (USA, University of California); Angela Perantoni; Aidan Cecchetti; Lisa Alvarez-Cohen</p>	<p>A Study On The Nutrition Recovery Evaluation By The Sustainable Cycle Efficiency Index In Water Reclamation Plants In Taiwan  Sheng-Jie You (Taiwan, Chung Yuan Christian University); Kuang-Chih Chang; Sheng-Hsiu Huang; David Tsai; Tien-Chin Chang; Ya-Fen Wang  Application Of Biobased Anode Material In A Microbial Nutrient Recovery System For Simultaneous Recovery Of Nutrients And Green Energy From Wastewater.  Kanwal Shahid (Finland, Lappeenranta-Lahti University of Technology); Deepika L. Ramasamy; Mika Sillanpää  Electricity Generation In Microbial Fuel Cell Using Anodic Anaerobic Bacteria And Cathodic Microalgae: Seeding Ratio And External Resistance Effects  CHYI-HOW LAY (Taiwan, Feng Chia University); J.Y. Wu; P.C. Cheng; C.C. Chen  Biogas Upgrading Via Homoacetogenesis In A Novel Membrane Biofilm Reactor  Lei Zhao (China, Harbin Institute of Technology); Zihan Wang; Minli Xiong; Chuan Chen; Nanqi Ren  Bioenergy Production And Nutrient Removal From High Strength Slaughterhouse Wastewater By Sequential Anaerobic And Aerobic Batch Reactors (ASBR-SBR)  Farrukh Basheer (India, Aligarh Muslim University); Izharul Farooqi; Diwakar Sharma; Asad Aziz; Ashish Sengar; Hasan Rameez  Evapotranspiration Toilet: A Safe And Sustainable Treatment For Black Water  Adriano Luiz Tonetti (Brazil, University of Campinas); Isabel Figueiredo; Caroline Miyazaki; Lays Paulino Leonel; Daniella Portela  BONUS RETURN: Reducing Emissions To The Baltic Sea By Turning Nutrients And Carbon Into Benefits  Rosemarin, Arno (Sweden, Stockholm Environment institute); Barquet, Karina  Comparison Of Phosphorus Adsorption Efficiency From Municipal Wastewater Using Commercial, Natural And Nanoparticle Modified Materials  Kotzurova, Iveta (Czech Republic, ASIO TECH); Holba, Marek</p>

<p>Ammonium Removal Performance of Domestic Natural Zeolites Miratul Maghfiroh (Korea, University of Science and Technology); Nari Park; Hyangyoung Chang; Yeoung Jang; Weonjae Kim</p>	<p>Nutrient Removal In Landfill Leachate By Struvite Precipitation: Effect Of PH And Mg:N:P Ratio On Crystal Formation Isaac Volschan Jr (Brazil, Federal University of Rio de Janeiro); Diego Veneu; Ana Carolina Silva; Lidia Yokoyama</p>	<p>Denitrification Phosphorus Removal Characteristics And DOM Transformation In The AAO-BCO System: Effect Of Sludge Retention Times Yawen Sun (China, Beijing University of Technology); Yongzhen Peng; Shuying Wang</p>	<p>Influence Of Fermentation On Pharmaceutical Concentrations In Urine Melita, Sanna (The Netherlands, LeAF); Weijma, Jan; Schuman, Els; Pfeiffer, Leneke; Vijn, Marcel; Van Strien, Eva; Wernli, Markus; Deher, Sarah</p>
<p>Effect Of Carbon Source And Initial COD/N Ratio In Denitrification Process Adriano Luiz Tonetti (Brazil, University of Campinas); Raul Lima Coasaca; Daniella Portela; José Henrique Pastorelli Junior; Maria Eduarda Almeida</p>	<p>Nutrients Removal And Recovery Using Flow-electrode Capacitive Deionization (FCDI)Based Technologies Changyong Zhang (Australia, University of New South Wales)</p>	<p>Impacts Of Wastewater Treatment Plant Upgrade On Functional And Health-related Microbes In Receiving River Water Yaohui Bai (China, Chinese Academy of Sciences)</p>	<p>Resources And Risks: Perceptions On The Application Of Sewage Sludge On Agricultural Land In Sweden Ekane, Nelson (Sweden, Stockholm Environment Institute); Rosemarin, Arno; Barquet, Karina</p>
<p>Effect Of Organic Matter Concentration On Denitrification Process In A Packed-bed And UASB Reactor Adriano Luiz Tonetti (Brazil, University of Campinas); José Henrique Pastorelli Junior; Raul Lima Coasaca; Natália Cangussú Duarte</p>	<p>Life Cycle Assessment Of Novel Electrochemical Phosphorus Recovery Technology At The Plant And U.S. Watershed Scales Morrissey, Karla (USA, University of Arkansas); Thoma, Greg</p>	<p>Nutrients And Characterization Of Greywater From Rural Households Adriano Luiz Tonetti (Brazil, University of Campinas); Isabel Figueiredo; Caroline Miyazaki; Daniella Portela; Maria Eduarda Almeida</p>	<p>Evaluation Of Application Of Faecal Sludge-Based Inputs In Agriculture For Weed Growth R, Girija (India, Consortium for DEWATS Dissemination); Parama, Ramakrishna; Shamanna, Gagana</p>
<p>Presence And Removal Of Antibiotics And Antibiotic Resistance Genes In Finnish Wastewater Treatment Plants Antonina Kruglova (Finland, Aalto University); Irina Levchuk; Anna Mikola</p>		<p>Enhancement The Transformation Of Branched-chain Amino Acids Into VFAs By Application Of SDBS Wang, Meng (China, Tongji University); Chen, Yinguang</p>	<p>LIFE- Newbies: Nitrogen Extraction from Wastewater by an Innovative Electrochemical System Pijuan, M. (Spain, Catalan Institute for Water Research); Ferrari, F.; Molenaar, S.; van den Brink, P.; Radgenovic, J.; Kuntke, P</p>
<p>Seasonal Variation Of Anaerobic Ammonium And Methane Oxidising Microbes From Wastewater Management Plant Sai Xu (China, Nanjing University of Science and Technology)</p>		<p>Effect Of Flocs On The N2O Emissions In Granular Sludge One-stage Partial Nitritation Anammox Reactors Wan, Xinyu (Belgium, Ghent University); Baeten, Janis; Volcke, Eveline</p>	<p>Comparison Of Different Treatment Methods For Protein Solubilisation From Waste Activated Sludge Xiao, Keke (China, Huazhong University of Science and Technology)</p>
<p>Minor Air Scouring In Anaerobic/anoxic Tanks Plays A Major Role In Nitrogen Removal By A Mainstream PN/A Process In A Full-scale WWTP In China Yuan, Quan (China, Tsinghua University); He, Beiping; Wang, Kaijun; Qian, Liang; Littleton, Helen; Daigger, Glen; van Loosdrecht, Mark; Wells, George</p>		<p>Study Of Pollution In River Sitnica, And Its Environmental Management Kajtazi, Besime (Kosovo)</p>	<p>Sulfadiazine affects short-chain fatty acids production during anaerobic fermentation of waste activated sludge Tingting Wang (China, Tongji University), Feng, Leiyu. Y., Jin, Z. Y.</p>
		<p>Efficient, Autotrophic Denitrification With Biosulfur (ADBIOS) Using Robust Biofilms In Moving Bed Biofilm Reactors (MBBRs) Kostrzytsia, Anastasiia (Italy, University of Cassino and Southern Lazio); Papirio, Stefano; Lens, Piet N.L.; Esposito, Giovanni</p>	<p>Electrochemical Disinfection And Removal Of Ammonia For Water Reuse In Aquaculture And Irrigation Qing, Geletu (USA, University of Arkansas); Foster, Shelby; Anari, Zahra; Greenlee, Lauren</p>