# 10th IWA International Conference on Biofilm Reactors Preliminary Programme *

**Tuesday, May 9, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
<th>Room A</th>
<th>Room B</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td><em>Welcome Reception</em></td>
<td><em>Conference Registration Opens</em></td>
<td></td>
</tr>
<tr>
<td>9:00 - 12:00</td>
<td><em>Workshop</em>: Biofilm Reactor Design</td>
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<tr>
<td>13:00 - 17:00</td>
<td><em>Session</em>: Biofilm Reactor Design</td>
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## Session: Bio-ElectroChemical Systems

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Robustness And Resiliency Of Anode-Respiring Biofilms To Perturbations With Nitrate</td>
<td>TBC</td>
<td>TBC</td>
</tr>
<tr>
<td>14:20</td>
<td>Scale-up Of A Microbial Electrolysis Cell For Domestic Wastewater Treatment And Energy Recovery</td>
<td>TBC</td>
<td>TBC</td>
</tr>
<tr>
<td>14:40</td>
<td>An Insight Into The Microbiome Of Electrotrrophic Biofilms</td>
<td>Luis Bañeras</td>
<td>Universitat de Girona</td>
</tr>
<tr>
<td>15:00</td>
<td>Bacterial Community Composition At Biofilm Anodes Of A Multi-electrode Bio- Electrochemical System During Municipal Waste</td>
<td>Edson Estrada</td>
<td>Mexican Institute of Water Technology</td>
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## Session: MBBR I

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>16:00</td>
<td>Improving Biofilm Reactor Model Simulations In Aquasin Through Artificial Diffusion</td>
<td>Janis Baeten</td>
<td>Ghent University</td>
</tr>
<tr>
<td>16:20</td>
<td>Hydrodynamic Model For Biofilm Reactors With Carrier Migration</td>
<td>Joshua Boltz</td>
<td>Volkert Inc</td>
</tr>
<tr>
<td>16:40</td>
<td>Modelling Biotransformation Of Drug Biomarkers By sewer Biofilms</td>
<td>Pedramin Ramin</td>
<td>Technical University of Denmark</td>
</tr>
<tr>
<td>17:00</td>
<td>Model Calibration For MBBR And IFAS Reactors: Experiences With The Good Biofilm Reactor Modelling Protocol</td>
<td>TBC</td>
<td>TBC</td>
</tr>
<tr>
<td>17:20</td>
<td>Sorption And Diffusion Of Micropollutants In Biofilms: Experimental Assessment And Model-based Interpretation</td>
<td>Elena Torresi</td>
<td>Technical University of Denmark</td>
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## Session: MBBR II

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## Session: Aerobic Granules I

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<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>14:00</td>
<td>Limited Simultaneous Nitrification-denitrification In Aerobic Granular Sludge Systems Treating Municipal Wastewater</td>
<td>Mercedes Garcia Villodres</td>
<td>EAWAG, Zurich</td>
</tr>
<tr>
<td>14:20</td>
<td>The Acid Soluble Extracellular Polymeric Substance Of Aerobic Granular Sludge Dominated By Defluviicoccus Sp.,</td>
<td>Yuemei Lin</td>
<td>TUDelft</td>
</tr>
<tr>
<td>14:40</td>
<td>Comparison Of Microbial Log Removal Performance Of Granular And Activated Sludge: Impacts On Wastewater Reuse</td>
<td>Ben Thwaites</td>
<td>University of New South Wales</td>
</tr>
<tr>
<td>15:00</td>
<td>Process Proving: A Stopped Approach To Validate The Application Of Aerobic Granular Sludge Technology</td>
<td>Marisa Buyers-Baso</td>
<td>Royal Haskoning DHV</td>
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## Session: TEA & COFFEE BREAK

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>19:00</td>
<td>POSTER SESSION</td>
<td><em>Welcome Reception</em></td>
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* *Welcome Reception*
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:10</td>
<td>Continuous Biofilm Nutrient Removal Process</td>
<td>TBC</td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td>Investigation Of Guild Stratification In A Mainstream Partial Nitrification/anammox Biofilm Reactor</td>
<td>Alex Rosenthal</td>
<td>Northwest University</td>
</tr>
<tr>
<td>9:50</td>
<td>Mainstream Deammonification With The IFAS ANITA™Mox Process</td>
<td>Florence Poty</td>
<td>Veolia</td>
</tr>
<tr>
<td>10:10</td>
<td>Evaluation Of Aggregation Ability Of Three Phylogenetically Distant ANAMMOX Bacterial Species</td>
<td>Muhammad Ali</td>
<td>King Abdullah University of Science and Technology</td>
</tr>
<tr>
<td>10:30</td>
<td>Biomass Segregation In Hybrid Biofilm Systems Improves NOB Control In Mainstream Partial Nitrification And Anammox</td>
<td>Michele Laureni</td>
<td>EAWAG/ETH</td>
</tr>
<tr>
<td>11:20</td>
<td>Mechanisms Of Pore Formation In MABR Biofilms, And Its Effects On System Performance</td>
<td>TBC</td>
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</tr>
<tr>
<td>11:40</td>
<td>Membrane Aerated Biofilm Reactor (MABR) Performance Sensitivity To Operating Conditions</td>
<td>Dwight Houweling</td>
<td>GE Water &amp; Process Technologies</td>
</tr>
<tr>
<td>12:00</td>
<td>Venting Of Membrane Aerated Biofilm Reactors (MABRs) Allows High Removal Rates And High-Transfer Efficiencies</td>
<td>TBC</td>
<td></td>
</tr>
<tr>
<td>12:20</td>
<td>Membrane-aerated Nitrifying Biofilms: Continuous Versus Intermittent Aeration</td>
<td>Yunjie Ma</td>
<td>Technical University of Denmark</td>
</tr>
<tr>
<td>12:40</td>
<td>Model And Experimental Assessment Of Nitrous Oxide Emission From Membrane-aerated Biofilm Reactor</td>
<td>Andras Nemeth</td>
<td>University College Dublin</td>
</tr>
<tr>
<td>13:00</td>
<td>Identifying Hotspots For Production And Consumption Of NO And N2O In A Membrane-Aerated Biofilm For Nitrogen Removal</td>
<td>Akihiko Terada</td>
<td>Tokyo University of Agriculture &amp; Technology</td>
</tr>
<tr>
<td>9:10</td>
<td>Determination Of Physiological Mechanism And Morphology Integrity Of Oxygenic Photogranaules For Wastewater Treatment</td>
<td>TBC</td>
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</tr>
<tr>
<td>9:30</td>
<td>Characterization By Microsensors Measurements Of Microbial Activity Within Biofilms Grown On Trickling Filters</td>
<td>Mabel Mora</td>
<td>Universitat Politècnica de Catalunya</td>
</tr>
<tr>
<td>9:50</td>
<td>The Impact Of Waveguide Structural Properties On Enhancing Algal Biofilm Growth</td>
<td>Yalda Azimi</td>
<td>University of Toronto</td>
</tr>
<tr>
<td>10:10</td>
<td>Structure And Diffusion Of Aerobic Granular Sludge Using Magnetic Resonance</td>
<td>Catherine Kirkland</td>
<td>Montana State University</td>
</tr>
<tr>
<td>10:30</td>
<td>A Novel MEMS-based Sensor For Simultaneous PH And Dissolved Oxygen Profiling In Biofilms</td>
<td>Xavier Gamisans</td>
<td>Technical University of Catalonia</td>
</tr>
<tr>
<td>11:20</td>
<td>Implementation Of Anamnose Process In An UASB Reactor At Mainstream Conditions</td>
<td>Clara Reino</td>
<td>Autonomous University of Barcelona</td>
</tr>
<tr>
<td>11:40</td>
<td>Ecophysiology Of Anaerobic Sludge Granules Across Distinct Size Fractions: Size Matters</td>
<td>TBC</td>
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<tr>
<td>12:00</td>
<td>Sulfur-cycle Based Moving-bed Biofilm Reactor For Mainstream Autotrophic Denitrification</td>
<td>Yan-Xiang Cui</td>
<td>The Hong Kong University of Science and Technology</td>
</tr>
<tr>
<td>12:40</td>
<td>Hydrogen Production By Co-digestion Of Cheese Whey With Glycerin In An AnSBBR: Temperature Effect</td>
<td>Giovanna Lovato</td>
<td>Maua Institute of Technology</td>
</tr>
<tr>
<td>13:00</td>
<td>Process Optimization And Metabolic Pathways Of Methane Production In AnSBBR Treating Wastewater From Hydrogen Product</td>
<td>Roberta Albanez</td>
<td>Maua Institute of Technology</td>
</tr>
<tr>
<td>13:20</td>
<td>Membrane Fundamentals</td>
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<tr>
<td>9:30</td>
<td>Biofilm Fundamentals</td>
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<td>9:50</td>
<td>Anaerobic Reactors</td>
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<tr>
<td>11:20</td>
<td>MABR I</td>
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<td>11:40</td>
<td>TEA &amp; COFFEE BREAK</td>
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<tr>
<td>12:00</td>
<td>LUNCH</td>
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**Wednesday, May 10, 2017**
<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:20</td>
<td>Intermittent Aeration Regimes Are Effective Tools To Manage Size Of Bio-granules And Microbial Communities In PN/A SBRs.</td>
<td>Jan-Michael Blum</td>
<td>Technical University of Denmark</td>
</tr>
<tr>
<td>14:40</td>
<td>Status Of Aerobic Granular Sludge Technology: Combining The Merits Of Activated Sludge And Biofilm Technology</td>
<td>Sjoerd Kerstens</td>
<td>Royal HaskoningDHV</td>
</tr>
<tr>
<td>15:00</td>
<td>Operation Of An Aerobic Granular Reactor To Treat Industrial Saline Wastewater</td>
<td>Paula Carrera</td>
<td>University of Santiago de Compostela</td>
</tr>
<tr>
<td>15:20</td>
<td>Selective Pressures For Granulation In Full-scale, Flow Through Activated Sludge System</td>
<td>Leon Downing</td>
<td>CH2M</td>
</tr>
<tr>
<td>15:40</td>
<td>Ecology And Performance Of AGS Treating High Saline Municipal Wastewater</td>
<td>Benjamin Thwaites</td>
<td>University of New South Wales</td>
</tr>
<tr>
<td>16:00</td>
<td>KEYNOTE SPEAKER</td>
<td>RENE ROSENDAL</td>
<td>Paques</td>
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**BAF/SAF**

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<tr>
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<tr>
<td>14:20</td>
<td>Nitrous Oxide Emissions From Full-scale Nitrifying And Denitrifying BAF Reactors</td>
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</tr>
<tr>
<td>14:40</td>
<td>Simultaneous Organic Matter Removal And Nitrification Of An Inert Self-supporting Media To Upgrade Aerated Lagoons</td>
<td>Etienne Boutet</td>
<td>Bionest Technologies</td>
</tr>
<tr>
<td>15:00</td>
<td>BIOSTYR DUO: Performances And Recent Development</td>
<td>Jacques Montélymard</td>
<td>Veolia</td>
</tr>
<tr>
<td>15:20</td>
<td>Revival Of Nitrifying Bacteria &amp; Recovery Of Nitrification Performance After Restart Of An Expanded Bed Biofilm Reactor</td>
<td>Mike Dempsey</td>
<td>Advanced Bioprocess Development Ltd. &amp; Manchester Metropolitan University</td>
</tr>
<tr>
<td>15:40</td>
<td>Biofilm Reactors For The Treatment Of Oil Sands Process-Affected Water</td>
<td>Yang Liu</td>
<td>University of Alberta</td>
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**TEA & COFFEE BREAK / POSTER PRESENTATIONS**
### Thursday, May 11, 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>First Name</th>
<th>Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Continuous Aeration In A Full-Scale DEMON™ Reactor To Reduce N2O Emissions</td>
<td>Nerea Uri Carreño</td>
<td>VandCenter Syd</td>
</tr>
<tr>
<td>9:40</td>
<td>Nitric Oxide Enhances Anammox Activity</td>
<td>Gayathri Natarajan</td>
<td>SELSE, Nanyang Technical University</td>
</tr>
<tr>
<td>10:00</td>
<td>Experiences In The Implementation On Recovery Of Anammox-Enriched Cultures After Starvation Conditions ON Biofilm System</td>
<td>Pongsak Noophan</td>
<td>Kasetsart University</td>
</tr>
<tr>
<td>10:20</td>
<td>gren Granular sludge modelling to evaluate microbial interactions and novel process concepts</td>
<td>Eveline Volcke</td>
<td>Ghent University</td>
</tr>
<tr>
<td>11:00</td>
<td>Influence Of Wastewater Composition On Microbial Communities Of Aerobic Granules And Their Nutrient Removal Performances</td>
<td>Aline Adler</td>
<td>École Polytechnique Fédérale de Lausanne</td>
</tr>
<tr>
<td>11:40</td>
<td>Effect Of COD/N Ratio On N2O Production During Nitrogen Removal By Aerobic Granular Sludge</td>
<td>Rejane Helena Ribeiro da Costa</td>
<td>Federal University of Santa Catarina</td>
</tr>
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<td>12:00</td>
<td>Different-Sized Microbial Aggregates In A Full-Scale AGS Plant Respond Differently To Local And Regional Factors</td>
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<td>12:40</td>
<td>Alginate-Like Exopolymer Recovery From Granular Sludge Biofilm Reactor Under Conditions Selecting For Slow-Growing PAOs</td>
<td>David Weissbourd</td>
<td>Delft University of Technology</td>
</tr>
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<td>Granular sludge modelling to evaluate microbial interactions and novel process concepts</td>
<td>Eveline Volcke</td>
<td>Ghent University</td>
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<td>14:00</td>
<td>The Importance Of Biofilm Surface Area And Suspended Biomass In The MBBR</td>
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<td>14:20</td>
<td>Rapid Development Of Anammox Biofilm On Augmented Carrier Material</td>
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<td>14:40</td>
<td>External Mass Transfer In Moving Bed Biofilm Reactors</td>
<td>Mark van Loosdrecht</td>
<td>Delft University of Technology</td>
</tr>
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<td>15:00</td>
<td>Biofilm Reactor Technologies - When should we apply them?</td>
<td>Kim Sorensen</td>
<td>WABAG</td>
</tr>
<tr>
<td>15:40</td>
<td>Closing Remarks and Awards</td>
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<tr>
<td>20:00</td>
<td>Post Conference Get Together</td>
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## Friday, May 12, 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>7:30</td>
<td>Buses leave for site visit</td>
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<tr>
<td>MORN</td>
<td>Visit to Aerobic Granules Site</td>
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<td></td>
<td>Lunch</td>
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<tr>
<td>AFT</td>
<td>Visit to Second Site</td>
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<tr>
<td>18:00</td>
<td>Return to Dublin</td>
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* This is a Provisional Programme and may be subject to change