



# 16<sup>TH</sup> IWA World Conference on Anaerobic Digestion

 *Accelerating natural cycles with anaerobic digestion*

## Preliminary program

**Sunday 23-06-2019**

16.00	Opening
16.20	AD in a social context: Kala Vairavamoorthy (IWA executive director)
17.00	AD in an economic context: Platinum sponsors
17.40	AD in a visionary research context: Willy Verstraete (University of Ghent)
18.20	Welcome cocktail

## Monday 24-06-2019

Time	Session 1	Session 2	Session 3
8.45-9.10	Opening Session		
9.10-9.40	Plenary 3: Alfred Spormann, Stanford University		
9.40-10.10	Plenary 4: Lutgarde Raskin, University of Michigan		
10.10-10.40	Coffee break + posters		
	<b><i>Microbiology of anaerobic digestion / (meta) genomic research</i></b>	<b><i>Sulfur cycle technology</i></b>	<b><i>Post treatment (+ agricultural use)</i></b>
10.40-11.00	<p><b>Anna Schnürer</b>  <b>Swedish University of Agricultural Sciences</b>  <b>Sweden</b></p> <p><i>Title to be confirmed</i></p>	<p><b>Erik van Zessen</b>  <b>Paques B.V.</b>  <b>The Netherlands</b></p> <p><i>Title to be confirmed</i></p>	<p><b>Appropriateness of empirical models predicting the performance of rock-bed trickling filters following UASB reactors</b></p> <p>C.A.L. Chernicharo, T. Bressani-Ribeiro, E.I.P. Volcke, Brazil</p>
11.00-11.15	<p><b>Global reference database of microbes in anaerobic digesters</b></p> <p>V. Rudkjøbing, M. Dueholm, S. Knutson, M. Nierychlo, J. Kristensen, F. Petriglieri, G. Dottorini, E. Yashiro, S. Karst, M. Albertsen, P. H. Nielsen, Denmark</p>	<p><b>Ni Stress to Sulphate Reducing Bacteria Enhances Ni Complexation: Opportunity for Ni-Co Separation from wastewater</b></p> <p>Y. Liu, A. Serrano, V. Wyman, G. Southam, J. Vaughan, D. Villa-Gomez, Australia</p>	<p><b>A. practical solution for sludge stabilization from aerobic post treatment in the anaerobic pre treatment unit</b></p> <p>A. van Haandel, Brazil</p> <p><i>To be confirmed</i></p>

<p>11.15-11.30</p>	<p><b>Genomic insights into the syntrophic metabolism of propionate oxidation</b></p> <p>M.K. Nobu, C.A.P. Hidalgo, T. Narihiro, H. Tamaki, W.-T. Liu, N.Q. Wofford, M.J. McInerney, Y. Kamagata, A.J.M. Stams, H. Imachi, <u>D.Z. Sousa</u>, The Netherlands</p> <p><i>To be confirmed</i></p>	<p><b>Developing a new thiosulfate-driven sulfur-cycle anammox process</b></p> <p>D.Wu, Hong Kong</p>	<p><b>Post-treatments and recirculation of agricultural solid digestates: impact on full-scale methane yield</b></p> <p><u>U. Brémond</u>, A. Bertrandias, J.P. Steyer, H. Carrere, France</p>
<p>11.30-11.45</p>	<p><b>Aerobic and facultative bacteria: working horses at the service of Anaerobic Digestion</b></p> <p><u>M. Alves</u>, S.Duarte, J. Vitor Oliveira, C. Pereira Magalhães, A. Salvador, A.R. Castro, A.J.M. Stams, A.J. Cavaleiro, M. Alcina Pereira, Portugal</p>	<p><b>Autotrophic denitrification via nitrite associated with microaeration for sulfide removal</b></p> <p><u>P.I.M. Firmino</u>, <u>G. Neto</u>, R.H.Lima, D.C. Hortêncio, M.E. Rodrigues da Silva, A.B.dos Santos, Brazil</p>	<p><b>Removal of dissolved methane and nitrogen from anaerobically treated sewage using the SIAM process</b></p> <p><u>J. M. Garrido</u>, J. Domínguez, L. Rodríguez, A. Silva-Teira, T. Serna, E. Sánchez, P. Simón, N. Moya, A. Arias, J. M. Lema, Spain</p>
<p>11.45-12.00</p>	<p><b>Microbial diversity, and biofilm growth, in size-resolved anaerobic granules</b></p> <p><u>A. Trego</u>, C. Morabito, S. Mills, S. Connelly, I. Bourven, G. Guibaud, C. Quince, U. Zeeshan Ijaz, G. Collins, Ireland</p>	<p><b>Potential of sulfide-based denitrification for municipal wastewater treatment</b></p> <p><u>A. Van den Hove</u>, J.E. Baeten, S.O. Decru, E.I.P. Volcke, Belgium</p>	<p><b>Hydrothermal carbonisation post-treatment of digestate from a municipal digester targeting solid reduction and increased methane yield</b></p> <p>J. Frigon, Canada</p>

12.00-12.15	<p><b>Meta-analysis of amplicon sequencing datasets to understand the ecology of Chloroflexi in methanogenic full scale reactors</b></p> <p><u>P. Bovio</u>, A. Cabezas, C. Etchebehere, Uruguay</p>	<p><b>Electron Donor Influence in Metal Sulfide Removal and Recovery from Acid Mine Drainage</b></p> <p><u>R.Costa</u>, D. Bevilaqua, Brazil</p>	<p><b>Partial nitrification/anammox process using intermittent aeration as post-treatment of food waste effluent</b></p> <p>J. Calábria de Araújo, F.A. Cristófaró Warrener, H.M. Campos Castro, A. Duarte Pereira, C. Augusto de Lemos Chernicharo, Brazil</p>
12.15-12.35	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>
	<p><b>Thermal hydrolysis affects the microbiome structure and composition in sewage sludge anaerobic reactors</b></p> <p>G.H.R.. Braz, A. Taboada-Santos, N. Fernandez-González, M. Carballa and J. M. Lema, Spain</p> <hr/> <p><b>End-of-life of biodegradable plastics supports through anaerobic digestion: performance and microbial study</b></p> <p><u>C. Guillaume</u>, F. Monlau, R. Guyoneaud, C. Vasmara, C. Gassie, R. Marchetti, France</p>	<p><b>Performance and bacterial diversity of a bioreactor for oxidation of sulfide from UASB reactor treating sewage</b></p> <p>L. S. Azevedo, J. C. Araújo, C. A. L. Chernicharo, Brazil</p> <hr/> <p><b>Use of magnetite for in-situ removal of hydrogen sulfide during anaerobic digestion</b></p> <p><u>H. Jung</u>, J. Kim, C.Lee, Republic of Korea</p> <p><i>To be confirmed</i></p>	<p><b>Filtration of municipal UASB effluent using a dynamic membrane immersed in anaerobic granular sludge</b></p> <p><u>A. Rodríguez-Medina</u>, A. Noyola, Mexico</p> <hr/> <p><b>Water treatment sludge as a filtration medium for post-treatment of UASB reactor effluent</b></p> <p>M. Ahammed, India</p>

	<p><b>Impact of operational parameters on reactor performance and microbial community development during pilot-scale low temperature anaerobic digestion wastewater treatment</b></p> <p><u>L.M. Paulo</u>, J. Castilla-Archilla, J. Ramiro-Garcia, J.A. Picón, D. Hughes, T. Mahony M. Murray, P. Wilmes, V. O’Flaherty, Ireland</p>	<p><b>Simultaneous biological treatment and REY (rare earth elements and yttrium) removal from an acid mine drainage</b></p> <p><u>E.W. Nogueira</u>, L.A.G. Godoi, G. Brucha, M.H.R.Z. Damianovic, Brazil</p>	<p><b>AlgaeBioGas: Algal-bacterial treatment of biogas digestate with biomass production and energy recovery</b></p> <p><u>R. Reinhardt</u>, M.B. Zrimec, B. Lazar, M. Slapnik, Slovenia</p>
	<p><b>How reproducible is the anaerobic digestion microbiome?</b></p> <p><u>M. Peces</u>, S. Astals, Denmark</p>	<p><b>A passive treatment system for bioremediation of sulfate rich mine affected waters</b></p> <p>S.Rossouw, C. Sheridan, South Africa</p> <p><i>To be confirmed</i></p>	<p><b>Impact of microaeration on dissolved sulfide and methane removals from anaerobic effluent</b></p> <p>C.S. Souza, C.A. de Lemos Chernicharo, J.C. Araújo, Brazil</p>
12.35-14.00	Lunch + posters		
	<p><b><i>Microbiology of anaerobic digestion / (meta) genomic research</i></b></p>	<p><b><i>Nutrient removal/recovery linked to AD (anammox, struvite, N/P general)</i></b></p>	<p><b><i>Anaerobic high-rate/granular sludge</i></b></p>
14.00-14.20	<p><b>Application of synthetic microbial co-cultures for the conversion of syngas to bio-based chemicals</b></p> <p><u>M. Diender</u>, I. Parera-Olm, J.Koehorst, P. Schaap, A. J.M. Stams, D. Z. Sousa, The Netherlands</p>	<p><b>Ilje Pikaar</b> Wageningen University and Research The Netherlands</p> <p><i>Title to be confirmed</i></p>	<p><b>Ana Soares</b> Cranfield University United Kingdom</p> <p><i>Title to be confirmed</i></p>

14.20-14.35	<p><b>Identifying metabolic flexibility in syntrophic populations within anaerobic digesters using stable-isotope informed metagenomics</b></p> <p><u>R. Ziels</u>, D.Z. Sousa, Canada</p> <p><i>To be confirmed</i></p>	<p><b>A new UASB-gas-lift reactor design for the simultaneous production and recovery of calcium phosphate granules and methane from vacuum collected black water</b></p> <p>J.R. Cunha, R.D. van der Weijden, L. Hernández Leal, G. Zeeman, C. Buisman, The Netherlands</p>	<p><b>Anaerobic Granular Sludge Technology at High Salinity – Why Protein May be Crucial</b></p> <p><u>D. Sudmalis</u>, M.C.Gagliano, H.H.M.C. Rijnaarts, G. Zeeman, H. Temmink, The Netherlands</p>
14.35-14.50	<p><b>Shaping robust methanogenic communities for the treatment of domestic wastewater at 15oC</b></p> <p><u>E. Petropoulos</u>, Y. Yu, A. Yakubu, T.P. Curtis, J. Dolfing, United Kingdom</p> <p><i>To be confirmed</i></p>	<p><b>The potential for polyphosphate cycling in Archaea and extensive anaerobic polyphosphate formation in Methanosarcina mazei</b></p> <p><u>J.C. Connolly</u>, F. Paula, J. Chin, A. Schnurer, B. Muller, P. Manesiotis, N. Waters, K. Macintosh, F. Abram, J. McGrath, V. O’Flaherty, Ireland</p>	<p><b>Development of dynamic membrane bioreactor based on rumen physiology for efficient hydrolysis of lignocellulosic biomass</b></p> <p><u>X. Fonoll Almansa</u>, T. Meuwissen, L. Aley, S. Shrestha, L. Raskin, United States</p>
14.50-15.05	<p><b>Revealing the causal relationship between the anaerobic microbiome and co-digester performance using a common garden approach</b></p> <p><u>L.Wang</u>, J. J. Ducoste, F. L. de los Reyes III, United States</p>	<p><b>Treatment of thermal hydrolysis process pre-treated mesophilic digestion dewatering liquors via two different deammonification reactors</b></p> <p><u>P.O. Ochs</u>, B. Martin, E. Germain-Crips, T. Stephenson, M.C.M. van Loosdrecht, A. Soares, United Kingdom</p>	<p><b>High Rate Biomethanation Delivered by a Novel Plug Flow Biofilm Reactor</b></p> <p><u>S.Savvas</u>, J. Donnelly, T. Petterson, Z. Chong, S.Esteves, United Kingdom</p>

15.05-15.20	<p><b>Transcriptome analysis of high ammonia biogas reactors</b></p> <p><u>O.Karlsson-Lindsjö</u>, B. Müller, F. Leung, A. Schnürer, Sweden</p> <p><i>To be confirmed</i></p>	<p><b>Balancing physics, chemistry and microbiology in intensified biosolids and nutrient treatment systems</b></p> <p><u>H. De Clippeleir</u>, Q. Zhang, B. Wett, S. Martinelli, M. Miranda, C. Cusic, S.M. Kharkar, R. Suzuki, N. Passarelli, A. Al-Omari and C. deBarbadillo, United States</p> <p><i>To be confirmed</i></p>	<p><b>Enhanced biogas production and in situ ammonia recovery using a novel gas-membrane absorption anaerobic reactor</b></p> <p><u>X. Shi</u>, J. Zuo, Y. Wang, M. Zhang, China</p>
15.20-15.35	<p><b>Anaerobic Propionate Degradation: From Metagenomes to Kinetics</b></p> <p><u>D. Popp</u>, D. Becker, T. Malycheva, F. Bonk, S. Kleinsteuber, H. Sträuber, F. Centler, Germany</p>	<p><b>Effect of N-NO<sub>2</sub><sup>-</sup>/N-NH<sub>4</sub><sup>+</sup> ratio and organic carbon concentrations on N<sub>2</sub>O production in biological batch reactors containing anammox-granular sludge</b></p> <p><u>T.D.S. Pereira</u>, R.H. Spindola, E.C. Pires, M.H.R.Z. Damianovic, Brazil</p>	<p><b>Low-ambient temperature high-rate anaerobic wastewater treatment at full-scale: two case studies</b></p> <p><u>L.M. Paulo</u>, J. Ramiro-Garcia, D. Hughes, T. Mahony, M. Murray, P. Wilmes, V. O'Flaherty, Ireland</p>
15.35-16.00	Coffee break + posters		
16.00-16.15	<p><b>Marker microbiomes and key taxa combinations are determined by operational parameters in anaerobic digestion</b></p> <p><u>S. Theuerl</u>, J. Klang, M. Heiermann, J. De Vrieze, Germany</p>	<p><b>Effect of thermal hydrolysis pre-treatment of waste activated sludge on fate and solubilisation of nutrients, melanoidins formation and effects on anaerobic digestion</b></p> <p><u>J.A. Pavez</u>, M.K de Kreuk, J.B van Lier, The Netherlands</p>	<p><b>VFA production using anaerobic granular sludge: product yield maximization by SRT control</b></p> <p><u>M. Mulders</u>, R. Kleerebezem, M. Pronk, J. Tamis, G. Stouten, A.E. Alonso, The Netherlands</p> <p><i>To be confirmed</i></p>

16.15-16.30	<p><b>Fungal pretreatment vs. Fungal bioaugmentation in lignocellulose-based anaerobic digesters: a metagenomic approach</b></p> <p><u>Ç. Akyol</u>, O. Ince, M. Bozan, E. Gozde Ozbayram, B. Ince, Turkey</p> <p><i>To be confirmed</i></p>	<p><b>N2O gas emissions estimated by water dissolved measurements: Robustness and financial opportunity in different configurations</b></p> <p>A. Fenu, <u>B. Saerens</u>, K. De Gussem, T. Wambecq, M. Weemaes, Belgium</p>	<p><b>Biopaq®ICX: The next generation high rate anaerobic reactor proves itself at full scale</b></p> <p><u>T.L.G. Hendrickx</u>, B. Pessotto, R. Prins, L. Habets, J. Vogelaar, The Netherlands</p> <p><i>To be confirmed</i></p>
16.30-16.45	<p><b>Response of anaerobic methanogenic biomass to immobilized C-nanotubes exposure</b></p> <p><u>B. Fernández</u>, J. Ruiz-Sánchez F. Prenafeta-Boldú, Spain</p>	<p><b>Nitrogen removal from low COD/TN tropical wastewater in pseudo-anaerobic condition: low-dissolved-oxygen nitrification and slowly-biodegradable COD utilization for denitrification</b></p> <p><u>A.C.S. May</u>, S.W.How, G.C. Ngoh, T.P. Curtis, Malaysia</p>	<p><b>Evaluation of microbial properties of the granular sludge developed in the psychrophilic UASB reactor fed with an electronics industry wastewater</b></p> <p><u>K. Syutsubo</u>, T. Danshita, H. Sumino, A. Iguchi, Y. Takemura, H. Sonaka, T. Yamaguchi</p>
16.45-17.00	<p><b>Comprehensive ecosystem specific 16S rRNA database illuminates the microbial dark matter in anaerobic digesters</b></p> <p><u>M.S Dueholm</u>, S. Knutson, V. Rudkjøbing, M. Nierychlo, J. Kristensen, F. Petriglieri, E. Yashiro, S.M. Karst, M. Albertsen, P.H. Nielsen, Denmark</p>	<p><b>Partial nitrification of anaerobically pre-treated sewage: pilot-scale experiences</b></p> <p><u>V. Kouba</u>, H.N.C. Thanh, B. Plutova, A. Paulu, B. Satkova, D. Vejmelkova, P. Dolejs, J. Hejnic, P. Jenicek, J. Bartacek, Czech Republic</p> <p><i>To be confirmed</i></p>	<p><b>Enhancing biogas recovery from municipal sewage using granular activated carbon amended UASB digestion</b></p> <p>Y. Zhang, L. Zhang, B. Guo, M.Gao, Y. Liu', Canada</p>



17.00-17.15	<p><b>Reduced lag time and archaeal community shift after bioaugmenting anaerobic co-digesters fed poly-hydroxybutyrate bioplastic</b></p> <p><u>N.Benn</u>, K. Venkiteshwaran, D. Zitomer, United States</p>	<p><b>Nitrogen recovery from anaerobically digested blackwaters using Bioelectrochemical systems</b></p> <p><u>E. Borràs</u>, D. Molognoni, M. Aliaguilla, P. Bosch-Jimenez, M. P. Bernicola, J. García-Montaño, S. Sanchis, Spain</p> <p><i>To be confirmed</i></p>	<p><b>Phase separation hinders the bioenergy recovery from sugarcane vinasse anaerobic digestion: Contradicting the literature</b></p> <p><u>L.T. Fuess</u>, M. Zaiat, C. Augusto Oller do Nascimento, Brazil</p> <p><i>To be confirmed</i></p>
17.15-17.35	4 poster pitches	4 poster pitches	4 poster pitches
	<p><b>Lactic acid bacteria as key players in acidogenic fermentation as unveiled by flow cytometry and amplicon sequencing</b></p> <p><u>H. Sträuber</u>, J. Lambrecht, S. Kleinsteuber, S. Müller, Germany</p> <hr/> <p><b>Enhanced resolution of ecological keystone populations in full-scale AD systems</b></p> <p><u>N. de Jonge</u>, T Sørensen, AC Pedersen, A Schnürer, JL Nielsen, Denmark</p>	<p><b>Treatment of sidestream dewatering liquors from thermally hydrolized and anaerobically digested biosolids</b></p> <p><u>W.J.B.M. Driessen</u>, J.T.A. van Veldhoven, M. Janssen, M.C.M. van Loosdrecht, The Netherlands</p> <p><i>To be confirmed</i></p> <hr/> <p><b>Enhanced anaerobic digestion for energy autonomy necessitates mainstream anammox technology</b></p> <p><u>S.E. Vlaeminck</u>, M. Van Tendeloo, D. Seuntjens, B. Bundervoet, A. Haan, I. Dekker, R. Jordaens, H. Mollen, E. Wypkema, J. Colsen, Belgium</p> <p><i>To be confirmed</i></p>	<p><b>AnSBBR Applied to Methane Production by Thermophilic Anaerobic Co-Digestion of Cheese Whey and Glycerin</b></p> <p><u>J.N. de Albuquerque</u>, A.P. Paulinetti, E. Kurita, J. Ventura, M.C. Hallak, S.M. Ratusznei, J.A.D. Rodrigues, Brazil</p> <p>-----</p> <p><b>Long-term performance of an ECSB reactor treating cheese industry wastewater</b></p> <p><u>V. Diamantis</u>, A. Aivasidis, Greece</p>

	<p><b>Investigating acid phase co-digestion for medium-chain fatty acid production at a municipal wastewater treatment plant</b></p> <p><u>M. Seib</u>, M. Scarborough, D. Noguera, United States</p> <p><i>To be confirmed</i></p>	<p><b>Towards enhanced nutrient recovery, biogas production and upgrading through AD and BES integration</b></p> <p><u>V. Koskue</u>, P. Ledezma, S. Freguia, M. Kokko, Finland</p>	<p><b>Hydrogen fermentation treatment of organic wastewater with high ammonia nitrogen concentration via electro dialysis bioreactor</b></p> <p><u>A. Xia</u>, P. Wei, C. Sun, Y. Huang, Q. Fu, China</p> <p>-----</p>
	<p><b>Identification of novel foam-forming microbes in full-scale mesophilic digester at a wastewater treatment plant</b></p> <p><u>C. Jiang</u>, E. Yashiro, A.K. Corfitz Petersen, P. Halkjær Nielsen, Denmark</p>	<p><b>Operational strategies for a membrane biofilm reactor coupling DAMO and Anammox treating municipal landfill leachate to achieve a high rate nitrogen removal</b></p> <p>G.J.. Xie China</p>	<p><b>Comparison of UASB and AnSCMR efficiency for the treatment of suspended solid (SS) rich starch wastewaters</b></p> <p><u>B. Jiang</u>, J. Wu, H. Chen, Y. Li, Japan</p>
17.35-19.30	Poster session I + drinks + fingerfood		

**Tuesday 25-06-2019**

<b>Time</b>	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>
9.00-9.30	Plenary 5: Kara Nelson, University of California		
9.30-10.00	Plenary 6: Raul Muñoz, University of Valladolid		
10.00-10.30	Coffee break + posters (CHANGE OVER)		
	<b><i>Low-tech solutions for developing countries/ Environmental Management</i></b>	<b><i>Biogas upgrading and management</i></b>	<b><i>Anaerobic biotransformations</i></b>
10.30-10.50	<b>S. Mutnuri</b> <b>Bits Pilani K K Birla Goa Campus</b> <b>India</b>  <i>Title to be confirmed</i>	<b>E. McAdam</b> <b>Cranfield University</b> <b>United Kingdom</b>  <i>Title to be confirmed</i>	<b>Energetic and economic assessment of sludge thermal hydrolysis in novel configurations of wastewater treatment plants</b>  <u>M. Carballa</u> , A.Taboada-Santos, J. M. Lema, Spain

10.50-11.05	<p><b>Quantifying methane emissions from anaerobic digesters</b></p> <p><u>J. Tauber</u>, V. Parravicini, K. Svardal, J. Krampe, Austria</p> <p><i>To be confirmed</i></p>	<p><b>Two-stage high pressure anaerobic digestion for biomethane production at operating pressures up to 50 bar</b></p> <p><u>W. Merkle</u>, A. Lemmer, H. Oechsner, Germany</p> <p><i>To be confirmed</i></p>	<p><b>A wide perspective of carbon materials as catalysts for bioremediation of emerging pollutants and methanogenesis</b></p> <p><u>L. Pereira</u>, A. Salvador, G. Martins, A.R. Silva, A.J. Cavaleiro, M.A. Pereira, A. Stams, M.F. Pereira, M. Alves, Portugal</p>
11.05-11.20	<p><b>Simultaneous stabilization, methanation, and hygienization of faecal matter from poor urban settlements applying co-digestion in plug-flow digester systems.</b></p> <p><u>J.N. Riungu</u>, M. Ronteltap, J.B. van Lier, The Netherlands</p> <p><i>To be confirmed</i></p>	<p><b>Anaerobic thermophilic trickle bed reactor as a promising technology for flexible H<sub>2</sub>/CO<sub>2</sub> biomethanation</b></p> <p><u>K. Koch</u>, D. Strübing, A.B. Moeller, B. Mößnang, M. Lebuhn, J.E. Drewes, Germany</p>	<p><b>Potential for biodegradation of microplastics in thermophilic anaerobic digesters</b></p> <p><u>J.L. Nielsen</u>, N.K. Pedersen, A. Peydaei, E. Baudu, W.E.Y. Fernando, L. Gurevich, P. Fojan, R. Wimmer, N. de Jonge, Denmark</p>
11.20-11.35	<p><b>Constraints, performance and perspectives of anaerobic sewage treatment: lessons from full-scale STPs in Brazil</b></p> <p><u>C.A.L Chernicharo</u>, L.A. Chamhum-Silva, T. Bressani-Ribeiro, Brazil</p>	<p><b>Biological removal of siloxanes from biogas for biomethane injection in natural gas grid</b></p> <p><u>C.Pascual</u>, E. Arnaiz, R. Muñoz, R. Lebrero, Spain</p>	<p><b>Combining Thermophilic Aerobic Reactor (TAR) with Mesophilic Anaerobic digestion (MAD) improves the degradation of pharmaceutical compounds</b></p> <p><u>Y. Bessiere</u>, I. Gonzalez-Salgado, L. Cavaillé, S. Dubos, E. Mengelle, C. Khim, E. Paul, S. Pommier, France</p>

11.35-11.50	<p><b>Closing cycle in food waste treatment: by-products and energy recovery in a pilot-scale integrated system</b></p> <p><u>F. Passos</u>, A. Torres, T. Ferreira, C. Souza, C. Mota, C.A.L. Chernicharo, Brazil</p>	<p><b>Ex-situ Biogas upgrading via hydrogenotrophic methanogenesis in anaerobic rotating reactor under extreme-thermophilic condition</b></p> <p><u>W. Zhu</u>, N. Dong, Y. Zhou, L. Xie, China</p>	<p><b>The fate of micro-pollutants in an anaerobic-aerobic based system treating domestic sewage</b></p> <p><u>L.V. de Castro</u>, L.S. Azevedo, S.F. Aquino, C. Moreira, M.P. de Freitas, A.F.T. Franco, F. Passos and C.R. Mota, Brazil</p> <p><i>To be confirmed</i></p>
11.50-12.05	<p><b>Anaerobic-based biorefinery — A Techno-Economic Analysis</b></p> <p><u>J.E. Schmidt</u>, J.R. Bastidas-Oyanedel, Denmark</p>	<p><b>In-situ biomethanation: Effect of hydrogen on acetate production and consumption rates.</b></p> <p><u>N. dos Reis Vechi</u>, L.M. Agneessens, L. Ditlev M. Ottosen, A. Feilberg, M. Vedel Wegener Kofoed, Denmark</p> <p><i>To be confirmed</i></p>	<p><b>Hydrolysis or acidogenesis? Who plays a major role on the biotransformation of organic micropollutants?</b></p> <p><u>R. Carneiro</u>, L. Gonzalez-Gil, M. Zaiat, M. Carballa, J. M. Lema, Spain</p>
12.05-12.25	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>
	<p><b>Influence of the scale factor on environmental and economic indicators of anaerobic digestion</b></p> <p><u>A. Arias</u>, G. Feijoo, M.T. Moreira, Spain</p> <p><i>To be confirmed</i></p>	<p><b>Pilot-scale demonstration of a biomembrane for biogas desulfurization</b></p> <p><u>L. Pokorna-Krayzelova</u>, J. Bartacek, S. Nyawira Theuri, C.A.S.Gonzalez, J.Prochazka, E.I.P. Volcke, P. Jenicek, Czech Republic</p>	<p><b>Anaerobic treatment of hexachlorocyclohexane contaminated biomass in continuous stirred tank reactor</b></p> <p><u>M. Nikolausz</u>, I. Nijenhuis, U. N. da Rocha, B. Liu, F. B. Corrêa, H. H. Richnow, Germany</p>

	<p><b>Model-based analysis of greenhouse gas emission reduction potential through farm-scale digestion</b></p> <p><u>T. Vergote</u>, W. Vanrolleghem, C. Van der Heyden, A. De Dobbelaere, J. Buysse, E. Meers, E.I.P. Volcke, Belgium</p>	<p><b>Biogas upgrading using algal-bacterial processes in wastewater treatment plants</b></p> <p>M. Rodero Raya, Spain</p> <p><i>To be confirmed</i></p>	<p><b>Comparative fate of antibiotic resistant <i>E. coli</i> and antibiotic resistance genes in anaerobically digested sludge from wastewater treatment plants</b></p> <p><u>S.C. Redhead</u>, J. Nieuwland, E. Hayhurst, United Kingdom</p>
	<p><b>Influence of aqueous phase supplementation on biofiltration of diffuse methane emissions</b></p> <p>E.M.F. Brandt, <u>J.C. Araújo</u>, C.A.L. Chernicharo, Brazil</p>	<p><b>Ex-situ biogas upgrading in thermophilic reactors using membranes as gas diffusion device</b></p> <p><u>M. Peprah</u>, P. Kougias, P. Tsapekos, L. Treu, S. Campanaro, I. Angelidaki, Denmark</p>	<p><b>Azo dyes structure influencing it's own degradation: kinetics and redox conditions</b></p> <p>R. Brito, <u>S.Gavazza</u>, J.R.Carvalho, M. Paraiso, M. Kato, L. Florencio, Brazil</p>
	<p><b>Anaerobic codigestion of sludge and manure in low cost vertical digesters for developing countries context</b></p> <p><u>R. Valencia Vázquez</u>, L.J. Velázquez-Chávez, C.U. Moreno-Medina, R. Lucho-Chigo, M.D.J. Rodríguez-Rosales, Mexico</p> <p><i>To be confirmed</i></p>	<p><b>Innovative in-situ biological biogas upgrading using high rate up flow anaerobic polyfoam bioreactor (UAPB)</b></p> <p><u>K.B. Karkaby</u>, K. Yanuka-Golub, S. Muhsein, M. Hassanen, N. Massalha, I. Sabbah, Israel</p>	<p><b>Biodegradability and Toxicity of Ubiquitous Azoles to Anaerobic and Post-Treatment Processes</b></p> <p><u>R. Sierra-Alvarez</u>, K. Jog, C.H. Nguyen, E. Vanover, G. Li, J.A. Field, United States</p>
12.25-14.00	Lunch + posters		

	<b>Anaerobic MBR, research &amp; application</b>	<b>MFC / Bio-electrochemical systems</b>	<b>Pre-treatment</b>
14.00-14.20	<p><b>J. Kim</b>  <b>INHA University</b>  <b>Republic of Korea</b></p> <p><i>Title to be confirmed</i></p>	<p><b>A. Ter Heijne</b>  <b>Wageningen University and Research</b>  <b>The Netherlands</b></p> <p><i>Title to be confirmed</i></p>	<p><b>Assessing the effect of enzyme application in anaerobic digestion: experiences from the DEMETER project</b></p> <p><u>L. de Beer</u>, F. Velghe, J. Liebetrau, L. Müller, Belgium</p>
14.20-14.35	<p><b>Challenging high salinity chemical wastewater treatment by applying anaerobic membrane bioreactors</b></p> <p><u>J.D. Muñoz Sierra</u>, H. Spanjers, J.B. van Lier, The Netherlands</p>	<p><b>Impact of applied voltage on methane production and microbial activity in anaerobic digesters in the presence of granular activated carbon (GAC)</b></p> <p><u>M. Harb</u>, Noel Ermer, Adam L. Smith, United States</p>	<p><b>An innovative pre-treatment of poultry manure via Poul-AR technology enabling high yield thermophilic mono-digestion</b></p> <p><u>N. Carlier</u>, A. Kulagowska, R. Jordaens, J. Colson, JW. Bijnagte, W. Fuchs, The Netherlands</p>
14.35-14.50	<p><b>Two-phase improves energy recovery from food waste at high organic loading rate in anaerobic membrane bioreactors</b></p> <p><u>Y.M. Amha</u>, W. Zhao, M. Corbett, A.L. Smith, Unites States</p>	<p><b>Microbial photoelectrochemical reactors for high rate wastewater treatment and energy recovery</b></p> <p><u>J.Ren</u>, Y Jiang, L Lu, X Chen, United States</p>	<p><b>Pushing organic loading rate in a full scale anaerobic digester with thermal hydrolysis pre-treatment</b></p> <p><u>Y. Bajon Fernandez</u>, A. Aimale-Troy, R. Villa, C. Carliell-Marquet, B. Digby, D. Polag, Y. Bajon Fernandez, United Kingdom</p>

14.50-15.05	<p><b>The first two years of operation of a semi-industrial AnMBR plant for urban wastewater treatment</b></p> <p>A. Robles, F. García-Bellón, A. Jiménez, F. Durán, J. Vazquez-Padín, J. Serralta, J. Ribes, J. Ferrer, F. Rogalla, A. Seco, Spain</p>	<p><b>Operation of a scaled-up BES prototype for electromethanogenesis</b></p> <p><u>D. Molognoni</u>, A. Ceballos-Escalera, P. Bosch-Jimenez, R. Rodriguez, E. Licon, D. Gali, C. Corbella, M. Aliaguilla, M.P. Bernicola, M. Della Pirriera, E. Borràs, Spain</p>	<p><b>Influence of individual phenols and furans released during thermal pre-treatment on anaerobic digestion</b></p> <p><u>A. Carvajal</u>, E. Caroca, A. Serrano, R. Borja, A. Jiménez, A.F.M. Braga, G. Rodriguez-Gutierrez, F. G. Feroso, Chile</p>
15.05-15.20	<p><b>Treatment of Domestic Wastewater with Recirculating Anaerobic Dynamic Membrane Bioreactor</b></p> <p><u>T. Fairley</u>, L. Raskin, S. Skerlos, United States</p>	<p><b>Evaluation of methane production in a bio-electrochemical anaerobic digestion reactor according to increased loading rate</b></p> <p><u>W.Q. Shi</u>, H.B. Jun, Republic of Korea</p> <p><i>To be confirmed</i></p>	<p><b>Potentials and challenges by implementing fine mesh sieving for primary treatment of wastewater</b></p> <p><u>L. Karstenskoy Hughes</u>, L. Bailon, M. Lykkegaard, C.Jes la Cour Jansen</p> <p><i>To be confirmed</i></p>
15.20-15.35	<p><b>Anaerobic membrane bioreactor for direct COD capture and biogas production in mainstream wastewater treatment</b></p> <p><u>C. Park</u>, S. Kim, M. Cha, Republic of Korea</p> <p><i>To be confirmed</i></p>	<p><b>Modeling an environmental biorefinery scenario with anaerobic digestion coupled to bioelectrosynthesis: analyzing the requirements for profitability</b></p> <p><u>R. Moscoviz</u>, A. Huyard, E. Desmond-Le Quéméner, J.H. Tian, T. Bouchez, M. Crest, France</p>	<p><b>Exploring the complex role of pre-treatments in anaerobic digestion: from batch to continuous mode</b></p> <p><u>C.M. Braguglia</u>, A. Gallipoli, A. Gianico, D. Montecchio, P. Pagliaccia, Italy</p>
15.35-16.00	Coffee break + posters		



16.00-16.15	<p><b>AnMBR: Evaluation of three membranes and three substrates</b></p> <p>J.R.Vazquez-Padin, Spain</p>	<p><b>Critical factors affecting biocathode development and bio-production from CO2 reduction in Microbial electrosynthesis (MES)</b></p> <p>P. Izadi, United Kingdom</p>	<p><b>Energetic and economic assessment of sludge thermal hydrolysis in novel configurations of wastewater treatment plants</b></p> <p><u>A. Taboada-Santos</u>, M. Carballa, J.M. Lema, Spain</p>
16.15-16.30	<p><b>Evaluating Antibiotic Resistance Proliferation in Anaerobic Membrane Bioreactors Under Different Antibiotic Exposure Conditions</b></p> <p><u>A.L. Smith</u>, P. Wang, M. Harb, L. Stadler, United States</p>	<p><b>Dreams are (only?) my reality - state of the art of microbial electrochemical sensors for AD process control</b></p> <p><u>J. Kretzschmar</u>, F. Harnisch, Germany</p>	<p><b>Steam explosion: A method for enhancing biogas production from lignocellulosic biomass on a semi-continuous system</b></p> <p><u>F. Kaldis</u>, D. Cysneiros, A. Chatzifragkou, A. Karatzas, United Kingdom</p>
16.30-16.45	<p><b>Fouling control by flocculant addition based on online measurement of sludge filterability in a pilot AnMBR</b></p> <p><u>M. Odriozola</u>, M. Lousada-Ferreira, N. Morales, H. Spanjers, J.B. van Lier, The Netherlands</p>	<p><b>On-line monitoring of biohythane fermentation system based on microbial electrochemical technology</b></p> <p><u>S. Huang</u>, S. Mengmeng, L. Zhidan, China</p>	<p><b>Electrochemical pretreatment for H2S control of CEPT sludge</b></p> <p><u>Q. Zeng</u>, FX Zan, TW Hao, GH Chen, Hong Kong</p>
16.45-17.00	<p><b>Antibiotic Resistance Gene Fate during Co-digestion of Livestock Manure and Domestic Wastewater in an Anaerobic Membrane Bioreactor</b></p> <p><u>E. Lou</u>, L. Baker, A. Smith, L. Stadler, United States</p>	<p><b>Dynamic simulation of bioelectrical and electrical processes in microbial fuel cells operating with municipal wastewater</b></p> <p><u>M. Lübken</u>, T. Littfinski, D. Pant, H. Hiegemann, T. Gehring, K. Georg Schmelz, M. Wichern, Germany</p>	<p><b>Optimization of methane production from cattle manure using steam explosion pre-treatment</b></p> <p>M. Studer, S. Brethauer, <u>E. Cazier</u>, Switzerland</p>

17.00-17.20	4 poster pitches	4 poster pitches	4 poster pitches
	<p><b>Development of Electrospun Nanofiber Membranes for Anaerobic Membrane Bioreactors</b></p> <p><u>S.Gee</u>, A. Smith, United States</p> <p><i>To be confirmed</i></p> <hr/> <p><b>Protocol to Evaluate and Correlate Membrane Performance and Mixed-liquor Characteristics of Full-scale and Pilot-Scale AnMBRs</b></p> <p><u>M.M.J. Baudry</u>, T. Zhou, P. Van Gaelen, I. Smets, S. Pacheco-Ruiz, The Netherlands</p> <hr/> <p><b>Heavy metals effects and denitrifying process in an Anaerobic Swirling Fluidized Bed Membrane Bioreactor (ASFMBR)</b></p> <p><u>J.E. Ramírez</u>, S. Esquivel, G. Buitrón, F.J. Cervantes, Mexico</p> <hr/>	<p><b>Long-term performance of TN removal and power generation in a single chamber MFC using a separator with pre-enriched nitrifying biofilm</b></p> <p><u>T. Watanabe</u>, A. Kawata, S. Tanno, S. Xue, K. Kubota, Japan</p> <hr/> <p><b>High carbon conversion rate to carboxylic acids through a bio-electrofermentation – ion substitution electro dialysis integrated system</b></p> <p><u>B. Yan</u>, M. Zhou, W. Zhao, Y. Zhang, China</p> <p><i>To be confirmed</i></p> <hr/> <p><b>Economic Evaluation Of Commercial Applications For Electrogenic Bioreactors Based On Experimental Results</b></p> <p><u>A. Szczupak</u>, R. Shechter, Israel</p> <p><i>To be confirmed</i></p>	<p><b>Biorefinery approach for lignocellulosic biomass valorisation: combination of pretreatment with chemical recycling, phenols extraction and anaerobic digestion</b></p> <p><u>G. Cazaudehore</u>, C. Peyrelasse, M. Marques, B. Schraauwers, F. Monlau, France</p> <hr/> <p><b>Electrokinetic disintegration for an improvement in sludge digestion yield</b></p> <p><u>S. Houtmeyers</u>, R. Dewil, L. Appels, Belgium</p> <hr/> <p><b>Exogenous ligninases improve methane yields during anaerobic digestion of lignocellulosics: The case of corn stover</b></p> <p><u>J. E. Mendez-Hernández</u>, O. Loera, E. M. Méndez-Hernández, U. Duran, N. O. Soto-Cruz, Mexico</p>

	<b>Fouling behavior comparison of three membrane modules in anaerobic membrane bioreactor</b>  <u>Z. Liu</u> , X. Huang, China	<b>Magnetic fields enhance power generation and shape exoelectrogenic microbiome in bioelectrochemical systems</b>  <u>H. Zhou</u> , D. Xing, China	<b>The science of enzyme dosing in anaerobic digestion.</b>  <u>J. Jantova-Patel</u> , Y. Bajón Fernández, F. Ishaq, C. Marquet, R. Villa, United Kingdom
17.20-18.30	Posters with drinks and finger food		
18.30-19.30	Arts and Science		

### Wednesday 26-06-2019

Time	Session 1	Session 2	Session 3
9.00-9.30	Plenary 7: Mark van Loosdrecht, Technical University of Delft		
9.30-10.00	Plenary 8: Elizabeth Edwards, University of Toronto		
10.00-10.30	Coffee break + posters		
	<b><i>Modelling and Control</i></b>	<b><i>Resource Recovery /Bio-polymer production using anaerobic systems</i></b>	<b><i>Sludge and slurry digestion</i></b>

10.30-10.50	<p><b>A revision of microbial grow yields in anaerobic Digestion</b></p> <p><u>J. Rodríguez</u>, M. Paton, United Arab Emirates</p>	<p><b>A. Rotaru</b> University of Southern Denmark Denmark</p> <p><i>Title to be confirmed</i></p>	<p><b>Co-digestion and pretreatment improve microalgae anaerobic digestion</b></p> <p><u>J. Ferrer</u>, M. Solé-Bundó, M. Garfí, Spain</p>
10.50-11.05	<p><b>Demand-driven biogas production by substrate management – Investigations in process stability at different scales</b></p> <p><u>E. Mauky</u>, S. Weinrich, H.J. Naegele, H.F. Jacobi, J. Liebetrau, M. Nelles, Germany</p>	<p><b>Integrating recovery of nutrients and energy: An economic assessment of fifteen scenarios for pig manure treatment</b></p> <p><u>J. de Vrieze</u>, G. Colica, C. Pintucci, C. Pedizzi, M. Spiller, M. Carballa, S.E. Vlaeminck, Belgium</p>	<p><b>High solids anaerobic digestion of lignocellulosic biomass via oxidation-reduction potential-based micro-aeration</b></p> <p><u>S. Khanal</u>, D. Nguyen, Z. Wu, S. Shrestha, P.H. Lee, L. Raskin, United States</p>
11.05-11.20	<p><b>Predictive models of AD inhibition can be built by integrating independent studies</b></p> <p><u>O. Chapleur</u>, S. Poirier, S. Déjean, K. Lê Cao, France</p>	<p><b>Chain oddity: understanding odd-chain elongation and why it behaves in an odd way</b></p> <p><u>R. Ganigué</u>, P. Candry, C. Petrognani, B. Ulčar, K. Rabaey, Belgium</p>	<p><b>Continuous stirred tank reactors in series: an approach to enhance the enzymatic hydrolysis and sludge reduction in anaerobic waste activated sludge digestion?</b></p> <p><u>H. Guo</u>, R. Nair, F. Tonin, A. Hendriks, J.B. van Lier, M. de Kreuk, The Netherlands</p>
11.20-11.35	<p><b>Moving window PCA based on NIRS spectra for anaerobic digestion (AD) process monitoring</b></p> <p><u>L. Awhangbo</u>, F. Béline, J. Roger, A. Gobrecht, R. Bendoula, France</p>	<p><b>Improvement of caproate synthesis from lactate through inoculum preparation and butyric acid supplementation</b></p> <p>C. Nzeteu, Ireland</p>	<p><b>Surprising requirements for anaerobic hydrolysis and acidification of proteins</b></p> <p><u>T.H. Duong</u>, M. van Eekert, K. Grolle, N.T.T. Viet, H. Temmink, G. Zeeman, The Netherlands</p> <p><i>To be confirmed</i></p>

11.35-11.50	<p><b>In-depth bioenergetic evaluation of propionate oxidation pathways</b></p> <p><u>M. Patón</u>, H.H, Hernandez, J. Rodríguez, United Arab Emirates</p> <p><i>To be confirmed</i></p>	<p><b>Effects of elevated pCO<sub>2</sub> in mixed culture fermentation</b></p> <p><u>P.S. Ceron Chafra</u>, R.E.F Lindeboom, R. Kleerebezem, K. Rabaey, J.B van Lier, The Netherlands</p>	<p><b>Linking microbial population dynamics in landfill bioreactors to food waste type and decomposition stage</b></p> <p><u>F.L. de los Reyes III</u>, L. Wang, E. Lee, M.A. Barlaz, United States</p> <p><i>To be confirmed</i></p>
11.50-12.05	<p><b>Long-term operation of a feedback control strategy for biohydrogen production from organic solid waste in a sequencing batch reactor</b></p> <p><u>I. Moreno-Andrade</u>, A. Vargas, S. Santiago, Mexico</p>	<p><b>Revamping the partition-release-recovery concept by thermal hydrolysis and internal carbon recycle: closing the carbon cycle</b></p> <p><u>D. Puyol</u>, I, Rodriguez, J.D. Marín-Batista, V. Monsalvo, T. Hülsen, D. Batstone, F. Martinez, J.A. Meleró, A.F. Mohedano, Spain</p> <p><i>To be confirmed</i></p>	<p><b>Feasibility of biomethane production by supplying H<sub>2</sub> into a pressurized digester of sewage sludge</b></p> <p><u>I. Diaz</u>, F. Fdz-Polanco, M. Fdz-Polanco, Spain</p>
12.05-12.25	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>	<p><b>4 poster pitches</b></p>
	<p><b>Open-loop model-based optimisation method for start-up of anaerobic co-digestion processes</b></p> <p><u>S. García-Gen</u>, Chile</p>	<p><b>From laboratory to continuous pilot scale VFA production: the challenge of up-scaling and process engineering</b></p> <p><u>J. Garcia-Aguirre</u>, M. Esteban-Gutiérrez, J. González Martínez de Goñi, I. Irizar, E. Aymerich, Spain</p>	<p><b>Influence of sorghum's structural composition for biomethane production using sequential cropping system</b></p> <p><u>M. Garuti</u>, P. Mantovi, M. Soldano, A. Immovilli, F. Ruozi, F. G. Feroso, A. J. Rodriguez, C. Fabbri, Italy</p>

	<p><b>Mixing characterisation in gas-mixed anaerobic digesters: scaled-down evaluation and scaled-up implication</b></p> <p><u>P. Wei</u>, R. F. Mudde, W.S.J. Uijtewaal, H. Spanjers, J. B. van Lier and M. de Kreuk, The Netherlands</p>	<p><b>Continuous Production and Separation of Organic Acids from Biomass via Anaerobic Digestion, Filtration and Electrodialysis</b></p> <p><u>J. Massanet-Nicolau</u>, R.J. Jones, R. Fernandez-Feito, A. Guwy, R. Dinsdale, United Kingdom</p> <p><i>To be confirmed</i></p>	<p><b>Contribution of acetogenesis to anaerobic digestion of sewage sludge</b></p> <p><u>B. Fu</u>, R. Conrad, X. Jin, H. Liu, China</p>
	<p><b>Effects of carbon redirection on anaerobic digester performance of water resource recovery facilities</b></p> <p><u>K. Solon</u>, M. Jia, E.I.P. Volcke, Belgium biogas</p>	<p><b>Enhancing biogas production and recovering volatile fatty acids with magnetic molecularly imprinted polymers</b></p> <p>M. Tonnuci, O. Adarme, B. Baeta, C. Tarley, <u>S. de Aquino</u></p> <p><i>To be confirmed</i></p>	<p><b>Anaerobic digestion in the kraft pulp and paper industry – benefits and strategies for implementation</b></p> <p><u>E. Ekstrand</u>, A. Björn, A. Karlsson, B. Magnusson, M. Gustavsson, M. Larsson, X.B. Truong, B.H. Svensson, J. Ejlertsson, Sweden</p>
	<p>-----</p> <p><b>Stratification in anaerobic granules: A health measurement of the anaerobic digestion process</b></p> <p><u>R. Gonzalez-Cabaleiro</u>, S. Connolly, United Kingdom</p> <p><i>To be confirmed</i></p>	<p>-----</p> <p><b>Steering microbiomes towards new biochemical production: iso-caproate</b></p> <p><u>K. de Leeuw</u>, D. Strik, C. Buisman, The Netherlands</p> <p><i>To be confirmed</i></p>	<p>-----</p> <p><b>Semi-continuous anaerobic co-digestion of flotation sludge and sweet potato: Nutrients and energy recovery</b></p> <p>Sarolli S. de M. Costa</p>

12.25-14.00	Lunch + posters		
14.00-14.15	<i>To be confirmed</i>	<p><b>Enhancing medium chain fatty acid production with co-electron donors of ethanol and lactate</b></p> <p><u>Q. Wu</u>, W. Guo, China</p> <p><i>To be confirmed</i></p>	<p><b>Dry anaerobic digestion of sewage sludge in small and medium WWTP</b></p> <p><u>E. Aymerich</u>, M. Esteban-Gutierrez, J. Garcia-Aguirre, L. Pastor, J.E. Sánchez-Ramírez, S. Doñate, R. Romaguera, C. Lardin, E. Mino, Spain</p>
14.15-14.30	<p><b>Insights into the synergistic effects of the anaerobic co-digestion of sludge and food waste through the modelization of semi-continuous experimental tests</b></p> <p><u>D. Montecchio</u>, P. Pagliaccia, V. Di Castro, A. Gallipoli, A. Gianico, S. Rossetti, B. Tonanzi, C. Braguglia, Italy</p>	<p><b>Evaluation of protein composition influence on yields and selectivity of volatile fatty acids production</b></p> <p><u>R. Bevilacqua</u>, A. Regueira, M. Mauricio, J.M. Lema, M. Carballa, Spain</p>	<p><b>BioH<sub>2</sub> and bioCH<sub>4</sub> recovery by recirculated temperature-phased anaerobic co-digestion of food waste and paper waste</b></p> <p><u>Y. Qin</u>, L. Li, J. Wu, B. Xiao, T. Hojo, K. Kubota, Y. Li, Japan</p>
14.30-14.45	<p><b>Using kinetic isotope effect to evaluate the significance of the sequential and parallel steps: formation of microbial consortium during reversible anaerobic methane oxidation coupled with sulfate reduction</b></p> <p><u>V.A. Vavilin</u>, L.Y. Lokshina, S.V. Rytov, Russian Federation</p>	<p><b>Caproic acid production: process development, product recovery, microbiome characterization and techno-economic analysis</b></p> <p><u>P. Oleskowicz-Popiel</u>, M. Lezyk, A. Duber, F. Brodowski, E. Jankowska, F. Walkiewicz, N. Gutowska, R. Zagrodnik, Poland</p>	<p><b>Enhanced anaerobic digestion of waste activated sludge using sludge incineration bottom ash</b></p> <p><u>Y. Shen</u>, C. Yin, N. Zhu, China</p>

	<i>To be confirmed</i>		
14.45-15.00	<p><b>Optimization of the agitation process in a full-scale anaerobic digester using computational fluid dynamics (CFD) and tracer experiment</b></p> <p>J. Claros, J.E.Sánchez-Ramírez, A.M. Maciá, C. Lardín, L. Pastor, Spain</p>	<p><b>Enrichment and characterisation of chain elongating communities</b></p> <p>P. Candry, J. Carvajal-Arroyo, S. Huang, K. Rabaey, R. Ganigue, Belgium</p>	<p><b>Seasonal Variation of the Digester Temperature: Using the Digester as Heat Storage</b></p> <p>C. Schaum, C. Hubert, B. Steiniger, M. Michel, M. Spalleck, Germany</p> <p><i>To be confirmed</i></p>
15.00-15.15	<p><b>Modelling VFA production kinetics from protein-rich industrial wastes</b></p> <p>A. Regueira, R. Bevilacqua, J. M. Lema, M. Carballa, M. Mauricio-Iglesias, Spain</p>	<p><b>Chain elongation with lactate for producing medium-chain carboxylates: challenging the robustness of the reactor microbiome by introducing a temperature perturbation</b></p> <p>B. Liu, Germany</p>	<p><b>Effect of zeolite addition on the biogas production from chicken manure leachate</b></p> <p>A. Spyridonidis, I.A. Vasiliadou, K. Athanasiou, Greece</p>
15.15-15.30	<p><b>Meta-analysis of dark fermentation in continuous stirred-tank reactors</b></p> <p>E. Razo-Flores, Mexico</p> <p><i>To be confirmed</i></p>	<p><b>High-rate production of caproic acid in a chain elongating granular reactor</b></p> <p>J.M Carvajal Arroyo, P. Candry, S.J. Andersen, R. Props, T. Seviour, R. Ganigué, K. Rabaey, Belgium</p>	<p><b>Methane recovery from ammonia-inhibited thermophilic reactors using bioaugmentation</b></p> <p>H. Tian, M. Yan, I. Angelidaki, I. A. Fotidis, Denmark</p> <p><i>To be confirmed</i></p>
15.30-16.00	Coffee break + posters		



16.00-17.30	Closing session: Paper award / Poster award Lettinga Award Farewell address
17.30-19.00	Bus transport to Scheveningen
	Conference dinner at the beach!