

June 2, 2024 (Sunday)			
13:30-19:00	Registration (Venue: ITU Faculty of Architecture-Taşkışla Campus)		
14:00-15:30	Workshops (Session 1) (Venue: ITU Faculty of Architecture-Taşkışla Campus)		
	Workshop 1 (Hall: 126)	Workshop 2 (Hall: 230)	Workshop 3 (Hall: 231)
	Anaerobic conversions for sustainable biorefineries (Chairs: Marta Carballa-Miguel Mauricio-Iglesias)	From microbial ecology to microbiome engineering of anaerobic digestion communities (Chairs: Anna Trego-Jo De Vrieze)	Integrating membrane processes into anaerobic systems (Chairs: Ángel Robles-Jules van Lier)
15:30-16:00	Coffee Break		
16:00-17:30	Workshops (Session 2) (Venue: ITU Faculty of Architecture-Taşkışla Campus)		
	Workshop 1 (Hall: 126)	Workshop 2 (Hall: 230)	Workshop 3 (Hall: 231)
	Anaerobic conversions for sustainable biorefineries (Chairs: Marta Carballa-Miguel Mauricio-Iglesias)	From microbial ecology to microbiome engineering of anaerobic digestion communities (Chairs: Anna Trego-Jo De Vrieze)	Integrating membrane processes into anaerobic systems (Chairs: Ángel Robles-Jules van Lier)
19:00-22:00	Welcome Reception (Venue: Grand Hyatt İstanbul)		

June 3, 2024 (Monday)	
08:00-09:00	Registration (Venue: İstanbul Congress Center)
09:00-10:50	Opening Ceremony (Hall: Üsküdar 1-2-3)
10:50-11:20	Coffee Break+Poster Session
11:20-12:40	Plenary Session (Hall: Üsküdar 1-2-3) (Chair: Jules van Lier)
11:20-12:00	Plenary Speech Carboxylate Platform. The Swiss Knife for Bioresource Recovery <i>Juan M. Lema, University of Santiago de Compostela</i>
12:00-12:40	Plenary Speech Controlling Product Formation in Anaerobic Digestion <i>Robbert Kleerebezem, Delft University of Technology</i>
12:40-12:50	Group Photo
12:50-14:00	Lunch

June 3, 2024 (Monday)

Session 1

14:00-16:30

Anaerobic Treatment of Industrial, Municipal, Agricultural Waste(water)

(Chair: Pavel Jenicek)

Hall: Üsküdar 1

Microbial Diversity in Anaerobic Processes

(Chair: Ismail Koyuncu)

Hall: Üsküdar 2

Advanced Processes and Technologies for Enhancing Waste Degradation and Biogas Production

(Chair: Vinay Kumar Tyagi)

Hall: Üsküdar 3

14:00-14:15

Optimization of swine wastewater methanization via zero-valent iron
N. Morais., R. do Nascimento., M. da Silva., A. dos Santos
(Federal University of Ceará, AD-371)

Seasonal microbial assessment of foaming dynamics in full-scale WWTP anaerobic digesters and its economic impact
S. Astals, M.S. Romero-Guiza, R. Asiain-Mira, J. Palatsi, M. Peces
(University of Barcelona, AD-506)

Pilot- and full-scale evaluation of a peroxide-based additive that reduces gaseous emissions and retains biogas potential from stored pig slurry
D. Hughes, S. Nolan, C.E. Thorn, M. McDonagh, R. Friel, V. O'Flaherty
(University of Galway, AD-587)

14:15-14:30

Effect of co-substrates and redox mediators on the linear alkylbenzene sulfonate anaerobic degradation
N.F. Bomfim, J.L. Costa, L.G. Silva, L. Florencio, F. Motteran, M.T. Kato
(Federal University of Pernambuco, AD-514)

Longitudinal process performance and microbial community trends in solar septic tank systems
C. Keating, T. Pussayanavin, C. Polprasert, R.J. Randle-Boggis, J. Russell, U.Z. Ijaz, W.T. Sloan, S. Connelly, T. Koottatep
(Durham University, AD-497)

Biogas production enhancement by non-conventional AnSBR treating protein and lipid-rich wastewater: From lab to pilot
J. Muñoz Sierra, Z. Deng, A.L.M. Ferreira, D. Cerqueda-Garcia, S. Pacheco Ruiz, D. Smets, K. Roest
(KWR Water Research Institute, AD-673)

14:30-14:45

Recovery of volatile fatty acids using a novel approach based on gas-permeable membranes
B. Molinuevo-Salces, B. Riaño, V. da Silva, M.C. García-González
(Agricultural Technological Institute of Castilla y León, AD-101)

Activity-targeted metaproteomics elucidates syntrophic metabolisms in a full-scale biogas facility
S.E. Friedline, M.W. Madill, K.R. Waring, S.J. Hallam, R.M. Ziels
(University of British Columbia, AD-386)

Enhanced methane recovery from food waste in a bio-electrochemically enhanced anaerobic digester (BEAD)
V. Singh, B. Tartakovsky, H. Li, B. Ormeci, A. Hussain
(Carleton University, AD-472)

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14:45-15:00	<p>How to interpretate methanogenic activity values used for monitoring a full-scale anaerobic reactor <u>M. Ribeiro</u>, L. Borzacconi, I. López (Universidad de la República, AD-365)</p>	<p>From microbial heterogeneity to evolutionary insights: A strain-resolved metagenomic study of H₂S-induced changes in anaerobic biofilms <u>G. Ghiotto</u>, N. De Bernardini, G. Giangeri, P. Tsapekos, M. Gaspari, P. Kougiyas, S. Campanaro, I. Angelidaki, L. Treu (University of Padova, AD-520)</p>	<p>Increase of biogas production of anaerobic digestion of sewage sludge by addition of heat hydrolysed bioplastic waste <u>J. Tsubota</u>, S. Akimoto, I. Angelidaki, T. Hidaka, T. Fujiwara (Osaka Gas Co. Ltd., AD-268)</p>
15:00-15:15	<p>Impact of solid retention time on the functional development of glucose-fermenting communities using membrane bioreactors <u>A. Pedrouso</u>, I. Renteria-Mercado, G.R. Stouten, R. Kleerebezem (Delft University of Technology, AD-693)</p>	<p>Assembly mechanisms shift toward stochasticity at intermediate frequency of disturbance in anaerobic digestion reactors <u>S.A. Neshat</u>, E. Santillan, S. Wuertz (Nanyang Technological University, AD-338)</p>	<p>Application of the microbial hydrolysis process on an existing anaerobic digestion system <u>D.L. Parry</u>, P.H. Nielsen, M. Fairley-Wax (Jacobs, AD-457)</p>
15:15-15:30	<p>Investigation of hydrothermal carbonisation as pretreatment on anaerobic digestion of waste-activated sludge <u>A.A. Shahnawazi</u>, L. Carvalho, S. Schwede (Mälardalen University, AD-659)</p>	<p>Unveiling magnetotrophism: Occurrence of direct interspecies electron transfer (DIET) in non-conductive material mediated by magnetotactic bacteria <u>H.S. Dornelles</u>, T.Y.C. Lam, E. Beirns, G.Y.A. Tan, C.A. Sabatini, M.A.T. Adorno, E.L. Silva, P.H. Lee, M.B.A. Varesche (University of São Paulo, AD-389)</p>	<p>Impact of microwave pretreatment on manure and endogenous microorganisms prior to acidogenic fermentation <u>K. Pipereau</u>, E. Trably, G. Santa-Catalina, D.G. Bernet, H. Carrere (Université de Montpellier, AD-359)</p>
15:30-15:45	<p>Effect of feeding regime and pH on thermophilic acidogenic fermentations from food waste <u>L. Vulart</u>, E. Peiro, F. Gòdia, R. Ganigué (Autonomous University of Barcelona, AD-277)</p>	<p>Influence of microbial communities on resistomes and mobilomes during mesophilic and thermophilic anaerobic digestion <u>D. Flores-Orozco</u>, N. Cicek (University of Manitoba, AD-176)</p>	<p>Anaerobic degradation of blackwater <u>J. Morken</u>, M.E. Moges, D. Todt, A. Stenseth, A. Heistad (Norwegian University of Life Sciences, AD-326)</p>
15:45-16:00	<p>Mainstream ammonia removal and recovery using a combination of ion exchange (IEX) and hollow fibre membrane contactor (HFMC) <u>H. Sakar</u>, K.H. Ip, M. Palmer, P. Vale, A. Soares (Cranfield University, AD-664)</p>	<p>Going beyond the ‘optimal range’: The potential of anaerobic digestion at high alkaline conditions <u>B. Diniz</u>, P. Wilfert, D.Y. Sorokin, M.C.M van Loosdrecht (Delft University of Technology, AD-45)</p>	<p>Enhancement of sludge filtrate treatment by biocatalyzed electrolysis assisted anaerobic digestion B. Kuang, L. Deng, J. Huang, B. Cui, X. Liang, <u>T. Wang</u> (Wuyi University, AD-115)</p>

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16:00-16:15	<p>Biotechnological potential of manure microbiota and fermented food waste for sustainable production of value-added products <u>S. Salimi Khaligh</u>, S. Sertgumec, E. Polat, O. Destanoglu, N. Özcan, M. Ozcan, M. Altinbas (Istanbul Technical University, AD-683)</p>	<p>Exploring the uncharted in methanogenic communities: The verrucomicrobiota case <u>P. Bovio-Winkler</u>, A. Cabezas, <u>C. Etchebehere</u> (Clemente Estable Biological Research Institute, AD-671)</p>	<p>Power and limitations of biochemical methane potential (BMP) tests <u>K. Koch</u>, S.D. Hafner, S. Weinrich, S. Astals, C. Holliger (Technical University of Munich, AD-41)</p>
16:15-16:30	<p>Removal and gain of antibiotic resistance in a micro-aerated anaerobic membrane bioreactor fed with antibiotics A.L. Piaggio, S. Mittapalli, D. Calderón-Franco, D.G. Weissbrodt, J.B. van Lier, <u>M.K. de Kreuk</u>, R.E.F. Lindeboom (Delft University of Technology, AD-517)</p>	<p>Integrated microalgal biorefinery for carotenoids and bioenergy recovery <u>E. Ruales</u>, M. Bellver, A. Álvarez-González, M. Garfí, I. Sampaio, F. Passos, I. Ferrer (Universitat Politècnica de Catalunya, AD-677)</p>	<p>Enhancing anaerobic treatment of thermo-mechanical pulping wastewater with electrochemical oxidation K. Rintala, <u>M. Kokko</u> (Tampere University, AD-212)</p>
16:30-17:00	Coffee Break+Poster Session		
Session 2			
17:00-19:15	<p>Novel and Hybrid/Integrated Anaerobic Process Configurations and Emerging Technologies (Chair: Adam L. Smith) Hall: Üsküdar 1</p>	<p>Modeling, Optimization, Instrumentation, and Control of Anaerobic Processes (Chair: Jean-Philippe Steyer) Hall: Üsküdar 2</p>	<p>Biogas Upgrading and Use Areas (Chair: Vincent O'Flaherty) Hall: Üsküdar 3</p>
17:00-17:15	<p>Robust H₂ production and highly effective H₂ harvesting from organic wastewater in membrane-bioelectrochemical reactors X. Li, <u>D. Liang</u> (Beihang University, AD-644)</p>	<p>Anaerobic digestion diagnostic platform (ADDiP): How omics tools help to optimize AD processes <u>G. Bruant</u>, A. Shaw, F. Ngoundjo, L. Schreiber, A. Ko, S.L. Ying, C. Fulton, L. Spreutels, S.R. Guiot, J.C. Frigon (Clean Energy Innovation Research Center, AD-475)</p>	<p>Metabolic flux balance analysis of different reactors performing biological CO₂ methanation and biogas upgrading D. Sanguineti, E. Orellana, M. Gaspari, A. Chatzis, G. Zampieri, P.G. Kougias, L. Treu, <u>S. Campanaro</u> (University of Padova, AD-521)</p>

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<p>17:15-17:30</p>	<p>Exploring the boundaries of syngas biomethanation E.M. Goonesekera, E. Thanasoula, H.F. Yousif, A. Grimalt-Aleman, I. Angelidaki (Technical University of Denmark, AD-445)</p>	<p>An approach to determine biomethane potential by simple laboratory methods B. Weber, A. Cruz Maya, M.D. Durán-García, C. Fröhlich (Autonomous University of the State of Mexico, AD-372)</p>	<p>Intermittent fasting of hydrogenotrophic methanogenic communities M. Nikolausz, M. Kabiru Nata'ala, W. Logroño, N. Abdulkadir, J.P. Saraiva, J.C. Kasmanas, R. Kallies, P.F. Stadler, U.N. da Rocha, S. Kleinstaubler (Helmholtz Centre for Environmental Research - UFZ, AD-462)</p>
<p>17:30-17:45</p>	<p>Photo-fermentation to unlock a locally available hydrogen source for biogas upgrading within two-phases anaerobic digestion processes M. Biasiolo, M. Turatello, P. Cerchier, G. Tassinato, C. Cavinato (Università Ca' Foscari Venezia, AD-595)</p>	<p>Towards ADM1 into CFD: Lab-scale validation and full-scale application R. Arnau, J. Climent, R. Martínez-Cuenca, J. Rodríguez, S. Chiva (Hydrodynamic and Environmental Services, AD-482)</p>	<p>Phototrophic-assisted electrochemical conversion of biogenic CO₂ from biogas upgrading and recycled nitrogen into single cell protein M. Pezuto, R. Lo Coco, D. Bolzonella, N. Frison (University of Verona, AD-470)</p>
<p>17:45-18:00</p>	<p>Membrane-based fermentation for high-purity caproic acid production from ethanol containing substrates P. Dessì, M. Romans-Casas, E. Perona-Vico, M. Tedesco, H.V.M. Hamelers, L. Bañeras, M.D. Balaguer, S. Puig (University of Naples Federico II, AD-339)</p>	<p>Multi-factor optimization of bioelectrochemically improved anaerobic digestion, for enhanced biomethane production D. Molognoni, M. Garcia, P. Bosch-Jimenez, E. Borràs, G. Bouteau, M. Juge, G. Courtecuisse, L. Benichou (Leitat Technological Center, AD-481)</p>	<p>Optimization of trickle-bed reactor for thermophilic biomethanation M. Sposob, R. Wahid, B. Bilgic (Department of Bioresources and Recycling Technologies, AD-30)</p>
<p>18:00-18:15</p>	<p>Combining electrocoagulation with anaerobic digestion: A sustainable approach for micro-pollutant removal from faecal sludge with simultaneous energy recovery P. Dong, D. Parmentier, S. Van Hulle (Ghent University, AD-221)</p>	<p>Modelling trace metal speciation effects during full-scale co-digestion of sewage sludge and food waste S. George, M.R. Mattei, L. Frunzo, G. Esposito, G. C. Hortal, E. M. Rodriguez Gonzalez, V. Luongo, F. G. Feroso (Istituto de la Grasa, CSIC, AD-267)</p>	<p>Ex-situ biological biogas upgrading with H₂ addition in a thermophilic anaerobic membrane bioreactor (AnMBR) A. Hafuka, S. Kanuma, K. Oshita, N. Sato, R. Ito, S. Mizuno, K. Kimura (Hokkaido University, AD-259)</p>

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18:15-18:30	<p>Long-term operation of AnMF-OMBR and UASB MF-OMBR systems treating slaughterhouse wastewater S. Hasanoglu, I.Y. Guney, I. Vergili, G. Yilmaz, Y. Kaya, C. Aydinler, Z.B. Gonder (Istanbul University-Cerrahpasa, AD-100)</p>	<p>A tool for optimal calibration of anaerobic co-digestion models: Development in the OpenModelica platform A. Catenacci, D. Carecci, A. Leva, A. Guerreschi, G. Ferretti, E. Ficara (Politecnico di Milano, AD-332)</p>	<p>Experimental and modelling study of the production of acetate from H₂/CO₂ in continuous reactors with microbial consortia L. Laguillaumie, S. Dubos, M. Bounouba, M. Peyre-Lavigne, S. Pommier, E. Paul, C. Dumas (Université de Toulouse, AD-224)</p>
18:30-18:45	<p>Integration of water scrubbing and membrane biofilm reactor (MBfR) for CO₂ capture and utilization via biomethanation T. Shoji, H. Izumika, K. Nakata, H. Tanaka, T. Nittami (Nishimatsu Construction Co. Ltd., AD-574)</p>	<p>Application of a simplified ADM1 for dynamic simulation of agricultural anaerobic digestion plants F. Delory, S. Weinrich (Deutsches Biomasseforschungszentrum gemeinnützige GmbH, AD-591)</p>	<p>Impact of organic loading rate on hydrogen consumption rate during in-situ biomethanation A. Dabestani-Rahmatabad, G. Capson-Tojo, E. Trably, J.P. Delgenès, R. Escudie (INRAE, AD-166)</p>
18:45-19:00	<p>BIOPAQ RISE introduces innovative external separators for high rate anaerobic waste water treatment T.L.G. Hendrickx, R. Prins, H. Zijlstra, E. Mozes, J. Vogelaar (Paques Technology B.V., AD-632)</p>	<p>Combination and comparison of machine learning and metabolic models to predict bio-methane from manure co-digestion in WWTP M.J. Tarrega, C. Lafita, D. Aguado (Global Omnium Medioambiente S.L., AD-437)</p>	<p>Biogas and beyond: Bioconversion of methane to ectoine in a Taylor flow bioreactor R. Herrero-Lobo, A.F. Torres, P. Zamora, V. Monsalvo, F. Rogalla, R.L. Fernández, R.M. Torre (University of Valladolid, AD-65)</p>
19:00-19:15	<p>Monitoring dewatering performance of anaerobic digestate using low-field nuclear magnetic resonance E.G. Bertizzolo, N. Ling, F. Tessele, M.L. Johns, E.O. Fridjonsson (The University of Western Australia, AD-260)</p>	<p>Data-driven modelling for prediction of biogas production in anaerobic co-digestion of waste activated sludge and food waste M. Ghazizade Fard, E. Koupaie (Queen's University, AD-622)</p>	<p>Hybrid electrolysis for simultaneous green H₂ production and CO₂ capture - Aiding biogas plants to become power-to-gas facilities T. Lippert, Y. Lin, H. Nielsen, K. Zhu, G. Wells (Northwestern University, AD-627)</p>

June 4, 2024 (Tuesday)

08:00-08:30

Registration (Venue: İstanbul Congress Center)

Session 3

08:30-10:45

Novel and Hybrid/Integrated Anaerobic Process Configurations and Emerging Technologies

(Chair: Juan Lema)

Hall: Üsküdar 1

Microbial Diversity in Anaerobic Processes

(Chair: Marta Carballa)

Hall: Üsküdar 2

Pre- and Post-Treatment Strategies for Anaerobic Digestion

(Chair: Sang-Hyoun Kim)

Hall: Üsküdar 3

08:30-08:45

Microaeration in co-digestion of food waste and sewage sludge
*W. Chuenchart, K.C. Surendra, C.B. Sawaya, A.L. Smith, **S.K. Khanal***
(University of Hawaii 'i at Mānoa, AD-297)

Metabolic trade-offs between energy yield and driving force in microbial CO₂ fixation
*A. Taha, M. Patón, **J. Rodríguez R.***
(Khalifa University, AD-503)

Long-term operation of coupled anaerobic digestion and electrochemical pre-treatment for selective acetate production from waste activated sludge
H. Guo, Q. Zeng, Y. Sato, G. Chen
(The Hong Kong University of Science and Technology, AD-349)

08:45-09:00

Using a recirculating anaerobic dynamic membrane bioreactor to treat hydrothermal liquefaction aqueous by-product: Reactor performance and microbial community
X. Fonoll, M. Thorson, A. Schmidt, J. Norton Jr.
(University of Texas at Austin, AD-233)

What is the minimal microbial consortium that can effectively anaerobically degrade oleic acid?
*S. Palani, **F. L. de los Reyes III***
(North Carolina State University, AD-570)

The complex effects of sewage sludge pretreatment methods on subsequent fermentation and nutrient release
*T. Pincam, **Y.Q. Liu***
(University of Southampton, AD-333)

09:00-09:15

Unlocking the potential of lactate fermentation for carboxylates, emphasizing succinate and pH
M.A. Vital-Jácome, A. Guerrero-Ramírez, J. Carrillo-Reyes, G. Buitrón
(Universidad Nacional Autónoma de México, AD-643)

On the microbiome robustness of seasonal waste activated sludge digestion
*J. Van Landuyt, J. Oosterlinck, **J. De Vrieze***
(Ghent University, AD-480)

Treatment of anaerobic digester effluent via DAMO-anammox co-culture
*R. Harb, **T.H. Erguder***
(Middle East Technical University, AD-652)

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09:15-09:30	Anaerobic conversion of carbon monoxide by different inoculum sources <i>R. Ali, L. Yde, M.T. Ashraf</i> (University of Southern Denmark, AD-421)	Individual anaerobic granules are whole-ecosystem replicates with reproducible responses to environmental cues <i>A. Trego, G. Collins, U. Ijaz, V. O'Flaherty</i> (University of Galway, AD-209)	Techno-economic analysis of anaerobic digestion process with wet oxidation and thermal hydrolysis <i>T. Das, I. Al-Waili, V. Balasubramanian, G. Appleby, P. Kaparaju, R. Parthasarathy, N. Eshtiaghi</i> (RMIT University, AD-590)
09:30-09:45	Catalysing change: Unlocking the potential of biological power to methane (bPtM) <i>S. Savvas, R. Gangappa, T. Patterson, S. Esteves</i> (University of South Wales, AD-454)	Are acetate and propionate syntrophic oxidation inhibited by osmotic pressure? <i>C. Chenebault, C. Marcilhac, R. Moscoviz</i> (CIRSEE, AD-171)	Priming and post-digestion as a strategy to increase degradation of residual organic structures in digestate rich in lignocellulose <i>M.A. Bjerg, F. Heino, S.S. Yekta, L. Šafarič, A. Enrich-Prast, J. Moestedt, E. Perman, A. Schnurer, A. Björn</i> (Linköping University, AD-340)
09:45-10:00	Vacuum-driven extractive fermentation of waste for chemical production <i>F. Zimbaridi, A. Facchin, C. Torri</i> (University of Bologna, AD-635)	Microbial community response to temperature reduction during high-rate anaerobic treatment of LCFA-containing wastewater <i>Y. Liu, J. Ramiro-Garcia, L.M. Paulo, C.M. Braguglia, M.C. Gagliano, V. O'Flaherty</i> (University of Galway, AD-334)	Assessment of mild-temperature vacuum stripping for anaerobic digestion of waste activated sludge <i>O. Sengur, D. Akgul, B. Calli</i> (Marmara University, AD-620)
10:00-10:15	A mechanistic model for kinetic and mass flow analysis of a wastewater-fed electrochemical-methanogenic system <i>T. Gehring, R. Rad, M. Corbalán, W.R.M. Leite, B.S. Magnus, M. Lubken, M. Wichern, U.P. Apfel</i> (Ruhr University Bochum, AD-536)	Biofilm forming abilities of syntrophic bacteria and methanogens are essential for granulation of anaerobic sludge <i>A. Doloman, M.S. Besteman, D.Z. Sousa</i> (Wageningen University and Research, AD-231)	Combined fungal and chemical pretreatment of lignocellulosic biomass for biogas production: Effect of pretreatment order and fungal strains <i>S. Meenakshisundaram, V. Calcagno, C. Ceballos, A. Fayeulle, E. Léonard, V. Herledan, J.M. Krafft, Y. Millot, X. Liu, C. Jolival, A. Pauss</i> (Université de Technologie de Compiègne, AD-492)
10:15-10:30	Enhanced anaerobic fermentation of organic fatty acids from C1 and H ₂ gas sources via novel char-sparger biofilm reactor (CBSR) <i>Y. Küçükakağa, A. Facchin, V. Stefanelli, S. Kara, C. Torri</i> (University of Bologna, AD-544)	Acclimation, aggregation, and retention of distinct microbial groups during saline anaerobic digestion <i>C.B. Vargas, M.C. Gagliano, V. O'Flaherty</i> (Wetsus – European Centre of Excellence for Sustainable Water Technology, AD-663)	Waste to profit: Circular economy approach towards the effective anaerobic digestion of paunch using potassium hydroxide pre-treatment <i>X. Bai, M. Rebosura Jr, M. Grassino, P. Jensen</i> (University of Queensland, AD-392)

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<p>10:30-10:45</p>	<p>Volatile fatty acids production from bioplastics: A new opportunity to create a closed-loop bioplastics supply chain <u>O. García-Depraect</u>, R. Lebrero, R.A. Börner, R. Muñoz (Institute of Sustainable Processes, AD-694)</p>	<p>Optimisation of anaerobic co-digestion for increased biomethane production and digestate sanitisation <u>S. Nolan</u>, A. Trego, N. Waters, C. Thorn, O. Fenton, K.G. Richards, V. O'Flaherty, U.Z. Ijaz, F. Abram (National University of Ireland, AD-638)</p>	<p>Intensification of thermophilic anaerobic digestion of sewage sludge by thermal hydrolysis A. Mágrová, <u>P. Jeniček</u>, M. Srb, P. Sýkora, J. Rosický, L. Appels (University of Chemistry and Technology Prague, AD-175)</p>
<p>10:45-11:15</p>	<p>Coffee Break+Poster Session</p>		
<p>11:15-12:20</p>	<p>Session 4</p>		
	<p>Circular Bioeconomy Concept: Nutrient, Energy, and Product Management Through Anaerobic Digestion / Economic and Environmental Sustainability Analysis of Anaerobic Processes / Policy Issues Related with Anaerobic Digestion</p> <p>(Chair: Jorge Rodriguez R.)</p> <p>Hall: Üsküdar 1</p>	<p>Modeling, Optimization, Instrumentation, and Control of Anaerobic Processes / Utilization of Direct Electron Transfer Materials in Anaerobic Digestion / Advanced Processes and Technologies for Enhancing Waste Degradation and Biogas Production</p> <p>(Chair: Tuba Hande Erguder Bayramoglu)</p> <p>Hall: Üsküdar 2</p>	<p>Anaerobic Co-digestion for Maximizing Biogas Production / Biogas Upgrading and Use Areas / Anaerobic Digestion Coupled with Algal Biomass: Algae-Microbiome Interactions</p> <p>(Chair: Zhongbo Zhou)</p> <p>Hall: Üsküdar 3</p>
<p>11:15-11:20</p>	<p>Greening livestock farming: A multi-platform photo-biorefinery for sustainable pig slurry management A.P. De Nicolás, M. Ventura, Y. Segura, I. Pariente, J.A. Melero, F. Martínez, A.S. Toro, S. Astals, F. Mas, J. Dosta, <u>D. Puyol</u> (University Rey Juan Carlos, AD-708)</p>	<p>Model-based evaluation of the effect of thermal hydrolysis on biogas production in anaerobic sludge digestion <u>G. Kor Bicakci</u>, A. Erdinçler, C. Eskicioglu, E. Cokgor, G. Insel (Bogazici University, AD-420)</p>	<p>Feasibility of dairy industry wastewater and microalgae co-digestion for on biomethane production <u>O. Isik</u>, M. Atilgan, H. Guven, H. Ozgun, M.E. Ersahin (Istanbul Technical University, AD-668)</p>

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<p>11:20-11:25</p>	<p>Coupling mainstream sludge minimization to centralized anaerobic digestion of municipal sewage sludge: Technology advances and sustainable strategies for circular economy <u>F. Di Capua</u>, R. Morello, G. Esposito, E. Sahinkaya, A. Giordano (University of Basilicata, AD-162)</p>	<p>Transposable decision-making tool for the energy recovery of grasslands respecting biodiversity using coupled experimental design and GIS <u>A. Dujany</u>, Y. Lebrinia, J.J. Victora, L. Kervroëdanb, P. Trubertd, L. Andrée, S. Potel (University of Picardie Jules Verne, AD-355)</p>	<p>Comprehensive full-scale experiences on the operation of a continuous dry anaerobic digestion plant for mechanically sorted OFMSW <u>A. Musluoglu</u>, R.K. Dereli, O.A. Arıkan, S.S. Övez (Hochreiter Biyogaz, AD-712)</p>
<p>11:25-11:30</p>	<p>Morphological, micro-structural and microbial community changes of biodegradable plastics after anaerobic digestion Y. Jin, C. Song, G. Liu, <u>C. Chen</u> (Beijing University of Chemical Technology, AD-734)</p>	<p>Synergizing language models and biogas plant control: A GPT-4 approach <u>D. Gaida</u> (TH Köln, AD-218)</p>	<p>Enhancement of methane production in anaerobic co-digestion of thermally pre-treated waste activated sludge and dairy industry wastewater <u>S. Shitreh</u>, B. Cicekalan, M.N. Hamidi, S. Salimi Khaligh, A. Yuksekdog, H. Guven, I. Koyuncu, H. Ozgun, M.E. Ersahin (Istanbul Technical University, AD-612)</p>
<p>11:30-11:35</p>	<p>Innovative strategy for phosphorus removal using granular anaerobic sludge pellets M.M. Silva, T.R. Giralddi, <u>R.P. Rodriguez</u> (Federal University of Alfenas, AD-86)</p>	<p>Grid-synchronized hydrogen injection for biogas upgrading: A modeling approach <u>S.A. Tabar</u>, M. Rajaei, R.K. Dereli, S. Cotterill, E. Casey (University College Dublin, AD-486)</p>	<p>Enhancing biogas potential of landfill leachates: A comparative study of anaerobic co-digestion with industrial by-products <u>L. Isik</u>, B. Öztürk (Ondokuz Mayıs University, AD-603)</p>
<p>11:35-11:40</p>	<p>Anaerobic biodegradability of polylactic acid: Impact of temperature and particle size <u>M. Olaya-Rincon</u>, J. Serra, M. Casallas-Ojeda, J. Dosta, R. Torres, M. Martinez, S. Astals (University of Barcelona, AD-356)</p>	<p>A new two-component hydrolysis model for the determination of biodegradation kinetics of primary and activated sludge digestion <u>G. Ozvildiz</u>, E. Cokgor, D. Guven, I. Takács, H. Hauduc, H. Spanjers, G. Insel (Istanbul Technical University, AD-646)</p>	<p>Optimization of the liquid-state anaerobic digestion by defining the optimal mixture design of substrates using simplex centroid design <u>A. Najj</u>, A. Coutu, S.G. Rechdaoui, V. Rocher, A. Pauss, T. Ribeiro (Service Public Pour l'assainissement Francilien, AD-136)</p>

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<p>11:40-11:45</p>	<p>Aquaculture waste in rural areas of Colombia as a source of biogas and nutrients in a circular economy model <u>C.A. Ochoa-Durán</u>, Y.C. Cortés, L.S. Cadavid-Rodríguez (Universidad Nacional de Colombia Sede Palmira, AD-601)</p>	<p>Modelling of the influence of pH over volatile fatty acids and hydrogen production from sugarcane vinasse G.F. Resende, F. Eng, R. Ribeiro, M. Zaiat, <u>P.T. Couto</u> (University of São Paulo, AD-217)</p>	<p>The influence of different biochar production temperatures on its effectiveness of increasing biomethane yield from glucose <u>M. Kozłowski</u>, K. Świechowski, A. Siedlecka, K. Sobieraj, A. Białowiec (Wrocław University of Environmental and Life Sciences, AD-584)</p>
<p>11:45-11:50</p>	<p>Effect of thermal pretreatment on resources valorization of food waste through anaerobic digestion <u>Y.Y. Lee</u>, C.H. Huang, C. Fan (National Taiwan University, AD-97)</p>	<p>Enhancing mixing efficiency in an anaerobic digester: A CFD-based approach for optimal submersible mixer placement <u>P. Taaffe</u>, C. D'Bastiani (Technological University Dublin, AD-151)</p>	<p>Lab and pilot scale demonstration of biological CO₂ hydrogenation A. Xirostylidou, A. Chatzis, <u>M. Gaspari</u>, G. Ghiotto, L. Treu, S. Campanaro, K.N. Kontogiannopoulos, P.G. Kougias (Hellenic Agricultural Organisation DIMITRA, AD-636)</p>
<p>11:50-11:55</p>	<p>The effect of inorganic and organic coagulants on sewage sludge anaerobic digestion following chemical treatment of municipal wastewater <u>A. Cainglet</u>, E. Heiderscheidt (University of Oulu, AD-473)</p>	<p>Bioconversion of CO₂ to biomethane by H₂-assisted in situ anaerobic co-digestion. A simulation study with ADM1 K. Morales-Castro, <u>S. García-Gen</u> (Universidad Técnica Federico Santa María, AD-493)</p>	<p>Biogas upgrading in an anaerobic membrane biofilm reactor (AnMBfR) <u>M. Kozak</u>, B.Z. Zaimoğlu, A. Duyar, E.O. Koroğlu, I. Ayranpınar, S. Göçer, K. Cırık (Cukurova University, AD-98)</p>
<p>11:55-12:00</p>	<p>Evaluating the environmental performance of anaerobic membrane bioreactors and other anaerobic systems by using LCA approach <u>M. Yilmaz</u>, I. Koyuncu (Istanbul Technical University, AD-581)</p>	<p>Multirate extended kalman filter design for monitoring of agricultural anaerobic digestion plants <u>S. Hellmann</u>, T. Wilms, S. Streif, S. Weinrich (Deutsches Biomasseforschungszentrum, AD-366)</p>	<p>Production of solid carbon and hydrogen from biomethane using non-thermal plasma R.R. Nair, S. Chavan, <u>M. Köttner</u> (K. Kayser IBBK Fachgruppe Biogas GmbH, AD-106)</p>
<p>12:00-12:05</p>	<p>The potential of agricultural residues for boosting biomethane production - A case study for Bavaria <u>M. Steindl</u>, T. Venus, K. Koch (Bavarian State Research Center for Agriculture, AD-141)</p>	<p>Modelling fermentative biogas upgrading using a hybrid dynamically constraint flux balance analysis approach <u>A. Grimalt-Aleman</u>, I. Angelidaki (Technical University of Denmark, AD-692)</p>	<p>Investigation of siloxanes removal with UV post treatment of biogas <u>U.G. Kiral</u>, I. Akmirza, R. Muñoz (Gebze Technical University, AD-732)</p>

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<p>12:05-12:10</p>	<p>Efficiency evaluation for CO₂ absorption with new generation ionic liquids C. Delibas, S.S. Ovez, V. Uyak (Istanbul Technical University, AD-726)</p>	<p>Hydrodynamic shear effects on anaerobic granule properties: From bulk approaches to quantified details H. Eslami, H. Bruning, H.H.M. Rijnaarts, D. Sudmalis (Wageningen University and Research, AD-515)</p>	<p>Exploring single-cell protein production from food waste through anaerobic digestion-induced biomethane fermentation K. Rasool, H.M.A. Shahzad, K.A. Mahmoud (Hamad Bin Khalifa University, AD-540)</p>
<p>12:10-12:15</p>	<p>Retrofitting proposal for rural septic tanks towards carbon neutrality T. Gómez-Borraz, C. Cuthill, T. Herzyk, S. Connelly, W.T. Sloan (University of Glasgow, AD-674)</p>	<p>Impact of nanomaterial structural properties on anaerobic digestion of municipal sludge M. Goodarzi, M. Arjmand, C. Eskicioglu (University of British Columbia, AD-164)</p>	<p>A microalgae biorefinery approach: Polyhydroxyalkanoate (PHA) production from microalgal biomass T. Ervan, E.F. Aydar, Z. Mertdinc, K.N. Kasapoglu, E. Demircan, S. Övez, B. Özcelik (Istanbul Technical University, AD-318)</p>
<p>12:15-12:20</p>	<p>Green anaerobic conversion of urban organic waste into marketable caproic acid through in situ lactate-driven chain elongation with natural pH control B. Tonanzi, A. Gallipoli, A. Frugis, A. Gianico, M. Lazzazzara, F. Angelini, S. Angelini, S. Crognale, M. Sbicego, G. Cecchini, C.M. Braguglia (Water Research Institute, CNR-IRSA, AD-583)</p>	<p>Effects of magnetite nanoparticles on the degradation of phenol and P-cresol in anaerobic membrane bioreactor (AnMBR) R.W. Kurnianto, M. Elshourbagy, B. Egerland Bueno, H. Spanjers, J. van Lier (Delft University of Technology, AD-541)</p>	<p>The role of anaerobic digestion in the sustainable management of olive mill solid waste: a techno-economic study S. Correa, M. Llamas, F. Passos, F.G. Feroso, I. Ferrer (Universitat Politècnica de Catalunya, AD-479)</p>
<p>12:20-13:30</p>	<p>Lunch</p>		

June 4, 2024 (Tuesday)

Session 5			
13:30-16:15	Anaerobic Treatment of Industrial, Municipal, Agricultural Waste(water)	Valorization of Anaerobic Digestate from Biowaste to High Value-Added Products	Advanced Processes and Technologies for Enhancing Waste Degradation and Biogas Production
	(Chair: Fernando G. Feroso) Hall: Üsküdar 1	(Chair: Francis de los Reyes III) Hall: Üsküdar 2	(Chair: Robbert Kleerebezem) Hall: Üsküdar 3
13:30-14:00	<u>Keynote Speech</u> Top-Down and Bottom-Up Design Approaches to Advance Anaerobic Biotechnologies	<u>Keynote Speech</u> Anaerobic Digestion Technology as a Holistic Option for Integrated Management of Municipal Wastewaters and Kitchen Wastes	<u>Keynote Speech</u> Microorganisms Assisting the Green Transition
	<i>Shilva Shrestha, Johns Hopkins University</i>	<i>Izzet Ozturk, Istanbul Technical University</i>	<i>Irin Angelidaki, Technical University of Denmark</i>
14:00-14:15	Three phase separators for anaerobic granular reactors; Review of 4 decades of full scale designs <u>J.H.F. Pereboom</u> <i>(Waterboard Rijnland, AD-300)</i>	Nutrients recovery by sequential filtration steps from agricultural digestate: A pilot-scale case study <u>F. Battista</u>, M. Cirilli, F. Rizzioli, D. Bolzonella, N. Frison <i>(University of Verona, AD-199)</i>	Improving resource recovery in urban sanitation: AnMBR-based WRRF implementation for integrated bio-waste management <u>P. Sanchis-Perucho, M. Elvira, J.B. Giménez, A. Robles, A. Seco, J.R. Vázquez, J. Ribes</u> <i>(University of Valencia, AD-484)</i>
	Comparison of treatment performances of acidic mine drainage (AMD) in passive bioreactors using chicken and cow manure as organic matter sources B.A. Hatib, M. Hamed, M. Aycil, M. Kaplan, E. Bay, E.K. Demir, <u>E. Sahinkaya</u> <i>(Istanbul Medeniyet University, AD-170)</i>	A new method for reclamation of nutrients and clean water from manure and digestate <u>C. Persner, F. Geltz</u> <i>(GEMÜ Gebr. Müller Apparatebau, AD-36)</i>	Methane enrichment in psychrophilic anaerobic digestion of pig slurry by using iron zero-valent nanoparticles M. Cerrillo, A. Lara, M. Moreno, N. Ruiz, L. Burgos, V. Riau, <u>A. Bonmati</u> <i>(Institute of Agrifood Research and Technology, AD-410)</i>

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14:30-14:45	CO ₂ enrichment improves the efficiency of anaerobic digestion <u>M.J. Bardi</u> , K. Koch (Technical University of Munich, AD-706)	Integration of biochar in psychrophilic anaerobic digestion: Effect on the digestate <u>A. Muñoz-Muñoz</u> , C. Borrero, Y. Cruz, N. Rodríguez, M. Cucina, L. Castro, H. Escalante (Industrial University of Santander, AD-358)	Impacts of biochar and wood ash additives on anaerobic digestion of hydrothermally pretreated energy crops I.A. Basar, C. Eskicioglu, <u>N. Altınay-Perendeci</u> (Akdeniz University, AD-253)
14:45-15:00	Biochemical methane potential (BMP) of fresh leachate: A study based on collections of municipal solid waste (MSW) F.A.T. Barbosa, I.G. Zambon, <u>L.L. Beal</u> (University of Caxias do Sul, AD-394)	Anaerobic fermentation assisted with a novel two-step membrane process: Production of ideal feedstock for carboxylate upgrading <u>H. Yesil</u> (Marmara University, AD-281)	Enhancing the solid-state mono anaerobic digestion of pig manure using digestate biochar <u>S. Riva</u> , K. Ishida, A. Terada (Tokyo University of Agriculture and Technology, AD-565)
15:00-15:15	Waste-to-energy nexus: Pilot demonstration of animal by-products anaerobic digestion valorisation in an industrial environment <u>D. Cantabella</u> , O. Osegueda, M. Bistué, M. Martínez-Quintela, L. Mejias, L. Paredes, S. Ponsá (University of Vic-Central University of Catalonia, AD-225)	Impact of solids retention time and in-line extraction on medium-chain fatty acid production from source separated organics using open-culture anaerobic fermentation <u>J.K. Parmar</u> , D. Dyussekenova, C.E. Lawson (University of Toronto, AD-71)	Development of an anaerobic reactor removing sulfides using biogas produced in the reactor <u>T. Onodera</u> , Y. Takemura, M. Aoki, K. Syutsubo (National Institute for Environmental Studies, AD-406)
15:15-15:30	Performance evaluation of a full-scale anaerobic internal circulation reactor treating calcium rich dairy industry wastewater <u>O.D. Yopez-Ceron</u> , S. Patterson, P. McCarthy, E. Casey, R.K. Dereli (University College Dublin, AD-450)	Upgrading cassava pulp into value-added products using mix microbial cultures A.I. Mulyawati, B. Suraraksa, P. Chairprasert, V.O'Flaherty, <u>C. Nzeteu</u> (University of Galway, AD-572)	Biogas upgrading through in-situ hydrogen bi-methanation in thermophilic and mesophilic anaerobic CSTR system <u>G. Cema</u> , M.S. Hellal, K.K. Kadimpati, A. Ziemińska-Buczyńska, J. Surmacz-Górska (Silesian University of Technology, AD-702)
15:30-15:45	Treatment of saline phenolic and petrochemical wastewater in anaerobic membrane bioreactor <u>Y.S. Garcia Rea</u> , J.D. Muñoz Sierra, B. Egerland Bueno, D. Cerqueda Garcia, H. Spanjers, J.B. van Lier (Delft University of Technology, AD-665)	Production and separation of volatile fatty acids with high purity from waste streams <u>I. Owusu-Agyeman</u> , M. Fridl, A. Köttö, F.M. Penha, Z. Cetecioglu (KTH Royal Institute of Technology, AD-328)	Microbial adaptation avoids propionate accumulation during in situ biomethanation L. Braga Nan, <u>M. Mahieux</u> , G. Capson-Tojo, J.P. Steyer, C. Richard, Q. Aemig, J.P. Delgenès, E. Trably, R. Escudé (ENGIE, AD-425)

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<p>15:45-16:00</p>	<p>Enhancing biomethane production and phosphorus recovery from aerobic granular sludge through thermal alkali pretreatment <u>B. Cicekalan</u>, M. Atilgan, S. Kosar, H. Guven, I. Koyuncu, M.E. Ersahin, I. Ozturk, H. Ozgun (Istanbul Technical University, AD-608)</p>	<p>Mathematical modelling of vacuum evaporation to enhance resource recovery from mesophilic anaerobic digestion A.M. Abdelrahman, A. Khadir, D. Santoro, E. Jang, A. Al-Omari, C. Muller, K.Y. Bell, J. Walton, D. Batstone, <u>G. Nakhla</u> (University of Western Ontario, AD-396)</p>	<p>Enhanced complex organic removal and tetracycline biodegradation in tetracycline-stressed anaerobic digestion systems with powdered activated carbon <u>Y. Wang</u>, B. Du, G. Wu (University of Galway, AD-395)</p>
<p>16:00-16:15</p>	<p>Impact of carbon-based conductive materials on the performance and microbial community composition during anaerobic digestion of butanol-octanol wastewater <u>J. Yang</u>, K. Shen, C. He, W. Wang (Hefei University of Technology, AD-201)</p>	<p>Liquid-liquid extraction for caproic acid recovery from mixed culture fermentation <u>N. Gutowska</u>, S. B. Rouhipour, M. Szczygielka, M. Łężyk, P. Oleskiewicz-Popiel (Poznan University of Technology, AD-368)</p>	<p>Enhancing COD harvesting through high-rate activated sludge operating at very short SRT J. Canals, <u>A. Cabrera-Codony</u>, O. Carbó, M. Martín, M. Baldi, B. Gutiérrez, M. Poch, A. Ordóñez, H. Monclús (Universitat de Girona, AD-634)</p>
<p>16:15-16:45</p>	<p>Coffee Break+Poster Session</p>		

June 4, 2024 (Tuesday)

Session 6

16:45-17:50

Anaerobic Treatment of Industrial, Municipal, Agricultural Waste(water) / Novel and Hybrid/Integrated Anaerobic Process Configurations and Emerging Technologies

(Chair: Erkan Sahinkaya)

Hall: Üsküdar 1

Microbial Diversity in Anaerobic Processes / Valorization of Anaerobic Digestate from Biowaste to High Value-Added Products

(Chair: Recep Kaan Dereli)

Hall: Üsküdar 2

Pre- and Post-Treatment Strategies for Anaerobic Digestion / Advanced Processes and Technologies for Enhancing Waste Degradation and Biogas Production / Presence and Fate of Micropollutants During Anaerobic Digestion / Water, Sanitation, and Hygiene Concerns in Resource-Constrained Communities

(Chair: Henri Spanjers)

Hall: Üsküdar 3

16:45-16:50

Measuring anaerobic degradation at a wide range of temperatures using fibre bags
A.J. Ward, J. Peng, H.B. Møller
(Aarhus University, AD-200)

Validating the Anna Karenina ecological principle to anaerobic digestion systems under ammonia stress
M. Nikolausz, N. Abdulkadir, B. Rusu, W. Logroño, U.N. da Rocha
(Helmholtz Centre for Environmental Research - UFZ, AD-461)

Thermal hydrolysis and two-stage anaerobic digestion in the biogas production from household waste
M.A de la Rubia, G. Lelli, E. Diaz, J. Colin, J.D. Marin-Batista, P. Lorenzo, A.F. Mohedano
(Universidad Autonoma de Madrid, AD-152)

16:50-16:55

Partial nitrification and anammox and microbial community in the co-treatment of mature leachate and domestic anaerobic effluent in different dilutions
L.A. Fernandes, T.G. Silva, C.D. Leal, **J.C. Araujo**
(Federal University of Minas Gerais, AD-404)

Microbial communities' displacements during OFMSW acid fermentation under different pH
G.D. Jojoa-Unigarro, **S. González-Martínez**, Y. Cuetero-Martínez, D. de-los-Cobos-Vasconcelos
(National University of Mexico, AD-496)

Water treatment sludge as a filtration medium for post-treatment of UASB reactor effluent
T. Nair, **M.M. Ahammed**
(S.V. National Institute of Technology, AD-227)

16:55-17:00

Production of volatile fatty acids (VFAs) from heterogeneous waste via acidogenic fermentation to obtain cost-effective bioplastics
L. Garrote, D. Hidalgo, F. Infante
(CARTIF Technology Centre, AD-727)

Biochar addition effect on the methyl-coenzyme M reductase and acetyl-CoA synthetase gene expression during anaerobic digestion - A preliminary research
M. Sikora, **A. Siedlecka**, M. Kozłowski, K. Świechowski, K. Sobieraj, K. Marycz, A. Białowiec
(Wrocław University of Environmental and Life Sciences, AD-669)

Recovery of bio-based volatile fatty acids (VFAs) from winery wastewater using side-stream hydrophobic membrane contactor
R. Lo Coco, E. Järvelä, N. Frison, D. Bolzonella
(University of Verona, AD-468)

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17:00-17:05	<p>Technology decision instrument: What is the best option for anaerobic decentralized wastewater treatment systems? L.M.O. Cruz, S.L.A. Geraldo, L.G.A. Lima (State University of Campinas, AD-569)</p>	<p>Silage indigenous community and pH were the driving forces influencing fermentation efficiency F. Coelho, C. Nzetou, A. Bartle, A. Trego, U. Ijaz, A. Villa, V. O'Flaherty (University of Galway, AD-637)</p>	<p>Application of forward osmosis as a pre-concentration process for elevated biogas production in subsequent anaerobic digestion Y.O. Demiral, A. Ayol (Dokuz Eylul University, AD-729)</p>
17:05-17:10	<p>Anaerobic digestion of dewatered sludge: Effects of solids concentration and thermal pretreatment G.B. Kim, J. Park, S. Park, S.H. Kim (Yonsei University, AD-96)</p>	<p>Deterministic processes drive microbial dynamics following inhibition in anaerobic digestion O. Chapleur, C. Bureau, C. Midoux (Université Paris-Saclay, AD-563)</p>	<p>Membrane fouling during nutrient recovery from digestate using electro dialysis: Long-term operation J. Meng, X. Zhan (University of Galway, AD-179)</p>
17:10-17:15	<p>Optimization of polyhydroxyalkanoate production from anaerobic treatment products of wheat processing industry wastewaters S. Yilmaz, B. Urediler, C. Yangin-Gomez, O. Karahan Ozgun (Istanbul Technical University, AD-687)</p>	<p>Spotlighting the key microbial players in commercial biogas plants operating at hyper-mesophilic temperatures M.A. Nnorom, L. Avery, R. Hough, T. Chen, D. Saroj, B. Guo (University of Surrey, AD-373)</p>	<p>Innovative waste activated sludge pre-treatment using a raceway pond reactor: Integration of low-temperature and solar radiation J.P. Monteiro, C. Cruzeiro, M. Salomé Duarte, M. Alcina Pereira, V.J.P. Vilar (University of Porto, AD-331)</p>
17:15-17:20	<p>Diazotrophic microbial protein production from volatile fatty acids, hydrogen and carbon dioxide using purple bacteria M.D.R. Rodero, J.P. Steyer, N. Bernet, R. Escudié, G. Capson-Tojo (INRAE, AD-197)</p>	<p>One vs. two stage fermentation process for an enhanced MCCA production from OFMSW A. Duber, R. Zagrodnik, N. Gutowska, F. Brodowski, M. Szczygielda, M. Łężyk, S. Dabrowski, D. Witt, P. Barski, P. Oleskowicz-Popiel (Poznan University of Technology, AD-387)</p>	<p>Comparing thermal hydrolysis and steam explosion pretreatment on methane generation from different lignocellulosic aquatic weeds P. Bhatia, M. Fujiwara, T. Toda (Soka University, AD-586)</p>
17:20-17:25	<p>Water and energy recovery of grease trap waste through hydrothermal liquefaction and anaerobic digestion D.V. Cabrera, I. Adema-Yusta, M.J. Santibañez, C. Celis, J.W. Tester, R.A. Labatut (Pontifical Catholic University of Chile, AD-722)</p>	<p>Maximizing VFAs production in acid digesters: A potential carbon supplement for BNR process A. Sayin, D. Halim, J. Fillos, K. Ramalingam, N. Perez (City University of New York, AD-92)</p>	<p>Two-stage anaerobic digestion of organic wastes: A review I. Simeonov, L. Kabaivanova, E. Chorukova (The Stephan Angeloff Institute of Microbiology, AD-187)</p>

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<p>17:25-17:30</p>	<p>Next-generation anaerobic digestion technologies for sustainable bioproducts and biofuels production <i>M. Urgan Demirtas, H. Wu, T. Lippert, T. Scheve, R. Dalke</i> (Northwestern University, AD-122)</p>	<p>Production of volatile fatty acids through anaerobic digestion using brewer's spent grains as a substrate <i>L. Ferreira, C. Kennes, M.C. Veiga</i> (University of A Coruña, AD-523)</p>	<p>Micro-aeration anaerobic digestion (MAAD) promotion of sulfide suppression and recalcitrant organics degradation in saline chemically enhanced primary treatment (CEPT) sludge cake <i>Z. Wang, R. Zhang, J.A. Natarajan, C.N.T. Vicera, S. Salim, X.Y. Lim, N.J.D. Graham, P.H. Lee, G.Y.A. Tan</i> (City University of Hong Kong, AD-566)</p>
<p>17:30-17:35</p>	<p>Conversion of acid whey into medium-chain carboxylic acids: Downstream product optimization <i>A.K. Ahmed, F.F. Almeida, E. Jones, M. Temovska, R. Hegner, J.N. Ntihuga, L.T. Angenent</i> (University of Tubingen, AD-272)</p>	<p>Retention time in anaerobic digestion: Leveraging digestate quality for enhanced C and N dynamics in soils <i>D. Fernández-Domínguez, L. Sourdon, M. Pérémé, F. Guilayn, J.P. Steyer, D. Patureau, J. Jimenez</i> (INRAE, AD-284)</p>	<p>Suppressing methane emissions in gravity sewer pipelines by ultrasonication <i>M. Mohit, O. Prakash, M. Makian, A.A. Joolaei, C.K. Lee, C. Moon, D.H. Kim</i> (Inha University, AD-223)</p>
<p>17:35-17:40</p>	<p>Integrating biological treatment and electro-oxidation in an anaerobic biomass membrane bioreactor for innovative and integrating urban wastewater treatment. <i>O. El Kik, G. Lesage, F. Zaviska, A. Sauvêtre, M. Heran, F. Lestremau</i> (Université de Montpellier, AD-474)</p>	<p>A study of the fertilizer properties of microalgae grown on anaerobic digestate <i>E. Polat, S. Biri, M. Altınbaş</i> (Sinop University, AD-498)</p>	<p>How effective is hydrodynamic cavitation in increasing the methane potential of waste activated sludge of extended aeration process? <i>S.N. Merdoglu, O. Dogan, A.E. Tugtas, B. Calli</i> (Marmara University, AD-153)</p>
<p>17:40-17:45</p>	<p>Hyper-thermophilic treatment of digested cattle manure <i>B. Haroun, M. El-Qelish, S. Kianizadeh, C. Muller, F. Kakar, K. Bell, G. Nakhla</i> (Western University, AD-680)</p>	<p>Understanding the emergence of halotolerant filamentous fungi during high-rate anaerobic digestion of saline wastewater <i>C. Buenaño Vargas, A.C. Villa Montoya, A. Trego, U.Z. Ijaz, M.C. Gagliano, V. O'Flaherty</i> (University of Galway, AD-623)</p>	<p>Effect of GAC addition, application of voltage and ultrasound pretreatment on the performance of anaerobic digestion and the removal of PM substances <i>E. Gkalipidou, M. Deligiannis, G. Gatidou, O. Arvaniti, M.S. Fountoulakis, A.S. Stasinakis</i> (University of the Aegean, AD-633)</p>

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17:45-17:50

Effects of thermal hydrolysis process on micropollutants removal and AD process performance
*G. Balasundaram, P. Gahlot, **V.K. Tyagi**, A. Sahu, A.A. Kazmi*
(National Institute of Hydrology, AD-62)

A mass balance approach on the fate and potential biotransformation of PFOA and 6:2 FTOH in anaerobic membrane bioreactors
***B.F. Costa**, C. Sawaya, J.M. Aguilar, D. Aga, A.L. Smith*
(University of Southern California, AD-697)

18:05

Departure to Gala Event

19:00

Gala Event (Venue: Çırağan Palace)

June 5, 2024 (Wednesday)

08:00-08:30

Registration (Venue: İstanbul Congress Center)

Session 7

08:30-10:15

Anaerobic Treatment of Industrial, Municipal, Agricultural Waste(Water)

(Chair: Xuedong Zhang)

Hall: Üsküdar 1

Utilization of Direct Electron Transfer Materials in Anaerobic Digestion

(Chair: Izzet Ozturk)

Hall: Üsküdar 2

Anaerobic Co-Digestion for Maximizing Biogas Production

(Chair: Yongqiang Liu)

Hall: Üsküdar 3

08:30-08:45

Anaerobic digestion of the liquid fraction of fruits and vegetables waste: Two-stage versus single-stage process
*P. de Souza Almeida, C.A. de Menezes, M.S. Duarte, T.P. Silva, F.C.G. da Silva Junior, **A.B. Dos Santos**, M. Zaiat, R.C. Leitão*
(Federal University of Ceará, AD-460)

Application of nanomaterials to improve the anaerobic treatment of industrial wastewaters
***F.J. Cervantes**, S.J. Ponce-Jahen, L.A. Ramirez-Montoya*
(Universidad Nacional Autónoma de México, AD-107)

Enhanced Biomethane Production via hydrodynamic cavitation pretreatment and co-digestion of brown and DAF sludge
***M.S. Islam**, V.V. Ranade*
(University of Limerick, AD-282)

08:45-09:00

Techno-economical analysis of digestate management for a full-scale continuous dry anaerobic digestion plant treating mechanically sorted OFMSW
***A. Musluoglu**, R.K. Dereli, O.A. Arıkan, H. Guven, K.E. Macin*
(Hochreiter Biyogaz, AD-713)

Enhancing methane production and pharmaceutical removal with bio-reduced graphene oxide
***O. Casabella-Font**, J.L. Balcazar, M. Pijuan, J. Radjenovic*
(Catalan Institute for Water Research, AD-244)

A thermophilic and mesophilic two-phase codigestion of waste activated sludge with organic fraction waste and equine manure
*L. Andre, F. Picard, X. Liu, T. Moreau, A. Magis, O. Bernat, F. Routhier, A. Brunet, P. Billette, **A. Pauss**, T. Ribeiro*
(Alliance Sorbonne Université, AD-182)

09:00-09:15

Screening organic waste streams for the selective conversion to odd-chain volatile fatty acids
***M. Mauricio-Iglesias**, M.R. Varela, M.L. Pérez, S. Balboa, M. Carballa*
(Universidade de Santiago de Compostela, AD-274)

Enhancement of psychrophilic anaerobic digestion of cattle manure via amendment of granular activated carbon
*Y. Odabas, **Y.D. Yilmazel***
(Middle East Technical University, AD-599)

Insights of microbial community shifts in mono- and co-digestion of sewage sludge and food waste
*L. Luo, **N. Pradhan***
(Hong Kong Baptist University, AD-33)

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09:15-09:30	<p>Discontinuous reactor feeding regime enables selective caproic acid production in sugar-based chain elongation A. Regueira, Á. Estévez-Alonso, A. Bosmans, C. Dubaere, R. Ganigué (Ghent University, AD-649)</p>	<p>Deciphering the impact of activated carbon, magnetite and zeolite on the activity of syntrophic cultures and pure cultures of methanogens C.S.N. Braga, G. Martins, M.S. Duarte, J.C. Sequeira, O.S.G.P. Soares, M.F.R. Pereira, I.C. Pereira, M.M. Alves, L. Pereira, A.F. Salvador (University of Minho, AD-367)</p>	<p>Energy and silicon recovery by anaerobic co-digestion of sewage sludge and rice straw T. Togari, N. Matsuura, R. Yamamoto-Ikemoto (Tottori University Environmental Studies, AD-108)</p>
09:30-09:45	<p>Evaluation of different HRT in hydrogen production from corn industry wastewater by dark fermentation M. Vázquez-López, R. Campuzano, D. de los Cobos-Vasconcelos, I. Moreno-Andrade (Universidad Nacional Autónoma de México, AD-214)</p>	<p>Facilitated CO biomethanation by exogenous materials via inducing specific methanogenic pathways W. Wu, W. Wang (Beijing University of Chemical Technology, AD-258)</p>	<p>Influence of sludge ratios and biokinetics leading to optimal design conditions for anaerobic co-digestion of excess sludge from the pulp and paper mill industry P. Racho, B. Nammana, N. Tantemsapya (Suranaree University of Technology, AD-610)</p>
09:45-10:00	<p>New approaches for the optimization of the start-up of full-scale anaerobic digesters A. Hmaissiaa, Y. Barehaa, E.M. Hernández, S. Boivinb, C. Vaneekhautea (Université Laval, AD-558)</p>	<p>Zero-valent iron for biogas upgrading: Investigating main mechanisms and feeding regime assessment I. Vyrides, M. Andronikou, D. Constantinou, C.G. Samanides, P. Karachaliou, P. Charalambous (Cyprus University of Technology, AD-507)</p>	<p>Thermophilic anaerobic co-digestion of lemnaceae biomass and swine wastewater for biogas production L.M. Lower, W.J. Sagues, R.C. Sartor, J.J. Cheng (North Carolina State University, AD-132)</p>
10:00-10:15	<p>Co-digestion of sewage sludge and food waste in anaerobic membrane bioreactors: Plant-wide modeling A.I. Cengiz, S.N. Turkoz, H. Gulhan, A.M. Abdelrahman, O. Isik, H. Guven, H. Ozgun, M.E. Ersahin (Istanbul Technical University, AD-578)</p>	<p>Long-term operation of an Electro-Stimulated Anaerobic Reactor (ELSAR[®]) on brewery wastewater A. Giménez-Lorang, P. Zamora-Bonachela, N. Hernández-Ibáñez, X. Tomás-Ortiz, V.M. Monsalvo-García, F. Rogalla, Y. Asensio-Ramírez, R. Vera-Domingo, B. Martínez-Falagan (Aqualia, AD-444)</p>	<p>Model-derived insights into a two-phase anaerobic dynamic membrane bioreactor system for efficient co-digestion of food waste and sewage sludge K. Zhu, T. Fairley-Wax, P. Puente, R. Karki, R. Starostka, Y. Guo, S. Skerlos, L. Raskin (University of Michigan, AD-543)</p>
10:15-10:45	Coffee Break+Poster Session		

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Session 8			
10:45-12:30	Circular Bioeconomy Concept: Nutrient, Energy, and Product Management Through Anaerobic Digestion (Chair: Samir Kumar Khanal) Hall: Üsküdar 1	Bio-Based Fertilizers from Digestate in Green Biorefinery (Chair: Sergi Astals) Hall: Üsküdar 2	Pre- and Post-Treatment Strategies for Anaerobic Digestion (Chair: Marika Kokko) Hall: Üsküdar 3
10:45-11:00	Recovery of bio-based products and bioenergy from microalgae in the framework of a circular bioeconomy <u>I. Ferrer</u> , M. Bellver, E. Ruales, F. Passos, M. Garfi (Universitat Politècnica de Catalunya·BarcelonaTech, AD-549)	Separation mechanisms of ammonia, phosphorus and hexanoate by flow-electrode capacitive deionization H. Sun, P. Wang, <u>X. Zhang</u>, S. Huang, B. Wub, M. Cui, G. Liu, Hongbo Liu, M.E. Ersahin, H. Ozgun, H. Liu (Jiangnan University, AD-345)	Non-aerated partial nitrification by algal-bacterial consortia treating anaerobic effluent: Process regulation and microbial interaction <u>Z. Zhou</u>, S. Chen, M. Zhi, Y. Xiao (Southwest University, AD-428)
11:00-11:15	What is the best use of biofuels generated from biowaste? LCA and LCC of alternative strategies <u>F. Pasciucco</u> , I. Pecorini, A. Baccioli, L. Ferrari (University of Pisa, AD-34)	Novel pilot-scale biomethanation and organo-mineral fertiliser production <u>I.A. Fotidis</u> , Y. Yan, N.I. Kallikazarou, D. Fu, T. Kotsopoulos, M.G. Antoniou (Ionian University, AD-704)	Replicability and upscale of microalgae-based treatment of digestate supernatant diluted with sewage <u>J. González-Camejo</u> , A. Petrucciani, M.G. Chieti, L. Mollo, J.C. Rojas-Castillo, N. Ciuccoli, A.L. Eusebi, A. Norici, M. Pachés, F. Fatone (Università Politecnica delle Marche, AD-453)
11:15-11:30	Unlocking circular economy potential via anaerobic digestion for bioresource recovery for the Australian red meat sector F. Tessele, K. Ferraro, L. Marinho, L. Moreno, <u>E. Bertizzolo</u> (The University of Western Australia, AD-304)	Assessing the agronomic potential of agricultural digestate and its solid and liquid fractions <u>C. Romio</u> , H.B. Møller, A.J. Ward (Aarhus University, AD-397)	Enhancing anaerobic digesters efficiency through thermal pre-treatment: Impacts on sludge composition and trace element bioavailability in full-scale sites <u>N. Nasar</u> , G. Pizzagalli, F. Coulon, Y. Bajón-Fernández (Cranfield University, AD-538)

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11:30-11:45	<p>Revolutionizing ammonia control in swine manure with odor-reducing agents and their impact on anaerobic digestion efficiency <u>Y.J. Jeon</u>, G.S. Yun, E.S. Kim, Y.M. Yun (Chungbuk National University, AD-111)</p>	<p>Advanced recovery of nutrients from sewage sludge to obtain biofertilizers and bio-stimulants (BIOFERES) <u>R. Arnau</u>, R. Tamarit, R. Garcia-Tirado, F. Valero, A. Antolí, J. Herrero, R. Romaguera, R. Hervás (Sociedad de Fomento Agrícola, S.A., AD-467)</p>	<p>Effect of multiple pre-treatment techniques on the digestibility of aerobic granular sludge M.S. Zaghoul, R. Salehi, <u>A. Elsayed</u>, R.A. Hamza, E. Elbeshbishy (Toronto Metropolitan University, AD-605)</p>
11:45-12:00	<p>Profitability of retrofitting sewage treatment plants towards volatile fatty acids production A. Taboada-Santos, H. Quintana, <u>C. Reino</u>, A. Castro-Fernandez, M. Tortosa, L. Rodríguez-Hernández, C.M. Castro-Barros (CETAQUA, AD-31)</p>	<p>Effects of anaerobic digestion in the biochar production from organic waste fractions M.M. Estevez, S. Eich-Greatorex, <u>R. Tomczak-Wandzel</u>, L. Lin, M.W. Bezabeh (Aquateam COWI, AD-48)</p>	<p>Evaluation of different degassing membrane technologies for dissolved methane capture from AnMBR effluents <u>K.M. Moyano</u>, P. Sanchis-Perucho, V. Sandoval-García, A. Robles (Universitat de València, AD-598)</p>
12:00-12:15	<p>Integration of cascading biorefinery systems for circular energy recovery of whiskey distillery by-products <u>A. Hackula</u> (University College Cork, AD-129)</p>	<p>Pretreatment strategies of bread waste for green chemical production via chain elongation <u>J.N. Ntuhuga</u>, R.Mayer, J.G. Usack, L.T. Angenent (University of Tübingen, AD-275)</p>	<p>Influencing factors of GHG-emissions from composting as a post-treatment of digestate <u>J. Matlach</u>, L. Knoll (German Biomass Research Center, AD-642)</p>
12:15-12:30	<p>Kinetic limitations in xylan conversion to caproate <u>J. Iglesias-Riobó</u>, M. Mauricio-Iglesias, M. Carballa (Universidade de Santiago de Compostela, AD-363)</p>		<p>Enhancing SOFC internal dry reforming compatibility: A feasibility study on the utilization of cow urine manure-derived biogas production. H. Wasajja, R.E.F. Lindeboom, <u>H. Spanjers</u>, P.V. Aravind, J.B. van Lier (Delft University of Technology, AD-434)</p>
12:30-14:00	Lunch		

June 5, 2024 (Wednesday)

Session 9

14:00-15:30

Anaerobic Treatment of Industrial, Municipal, Agricultural Waste(Water)

(Chair: Irini Angelidaki)

Hall: Üsküdar 1

Modeling, Optimization, Instrumentation, and Control of Anaerobic Processes

(Chair: Ivet Ferrer)

Hall: Üsküdar 2

Presence and Fate of Micropollutants During Anaerobic Digestion

(Chair: M. Angeles De La Rubia)

Hall: Üsküdar 3

14:00-14:15

Comparison of methane yield and microbial community in anaerobic digestion under ammonia-stressed conditions

L.H. Bae, J.W. Jeong, C.H. Park, S.B. Park, J.H. Shin, J.M. Triolo, S.G. Shin
(Gyeongsang National University, AD-573)

FLEXIMETHA: Scenarios for flexible biomethane production facing the gas grid limitations

S. Pommier, S. Métivier, T. Rigou
(Université de Toulouse, AD-456)

Effect of anaerobic digestion on pristine and weathered microplastics in sewage sludge

E. Yli-Rantala, M.C. Lessa Belone, E. Sarlin, M. Kokko
(Tampere University, AD-196)

14:15-14:30

Multistep biorefinery approach for heptanoic acid and methane production from spent coffee grounds

A. Oliva, S. Papirio, F. Pirozzi, G. Esposito, P.N.L. Lens
(University of Naples Federico II, AD-377)

The dosage-effect of biochar on a methane production during anaerobic digestion

K. Sobieraj, K. Świechowski, M. Kozłowski, A. Siedlecka, A. Białowiec
(Wrocław University of Environmental and Life Sciences, AD-502)

Revealing the impact and migration behavior of triclosan in the anaerobic digestion of waste activated sludge

M.H. Cui, L. Chen, H. Liu
(Jiangnan University, AD-313)

14:30-14:45

Does rapid granulation at hypersaline conditions truly require proteinaceous wastewaters - how much protein is enough?

D. Sudmalis, M.C. Gagliano, M.A. Kabel, P. de Gijssel, G. Zeeman, H.H.M. Rijnaarts, H. Temmink
(Wageningen University and Research, AD-419)

Analysis and optimization of thermophilic anaerobic sewage sludge digestion. New modelling approach based on real WRRF data

S. Jaray-Valdehiero, E. Aymerich, E. Ayesa, J. Gómez, A. López, I. Ilzarbe
(CEIT-Basque Research and Technology Alliance, AD-64)

The effect of bio-aging of polyethylene on anaerobic digestion and its interactions with organic contaminants

M.D.D. Tahan, M. Ozdemir, I. Imamoglu, F.D. Sanin
(Middle East Technical University, AD-278)

June 5, 2024 (Wednesday)

14:45-15:00	<p>Biodegradable food packaging in bio-waste management: A focus on their anaerobic biodegradability J.C. Suarez Murcia, G. Huet, J. Lamarque, E. Gastaldi, C. Sambusiti, S. Domenek, C. Marin, F. Pion, B. Grassl, F. Monlau (Université de Pau et des Pays de l'Adour, AD-77)</p>	<p>Analysis of potential bioavailability of trace elements in manure-derived digestates H.L. de Castro e Silva, A.A. Robles-Aguilar, Ç. Akyol, E. Meers (Ghent University, AD-142)</p>	<p>Optimization of the solid-state anaerobic digestion of swine manure for maximising the removal of antibiotics Á. Trujillo-Reyes, J. Purswani, C. Postigo, E. Aranda, A. Serrano (University of Granada, AD-459)</p>
15:00-15:15	<p>Effects of different anaerobic inoculum on the production of volatile fatty acids at acidic pH E. Jiménez-Páez, M. Gacitúa, D. Correa-Galeote, S. Zahedi, F.G. Feroso, A. Carvajal, A. Serrano (University of Granada, AD-463)</p>	<p>Chemical oxygen demand measurements of acidified anaerobic reactors: How reliable are laboratory results? J.A. Gutiérrez-González, A. Fernández-Mohedano, F. Raposo (Instituto de la Grasa-CSIC, AD-226)</p>	<p>Fate of antibiotic resistance genes and resistant bacteria under various operating temperatures of anaerobic digestion J.M. Budatala, S. Purkrtova, M.A. Lopez Marin, L. Appels, J. Bartáček (KU Leuven, AD-379)</p>
15:15-15:30	<p>Biofertilizer production by purple phototrophic bacteria in anaerobic wastewater treatment F.J. Delgado, E. Marín, M. Tena, P. Zamora, V. Monsalvo, F. Rogalla (Aqualia, AD-271)</p>	<p>Flow and mixing in a full-scale gas-mixed anaerobic digester P. Wei, W. Uijtewaal, H. Spanjers, M. de Kreuk, J. B. van Lier (Delft University of Technology, AD-329)</p>	<p>Viability of low-cost digesters in decentralized wastewater treatment in the Ecuadorian Amazon: The crucial role of wetlands J. Martí-Herrero, I. Erazo, R. Jimenez, Z. Niño-Ruiz (Universidad Regional Amazonica Ikiam, AD-616)</p>
15:30-16:00	Coffee Break+Poster Session		
16:00-16:30	Proposals for Organization of AD19 (Hall: Üsküdar 1-2-3)		
16:30-17:30	Panel Session (Hall: Üsküdar 1-2-3)		
17:30-18:00	Lettinga Award (Hall: Üsküdar 1-2-3)		

June 5, 2024 (Wednesday)

18:00-18:30

AD18 Awards (Hall: Üsküdar 1-2-3)

18:30-19:00

Closing Session (Hall: Üsküdar 1-2-3)

June 6, 2024 (Thursday)

08:00-18:00

Technical Tour (Departure From/Arrival to Istanbul Congress Center)

POSTER SESSION (Hall: Çamlıca)

AD-16 Anaerobic digestion intensification: Rethinking the sizing of municipal sludge digesters
*R. Moscoviz, **M. Haddad**, M. Rouez, D. Conteau*
(SUEZ)

AD-20 Anaerobic digestion within 10 days: Temperature-phased anaerobic digestion of hydrolyzed sludge
***A. Mágrová**, M.A. Lopez Martin, L. Appels, P. Jeníček*
(University of Chemistry and Technology)

AD-21 Biomethanation using froth-filled reactors
***H. Ding**, Y. Kasaki*
(Osaka Institute of Technology)

AD-24 Hydrothermal pre-treatment for improving BMPs of fossil-based biodegradable plastics
***S. Kang**, S. Im, J. Kang, I. Hwang*
(Korea Institute of Civil Engineering and Building Technology)

AD-37 Effects of a side-stream ammonia stripping treatment on the biogas production of 32 full-scale digesters
***G. Carraro**, H. Oliveira, T.M. Anacleto, L. Šafarič, S.S. Yekta, A. Björn, A. Enrich-Prast*
(Linköping University)

AD-39 Environmental impacts of an anaerobic digestion facility producing volatile fatty acids from waste
*D. Yalcinkaya, I. Owusu-Agyeman, N. Elginöz, Z. Cetecioglu Gurol, **F. Germirli Babuna***
(Istanbul Technical University)

AD-40 Simple modeling of anaerobic digestion for mitigating renewable energy variability in rural areas
***T. Hidaka**, M. Nakamura, F. Oritate*
(Kyoto University)

POSTER SESSION (Hall: Çamlıca)

- AD-42** A novel approach to estimate methanogenic pathways in biogas reactors with stable carbon isotopes
H.R. Oliveira, T.M. Anacleto, G. Carraro, F. Abreu, A. Enrich-Prast
(Centro Federal de Educação Tecnológica Celso Suckow da Fonseca)
- AD-46** Microbial diversity and community resilience in co-fermentation of activated sludge and food waste
N. Perez-Esteban, **S. Astals**, J. Vives-Egea, J. Dosta, M. Peces
(University of Barcelona)
- AD-49** Bioplastics as a new industrial waste subjected to anaerobic digestion
R. Tomczak-Wandzel, B. Szatkowska
(Aquateam COWI)
- AD-53** Comparative metagenomic analysis of anaerobic digestion and co-digestion of biowaste
M. Tobajas, E. Suárez, N.D. Duran, A.F. Mohedano, M.A. de la Rubia
(Universidad Autónoma de Madrid)
- AD-56** Performance of autochthonous and allochthonous inocula for hydrogen production from banana waste
C. da Costa Freire, G.S. Ribeiro, **S.I. Maintinguer**
(UNESP/IPBEN Bioenergy Research Institute)
- AD-57** The impact of pinewood biochar on enhancing biogas production from anaerobic digestion of cheese wastewater
J. Ning, M. Kamali, L. Appels
(KU Leuven)
- AD-59** Mathematical modeling as a tool for the comprehension of anaerobic digestion kinetics
I.M.G. August, A.P. Paulinetti, L.P.P. Batista, A.G.B. Tavares, R. Albanez, S.M. Ratusznei, G. Lovato, **J.A.D. Rodrigues**
(Mauá School of Engineering)

POSTER SESSION (Hall: Çamlıca)

- AD-60** Microbial community structure of anaerobic digester enriched with halloysite nanotube and magnetite
C. Rhee, S. Park, J. Shin, J. Jeon, Y. Lee, S. Shin
(Gyeongsang National University)
- AD-67** Carbon-based materials: Novel electron acceptors for nitrification
S.J. Ponce-Jahen, F.J. Cervantes
(Universidad Nacional Autónoma de México)
- AD-68** The potential of cattle manure to generate CH₄ in anaerobic co-digestion of industrial wastes
C.V. Rodrigues, F.P. Camargo, V.A. Lourenco, I.K. Sakamoto, S.I. Maintinguer, E.L. Silva, M.B.A. Varesche
(University of São Paulo)
- AD-73** Numerical simulation of hydrodynamics and heat transfer in a full-scale anaerobic biodigester
S. Vega, L. Jara, J. Gutiérrez, C. González
(University of Santiago)
- AD-74** Biomethanation employing a pressurised reactor
Y. Kosaki, H. Ding
(Osaka Institute of Technology)
- AD-76** Comparative evaluation of the anaerobic biodegradability and impurity levels of bio-waste streams
J.C.S. Murcia, F. Monlau, B. Grassl, C. Sambusiti
(Université de Pau et des Pays de l'Adour)
- AD-78** Full scale start-up of Poul-AR installation: Pre-treatment of poultry manure enabling mono-digestion
J.M. Carvajal-Arroyo, N. Carlier, M. Picavet, J.W. Bijmagne, A.V. Hoije, B. Colsen, N. Tack, J. de Vrieze
(Colsen)

POSTER SESSION (Hall: Çamlıca)

- AD-79** Antibiotic resistance during anammox treatment of domestic wastewater & landfill leachate in Brazil
*L.A. Vasquez, **J.C. de Araújo**, L. Fernandes, B. Piteira, E. Machado, C. Leal, N. Mladenov, M. Verbyla*
(Universidade Federal de Minas Gerais)
- AD-80** Evaluation of long-term sewage treatment performance using newly developed coconut fiber carrier
***T. Okubo**, N. Kubo, S. Toriumi, R. Kuwabara, T. Watari, V.K. Tyagi, S. Uemura*
(Kisarazu College)
- AD-81** Nitrogen removal performance of mainstream ANAMMOX process based on multiple regulatory strategies
***X. Gu**, X. Li, W. Huang, Y. Huang*
(Suzhou University of Science and Technology)
- AD-83** Expanding the product potential in mixed culture fermentation
***H. Prusak**, N. Gutowska, M. Szczygielka, M. Łężyk, P. Oleskiewicz-Popiel*
(Poznan University of Technology)
- AD-90** The impact of thermal hydrolysis performed at different temperatures on biomethane yield of digestate
***B. Bilgic**, L. Feng, S.J. Horn, M. Sposób*
(NIBIO)
- AD-102** Mechanical properties of extracellular polymeric substances (EPS): Do they explain the physical properties of anaerobic granules?
***C. Gao**, H.H.M. Rijnaarts, D. Sudmalis*
(Wageningen University and Research)
- AD-104** Advancing circular economy: Bio-hydrogen production via dark fermentation process from organic waste
*A. Solimeno, N. Rey-Martínez, **C. Reino-Sanchez**, A. Dominguez-Pardo, M. Poch, A. Reyes, M. Ruiz, C.M. Castro-Barros*
(CETAQUA)

POSTER SESSION (Hall: Çamlıca)

AD-105 Discovering anaerobic digester core microbial communities from biological pretreated sewage
M.A. Holden, Z. Aanderud, J. Hansen, C. Jensen
(Brigham Young University)

AD-109 A novel PVA/Fe/Starch gel-bead biocarrier for enhanced azo dye anaerobic treatment
T. Watari, T.H. Nguyen, T.T. Vo, M. Hatamoto, T. Setiadi, T. Yamaguchi
(Nagaoka University of Technology)

AD-110 In-situ ultrasound cleaning strategy in an anaerobic dynamic membrane bioreactor under super high flux operation
Y. Luo, H. Guo, G. Chen
(The Hong Kong University of Science and Technology)

AD-113 Advanced pre-treatment for waste activated sludge: Low thermal combined with solar radiation
J. Monteiro, S. Duarte, A. Pereira, V. Vilar
(University of Porto)

AD-114 The anaerobic conversion of food waste and fish sludge-biorefinery for the high value-added products
B. Szatkowska, R.T. Wandzel
(Aquateam COWI)

AD-119 Anaerobic digestion of waste activated sludge: Insights from pre- and post-treatment configurations
B.K. Ahn, Y.M. Yun
(Chungbuk National University)

AD-124 Impact of magnetite on anaerobic digestion of swine manure with high ammonia levels
J.S. Lee, Y.M. Yun
(Chungbuk National University)

POSTER SESSION (Hall: Çamlıca)

- AD-125** Improving biohydrogen and biomethane production through addition of combined conductive materials
T.H. Kim, Y.M. Yun
(Chungbuk National University)
- AD-127** Effects of the permeate flux in a dynamic membrane bioreactor for continuous biohydrogen production.
A.K. Pandey, S.H. Kim
(Yonsei University)
- AD-130** A novel two-phase anaerobic digestion biorefinery to produce biogas and biobased chemicals
R. Shinde, S. Barth, J.D. Murphy, D.M. Wall
(University College Cork)
- AD-131** Fermentative hydrogen production from lactic acid: A study on metabolic and taxonomic profile
L. Luo, N. Pradhan
(Hong Kong Baptist University)
- AD-133** Methane yield prediction of anaerobic digestion using in-situ monitoring for deep learning process
G.O.O. Vanegas, Y.A. Lee, H.I. Lee, Y.J. Lim, H.W. Kim
(Jeonbuk National University)
- AD-135** Comparison of thermal pretreatments to enhance degradation of carbamazepine in anaerobic digestion
G. Kor-Bicakci, T. Johnson, C. Eskicioglu
(Bogazici University)
- AD-137** Deciphering the effect of propionic acid on anaerobic digestion of sludge: gas production and microbial community structure
C. Soulard, X. Liu, A. Pauss, **L. André**, T. Ribeiro, S. Guérin, V. Rocher, C. Lacroix, C. Bureau, C. Midoux, O. Chapleur, A. Bize, C. Roose-Amsaleg
(Université d'Artois)

POSTER SESSION (Hall: Çamlıca)

AD-138 Inhibition of anaerobic digestion of urban sewage sludge by sodium propionate: Biogas production and microbial community shift
*J.A. Agumah, X. Liu, L. André, S.G. Rechdaoui, V. Rocher, C. Lacroix, O. Chapleur, A. Bize, C.R. Amsaleg, A. Pauss, **T. Ribeiro***
(Université de technologie de Compiègne)

AD-143 A new integrated device with auto-recycle for the treatment of high ammonia and low C/N wastewater
***X. Li**, H. Yong*
(Suzhou University of Science and Technology)

AD-145 Anaerobic treatment of process water from hydrothermal carbonization of food waste in UASB reactor
***A.F. Mohedano**, R.P. Ipiates, E. Díaz, M. De Los Angeles De La Rubia*
(Universidad Autonoma de Madrid)

AD-157 Insights into chain elongation and microbial community for caproic acid production with mixed inocula
*D.P.P. Gomes, T.S. Santos, F. Motteran, M. Kato, **L. Florencio**, B. Fernandes, S. Machado, S. Gavazza*
(Federal University of Pernambuco)

AD-159 Enhancement of biohydrogen production from fermented acidic cheese whey by lactate-acetate pathway
***E.J.O. Frías**, K.M.M. Páez, G. Buitrón*
(Universidad Nacional Autónoma de México)

AD-163 Biogas potential of waste sludge from an MBR treating textile wastewater at different SRTs
*E. Gocen, E.K. Demir, T. Yilmaz, S.T. Basaran, **E. Sahinkaya***
(Istanbul Medeniyet University)

AD-168 Enhanced biogas production and phosphorus recovery of organic sludge by an AnMBR together with PNA
***G. Guangze**, Z. Shitong, C. Yujie, L.Y. You*
(Tohoku University)

POSTER SESSION (Hall: Çamlıca)

AD-169 Production of high-value-added products by photofermentation using fermented wine lees supplemented with Fe and levulinic acid
*V. Montiel-Corona, **G. Buitrón***
(Universidad Nacional Autonoma de Mexico)

AD-172 VarBUQ: Bayesian uncertainty quantification for anaerobic digestion
***A. Picard**, G. Capson-Tojo, B. Guedj, R. Moscoviz*
(SUEZ CIRSEE)

AD-174 Short-chain fatty acids production from tannery sludge in zeolite-assisted anaerobic process
***G.A. Tuci**, M. Gottardo, P. Pavan, F. Valentino*
(Ca' Foscari University of Venice)

AD-181 Impact of thermo-rheological behaviour on sludge transport in the anaerobic digestion process
*A. Charles, **T. Ribeiro**, M. Oliveira, S. Azimi, V. Rocher, J.C. Baudez, A. Bahrani*
(University of Lille)

AD-192 Effects of hydrodynamic cavitation on waste activated sludge characteristics
***S. Kolbl Repinc**, M. Dular, J. Gostiša, A. Kaurin, M. Petkovšek, B. Stres, M. Zupanc*
(University of Ljubljana)

AD-193 Enhanced recovery of concentrated phosphate from digested effluents through acidification
***M.B. Vanotti**, A.A. Szogi*
(United States Department of Agriculture, Agricultural Research Service (USDA-ARS))

AD-195 Sustainable waste management towards extended biogas production from agro-food wastes
*A. Akhbari, **M.M. Habashy**, A. Björn*
(Linköping University)

POSTER SESSION (Hall: Çamlıca)

- AD-202** Thermophilic anaerobic digestion of sewage sludge with hydrogen addition: Methane production and pH dynamics
C.Y. Kwang, T. Hidaka, Y. Nomura, T. Fujiwara, S. Akimoto, J. Tsubota
(Kyoto University)
- AD-204** Stimulation of methane production through CO₂ enrichment
F. Müller, K. Koch
(TU Munich)
- AD-205** Nutrients recovery from agricultural digestate by sequential pressure driven membranes
F. Rizzoli, D. Bolzonella, A. Grönroos, F. Battista
(University of Verona)
- AD-207** The ammonia stripping treatment to improve the biogas production and recover N at Linköping sewage biogas plant
G. Carraro, K. Smolarczyk, J. Moestedt, R. Sehlén, A. Enrich-Prast
(Linköping University)
- AD-215** Hybrid modelling of dynamic anaerobic digestion process with neural networks and BMP measurements
A. Meola, S. Weinrich
(DBFZ Deutsches Biomasseforschungszentrum gGmbH)
- AD-220** Assessment of biogas production potential of chemically pretreated rice straw
S. Dahal, S. Gurung, **A. Ghimire**
(Kathmandu University)
- AD-228** Development of a new integrated approach to assess product qualities and environmental impact of anaerobic digestion
M. Pérémé, **J.P. Steyer**, J. Jimenez
(INRAE-LBE)

POSTER SESSION (Hall: Çamlıca)

AD-229 Alkaline treatment of the solid fraction of digestate and agricultural by-products for enhanced biogas recovery
C. Romio, H.B. Møller, M.V.W. Kofoed
(Aarhus University)

AD-230 Microbial community and granule growth dynamics during de novo granulation: How wastewater composition affects this?
C. Gao, A. Doloman, E. Alaux, D.Z. Sousa, H.H.M. Rijnaarts, D. Sudmalis
(Wageningen University and Research)

AD-235 Sulfur compounds in anaerobic digestion: Impact on methane yield and microbial community
P. Ghofrani-Isfahani, A. Kovalovszki, J. Johansen, I. Angelidaki
(Technical University of Denmark)

AD-239 Production of biohydrogen in batch systems from the co-digestion of different organic wastes
D.V. Villalobos-Vázquez, M. Vázquez-López, I. Moreno-Andrade
(Universidad Nacional Autónoma de México)

AD-242 Rheological properties of agricultural digestate
C. Romio, H.B. Møller, **A.J. Ward**
(Aarhus University)

AD-248 Co-fermentation of wine lees and waste activated sludge: Effect of pH and wine lees type
A. Lanfranchi, C. Cavinato, E. Trably
(INRAE)

AD-250 Mixed flow reactor improves performance of the mainstream partial nitrification-anammox over upflow reactor
P.Y. Takeda, C.T. Paula, A. Do Vale Borges, A.E. Shibata, L.C. Grangeiro, M.H.R.Z. Damianovic
(University of São Paulo)

POSTER SESSION (Hall: Çamlıca)

AD-251 Categorizing reactor types and effects in rotary generators of hydrodynamic cavitation for waste sludge treatment
M. Blagojević, S. Kolbl Repinc, B. Bizjan, G. Rak
(University of Ljubljana)

AD-252 Methane yield response to pretreatment is dependent on substrate chemical composition
A. Enrich-Prast, B.K. Suzuki, A. Björn, S.S. Yekta, L. Masuda, V.P. de Oliveira, T. Anacleto
(Linköping University)

AD-254 Powdered and granular anaerobic sludge as biosorbent of copper- and zinc-rich wastewaters
A.B.S. Aguiar, J.M. Costa, G.E. Santos, G.P. Sancinetti, **R. Rodriguez**
(Federal University of Alfenas)

AD-255 Assessing phytotoxicity of anaerobic digestate from different sources
T. Anacleto, H.R. Oliveira, G. Carraro, A. Björn, S.S. Yekta, L. Šafarič, É. Pinheiros, A. Enrich-Prast
(Universidade Federal do Rio de Janeiro)

AD-257 Effect of trace elements supplementation on the mesophilic anaerobic digestion of food waste
A. Halwai, A. Thakali, **A. Ghimire**
(Kathmandu University)

AD-261 Mesophilic versus thermophilic digestion of municipal sludge in the presence of polypropylene microplastics
O. Altuntas, F.D. Sanin
(Middle East Technical University)

AD-262 Nutrient recovery from digestate using gas-permeable membrane technology and struvite formation
B. Riaño, **B.M. Salces**, V. Oliveira, C.D. Ferreira, M.C.G. González
(Agricultural Technological Institute of Castilla y León)

POSTER SESSION (Hall: Çamlıca)

- AD-263** Mixed culture biotechnology for the selective production of ethanol in non-sterile environments
***Á. Estévez**, R. Kleerebezem, R. Ganigué
(Ghent University)*
- AD-264** A new diffusion-driven flat-sheet membrane bioreactor for precise oxygen dosing in microaeration research
*M. Zhou, **J.N. Nihuga**, L.T. Angenent, J.G. Usack
(University of Tübingen)*
- AD-265** Characterization of refractory organic matter from sludge treated by hydrothermal carbonization: Sludge type and temperature influence
*S. Faixo, J.C. Garrigues, S. Mazeghrane, **M. Haddad**, G. Gaval, E. Paul
(Université de Toulouse)*
- AD-266** Bench-scale verification of in-situ biomethanation technology using a 2000L scale digester in a waste water treatment plant
***S. Akimoto**, J. Tsubota, I. Angelidaki, T. Hidaka, T. Fujiwara
(Osaka Gas Co., Ltd.)*
- AD-273** Impact of sulfate, salt, and redox mediator on the anaerobic decolorization of the azo dye Reactive Black 5
*J.K.S.O. Júnior, A.B. Dos Santos, M.E.R. Da Silva, **P.I.M. Firmino**
(Federal University of Ceará)*
- AD-276** Performance of AnMBR equipped with external ultrafiltration membrane on the treatment of raw beet vinasse
*B.E. Bueno, **A.L.M. Brito**, M. Zaiat, J.B. Van Lier
(University of Paraíba State)*
- AD-279** Tailoring fermentation pathways during the anaerobic co-valorization of food waste and primary sludge to produce green energy and platform chemicals
***A. Prats**, A. Ríos-Mejía, J.P. Gallardo-Mejías, Á. Robles, M.V. Ruano, G. Capson-Tojo
(Universitat de València)*

POSTER SESSION (Hall: Çamlıca)

AD-283 Towards comparability of VFA measurements in anaerobic digestion: Linearity tests in synthetic medium with titration and photometry
A. Ruf, S. Krause, C. Schaum
(Bundeswehr University Munich)

AD-285 Micro-aeration to improve oleate degradation in bioreactors
C.P. Magalhães, **M.S. Duarte**, M.A. Pereira, A.J.M. Stams, A.J. Cavaleiro, M.M. Alves
(University of Minho)

AD-286 Environmental life cycle assessment of caproic acid recovery from brewery waste streams
S. Shrestha, M. Abdullah, L. Raskin, S. Skerlos
(University of Michigan)

AD-287 Anaerobic digestion as a core technology in addressing the global sanitation crisis: Challenges and opportunities
X. Fonoll, R. Starostka, L. Raskin, G. Zeeman, F. de los Reyes III, J. Waechter, D. Yeh, T. Radu
(University of Texas at Austin)

AD-289 Application of one- and two-phase anaerobic processes for winery wastewater treatment and biogas production
F.R. Chavez, M.L. Reyes, **G. Moreno**, G. Buitrón
(Universidad Nacional Autónoma de México)

AD-298 Challenges in cocoa waste management: Exploring the potential of mucilage as a sustainable resource in Colombia
M.G. Jácome, J. Navarro, J. Nieto, **L. Castro**, H. Escalante
(Universidad Industrial de Santander)

AD-301 Retention of conductive materials using magnetic forces to overcome ammonia inhibition in anaerobic digestion
K. Ueno, G. Yoshida, M. Farghali, M. Iwasaki, Y. Sakai, I. Ihara
(Kobe University)

POSTER SESSION (Hall: Çamlıca)

- AD-302** Bio-based fertiliser from anaerobic digestate derived from red meat processing industry by-products
F. Tessele, *K. Ferraro, E. Bertizzolo, I. Kininmonth*
(*Tessele Consultants*)
- AD-303** CO₂ recovery from anaerobic digestion: Application, technologies and potential in the Australian red meat industry
F. Tessele, *K. Ferraro, L. Marinho*
(*Tessele Consultants*)
- AD-305** Systematic microbiome data analysis: Identifying potential reproducible early warning indicators for ammonia inhibition
J. Cortez-Cervantes, *I. Moreno-Andrade, P. Cervantes-Avilés, J. Carrillo-Reyes*
(*Universidad Nacional Autónoma de México*)
- AD-306** Iron nanoparticles application for increasing volatile fatty acid production via anaerobic digestion
N. Hoffmann, *C. Vergara, G. Ciudad, G. Tortella, G. Martins, O. Rubilar*
(*Universidad de La Frontera*)
- AD-309** Electrical stress and acid orange 7 synergistically clear the blockage of electron flow in the methanogenesis of low-strength wastewater
Z. Guo, *W. Liu*
(*Jiangsu University of Science and Technology*)
- AD-311** Enhancing anaerobic membrane bioreactor performance for liquid dairy biomass treatment using conductive materials
M. Miyahara, *G. Yoshida, M. Farghali, M. Iwasaki, I. Ihara*
(*Kobe University*)
- AD-314** Enhanced direct gaseous CO₂ fixation into higher bio-succinic acid production and selectivity
W. Wang, *W. Wu*
(*Research Center for Eco-Environmental Sciences*)

POSTER SESSION (Hall: Çamlıca)

- AD-315** Towards the production of health-safe single cell proteins from fermentation gas in urban bio-refineries
J.P. Gallardo-Mejias, A. Prats, A. Ríos-Mejía, L.P. Alcañiz, M.V. Ruano, A. Robles
(Universitat de València)
- AD-321** Global analysis of AD microbiomes reveals the impact of experimental conditions and synthetic waste on ecosystem stability
C. Keating, A. Trego, V. O'flaherty, U.Z. Ijaz
(Durham University)
- AD-323** Identification of interactions in substrate mixtures for hydrogen production by dark fermentation
L. Perat, R. Escudié, N. Bernet, C. Richard, M. Jégoux, M. Juge, E. Trably
(Université de Montpellier)
- AD-324** Biological methanization of CO₂ with external hydrogen – Pilot-scale experiences
D. Pokorna, Z. Varga, J. Zabranska
(University of Chemistry and Technology)
- AD-327** Anaerobic digestion of vinasse in two different configurations of pilot scale reactors
V. Del Nery, I. Alves, M.H.Z. Damianovic, M. Araujo Jr, E.C. Pires
(University of São Paulo)
- AD-335** Microbial diversity in immobilized biofilm from packed bed anaerobic bioreactor for biogas production
V.N. Hubenov, G.D. Stoyancheva, M.D. Kaleva, L.V. Kabaivanova
(Bulgarian Academy of Sciences)
- AD-337** Advanced anaerobic digestion yields higher biogas generation & higher throughput at Tarnow WWTP, Poland
A.M. Niedzielska, J. Mukawa, J. Kosciukiewicz, **A. Sahu**
(Cambi Group AS)

POSTER SESSION (Hall: Çamlıca)

- AD-341** Upcycling AD by-products to single-cell proteins: Which process alternatives?
F. Di Benedetto, *S. Cantera, R. Muñoz, A. Turolla, E. Ficara*
(Politecnico di Milano)
- AD-344** Increasing CH₄ productivity in anaerobic digesters by addition of CO₂ – The use of stable isotope techniques to identify the mechanisms
D. Polag, *F. Muller, K. Koch, M. Lebuhn, M. Weigoldt, F. Keppler*
(Heidelberg University)
- AD-350** Towards an integrated model for AnMBR systems
V. Sandoval-García, *M.V. Ruano, Á. Robles*
(Universitat de València)
- AD-351** New decision support system for biogas and electricity forecast in wastewater treatment plants
*G. Martins, ***M.S. Duarte***, P. Oliveira, A. Dias, F. Marcondes, M.A. Pereira, P. Novais*
(University of Minho)
- AD-354** Anaerobic digestion of sewage sludge by using novel two-stage bioreactor for maximizing biomethane, system stability and synergy development
M. Ali, *J. De Vrieze, V. Lobanov*
(Gent University)
- AD-357** Evaluation of the relationship between voltage and microbial yield in a bioelectrochemical reactor for optimization of methane production
V. Ahmadi, *N. Aryal*
(University of Southeastern Norway)
- AD-360** Insights on the modeling of agricultural anaerobic digestion plants at full-scale
T. Segura, *P. Zanoni, C. Lucet-Berille, U. Brémond, R. Escudié, J.P. Steyer*
(Université de Montpellier)

POSTER SESSION (Hall: Çamlıca)

- AD-361** Modelling the influence of mobile genetic elements and microbial communities on resistomes in manure anaerobic digestion
D.F. Orozco, *N. Cicek*
(*University of Manitoba*)
- AD-374** Enhancing valorization potential of digestate through nitrogen reduction via aeration and hydrodynamic cavitation: A process optimization approach
J.K. Nayak, *V.V. Ranade*
(*University of Limerick*)
- AD-375** Anaerobic codigestion of flotator sludge and activated sludge from the poultry slaughtering and processing industry
K.C. Fagnani, S.D. Gomes, E. Rodio, G.F. De Souza, D.C. Zenatti, R. Sequinel
(*Western Paraná State University*)
- AD-376** Innovative process for the valorization of the organic fraction of municipal solid waste through the production of biohydrogen via lactate-driven dark fermentation
C. MartínezI, R. Muñoz, P. Huerta, M.T. Simorte, I. Sanz, O. García-Depraect
(*University of Valladolid*)
- AD-380** Bio-synergistic valorisation of residual forage biomass: Butyric acid and biogas production from de-proteinated biomass
P. Pooja, *C. Nzeteu, V. O'flaherty, O. McAuliffe*
(*University of Galway*)
- AD-382** Fate of mobilized colistin resistance genes with increasing concentration of last resort antibiotic in anaerobic membrane bioreactors
H. Gohwala, *M. Saldana, A.L. Smith*
(*University of Southern California*)
- AD-383** Methane yield database
S. Kolbl Repinc, B. Murovec, B. Stres
(*University of Ljubljana*)

POSTER SESSION (Hall: Çamlıca)

- AD-384** Microplastics in anaerobic sludge digestion following pancreatin enzyme disintegration
E.N. Guzel, *F.D. Sanin*
(Middle East Technical University)
- AD-388** Kinetics of anaerobic bacteria in micro-aerated anaerobic digestion
K.T.M. Ho, *P.H.H. Lee*
(Imperial College London)
- AD-391** Influence of anaerobic digestion on ibuprofen, diclofenac, carbamazepine, caffeine and atenolol removal
E.W. Nogueira, *M.N. de Araujo*, *C. Comparato*, *E.G.F. de Rezende*, *A. Ogura*, *G. Grosseli*, *P.S. Fadini*, *M. Zaiat*
(University of São Paulo)
- AD-393** Unravelling anaerobic ethanol metabolic pathways: Insights into operational modes and powdered activated carbon
B. Du, *Y. Wang*, *G. Wu*
(University of Galway)
- AD-399** Codigestion of microalgae biomass and vinasse in two-stage anaerobic reactors: Performance and microbial dynamics
A.A.D. Pinheiro, *E.M. Silva*, *D.C.P. De Oliveira*, ***B.S. Magnus***, *F. Motteran*, *M.T. Kato*, *L. Florencio*, *W.R.M. Leite*
(Federal University of Pernambuco)
- AD-400** Scientific advancements in psychrophilic anaerobic digestion: Biochar's role from laboratory to household implementation
J. Jaimés-Estévez, *J. Martí-Herrero*, *H. Escalante*, ***L. Castro***
(Universidad Industrial de Santander)
- AD-401** Naphthalene inhibition on methanogenesis productivity depending on mixed substrate ratio
Y.J. Lim, *Y.A. Lee*, *G. Ortiz*, *H.W. Kim*
(Jeonbuk National University)

POSTER SESSION (Hall: Çamlıca)

- AD-402** Effect of perfluorooctane sulfonate (PFOS) on methane production of anaerobic co-digestion
H.I. Lee, *Y.A. Lee, G. Ortiz, J.Y. Nam, H.W. Kim*
(Jeonbuk National University)
- AD-407** Semi-continuous co-digestion of a lignocellulosic waste corncob with digestate: Effect of pretreatment
*T.C. Caglar, **T.H. Erguder***
(Middle East Technical University)
- AD-408** Sustainable reduction of the carbon footprint in Tumaco through the production of biogas from organic waste
*V. Osorio-Gómez, **L.S. Cadavid-Rodríguez**, A.A. Cano-Londoño*
(Universidad Nacional de Colombia Sede Palmira)
- AD-413** Methane emissions from biogas upgrading plants
*L. Knoll, **J. Matlach***
(DBFZ Deutsches Biomasseforschungszentrum GmbH)
- AD-417** Presence and fate of micropollutants during anaerobic digestion
E.K. Sakinmaz, *D.F. Sanin*
(Middle East Technical University)
- AD-422** Development of an extended two-step process model for simulation of dynamic biogas production in agricultural anaerobic digestion plants
M. Winkler, *S. Weinrich*
(DBFZ Deutsches Biomasseforschungszentrum GmbH)
- AD-424** In situ biomethanation enhances anaerobic digestion biodegradation capacities
M. Mahieux, *L. Braga Nan, C. Richard, Q. Aemig, J.P. Delgenès, E. Trably, R. Escudé*
(ENGIE)

POSTER SESSION (Hall: Çamlıca)

- AD-427** Biochemical methane potential (BMP) of anaerobic co-digestion of sugarcane-livestock waste
A.B.S. Aguiar, M.P.C. Volpi, G. Mockaits, R.P. Rodriguez, B.S. Moraes
(University of Campinas)
- AD-433** Fouling behaviour/control of free-living microorganisms in anaerobic membrane bioreactors
Z. Zhou, Y. Yao, F. Meng
(Southwest University)
- AD-439** Cheese whey pilot scale fermentation for VFA production; the key role of pH and HRT
E.R. Cal, L. Besga, T.F. Arévalo, **E. Aymerich**
(Universidad de Navarra)
- AD-440** Application of a high-rate reactor for biogas production from the integration of sugarcane-livestock waste
A.B.S. Aguiar, R.P. Rodriguez, B. De Souza Moraes
(University of Campinas)
- AD-441** Enhancing anaerobic biodegradation of bio-based compostable bags with domestic food waste through pretreatment integration
S. Angelini, A. Gallipoli, A. Gianico, D. Montecchio, P. Cerruti, M.L. Di Lorenzo, G. Scarinzi, G. Santagata, C.M. Braguglia
(Water Research Institute, National Research Council (CNR))
- AD-448** Unveiling the myths behind the biochar role in anaerobic digestion
G. Yavena, P. Ghofrani-Isfahani, A. Ziomas, I. Angelidaki
(Technical University of Denmark)
- AD-458** Anaerobic acidogenesis of a lignocellulosic feedstock: Just limited by the hydrolysis step?
E.J. Páez, A. Serrano, J. Purswani, Á.T. Reyes, F.G. Feroso
(University of Granada)

POSTER SESSION (Hall: Çamlıca)

- AD-464** Fermentation and methanization of cacao pod husks
F. de Jesús Morgado-León, S. Gonzalez-Martinez
(Universidad Nacional Autónoma de México)
- AD-465** Two-phase mixture evaluation of a UASB Reactor for treating domestic wastewater using CFD
J.I. Troian, L.L. Beal
(University of Caxias do Sul)
- AD-469** Optimization of biogas production from solid tuna waste through thermal pretreatment
A.R. Montes, N.B. Penabad, C. Kennes, M.C. Veiga
(University of A Coruña)
- AD-478** Hyperthermophilic anaerobic digestion of lignocellulosic biomass for enhanced fiber degradation and biogas production
M.P. Kozera, A.J. Ward, K. Bester, H.B. Møller
(Aarhus University)
- AD-485** FISH-TAMB guided microbes isolations and syntrophic insights in anaerobic microbiome
G. Giangeri, S. Campanaro, I. Angelidaki
(Technical University of Denmark)
- AD-487** Fish waste as the main substrate for enhance biofilm plug-flow reactor performance
R. Wahid, J. Walter, E. Govasmark
(Antec Biogas AS.)
- AD-488** Biological removal of nitrogen, sulfur, and organic matter: A comparative perspective
L. Guerrero, C. Huiliñir, A. Barahona
(Universidad Técnica Federico Santa María)

POSTER SESSION (Hall: Çamlıca)

- AD-489** Behavior and kinetic evaluation of an anaerobic filter operating with urban wastewater at room temperature
L. Guerrero, A. Barahona
(Universidad Técnica Federico Santa María)
- AD-491** Identification of key microorganisms responsible for low-thermal pre-treatment of food waste for methane fermentation
F. Gamon, H. Byliński, M. Szopińska, A. Luczkiewicz, S.F. Książek
(Gdansk University of Technology)
- AD-495** Flow cytometry to identify methanogenic communities in different anaerobic digestion ecosystems
J.W.L. Van Landuyt, L. Depaz, N. Boon, J. De Vrieze
(Universiteit Gent)
- AD-499** Nanotechnology boost production of clean energy via nanoparticles addition in anaerobic digestion
J.C. De Castro, E.M. Resende, I.N. Taveira, F. De Avila Abreu, A. Enrich-Prast
(Universidade Federal do Rio de Janeiro)
- AD-500** Influence of oxidation-reduction potential on polyhydroxyalkanoate production from winery effluents
H.C. Lavidá, V. Montiel, G. Buitrón
(National Autonomous University of Mexico)
- AD-504** Ultrasonication pre-treatment as a tool to boost COD solubilization and biogas production in anaerobic digestion
M. Biasiolo, F. Mazzolini, C. Giotto, C. Cavinato
(Ca' Foscari-University of Venice)
- AD-505** Anaerobic vs. aerobic wastewater treatment: A comprehensive comparison of pharmaceutical contaminant removal
M.N. de Araujo, G.M. Grosseli, C.N. Comparato, E.W. Nogueira, E.G.F. De Rezende, L.T. Fuess, M. Zaiat, P.S. Fadini
(University of São Paulo)

POSTER SESSION (Hall: Çamlıca)

- AD-508** Macroalgae valorization into volatile fatty acids: Influence of pH and organic loading rate
J.C. Cardoso, *G. Eibes, M. Carballa*
(*University of Santiago de Compostela*)
- AD-509** Valuable compounds in anaerobic digestate from a semi-continuous reactor utilizing olive mill solid wastes
J.C. Cardoso, *G.R. Gutiérrez, F.G. Feroso*
(*Universidad Pablo de Olavide*)
- AD-510** Enhancing biogas production through swine manure and poultry litter co-digestion
D.C. Tapparo, S.P. Neto, B. Venturin, C.E. Hollas, R.L.R. Steinmetz, A. Kunz
(*Embrapa Suínos e Aves*)
- AD-512** Valorisation of dairy waste for the volatile fatty acid production
A.C.V. Montoya, *A. Bartle, C. Nzeteu, S. O'connor, V. O'flaherty*
(*University of Galway*)
- AD-516** Assessing the biogas potential of various industrial wastewaters: A study on BMP tests and microbial community structure
M.E. Lee, J. Shin, J.M. Triolo, Y. Choi, J. Cha, H. Park, J. Chung, C. Lee, S.G. Shin
(*Gyeongsang National University*)
- AD-518** Forging green energy and valuable metals in anaerobic digestion: A dynamic methanogen/sulfate-reducer dance
P.H. Zadeh, G. Collins, F. Abram, F.G. Feroso
(*Instituto de la Grasa-CSIC*)
- AD-519** Interrelation of EPS and metal content in a UASB under cobalt continue dose
E. Caroca, R. Buzier, S. Simon, G. Guibaud, S. Zahedi, F.G. Feroso
(*Instituto de la Grasa-CSIC*)

POSTER SESSION (Hall: Çamlıca)

AD-524 Anaerobic dynamic membrane bioreactors for high-strength domestic wastewaters treatment under high fluxes
A.L.M. Brito, *W.S. Lopes, A.L.F. De Brito, A.C.S. Muniz*
(University of Paraíba State)

AD-525 Effect of furfural on biomethane production from xylose
S.C. Araújo, L.F. Alcântara, E.M. Silva, S.T. Veras, J.C. Rodrigues Júnior, M.T. Kato, L. Florencio
(Federal University of Pernambuco)

AD-527 Anaerobic digestion of swine manure improved with oat husk derived biochar in UASB digester
J.P. Díaz, *F. Gutierrez, C. Huiliñir, L. Hernández*
(Universidad de Santiago de Chile)

AD-534 A new UASB reactor design + AeMBR for sewage treatment.
M. Fernández, D.F. Marin, E. Lara, F. Rogalla, Z. Arbib
(Aqualia)

AD-537 NPHarvest – Economic recovery technology for nutrients in manure and digestate
J.U. Kaljunen
(Aalto University)

AD-539 GC-IMS ability to analyse target and non-target compounds of relevance to anaerobic digestion and biorefineries
A.P.G. De Oliveira, *A. Henley, A. Iannetelli, T. Patterson, J. Reed, S. Esteves*
(University of South Wales)

AD-542 Activated carbon: A promising packing material for effective siloxanes biodegradation from biogas
C. Pascual, D. Antolín, S. Cantera, R. Muñoz, R. Lebrero
(University of Valladolid)

POSTER SESSION (Hall: Çamlıca)

AD-545 Evaluating the energy potential and presence of metals, pathogens and antibiotic resistance genes in Andalusian agro-industrial by-products
*J.M Espinosa, **C. Martín**, M.L Sanchez, V.M Ramos, F.G. Feroso, S. Zahedi*
(Spanish National Research Council)

AD-546 Micropollutants and energy potential in different industrial exploitation of pigs in Andalusian (Southern Spain)
***C. Martín**, J.M Espinosa, M. Pintado, V. Ramos, F.G. Feroso, S. Zahedi*
(Spanish National Research Council)

AD-550 Evaluating the effect of feedstock and electrodes' pretreatments on bioelectrochemically improved anaerobic digestion process
***M.G. Montolio**, D. Molognoni, P. Bosch-Jimenez, M. Espejo, K. Herkendell, G. Bouteau, G. Karakachian, E.B. Camps*
(Leitat Technological Center)

AD-552 Effect of synthetic melanoidins on the short-chain volatile acids and solvents production in dark fermentation
*C.N. Comparato, M.N. de Araujo, **M. Damianovic**, A. Silva*
(University of São Paulo)

AD-553 Dual role of citric acid: Enhancing CO₂ conversion to CH₄ and influencing zero-valent iron reactivity
***D. Constantinou**, I. Vyrides*
(Cyprus University of Technology)

AD-556 Assessing different packing materials to achieve high-efficiency biological methanation in trickle-bed reactors
***A.D. Chatzis**, M. Gaspari, K. Kontogiannopoulos, D. Sanguineti, G. Zampieri, L. Treu, S. Campanaro, A. Zouboulis, P. Kougiass*
(Aristotle University of Thessaloniki)

AD-557 Bio-hydrogen production from winery wastewater: Influence of the temperature, pH, and substrate-inoculum ratio
***Y. Lauzurique**, M. Medina, J. Pagés-Díaz*
(Universidad de Santiago de Chile)

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- AD-559** Evaluation of the anaerobic digestion of winery wastewater: Effect of fly ash in anaerobic sequencing batch reactor
Y. Lauzurique, A. Meza, C. Huiliñir, R. Salazar, G. Vargas- Morales
(Universidad de Santiago de Chile)
- AD-560** Kinetic assessment of mercury chloride inhibition in anaerobic biomass for micropollutant sorption experiments
E.G.F. De Rezende, M.N. Araujo, T.V.R. Soeira, G.H.D. De Oliveira, M. Zaiat, R. Ribeiro
(University of São Paulo)
- AD-561** Comparative analysis of wastewater-based and lab-defined growth mediums for operation of hydrogenotrophic methanogenic reactors
W.R.M. Leite, **B.S. Magnus**, T. Gehring, R. Rad, M. Lubken, L. Florencio, U.P. Apfel, M. Wichern
(Federal University of Pernambuco)
- AD-564** Biomethane production from sugarcane vinasse in São Paulo state: An energetic and environmental perspective
R.C. Rogeri, **M.N. Araújo**, L.C. Grangeiro, L.T. Fuess
(University of São Paulo)
- AD-567** The dual effects of micro-aeration anaerobic digestion (MAAD) in enhancing sulfide suppression and methane production of saline waste activated sludge
R. Zhang, Z. Wang, L.Y.L. Ho, A.M. Wibowo, T.Y.C. Lam, N.J.D. Graham, P.H. Lee, G.Y.A. Tan
(City University of Hong Kong)
- AD-568** Dry anaerobic digestion of high solid organic wastes: Effect of feedstock composition on percolate dynamics
N.E. Chukwuekezie, S. Wagland, P. Andre, T. Ribeiro, Y.B. Fernández
(Cranfield University)
- AD-571** Microbial community composition and assembly in anaerobic co-digestion of food waste
S. Smith, **F. de los Reyes III**
(North Carolina State University)

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- AD-577** A novel photo-anaerobic bioprocess mediated by purple phototrophic bacteria
M. Pezzuto, R. Lo Coco, D. Bolzonella, N. Frison
(University of Verona)
- AD-580** Methane production via anaerobic digestion assisted with Fe₃O₄ supported on granular activated carbon
L.H. Alvarez, M.A. Armenta, M. Orrantia, V. Burboa-Charis, D. Serrano, E. Meza
(Instituto Tecnológico de Sonora)
- AD-582** Exploring hydraulic and organic overload effects in a xylose-fed SBR
J. Iglesias-Ribó, M. Mauricio-Iglesias, M. Carballa
(Universidade de Santiago de Compostela)
- AD-589** The single and combined effect of anaerobic digestate and chemical fertilizer on maize production and soil health
C. Nikolaidou, M. Mola, S. Papakostas, V.G. Aschonitis, I. Milonas, N. Monokrousos, **P.G. Kougias**
(Soil and Water Resources Institute)
- AD-593** Association of advanced oxidative processes and biological anaerobic processes for the treatment of a synthetic textile effluent
B. Bernardino, M. Zaiat, R. de Brito, **B.F. Vieira**, E.B. Azevedo
(University of São Paulo)
- AD-594** Impact of undissociated acids on microbial maintenance in anaerobic fermentation systems: A bioenergetic description
J. Rodríguez R., M. Patón, T. Allegue
(Khalifa University)
- AD-600** Feasibility of two-phase anaerobic digestion with glycerol fermentation to enhance pharmaceuticals biodegradation in wastewater treatment plants
R.B. Carneiro, E.W. Nogueira, G.M. Gomes, M. Zaiat, Á.J.S. Neto
(University of São Paulo)

POSTER SESSION (Hall: Çamlıca)

- AD-606** Harnessing microbial power: Fully automated bioelectrochemical system for methane production
B. Oden, F.E. Kutlar, A. Ghaderikia, B. Evren, Y.D. Yilmazel
(Middle East Technical University)
- AD-611** The influence of inoculum source on the digestibility of dairy industry wastewater
B. Cicekalan, S. Shitreh, B. Cavdar, A. Yuksekdog, S. Anacak, M. Tug, A. Musluoglu, H. Guven, I. Koyuncu, M.E. Ersahin, H. Ozgun
(Istanbul Technical University)
- AD-613** Methane and hydrogen production with bioelectrochemical anaerobic digestion using stainless steel mesh cathode
F.E. Kutlar, **Y.D. Yilmazel**
(Middle East Technical University)
- AD-615** Prevalence of antimicrobial resistance among Nordic biogas plants
L. Šafarič, G.B. Kraychete, S.S. Yekta, M. Martí, O. Magnusson, G. Carraro, T.M. Anacleto, H.R. Oliveira, A. Björn, R.C. Picão, A. Enrich-Prast
(Linköping University)
- AD-617** Olive mill solid waste valorisation: Natural textile dye and biogas production
F. Passos, S. Correa, M. Riba-Moliner, I. Ferrer
(Universitat Politècnica de Catalunya-BarcelonaTech)
- AD-619** Effect of thermal hydrolysis on anaerobic digestion of various municipal and industrial organic waste streams
A. Azizi, E. Koupaie
(Queen's University)
- AD-624** Microwave pre-treatment successfully unlocks the biogas value of dairy industry sludges
C. Nzeteu, S. O'connor, A. Villa, A. Bartle, V. O'flaherty
(University of Galway)

POSTER SESSION (Hall: Çamlıca)

- AD-626** Simultaneous biogas and biofertilizer production via codigestion of aquaculture waste and food waste
C. Wang
(National University of Singapore)
- AD-628** Acid whey chain elongation using anaerobic dynamic membrane bioreactor and continuous liquid-liquid extraction and in-situ membrane separation technologies
D. Kitt, X. Zhang, S. Shrestha, D. Speer, A. Tuteja, L. Raskin
(University of Michigan)
- AD-629** Renewable natural gas production via biomethanation in a membrane biofilm reactor
H. Nielsen, T. Lippert, B. Wang, Y. Lin, L. Raskin, K. Zhu, G. Wells
(Northwestern University)
- AD-631** Evaluation of alkalinity and temperature decreases in an anammox reactor treating anaerobically pre-treated sewage, and impact of heterotrophic denitrifiers in the stability of the process
A.E. Shibata, P.Y. Takeda, G.L. Giglio, **M.H.R.Z. Damianovic**
(University of São Paulo)
- AD-645** Quantifying the heating potential of methanotrophs for application within decentralised anaerobic wastewater treatment technologies
T. Herzyk, T. Gómez-Borraz, R. Gonzalez-Cabaleiro, W.T. Sloan
(University of Glasgow)
- AD-651** Producing butyrate at high selectivity and titre from lactate-rich streams in a thermophilic process
A. Regueira, M. Sakarika, A. Bosmans, D. Benson, R. Ganigué
(Universidade de Santiago de Compostela)
- AD-653** Microbiota involved in the anaerobic digestion of kraft pulp mill biosludge pre-treated with thermal hydrolysis
C. Callejas, N. Goycochea, I. López, L. Borzacconi
(Universidad de la República)

POSTER SESSION (Hall: Çamlıca)

- AD-655** Implementation of industrial biorefinery fed by “certified” sewage sludge, agri-food waste and OFMSW
*E. Blumenthal, **J.G. Camejo**, N. Frison, T. Amati, A. Foglia, A.L. Eusebi, F. Fatone*
(Università Politecnica delle Marche)
- AD-657** Organic matter removal in anaerobic digestion of landfill leachate, agroindustrial and municipal wastewaters
***L.G.Z. Gotardo**, G.H. Pedroso, L.G. Marques, J.T. Gotardo, S.D. Gomes*
(Western Paraná State University)
- AD-658** Artificial intelligence-aided meta-research on hot topics and future trends in anaerobic digestion
***A. Elsayed**, M.S. Zaghoul, E. Elbeshbishy*
(Toronto Metropolitan University)
- AD-666** Enhancement of biogas yield by anaerobic co-digestion of landfill leachate and various wastewaters
*G.H. Pedroso, L.G. Marques, L.G.Z. Gotardo, **J.T. Gotardo**, S.D. Gomes*
(Western Paraná State University)
- AD-667** CO inhibitory effects on glucose acidogenic fermentation and acetoclastic methanogenesis
***P. Postacchini**, A. Grimalt-Alemany, P. Ghofrani-Isfahani, L. Menin, F. Patuzzi, M. Baratieri, I. Angelidaki*
(Free University of Bolzano)
- AD-672** Co-digestion of glycerol with domestic sewage enhances nonylphenol ethoxylate removal and methane production in expanded granular sludge bed reactor
*E.L. Volpato, **H.S. Dornelles**, E. Silva, M.B.A. Varesche*
(University of São Paulo)
- AD-675** Valorization of poultry farm wastes through anaerobic digestion
*G. Zinola, A. Martínez, V. Takata, A. Del Pino, G. Arrarte, Y. Figueroa, C. Stoletniy, J. Posada, P. Zunino, A. Umpierrez, **C. Etchebehere***
(Biological Research Institute Clemente Estable)

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- AD-679** Anaerobic treatment of soapstock splitting wastewater under high sulfate/COD ratio
S. Sertgumec, M. Altınbas
(Istanbul Technical University)
- AD-684** Maximizing polyhydroxyalkanoates production from mixed volatile fatty acids and acetate in urban biorefineries
A. Ríos-Mejía, A. Prats, J.P. Gallardo-Mejías, Á. Robles, M.V. Ruano, L. Borrás
(Universitat de València)
- AD-685** Investigating PFAS accumulation in anaerobic biosolids via targeted and non-targeted characterization
C. Sawaya, B.F. Costa, A.L. Smith
(University of Southern California)
- AD-688** Piloting AnMBR for resource recovery from decentralized systems and sewage mining
N. Morales, M. Elvira, R. Serna-García, P. Sanchis-Perucho, J.R. Vázquez-Padín, F. Rogalla, A. Bouzas, A. Seco, **Z. Arbib**
(Aqualia)
- AD-689** Energy balance of municipal wastewater treatment plant sludge treatment - systematic benchmarking approach and lessons learnt
O. Beneš, R. Rosenbergová, P. Chudoba, M. Srb, P. Sýkora, J. Rosický, P. Válek, **P. Jeníček**
(Institute of Chemical Technology Prague)
- AD-691** Exploring the anaerobic bioconversion of food waste and sludge: The pivotal role of trace elements
A. Gallipoli, **F. Angelini**, S. Angelini, A. Gianico, D. Montecchio, B. Tonanzi, C.M. Braguglia
(Water Research Institute, CNR-IRSA)
- AD-695** Effect of redox mediator on azo dye decolorization in a sequential acidogenic-aerobic granular sludge system
P.T. Barbosa, A.B. Dos Santos, ME.R. Da Silva, **P.I.M Firmino**
(Federal University of Ceará)

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- AD-696** Biohydrogen production from co-digestion of fermented cassava wastewater and glycerol
V. Vaz, C.L. Andreani, T.M. Silva, E.S. Lui, E. Rodio, F. Granja, S.D. Gomes
(State University of West Paraná)
- AD-698** Effluent safety of anaerobic dynamic membrane bioreactors (AnDMBRs): Intracellular and extracellular antibiotic resistance gene profiles
L. Ramadan, M. Harb
(New Mexico Tech)
- AD-701** Impact of substrate choice on electroactive biofilm growth and functional characteristics
C. Saucedo, A.L. Smith
(University of Southern California)
- AD-703** Bioaugmentation with lyophilized inoculum to boost biomethanation under high ammonia levels
I.A. Fotidis, Y. Yan, D. Fu
(Ionian University)
- AD-705** Bioaugmentation with immobilised inocula enhanced with biochar: A long-term solution to ammonia problem in continuous biogas reactors
I.A. Fotidis, Y. Yan, D. Fu
(Southeast University)
- AD-709** Effects of cyanobacteria biomass pretreatment on biomethane production and anaerobic microbial community
Y. Yan, I. Fotidis, D. Fu
(Southeast University)
- AD-710** Improvement of methane production using an electrooxidation system as pre-treatment and granular activated carbon impregnated with Fe
V.A. Burboa Charis, L.H. Álvarez-Valencia, M.A. Armenta-Gutiérrez, D. Serrano-Palacios, E.R. Meza-Escalante, C. García-Gómez
(Instituto Tecnológico de Sonora)

POSTER SESSION (Hall: Çamlıca)

AD-716 Bioelectrochemical hydrogen production using a continuous-flow microbial electrolysis cell from livestock wastewater and food waste
*H.J. Kim, **H.W. Kim**, E. Jwa, J.Y. Nam*
(Jeonbuk National University)

AD-721 Analysis of energy efficiency in hydrogen fermentation of thermally hydrolyzed food waste
***J. Kim**, J.Y. Kim*
(Seoul National University)

AD-728 Nutrient recovery via hybrid microalgae cultivation of digestate from acidogenic fermentation of heterogeneous waste streams
***L. Garrote**, D. Hidalgo, F. Infante*
(CARTIF Technology Centre)

AD-730 Microbiome physiology response chip: Cavitation significantly increased microbiome and chemical reactions in WWTP sludge
***M. Ošlak**, M. Blagojevič, J. Gostiša, S. Kolbl Repinc, B. Murovec, B. Stres*
(University of Ljubljana)

AD-733 Machine learning-based prediction of methane production from lignocellulosic wastes
*C. Song, Y. Jin, G. Liu, **C. Chen***
(Beijing University of Chemical Technology)

AD-739 The rise of anaerobic digestion for the management of organic fraction of municipal solid waste in Türkiye
*A. Musluoglu, S.S. Ovez, O.A. Arıkan, R.K. Dereli, K.E. Macin, **K. Ozcelik**, M. Waqas*
(Istanbul Technical University)