

EB Network On-Line ECR Conference 2020

25 June 2020 - 09:00 - 16:00 or drop in as you're able

09:00 AM

Intro and welcome

SESSION 1		<u>Wastewater and resource recovery</u> <u>Chair: Emmanuel Atai, Cranfield University</u>
09:05 AM	Carolina Ospina Newcastle University	Valorisation of nitrogen-deficient wastewater treatment systems using sludge enriched with nitrogen-fixing bacteria
09:20 AM	Nopa Maulidiany University of Southampton	Enhancing Phosphorus Release from Hydroxyapatite-rich Activated Sludge in Fermentation Processes
09:35 AM	Tararag Pincam University of Southampton	Enhancing phosphorus release and volatile fatty acids production in fermentative processes of sewage sludge by thermal and ultrasonic pretreatments
09:50 AM	Seonbong Heo University of Southampton	Effects of Biomass concentration and sludge morphology on Polyhydroxybutyrate accumulation in sequencing batch reactors
10:05 AM		Questions and poster discussion (posters below)
		<u>Value added products (Poster Discussion)</u>
	<i>Dr Mauro Rinaldi</i> <i>University of Manchester</i>	<i>Growing cells with cellulose towards green chemical manufacturing</i>
	<i>Maria Ramos Suarez</i> <i>University of Southampton</i>	<i>Continuous acidogenic fermentation of organic residual solids; effect of hydraulic retention time</i>
	<i>Serena Simonetti</i> <i>University of Aberdeen</i>	<i>Effect of substrate concentration and retention time on the anaerobic fermentation of food waste</i>
SESSION 2		<u>AD for the future</u> <u>Chair: Dr Sanjay Nagarajan, Queen's University Belfast</u>
10:25 AM	Mauro Lafratta University of Surrey	Innovative dynamic feeding strategies of anaerobic digestion of sewage sludge for on-demand electricity generation.
10:40 AM	Yahyunanto Nugroho Sheffield University	A study how CO ₂ microbubble injection affecting the microbial community inside the anaerobic digester of food waste
10:55 AM	Dr Bing Tao University of Southampton	Predicting pH rise as a control measure for integration of CO ₂ biomethanisation with anaerobic digestion
11:10 AM		Questions and poster discussion (posters below)
	<i>Sarah Hunter</i> <i>University College London</i>	<i>Evaluating the Impact of Chemical Structure on Anaerobic Digestion</i>
	<i>Dr Rachel Schwartz-Narbonne</i> <i>Sheffield Hallam University</i>	<i>Multidisciplinary Analyses of Wastewater Reactors</i>
	<i>Mohammad Zamzami</i> <i>University of Southampton</i>	<i>Secondary sewage improvement of Saudi municipal plants by using dynamic membrane as post-treatment after final clarifiers.</i>
	<i>Thitirat Ditkaew</i> <i>University of Southampton</i>	<i>Methane - producing bioelectrochemical system using abiotic anode and biocathode</i>
SESSION 3		<u>Microbial and molecular advances 1</u> <u>Chair: Reihaneh Bashiri, Newcastle University</u>
11:30 AM	Reihaneh Bashiri Newcastle University	Do psychrophiles produce extracellular lipases to degrade lipids in wastewater systems?
11:45 AM	Dr James Robson University of York	Temporal metatranscriptomics reveals the rate limiting enzymatic step in the anaerobic digestion of whisky waste
12:00 PM	Yumechris Amekan University of York	identifying active microbial populations in anaerobic digestion through bio-orthogonal non-canonical amino acid tagging, affinity-based cell separation and nanopore sequencing
12:15 PM		Questions

12:25 PM		LUNCH
01:25 PM		SLIDO SURVEY
SESSION 4		<u>Microbial and molecular advances 2</u> <u>Chair: Dr Jose Munoz, Northumbria University</u>
01:35 PM	Dr Simone Morra University of Nottingham	Exploring the diversity and function of [FeFe]-hydrogenases in H ₂ -producing bacteria
01:50 PM	Eloi Martinez-Rabert University of Glasgow	Metabolism shapes growth kinetics of nitrifiers and define their survival under specific environmental conditions
02:05 PM	Dr Zhugen Yang Cranfield University	Paper-origami device enabling low-cost and rapid microbial analysis
02:20 PM		Questions
SESSION 5		<u>Engineering and biology</u> <u>Chair: Dr Hadiza Auta, University of Bath</u>
02:30 PM	Khaled Almoalimi University of Southampton	Fouling and cleaning of thin film composite (TFC) forward osmosis membrane for municipal wastewater concentration
02:45 PM	Dr Erifyli Tsagkari University of Glasgow	Combination of computational modelling and 3-D printing to engineer biofilm and shear interaction
03:00 PM		Questions
SESSION 6		<u>Environmental interactions</u> <u>Chair: Sarah Farthing, University of Nottingham</u>
03:10 PM	Till Weidner University of Oxford	Comparison of local and centralized biowaste management strategies – a spatially sensitive approach for the Porto region
03:25 PM	Dr Angela Sherry Northumbria University	The effect of molluscicide applications on agricultural soils - is pollution swapping a risk?
03:40 PM		Questions and poster discussion (posters below)
	<i>Georgia Waldram</i> <i>Heriot-Watt University</i>	<i>Marine Oil Snow (MOS): Understanding Formation Mechanisms and Role in Microbial Biodegradation of Crude Oil</i>
	<i>Valeria Semler</i> <i>Heriot-Watt University</i>	<i>Screening and characterization of novel bio-surfactants and bio-emulsifiers from marine bacteria and potential biotechnological applications</i>
	<i>Anna Krzynowek</i> <i>Heriot-Watt University</i>	<i>Bioprospecting of Thraustochytrids in Scottish coastal waters for commercially valuable compounds</i>
04:00 PM		CLOSE