

Environmental Biotechnology Network ECR Conference 2023

Wednesday, 30 August 2023 - Friday, 1 September 2023
Edinburgh Conference Centre - James Watt 2 (JW2) - Heriot-Watt University

WEDNESDAY 30 August 2023

17:00	18:00	ARRIVAL/REGISTRATION (JW2 Lounge)
18:00	19:00	Opening plenary session (JW2 Hall) Professor Mike Manfield, University of New South Wales, Australia
19:00	22:00	Evening Drinks and Buffet (JW2 Lounge) <i>Informal networking</i>
Free Coach to Brae House at 22:00 hrs		

THURSDAY 31 August 2023

Free coach from Brae House at 08:15 hrs		
09:00	09:30	ARRIVAL REFRESHMENTS (JW2 Lounge)
09:30	09:45	Welcome: "I am an Environmental Biotechnologist..."
SESSION 1 (JW2): 09:45 - 11:30		Environmental Protection and Bioremediation Chair: Dr Anjali Jayakumar, Newcastle University
09:45	10:00	1 Dr Sabolc Pap, Environmental Research Institute - UHI <i>Biochar from sewage sludge as adsorbent and soil conditioner: a Scottish case study</i>
10:00	10:15	2 Miss Ayisha Affo Souleymane, Cranfield University <i>Solid-phase denitrification for tertiary nitrate removal from municipal wastewater</i>
10:15	10:30	3 Ms Maggie White, Newcastle University <i>Steps towards a sustainable clay-microbe Advanced Oxidation Process for micropollutant removal from water</i>
10:30	10:45	4 Miss Radwa Ibrahim, University of Westminster <i>Enhanced azo dye treatment in a sequential anaerobic-aerobic coupled system of a biophotovoltaic cell and aerobic bioreactor</i>
10:45	11:00	5 Miss Georgia Waldram, Heriot-Watt University <i>Biodegradation of Crude Oil Associated with Marine Oil Snow (MOS)</i>
11:00	11:15	6 Miss Lucy Oram, University of South Wales <i>The effect of two-stage fermentation on volatile fatty acids and biomethane yields from primary sewage</i>
11:15	11:30	General Questions and Discussion
11:30	12:00	REFRESHMENT BREAK (JW2 Lounge)

SESSION 2 (JW2): 12:00 - 13:15		Careers in Environmental Biotechnology	
12:00	12:15		Invited Speaker - Dr Angela Sherry, Northumbria University <i>Career development - An academic perspective</i>
12:15	12:45		Invited Speaker - Dr Ian Fotheringham, Ingenza <i>Career development - An industry perspective</i>
12:45	13:15		Open Discussion - A/Prof Gutierrez, Prof Manefield, Dr Fotheringham, Dr Sherry <i>Career development: bridging academia and industry</i>
13:15	14:15	LUNCH and POSTER SESSION 1 (JW2 Lounge)	
SESSION 3 (JW2): 14:15 - 15:45		Monitoring Microbial Systems Chair: Ms Maira Anam, University of Nottingham	
14:15	14:30	1	Ms Carla Spatola Rossi, Cranfield University <i>Development of a low-cost paper-based biosensor for rapid detection of live pathogens in water</i>
14:30	14:45	2	Dr Natalie Lamb, QuadraChem Laboratories <i>SENTRY: real time microbial performance monitoring in wastewater treatment</i>
14:45	15:00	3	Miss Beatriz Delgado Corrales, Northumbria University <i>Location and room type drive air microbiome diversity in farms across an urban - rural gradient</i>
15:00	15:15	4	Mr Hector De las Heras, Sheffield Hallam University <i>Lipidomic characterization of activated sludge wastewater reactors</i>
15:15	15:30	5	Dr Lauren Messer, University of Stirling <i>Comparative metaproteomics of the marine plastisphere: novel functional insights into the oceans' newest niche</i>
15:30	15:45		General Questions and Discussion
15:45	16:15	REFRESHMENT BREAK (JW2 Lounge)	
SESSION 4 (JW2): 16:15 - 18:00		Sustainable Processes Chair: Dr George Hurst, SAMS	
16:15	16:30	1	Dr Carlos Domingo Felez, University of Glasgow <i>Management of nitrous oxide (N₂O) emissions from water treatment</i>
16:30	16:45	2	Mr Abbas Abbas, Loughborough University <i>Optimising microbial electrosynthesis systems for bioelectrochemical conversion of carbon dioxide into value-added chemical compounds</i>
16:45	17:00	3	Miss Manpreet Bagga, Newcastle University <i>Pure biomethane from anaerobic sludge rather than biogas</i>
17:00	17:15	4	Miss Kathleen Dunbar, University of Surrey <i>Hydrogen production from genetically modified Escherichia coli and their use within biocoatings</i>
17:15	17:30	5	Dr Sanjay Nagarajan, University of Bath <i>Photo-reforming of sewage sludge for green hydrogen production</i>
17:30	17:45	6	Dr Anjali Jayakumar, Newcastle University <i>Humanising science to solve the climate crisis: lessons from biochar research</i>
17:45	18:00		General Questions
18:00	19:00	FREE TIME BEFORE DINNER	
19:00	22:00	Evening Dinner (JW2 Lounge)	
Free coach to Brae House at 22:00 hrs			

FRIDAY 1 September 2023

Free coach from Brae House at 08:15 hrs		
09:00	09:30	ARRIVAL REFRESHMENTS (JW2 Lounge)
SESSION 5 (JW2): 09:30 - 11:15		Engineering Microbial Systems Chair: Dr Anastasiia Kostrytsia, University of Glasgow
09:30	09:45	1 Dr Erifyli Tsagkari, University of Glasgow <i>The role of shear dynamics in biofilm formation in tap water systems</i>
09:45	10:00	2 Dr Joshua Loh, Northumbria University <i>A fabricating platform for producing functional bacterial cellulose</i>
10:00	10:15	3 Dr Mathew Brown, Newcastle University <i>Key role of virus – microbe interactions in anaerobic digestion</i>
10:15	10:30	4 Dr Xiang Shi, University of Glasgow <i>Microbial stratification and DOM removal in drinking water biofilters: implications for enhanced performance</i>
10:30	10:45	5 Mr Sergio Serrano Blanco, Newcastle University <i>Effect of carrier fill ratio on T. obliquus growth and productivity in heterotrophic conditions</i>
10:45	11:00	6 Dr Albert Woodward-Rowe, University of Surrey <i>Design and optimisation of poly(ethylene glycol) hydrogels for encapsulation of living bacteria</i>
11:00	11:15	General Questions
11:15	11:45	REFRESHMENT BREAK (JW2 Lounge)
SESSION 6 (JW2): 11:45 - 13:15		Resource Recovery from Waste Chair: Dr Sanjay Nagarajan, University of Bath
11:45	12:00	1 Dr Alice Banks, Imperial College London <i>Biodegradation and valorisation of polyolefin plastics</i>
12:00	12:15	2 Miss Laura Martin, University of Oxford <i>Acidogenic Fermentation Broth – An impure, mixed feedstock for microbial bioproduction of wax esters</i>
12:15	12:30	3 Dr George Hurst, Scottish Association of Marine Science <i>Anaerobic digestion of recycled paper crumb and effects of digestate on concrete performance</i>
12:30	12:45	4 Mr Wenjun Peng, University of Sheffield <i>Experimental evaluation of biochar effects on anaerobic digestion of food waste and biomethanation of hydrogen</i>
12:45	13:00	5 Mr Michael Ho, Imperial College London <i>Microbial stoichiometry and kinetics of micro-aerated anaerobic digesters</i>
13:00	13:15	General Questions and Discussion
13:15	14:15	LUNCH and POSTERS (JW2 Lounge)
14:15	15:00	PRIZE GIVING - A/Prof Tony Gutierrez, Heriot-Watt University (EBNet)
15:00	15:30	CLOSE & COLLECT POSTERS
Free Coach to Edinburgh Waverley Station, Princes St at 15:30 hrs: 60 (max. capacity) first-come, first-served		