



EBIC Environmental
Biotechnology
Innovation Centre



Workshop: Environmental Biotechnology for the management of PFAS and beyond

SHORT PROGRAMME 06th June 2025

Location: Stafford B41, SC3 MAIN ROOM, Cranfield University

09:30 - 10:00	Registration and welcome coffee
10:00 - 10:05	Welcome Tao Lyu , Senior Lecturer in Green Technologies, Cranfield University, UK
10:05 - 10:20	Introduction to EBIC, EBNet and the workshop. Frederic Coulon , Professor of Environmental Chemistry & Microbiology, Director, Environmental Biotechnology Innovation Centre (EBIC), Cranfield University, UK
AM session	
10:20 - 10:50	Natural bacterial strains for PFAS defluorination. Peter Jaffé , Professor of Civil and Environmental Engineering, Princeton University, USA.
10:50 - 11:20	Phosphate-enabled mechanochemical PFAS destruction for fluoride reuse Long Yang , Research Associate, Department of Chemistry, University of Oxford, UK
11:20 - 11:50	Hydrolytic bacterial defluorinases: Toward expanding substrate range and engineering fluoroacetate dehalogenases for the degradation of polyfluorinated compounds. Hairong Ma , Researcher, School of Environmental and Natural Sciences, Bangor University
11:50 - 12:00	Comfort break
Early Career Researchers Flash Presentations	
12:00 - 12:10	Investigating the microbial biodegradation of polyfluoroalkyl substances (PFAS) by molecular docking and molecular dynamic simulations. Mahsa Baniasadi , Research Associate, Cranfield University, UK
12:10 - 12:20	Statistical analysis of PFAS and catchment characteristics in the UK. Emily Jane Blackburn , PhD student, University of Sheffield, UK
12:20 - 12:30	PFAS movement through soil and saprolite. Gemma Shaw , PhD student, Cranfield University, UK
12:30 - 12:40	Engineering biology solution for PFAS: A modular approach for bioremediation, biosensing, and biosafety. Dhiman Chakravarty , Research Associate, Cranfield University, UK
12:40 - 13:30	Lunch Break
PM session	
13:30 - 14:00	Synthetic biology approaches in environmental applications. Joshua Atkinson , Assistant Professor of Civil and Environmental, Princeton University, USA.
14:00 - 14:30	Sustainable solar conversion via biohybrid system: fuel generation, chemical valorization, and waste reduction. Lin Su , Lecturer in Engineering Biology, Queen Mary University of London, UK
14:30 - 15:00	Engineering biology applications for environmental solutions: potential and challenges. Francis Hassard , Reader in Public Health Microbiology, Cranfield University, UK
15:00 - 15:10	Early Career Researchers Best Presentation Prize. Awarded by Frederic Coulon , Director of EBIC and Co-director of EBNet
15:10 - 15:20	Concluding remarks and conference close. Tao Lyu , Senior Lecturer in Green Technologies, Cranfield University, UK