

# What's New In Fluid Separations?

**The University of Edinburgh**

**29 May 2026**

**Rowan teaching room, Nucleus Building**

**The University of Edinburgh King's Buildings Campus**

Thomas Bayes Rd, Edinburgh EH9 3FG University of Edinburgh

## Programme

9:30: Registration, coffee and networking

9:50: Welcome and introduction by Chairs

9:55: "On-Board Carbon Capture Technology for Marine Applications"

*Freya Bretton*

*University of Edinburgh*

10:20: "MOF-Based Membranes vs PFAS: Capture-and-Destroy Photocatalysis for "Forever Chemicals""

*Joshua Leeson*

*University of Nottingham*

10:45: "Surface Porosity Enhancement of Bottom-Ash-Derived Carbon Using Waste Eggshell for Carbon Capture Applications"

*Kofoworola Awodun*

*Brunel University*

11:10: Break

11:20: "Techno-Economic Assessment of Membrane-Based Processes for Carbon Capture for Biogas Upgrading"

*Sarah Algasabi*

*University of Manchester*

11:45: "Linking phase behaviour to antibiotic extraction in green ethyl lactate–choline salt based aqueous biphasic systems"

*Marion Engole*

*Aston University*

12:10: "Study of gas transport at a polymer/MOF interface with molecular modelling techniques"

*Tiziano Cavalieri*

*University of Edinburgh*

12:35: Lunch and Networking

13:30: "Optimised Alkene Epoxidation and Efficient Separation Using Polymer Supported Mo(VI) Catalysts: A Response Surface Methodology Approach"

*Md Masud R. Bhuiyan  
Lancaster University*

13:55: "ZIF-7/Polyetherimide Mixed Matrix Membranes for Hydrogen Purification"

*Niko Hilmi  
University of Nottingham*

14:20: "CO<sub>2</sub> adsorption on 13X monolith using volumetric and chromatographic techniques"

*Zihan Sun  
The University of Edinburgh*

14:45: Break

14:55: "The Manufacture of Sustainable Nanofiltration Polyelectrolyte Membranes"

*Chang Qu  
University of Bath*

15:20: "TBC"

*Zikir Akbar Kemala  
University College London*

15:45: Coffee and networking

16:00: Winners announcement and closure