5th CCS Symposium - Multiscale approaches to assess and advance CCUS

20 - 21 October 2026

The Geological Society, Burlington House, London

Final Programme

Day One	
08.30	**Registration**
09.00	**Welcome and Opening Remarks**
09.10	**Keynote: Looking for 'Goldilocks': multiscale subsurface characterisation to predict and optimise CO_2 storage efficiency** **Catherine Gibson Poole**
	Session One:
09.45	**Pragmatic CS Development: Bridging Merchant Challenges and Asset Decarbonization with Fit-for-Purpose Solutions** Romain RUBI
10.10	**Is it time to convert natural gas fields to low carbon hydrogen production?** David Hughes
10.35	**BREAK**
	Session Two:
11.10	**Study on the CO_2 hydrate distribution and seepage flow characteristics within NGH reservoirs** Ziming Yang
11.35	**Investigating Water Vapour Sorption and Thermodynamic Characteristics of Clay Minerals under the Influence of Temperature** Shubham Kumar
12.00	**The Impact of Small-Scale Heterogeneities on Carbon Dioxide Saturation and Trapping in Carbonate Rocks.** Nihal Darraj
12.25	**LUNCH**
	Session Three:
13.35 Virtual	**Quantifying CO_2-Induced Reservoir Evolution Through Integrated Digital Rock Physics** Lobel Danicic
14.00 Virtual	**Laboratory-to-Field Scale Assessment of Rock–Fluid Interactions on Geochemical and Geomechanical Properties of CO_2-Sequestered Basalt** Nitin Nagarkoti
14.25	**Exploring the controls on CO_2 saturation during vertical buoyancy-driven flow** Mateja Macut
14.50	**Impact of geological and petrophysical uncertainty and capillary heterogeneity upscaling of CO_2 plume dynamics** Harry Morris
15.15	**BREAK**
	Session Four:
15.50	**Multi-Scale Simulations of CO_2 Storage in the Bunter Sandstone Hydraulic Unit, Southern North Sea: Advances, Challenges, and Key Insights.** Luke Jenkins

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16.15 Virtual	**Exploring Multiscale Heterogeneity in Upper Triassic Siliciclastic Sequences: Implications for CO_2 Storage Efficiency** Abdullah Alqubalee
16.45	**From outcrop to pore scale: multi-scale characterisation of paralic reservoir heterogeneities for early-stage CCS screening workflows.** David William Whitworth
17.10	**End of day One**
17.15-18.15	**Drinks Reception**

Day Two	
08.30	**Registration**
08.50	**Welcome**
	Session Five:
09.00	**Influence of aquifer architecture on CO_2 trapping mechanisms - learnings from dynamic simulation of the G14-AP permit, offshore Australia** Mick McCaughey
09.25	**Appraisal of the BC39 and BC40 structures for CO_2 storage, Southern North Sea, UK** James Hamilton-Wright
09.50	**A Second Look at CO_2 at Grane: An Integrated Seismic-to-Simulation Assessment of CCUS in a Heavy Oil Reservoir** Saeful Putra
10.15	**BREAK**
	Session Six:
10.40	**KEYNOTE: Faults in CCS: bridging pore-scale processes and basin-scale containment risk** **Andreas Busch**
11.15	**Are the fears justified? Observations of fault seal from the US Gulf Coast and implications for CO_2 storage** Alexander Bump
11.40	**Closing the loop on fault leakage assessment for CCS across scales: A workflow tested for the Malay Basin** Phoenix Nguyen
12.05	**Induced Seismicity at the Quest CCS Site, Alberta** James Verdon
12.30	**LUNCH**
	Session Seven:
13.20	**Controls of volcanic architecture on carbon storage potential in buried volcanoes: Evidence from seismic data** He Yanxin
13.45	**Efficacy of Seawater and Freshwater as Solvents for In-Situ Carbon Mineralisation in Peridotite** Niseni Gunaratne
14.10	**Understanding CO_2 mineralisation in basalt through time-resolved spatial imaging** Faisal W. Khudhur
14.35	**Bridging Enhanced Rock Weathering and CCUS: Multiscale Evaluation of CO_2 Uptake in Mafic-ultramafic Mine Wastes** Rosalia Shiimi
15.00	**BREAK**
	Session Eight:

15.25	**Assessing uncertainty and making risk-based decisions using geophysical data** Andrew Curtis
15.50	**DAS as a tool for passive seismic monitoring and imaging offshore CCS sites** Germán Rodríguez
16.15	**Bayesian Ambient Noise Tomography of the Tampnet-ASN Subsea DAS Array for CCS Monitoring** Tobermory Mackay-Champion
16.40	**Environmental and Passive Seismic Monitoring for the Endurance Store** Stephen Auld
17.05	**Closing** **Chris Jackson**
17.30	**End of conference**