

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:
15.45	Multi-Scale Simulations of CO ₂ Storage in the Bunter Sandstone Hydraulic Unit, Southern North Sea: Advances, Challenges, and Key Insights. Luke Jenkins

16.10	Assessing the Impact of a Marine Transgression on Reservoir Quality and Implications for CCS Joel Lozano
16.35	Exploring Multiscale Heterogeneity in Upper Triassic Siliciclastic Sequences: Implications for CO₂ Storage Efficiency Abdullah Alqubalee
17.00	From outcrop to pore scale: multi-scale characterisation of paralic reservoir heterogeneities for early-stage CCS screening workflows. David William Whitworth
17.25	End of day One
17.30	Drinks Reception

Day Two	
08.30	Registration
08.50	Welcome
	Session Five:
09.00	Influence of aquifer architecture on CO₂ 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 CO₂ storage, Southern North Sea, UK James Hamilton-Wright
09.50	A Second Look at CO₂ at Grane: An Integrated Seismic-to-Simulation Assessment of CCUS in a Heavy Oil Reservoir Saeful Putra
10.15	BREAK
	Session Six: Impact of faulting
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 CO₂ 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 CO₂ mineralisation in basalt through time-resolved spatial imaging Faisal W. Khudhur

14.35	Bridging Enhanced Rock Weathering and CCUS: Multiscale Evaluation of CO₂ 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