





Geological Carbon Storage: Meeting the Global Challenge

A joint meeting with the Geological Society and American Association of Petroleum Geologists

14-15 April 2014

Programme

Monday 14 April 2014		
09.00	Registration & tea & coffee (Main foyer and Lower Library)	
The scale of the global challenge		
09.30	The trillion tonne triangle: carbon in the 21 st century	
	Bryan Lovell (University of Cambridge)	
Basin scale propagation and trapping		
10.00	Small-scale trapping constrains large-scale storage capacity	
	Chris MacMinn (University of Oxford)	
10.30	Practical models for large-scale CO ₂ injection, migration and trapping	
	Sarah Gasda (University of Bergen)	
11.00	Tea, coffee and refreshments (Lower Library)	
11.30	The impact of reservoir conditions on multiphase flow and trapping in the CO_2-	
	brine-sandstone system	
	Sam Krevor (Imperial College London)	
12.00	Impact of capillary hysteresis and trapping on vertically integrated models for CO ₂	
	storage	
40.00	Florian Doster (Heriott-Watt University)	
12.30	Fluid dynamics of CO ₂ dissolution Jerome Neufeld (University of Cambridge)	
12.00		
13.00	Wrap up	
13.20	Lunch (Lower Library)	
Measurement techniques		
14.30	An overview of measurement techniques Charles Jenkins (CO2CRC)	

15.00	Tracing the migration and fate of CO ₂ in natural and CO ₂ -EOR fields using noble gases and stable carbon isotopes Stuart Gilfillan (University of Edinburgh)	
15.30	Tea, coffee and refreshments (Lower Library)	
16.00	Less is good: Monitoring CO ₂ storage using passive seismic methods Mike Kendall (University of Bristol)	
16.30	Non-uniqueness, fluid mechanics and monitoring CO ₂ dispersal subsurface Andy Woods (University of Cambridge)	
17.00	Wine reception (Lower Library)	
Tuesday 15 April 2014		
09.15	Registration, Tea & coffee (Main foyer and Lower Library)	
00.45		
09.45	Welcome and introduction to day 2	
10.00	Field trials – lessons learned	
10.00	Green River, Utah, a natural analogue for long-term CO ₂ storage Mike Bickle (University of Cambridge)	
10.35	Constraints on magnitude, mechanism, and rate of CO ₂ dissolution at Bravo Dome, NM	
1	Marc Hesse (University of Texas at Austin)	
11.10	Tea, coffee and refreshments (Lower Library)	
11.40	Proved storage resources: what it takes to mature a project Owain Tucker (Shell)	
12.15	Verifying storage performance at Sleipner Andy Chadwick (British Geological Survey)	
12.50	Wrap up	
13.10	Lunch (Lower Library)	
14.10	Nature and Consequences of Well Leakage and Blowouts in Natural Gas and CO ₂ Wells Ian Duncan (Bureau of Economic Geology, University of Texas at Austin)	
14.45	The CO2CRC Otway 2B residual gas saturation test: application and outcomes	
17. 1 0	Dirk Kirste (Simon Fraser University, British Columbia)	
15.20	Challenges and Successes Implementing MMV Technologies for the Saskatchewan Aquistore Project	
	Rick Chalaturnyk (University of Alberta)	
15.55	An overview and current status of Australia's flagship CCS projects Jim Underschultz (University of Queensland)	
16.30	Science discussion: highlights to report to policy session, and the future research	
	agenda Marc Hesse (University of Texas at Austin)	
	Jerome Neufeld (University of Cambridge)	
	Jim Underschultz (University of Queensland)	
17.00	Tea, coffee and refreshments (Lower Library)	

Prospects and challenges for implementing CCS (with invited policy audience)		
17.30	Summary of the science programme for new audience members Jerome Neufeld (University of Cambridge)	
17.45	Some challenges for scientists and policy-makers working on CCS David Reiner (Cambridge Judge Business School)	
18.00	Panel discussionChair: Bryan Lovell (University of Cambridge)Steve Cawley (BP)Alexandra Elson (Shell)Herbert Huppert (University of Cambridge)David Reiner (Cambridge Judge Business School)	
19.00	Wine reception (Lower Library)	