

Agenda

March 9 – Morning

Session 1 – Geological Carbon Sequestration: Introductions (8:30-10:15), *Jeff Daniels, Moderator*

1. Welcome and Introductions: (Doug Alsdorf, OSU; Gary Spitznogle, AEP; Battelle spokesperson)
2. Power Industry perspective of Technical Challenges (Mike Hammond, AEP)
3. Field Testing: The Laboratory for Geological Carbon Sequestration (Neeraj Gupta, Battelle)

Session 2 – Carbon Capture and Sequestration Challenges (10:30-12:15), *Scott Miller, Session Chair*

1. Technical Challenges in Reducing the Costs for Carbon Capture (Bruce Sass, Battelle)
2. Capture and sequestration challenges for synfuel development, Dave Bayless, OU
3. Geologic and hydrogeologic Challenges in the Midwest (Larry Wickstrom, Chief Ohio Geological Survey)
4. Sequestration options at the source (L.S. Fan, OSU)

Keynote: Klaus Lackner, Columbia University (1:15-2:00)

March 9 – Afternoon Sessions

Session 3 – Fluid flow, transport, and Hydrology (2:15-4:00), *Frank Schwartz, session chair*

1. Hydrogeologic Modeling Challenges (Frank Schwartz, OSU)
2. Overview and Initial Assessments of Potential Groundwater Impacts (Jens Birkholzer, LBNL)
3. CO₂-brine-rock interactions and Geochemical Modeling Challenges (Chen Zhu, Indiana University)
4. Coupled Thermal, Hydraulic and Mechanical (THM) processes in Geological Media (Jonny Rutqvist, LBNL)

March 10 – Morning (8:30 AM)

Session 5 – Mineralization, fractures and CO₂ in saline aquifers (8:30-10:15), *Beverly Saylor, Session Chair*

1. Geologic heterogeneity and CO₂-mineral interactions (Beverly Saylor, CWRU)
2. The Kinetics of Sub-surface carbon sequestration (Eric Oelkers, University of Toulouse)
3. Geochemical Tools for Monitoring Geologic Carbon Sequestration, (David Cole, ORNL)
4. Geologic Sequestration in Reactive Rocks Opportunities and Challenges, (Travis McLing, INL)

Session 6 – Characterization and Monitoring (10:30-12:30), *Gregg Nadon, Session Chair*

1. Pore space and permeability for CO₂ movement (Steve Bryant, UT Austin)
2. Seismic Techniques for Characterizing and Monitoring of sequestered CO₂ (Jackie Gerst, Battelle)
3. Borehole geophysical well logging methods for characterization (Andrew Duguid, Schlumberger)

Lunch (12:30-1:30), (1:45-2:30) Keynote: Mark Shanahan,

Energy Advisor to the Governor; Director, Ohio Air Quality

Development Authority

March 10 – Afternoon

Session 7 – Pore Space and Permeability (2:45-4:00), Gary Spitznogle, Session Chair

1. Capacity and Injectivity: Are they in conflict? (T.S. Ramakrishnan, Schlumberger; J. Johnson, Presenter)
2. CO₂ Injection Test Results and Permeability Data – MRCSP Michigan Basin Test Site (Joel Sminchak, Battelle)
3. System and process controls on dynamic mass partitioning, isolation performance, and site selection (Jim Johnson, Schlumberger)

Summary of Challenges (4:00 – 5:00) – Speakers present 1 key challenge; audience input and discussion

Wrapup Comments – Jeff Colwell, Battelle; Dan Duellman, AEP