

**Session 4—Seismic Monitoring, Ballroom B, 4th Floor**

➤ **Oral Session**

- 1:30–2 p.m. .... **4-D Seismic Monitoring of CO<sub>2</sub> Injection Based Upon Spectral & Adjoint Methods: Elastic, Acoustic, Poroelastic Theory**, *Christina Morency*
- 2–2:30 p.m. .... **Integrated Reservoir Simulation and Seismic for CO<sub>2</sub> Sequestration Monitoring and Verification**, *Dimitri Bevc*
- 2:30–3 p.m. .... **Preliminary Results of Seismic Monitoring of CO<sub>2</sub> Sequestration in Naylor Field, Otway Basin Victoria, Australia**, *Boris Gurevich*
- 3–3:30 p.m. .... Coffee Break
- 3:30–4 p.m. .... **4D Response Evaluation Criteria for Permanent OBC Monitoring**, *Akihisa Takahashi*
- 4–4:30 p.m. .... **Time Lapse Crosswell Seismic Monitoring of CO<sub>2</sub> Migration in a Lignite Coal**, *Tom Morgan*
- 4:30–5:30 p.m. .... Whiteboard summary: What is missing for field and well-scale seismic monitoring?
- 6–8 p.m. .... Group Dinner, *Adrienne Salon, 4th Floor*

**Wednesday, 21 July**

- 8–8:30 a.m. .... Registration Check-In, *Ballroom Foyer, 4th Floor*
- Continental Breakfast, *Ballroom B, 4th Floor*
- 8:30–8:45 a.m. .... Introduction

**Session 5—Nonseismic Monitoring Methods, Ballroom B, 4th Floor**

➤ **Oral Session**

- 8:45–9:15 a.m. .... **Monitoring a CO<sub>2</sub> EOR WAG Process with Electromagnetic Technology**, *Mike Wilt*
- 9:15–9:45 a.m. .... **Gravity Gradiometry for CO<sub>2</sub> Sequestration Monitoring**, *Manik Talwani*
- 9:45–10:15 a.m. .... Whiteboard summary: What do we need to do to integrate seismic and non-seismic monitoring technologies?
- 10:15–10:30 a.m. .... Coffee Break
- 10:30–11 a.m. .... **Using Injection Induced Surface Deformation to Constrain Subsurface CO<sub>2</sub> Migration Models**, *Joseph Morris*
- 11 a.m.–12 p.m. .... End of Day Discussions: Summary of issues; potential paths forward



**Society of Exploration Geophysicists**  
*The international society of applied geophysics*

8801 S. Yale Ave., Ste. 500 • Tulsa, OK 74137-3575

+1-918-497-5500 • Fax +1-918-497-5557

<http://www.seg.org>

SEG 2010  
development and production  
**D&P** forum

**CO<sub>2</sub> EOR and sequestration**

**MEETING  
SCHEDULE**



**BOSTON, USA**  
**18–21 JULY 2010**

## D&P Forum Schedule

### Sunday, 18 July

3:30–6 p.m. .... Registration Check-In, *Ballroom Foyer, 4th Floor*

6–8 p.m. .... Ice Breaker, *Adrienne Salon, 4th Floor*

Dinner on Own

---

*All speakers 15 minute presentation followed by 15 minutes of discussion.*

---

### Monday, 19 July

8–8:30 a.m. .... Registration Check-In, *Ballroom Foyer, 4th Floor*

Continental Breakfast, *Ballroom B*

8:30–8:45 a.m. .... Welcome and Overview: *Charlotte Sullivan and Mike Wilt*

#### Session 1—Risks and Uncertainties of Very Large Scale EOR: What's being overlooked? *Ballroom B, 4th Floor*

##### ➤ Oral Session

8:45–9:15 a.m. .... **Physics of Plume Migration**, *T.S. Ramakrishnan*

9:15–9:45 a.m. .... **Safety and Security for CO<sub>2</sub> Geological Storage While CO<sub>2</sub>/H<sub>2</sub>O/Rock Reaction**, *Bo Peng*

9:45–10:15 a.m. .... **Dealing with Uncertainties in Predictions of a CO<sub>2</sub> Storage Project Performance**, *Nikita Chugunov*

10:15–10:45 a.m. .... **Summary:** Uncertainties and risk in CO<sub>2</sub> EOR and Sequestration

10:45–11 a.m. .... Coffee Break

11–11:30 a.m. .... **VP-Tomography Images of CO<sub>2</sub> Behavior in Porous Sandstones**, *Keigo Kitamura*

11:30–12 p.m. .... **Geophysical Lessons Learned in EOR with CO<sub>2</sub> in Fluvial Gulf Coast Rocks**, *Robert Schellhorn*

12–1:30 p.m. .... **Lunch on own**

#### Session 2—Site Characterization, *Ballroom B, 4th Floor*

##### ➤ Oral Session

1:30–2 p.m. .... **CO<sub>2</sub> Marine Geological Sequestration Planning and Site Investigation in Taiwan**, *Char-Shine Liu*

2–2:30 p.m. .... **Seismic Acquisition Challenges at an Industrial CCS Site**, *Marcia Coueslan*

2:30–3 p.m. .... **3D Multi-component Design & Acquisition in Shallow High Permeability Clastic Reservoirs with High Rate CO<sub>2</sub> Injection in Delhi Field LA USA**, *Trevor Richards*

3–3:30 p.m. .... Coffee Break

3:30–5 p.m. .... Whiteboard summary: What's missing in technology for site characterization?

5–6 p.m. .... Poster, *Ballroom B*

**Dinner on Own**

### Tuesday, 20 July

8–8:30 a.m. .... Registration Check-In, *Ballroom Foyer, 4th Floor*

Continental Breakfast, *Ballroom B, 4th Floor*

8:30–8:45 a.m. .... Introduction

#### Session 3—Rock Physics and Geomechanics, *Ballroom B, 4th Floor*

##### ➤ Oral Session

8:45–9:15 a.m. .... **The Rock Physics Basis for 4D Seismic Monitoring of CO<sub>2</sub> EOR and Sequestration: Are We There Yet?**, *Tiziana Vanorio*

9:15–9:45 a.m. .... **Rock Physics Model for Interpreting Dynamic and Static Young's Moduli of Soft Sedimentary Rocks**, *Toru Takahashi*

9:45–10:15 a.m. .... **Time Lapse Digital Rock Physics of CO<sub>2</sub> Injection in Carbonates**, *Elizabeth Diaz*

10:15–10:45 a.m. .... **Upscaled Signatures and Uncertainty of Rock-Physics Relationships in Dynamic Reservoirs**, *Kyle Spikes*

10:45–11 a.m. .... Coffee Break

11–11:30 a.m. .... **Fluid Flow Simulation with Geomechanical Constraints for an EOR and Sequestration Pilot at Teapot Dome WY: Uncertainties Due to Fractures**, *Laura Chiaramonte*

11:30 a.m.–12 p.m. .... **Coupled Impact of Geochemical and Geomechanical Processes on Seal Integrity During CO<sub>2</sub> Storage**, *James Johnson*

---

*Discussion: What is missing for upscaling rock physics models/relationships?*

---

12–1:30 p.m. .... **Lunch on Own**

