

## **POSTCONVENTION WORKSHOP**

## W-5: Bridging the Gaps for Effective CCS Deployment

## George R. Brown Convention Center, Room 362A

| Start    | Stop     | Presentation  | Speaker   | Affiliation  |
|----------|----------|---|---|--|
| 8:30 AM  | 8:40 AM  | Introduction  | Erkan Ay and Nimisha  | SEG Research Committee Chair                           |
|          |          |   | Vedanti   | and CSIR-NGRI  |
|          |          | Session 1   |   |  |
| 8:40 AM  | 9:00 AM  | India's Energy Transition and Geological CO2 Storage Opportunities  | Nimisha Vedanti   | CSIR-National Geophysical<br>Research Institute, India |
| 9:00 AM  | 9:20 AM  | The Big Picture: Toward Basin-Scale Monitoring of Geological CO₂ Storage  | Stas Glubokovskikh  | LBNL   |
| 9:20 AM  | 9:45 AM  | Poster Pitch  | All poster presenters   |  |
| 9:45 AM  | 10:00 AM | Coffee Break  |   |  |
|          |          | Session 2   |   |  |
| 10:00 AM | 10:30 AM | SEAM CO2 Project Update   | Michael Fehler  | Fehler Consultancy LLC                                 |
| 10:30 AM | 10:50 AM | How Near-surface Variations Can Swamp 4D Seismic CCS Monitoring, and Possible Solutions   | Christof Stork  | Land Seismic Noise Specialists                         |
| 10:50 AM | 11:20 AM | Panel on " Challenges in Low Carbon Energy Transition"  | Matthias Imhof, Joel Le<br>Calvez, Nimisha Vedanti,<br>and Erkan Ay     | ExxonMobil, SLB, CSIR-NGRI                             |
|          |          | Poster Presentations  |   |  |
|          |          | Monitor Potential Fracture Growth in Carbon Sequestration Reservoirs using Distributed Strain Sensing                               | Yanrui Ning, Ge Jin,<br>James Carmichael, Ali<br>Tura, and Melinda Gale | Colorado School of Mines                               |
|          |          | Unsupervised Detection of CO <sub>2</sub> Plumes at Sleipner Using Variational Autoencoders and Density-Based Clustering Javed Ali* | Javed Ali, William Kumar<br>Mohanty, and Sudeshna<br>Sarkar             | Indian Institute of Technology<br>Kharagpur            |
|          |          | SEG EVOLVE 2024-2025 Carbon Solutions: Assessing Sleipner's Carbon Dioxide Capture and Storage future potential                     | Christian Luddeke   | EVOLVE-Eco Explorer                                    |
|          |          | Fracture Topology and Connectivity Analysis for the Identification of Suitable Fluid-Flow Zones in the Deccan Basalt                | Dip Das, Hari Prasath, and Nimisha Vedanti                              |  |

| CO2-induced attenuation model building via time-lapse viscoacoustic full-waveform inversion                                     | Qiang Mao, and Yi Shen   |                              |
|---|--|------------------------------|
| Efficient Monitoring of a GCS process through Accelerated Poroviscoelastic wave modeling with CPML BC                           | Saquib Zia, Ajay Malkoti,<br>and Nimisha Vedanti   |                              |
| A CCUS Case Study in the Bunter Sandstone, Southern North Sea (SEG EVOLVE Program)  | Abdolrazzagh Javid   | EVOLVE-University of Houston |
| Reservoir characterization and assessment for carbon storage potentials in offshore Matagorda Island, South Texas               | Azeez Yusuf Olaide   | EVOLVE- Texas A&M            |
| Wavelet Estimation for Quantitative Characterization of CO₂ Plume   | Weiting Peng, and Yi<br>Shen   |                              |
| A Simplified Optimistic Economic CO2 Storage Scenario, Rock Springs Uplift, Wyoming, USA  | Jaren Schuette, Charlie<br>Nuncio, Baraa Osmon,<br>Abby Mensch,<br>Mohammad Alfehaid,<br>Aditya Srivastava, and<br>Benard Oppong |                              |
| CO2 Plume Imaging with Multi-Physics  | Kurt Strack  |                              |
| Combining New Permanent Seismic Sources and Surface and Borehole Sensors for Long-Term Monitoring at CCS (and Geothermal) Sites | Nicholas J Brooks, Jakob<br>Haldorsen, Tianrun<br>Chen, and Howard<br>Wilkinson  |                              |
| 2D Viscoacoustic FWI for imaging CO2 sequestration of the Sleipner Field,<br>North Sea  | Emmanuel Anthony, and Thomas Bohlen  |                              |