

SEG/SPE Injection-Induced Seismicity Workshop
16–17 June 2026
Banff, Alberta, Canada

TECHNICAL PROGRAM

Monday, 15 June 2026

Icebreaker and Early Registration

18:00–19:30 Banff Centre for Arts and Creativity, Kinnear Centre, KC203

Tuesday, 16 June and Wednesday, 17 June 2026

Banff Centre for Arts and Creativity, Kinnear Centre: Oral Presentations KC103/105; Poster Presentations KC203;

Day 1 Tuesday, 16 June 2026	
7:00–8:00	Breakfast Buffet in Vistas Restaurant and Registration in Kinnear Centre (~2-minute walk)
8:00–8:30	Welcome and Opening Remarks <i>Shawn Maxwell, Chair, Ovintiv</i> <i>John Eastwood, SEG Past President</i>
Induced Seismicity in Western Canada Session Chairs: Shawn Maxwell, Ovintiv and Todd Shipman, Alberta Energy Regulator	
8:30–10:00	Session Opening
	Keynote — <i>Stu Venables, British Columbia Energy Regulator</i> Banff to Banff: Bookending the last 12 years
	Identification and characterization of fluid disposal-induced seismicity in Alberta, Canada <i>Mauricio Canales, AGS</i>
	Keynote — <i>Alex Bolton, Former Regulatory Tribunal Adjudicator</i> Induced seismicity and the public interest
	Moderated Discussion
10:00–10:30	Networking Break
Forecasting Induced Seismicity Hazard and Risk Session Chairs: Jens Lund Snee, Fervo Energy and Katie Smye, The University of Texas at Austin	
10:30–12:00	Session Opening
	Inference, forecasting, and control of induced poroelastic stress and seismicity <i>Stephen Bourne, Shell</i>
	Evidence of direct fluid connections between hydraulic fractures and pre-existing faults at the Cape Station EGS Project <i>Taeho Kim, Stanford University</i>
	Identifying and interpreting the bound growth of induced earthquakes <i>Ryan Schultz, Swiss Federal Institute of Technology (ETH) Zurich</i>
	Integrating observations and models to understand magnitude distributions and sequence evolution in induced seismicity <i>Elizabeth Cochran, USGS</i>
	Moderated Discussion
12:00–13:00	Lunch — Vistas Restaurant
Traffic Light Protocols Session Chairs: Hannah Chittenden, Diamondback Energy and Jens Lund Snee, Fervo Energy	
13:00–14:30	Panel Discussion <i>Doug Klepacki, Coterra</i> <i>David McHarg, Tourmaline</i> <i>Andrew Nuytten, ConocoPhillips</i> <i>David Eaton, University of Calgary</i>

Poster Session and Reception	
Session Chairs: Jens Lund Snee, Fervo Energy and Katie Smye, The University of Texas at Austin	
14:30–14:45	Poster Session Introduction
14:45–17:00	Poster Presentations and Reception — Room KC203

Day 2	
Wednesday, 17 June 2026	

7:00–8:00	Breakfast Buffet in Vistas Restaurant and Registration in Kinnear Centre (~2-minute walk)
-----------	--

Management of Interacting Injection Systems	
Session Chairs: Jonathan Winsor, Shell and Hannah Chittenden, Diamondback Energy	

8:00–10:00	Session Opening
	Regional pressurization and local acceleration of basement fault loading in a multi-well disposal setting, Peace River, Alberta <i>Kento Akitaya, University of Calgary</i>
	Mitigating induced seismicity in Kakwa: A data-driven approach to Winterburn SWD operations <i>Rick Nakamoto, ARC Resources</i>
	Geomechanical insights into seismicity in the Delaware Basin, West Texas <i>Bill Curry, ExxonMobil</i>
	Surface to basement: Interacting Permian Basin injection systems and impacts <i>Katie Smye, The University of Texas at Austin</i>
	Moderated Discussion

10:00–10:30	Networking Break
-------------	-------------------------

Public and Stakeholder Engagement	
Session Chairs: Katie Smye, The University of Texas at Austin and Shawn Maxwell, Ovintiv	

10:30–12:00	Panel Discussion <i>Heather Boychuk, Ovintiv</i> <i>Allan Ingleson, University of Calgary</i> <i>Sven Anders, University of Alberta</i> <i>James Vaughan, Alberta Energy Regulator</i>
-------------	---

12:00–13:00	Lunch — Vistas Restaurant
-------------	----------------------------------

Management of CCS	
Colin Brooks, Oklahoma Corporation Commission and Jonathan Winsor, Shell	

13:00–14:30	Seismicity insights from ten years of storing CO ₂ at the Quest Project (Alberta, Canada) <i>Jonathan Winsor, Shell</i>
	Designing, implementing, and monitoring an adaptive injection induced-seismicity program: Insights from the Decatur CO ₂ storage site <i>Oladipupo Babarinde, Illinois State Geological Survey</i>
	Induced seismicity in CCUS: Insights from Clive and origins in Central Alberta <i>Laura Mislán, Enhance Energy</i>
	Snyder Region seismicity - A brief historical review <i>Paul Anderson, Oxy</i>
	Moderated Discussion

14:30–15:00	Networking Break
-------------	-------------------------

Regulatory and Policy Roundtable	
Session Chairs: Todd Shipman, Alberta Energy Regulator and Colin Brooks, Oklahoma Corporation Commission	

15:00–16:30	<i>Reed Baker, Texas Railroad Commission</i> <i>Colin Brooks, Oklahoma Corporation Commission</i> <i>Amanda Mitander, British Columbia Energy Regulator</i> <i>Todd Shipman, Alberta Energy Regulator</i>
-------------	--

16:30–17:00	Concluding Remarks
-------------	---------------------------

Poster Presentations

Quantifying accuracy of analytical solutions utilized to model pore pressure diffusion associated with SWD injection in the Permian Basin

Josimar Alves da Silva, ExxonMobil

The seismogenic basement of the Delaware Basin, Texas imaged with tomography

Adam Baig, Nanometrics

InSAR-constrained characterization of a Mw ~5.3 slow-slip event in the Permian Basin and implications for injection-induced fault reactivation

Pieter Bas Leezenberg, SkyGeo

Can 5-Hz geophones replace broadband seismometers for injection-induced seismicity monitoring?

Nicholas Brooks, SensorEra, Inc.

High-resolution nodal seismic catalogs for improved subsurface interpretation in the Peace River region, Northwestern Alberta

Hanh Bui, Alberta Energy Regulator – Alberta Geological Survey

Evolving earthquake populations in the southern Delaware Basin, TX: Interrogating b-Values and fractal dimension

Seth Buseti, Bureau of Economic Geology, The University of Texas

Sensitivity analysis of earthquake depths in the Culberson–Mentone earthquake zone, Delaware Basin

Emmanuel Castillo, The University of Texas at Dallas

Assessing surface infrastructure vulnerability to injection-induced seismicity using geotechnical beam centrifuge testing and fragility curve development

Richard Chalaturnyk, University of Alberta

Time-dependent maximum magnitude and exceedance probability forecasting for induced seismicity in British Columbia

Zahra Esmailzadeh, ESG Solutions

3D geomechanical simulation and probabilistic moment tensor inversion across different frequency bands captures the evolution of a slip patch in time and space

Ranajit Ghose, Delft University of Technology

Implications of integrated mechanistic assessment of the Culberson-Mentone Earthquake System in Texas and New Mexico to induced seismicity hazard characterization data acquisition and strategy

Elizabeth Horne, The University of Texas at Austin

Beyond microseismicity: Characterizing differentially-propped fracture networks and their coupling with faults to unravel induced-seismicity mechanisms

Gang Hui, China University of Petroleum Beijing

Mind the gap: NPS integration for enhanced geomechanical/geophysical analysis and induced seismicity risk Assessment in the Permian Basin

Reza Keshavarzi, 3vGeomatics

Well integrity assessment during saltwater disposal operations considering transient pressure loading and induced seismicity

Jawad Khan, PetroND Energy Solution

An advanced detection and relocation workflow for characterizing seismicity associated with hydraulic fracturing in the Eagle Ford Basin, Texas

James Kirchenwitz, Miami University

Advancing to real-time forecasting in ORION with ML-based event detection, classification, and location

Kayla Kroll, Lawrence Livermore National Laboratory

Beyond seismicity: Evaluating the spatiotemporal transition from deep induced earthquakes to well-failure associated uplift features. A case study from Martin County, Texas (2016–2026)

Courtney Lucente, TRE Altamira

Updated compilation and mapping of the in situ stress regime in the Western Canadian Sedimentary Basin with applications to induced seismicity

Patrick McLellan, McLellan Energy Advisors, Inc.

Data-driven pressure forecasting based on injection rates

Venkatesh Meenakshisundaram, ExxonMobil

Induced seismicity in southeastern New Mexico, USA

Justin Rubinstein, US Geological Survey

Predicting water injection-induced seismicity and mapping risk with machine learning

Yu Pang, S&P Global Energy

Real-time seismic monitoring in Alberta: Network expansion, magnitude consistency, and detection thresholds

Javad Yusifbayov, Alberta Geological Survey — Alberta Energy Regulator