

Projecting the Future of Subsurface Characterization with Seismology: Technical Dialogues from the Next Generation of Geoscientists

VIRTUAL WORKSHOP

29 June – 02 July 2026

07:00 – 11:00 Daily, Central Time (GMT -5)

TECHNICAL PROGRAM

Day 1: AI in Geophysics				
Monday, 29 June 2026				
Houston (GMT -5)	Europe (GMT +2)	Dubai (GMT +4)	China (GMT + 8)	
07:00 – 07:05	14:00 – 14:05	16:00 – 16:05	20:00 – 20:05	Opening Comments Pwavodi Joshua , Workshop Chair, BRGM - French Geological Survey, France
07:05 – 07:20	14:05 – 14:20	16:05 – 16:20	20:05 – 20:20	Geoscience Changing Fast and Furiously: Opportunities, Threats, and How to Survive and Thrive Stephan Gelinsky , Ephangeli Enterprises and Ikon Science, Texas, USA
07:20 – 07:30	14:20 – 14:30	16:20 – 16:30	20:20 – 20:30	SEG Welcome Joe Reilly , President, SEG Annabella Betancourt , Managing Director of Programs, SEG
Artificial Intelligence & Machine Learning Session Chair: Silas Adeoluwa, BP Texas, USA				
07:30 - 08:05	14:30 – 15:05	16:30 – 17:05	20:30 – 21:05	Plenary: Future Trends of AI & ML in Geosciences Chandra Prakash Dubey , Indian Institute of Technology, Kharagpur, India Muhedeen Lawal , The Ohio State University, USA Tao Zhao , SLB, USA
08:05 - 8:25	15:05 – 15:25	17:05 – 17:25	21:05 – 21:25	Enhancing Seismic Phase Detection in the Bali-Lombok Volcanic Zone using Time-Frequency Domain Adaptation and Transfer Learning ABSTRACT Abimanyu Dharma Kamanungsan , Universitas Indonesia, Indonesia
08:25 - 08:50	15:25 – 15:50	17:25 – 17:50	21:25 – 21:50	Physics-Guided Deep Learning Seismic Inversion for Fluid Discrimination in the F3 Block, Dutch North Sea ABSTRACT Abdulrhman Osman , China University of Petroleum Beijing, China
08:50 - 09:10	15:50 – 16:10	17:50 – 18:10	21:50 – 22:10	Discrete Morse Theory for Predictive Mapping from Regional Geophysical Benjamin Le Teurnier , BRGM - French Geological Survey, France
09:10 - 09:20	16:10 – 16:20	18:10 – 18:20	22:10 – 22:20	BREAK
Subsurface Modelling Session Chair: Jaewook Lee, University of Texas Permian Basin, USA				
09:20 - 09:55	16:20 – 16:55	18:20 – 18:55	22:20 – 22:55	Keynote: Real-time Microseismic Monitoring in the Era of Machine Learning and DAS MORE INFO Umair Bin Waheed , King Fahd University of Petroleum and Minerals, Saudi Arabia

09:55 - 10:15	16:55 – 17:15	18:55 – 19:15	22:55 – 23:15	Deep Learning Driven Integration of Aeromagnetic and Radiometric Data for Mineral Prospectivity Assessment in the Abakaliki Region, Southeastern Nigeria ABSTRACT Martins Uchenna Obidiegwu , University of Miskolc, Hungary
10:15 - 10:35	17:15 – 17:35	19:15 – 19:35	23:15 – 23:35	Edge AI-Embedded IoT Sensors for Real-Time Groundwater Quality Prediction and Availability Forecasting in Solar-Powered Rural Water Systems: A Case Study Framework for Sub-Saharan Africa Victoria Ihenetu , Hydro Envision Hub, Nigeria
10:35 - 10:55	17:35 - 17:55	19:35 - 19:55	23:35 - 23:55	GEOSCIENCE Quiz Challenge Azeez Yusuf , Texas A&M University, USA
10:55 - 11:00	17:55 – 18:00	19:55 – 20:00	23:55 – 00:00 (+1)	Closing Remarks / Day Summary
Day 2: CCUS, Geothermal Energy, and Hydrogen				
Tuesday, 30 June 2026				
Houston (GMT -5)	Europe (GMT +2)	Dubai (GMT +4)	China (GMT + 8)	
07:00 – 07:05	14:00 – 14:05	16:00 – 16:05	20:00 – 20:05	Opening Speech Haoran Zhang , China University of Petroleum, Beijing, China
CCUS, Geothermal Energy, and Hydrogen I Session Chair: John Olutoki, Queensland University, Australia				
07:05 - 07:25	14:05 – 14:25	16:05 – 16:25	20:05 – 20:25	Physics-Informed Machine Learning for Predicting P-Wave Velocity Evolution During Supercritical CO ₂ Injection ABSTRACT Sreeja , Indian School of Mines, Jharkhand, India
07:25 - 07:45	14:25 – 14:45	16:25 – 16:45	20:25 – 20:45	Log Conditioning and Shear-wave Velocity Synthesis for Reliable Inversion at the Sleipner Site ABSTRACT Jiyeon Lee , Hanyang University, South Korea
07:45 - 08:05	14:45 – 15:05	16:45 – 17:05	20:45 – 21:05	Regional Well-log Integration for Reliable Porosity and Shale Volume Estimation in the Sleipner CCS Field ABSTRACT Gahyeon Lee , Hanyang University, South Korea
08:05 - 08:15	15:05 – 15:15	17:05 – 17:15	21:05 – 21:15	BREAK
CCUS, Geothermal Energy, and Hydrogen II Session Chair: Mercy Owen, University of Lagos, Nigeria				
08:15 - 08:25	15:15 - 15:25	17:15 - 17:25	21:15 - 21:25	De-risking the Energy Transition: Subsurface Expertise and Innovation at BRGM Pwavodi Joshua , BRGM - French Geological Survey, France
08:25 - 09:00	15:25 – 16:00	17:25 – 18:00	21:25 – 22:00	Plenary: Women in Geosciences – Leadership in CCUS, Geothermal, Hydrogen Jeanne Vidal , Women in Geothermal (WING), France Camelia Knapp , Oklahoma State University, USA Nancy J. House , SEG, AAPG, SPE, Denver, USA
09:00 - 09:20	16:00 - 16:20	18:00 - 18:20	22:00 - 22:20	Ratio-based 4D Seismic Imaging for High-resolution CO ₂ Plume Monitoring in the Sleipner Field ABSTRACT Junyon Park , Hanyang University, South Korea

09:20 - 09:40	16:20 - 16:40	18:20 - 18:40	22:20 - 22:40	Glass-Box Machine Learning for Discovery of Stress-Dependent Poro-elastic Behavior and CCUS Stability in Sandstones ABSTRACT Pranjal Srivastava , Indian School of Mines, Jharkhand, India
CCUS, Geothermal Energy, and Hydrogen III Session Chair: TBD				
09:40 - 10:15	16:40 - 17:15	18:40 - 19:15	22:40 - 23:15	Keynote: Geological Characterization for Carbon Capture Utilization and Storage (CCUS): Insights from the Seismically Active Cook Inlet Basin, Alaska MORE INFO Richie Ness , Advanced Resources International, Inc.
10:15 - 10:40	17:15 - 17:40	19:15 - 19:40	23:15 - 23:40	Career Development SEG EPIC (Emerging Professionals International Committee)
10:40 - 11:00	17:40 - 18:00	19:40 - 20:00	23:40 - 00:00	Prospective CO ₂ Injection Horizons within Malwa Plateau Basalts, Deccan Volcanic Province - A Case Study from the Mhow Region ABSTRACT Torel Samyuktha S , Indian Institute of Science Education and Research, India
11:00 - 11:05	18:00 - 18:05	20:00 - 20:05	00:00 - 00:05 (+1)	Closing Remarks / Day Summary
Day 3: Reservoir and Petrophysics				
Wednesday, 01 July 2026				
Houston (GMT -5)	Europe (GMT +2)	Dubai (GMT +4)	China (GMT + 8)	
07:00 – 07:05	14:00 – 14:05	16:00 – 16:05	20:00 – 20:05	Opening Speech Silas Adeoluwa , BP Texas, USA
Reservoir and Petrophysics I Session Chair: Aleksei Nelaev, Tel Aviv University, Isreal				
07:05 - 07:25	14:05 – 14:25	16:05 – 16:25	20:05 – 20:25	Quantitative Fracture and Fault Characterization in a Fractured Reservoir Using High- Resolution Quanta Geo Borehole Imaging Case of Marsouin-1 Bir Allah Field ABSTRACT Dahmane Bah , Boumerdes University, Boumerdes, Algeria
07:25 - 08:00	14:25 – 15:00	16:25 – 17:00	20:25 – 21:00	Plenary: Bridging the Gap: Strategies for Early-Career Geoscience Jobs Cicero Yuri Majikol , SLB, Malaysia Sergio Chávez-Pérez , Instituto Mexicano del Petróleo (IMP) [Mexican Petroleum Institute], Mexico City, Mexico Ali Moradi Tehrani , Geosoftware, Netherlands
08:00 - 08:10	15:00 – 15:10	17:00 – 17:10	21:00 – 21:10	Digital Intelligence for Subsurface Characterization: Innovative Software Solutions from Geosoftware Ali Moradi Tehrani , Geosoftware, Netherlands
8:10 - 8:20	15:10 - 15:20	17:10 - 17:20	21:10 - 21:20	Prasad Pothana , The University of Texas Permian Basin
08:20 - 08:40	15:20 – 15:40	17:20 – 17:40	21:20 – 21:40	Probabilistic Delineation of Siliciclastic Thin Beds: A Duration-Aware Hidden Markov Model Approach for Seismic-Log Fusion ABSTRACT Ejike Kenneth Ezeh , RWTH Aachen University, Germany

08:40 - 09:15	15:40 – 16:15	17:40 – 18:15	21:40 – 22:15	Keynote: Using Digital Rock Technology for Subsurface Characterization MORE INFO Ronny Hofmann , Shell Exploration and Production Company, USA
09:15 - 09:25	16:15 – 16:25	18:15 – 18:25	22:15 – 22:25	BREAK
Reservoir and Petrophysics II Session Chair: Moones Alamooti, University of North Dakota, USA				
09:25 - 09:45	16:25 – 16:45	18:25 – 18:45	22:25 – 22:45	Distributed Strain Sensing Amplitude Analysis for Induced Fractures Characterization ABSTRACT Badr S. Badghaish , Colorado School of Mines, USA
09:45 - 10:05	16:45 – 17:05	18:45 – 19:05	22:45 – 23:05	Chinguetti Field Failure versus the Banda, TEVET, and TIOF Fields: Reservoir Evaluation and Economic Performance in the Mauritanian Coastal Basin ABSTRACT Bah Dahmane , Boumerdes University, Boumerdes, Algeria
10:05 - 10:35	17:05 – 17:35	19:05 – 19:35	23:05 – 23:35	Plenary: Young Professionals Panel: Future of Reservoir Characterization Yusuf Olaide Azeez , Texas A&M University, USA Victoria Ihenetu , Hydro Envision Hub, Nigeria Ali Mahdy , Ain Shams University, Egypt
10:35 - 10:55	17:35 – 17:55	19:35 – 19:55	23:35 – 23:55	GEOSCIENCE Quiz Challenge Yusuf Olaide Azeez , Texas A&M University, USA
10:55 - 11:00	17:55 – 18:00	19:55 – 20:00	23:55 – 00:00 (+1)	Closing Remarks / Day Summary
Day 4: Seismic Processing & Imaging				
Thursday, 02 July 2026				
Houston (GMT -5)	Europe (GMT +2)	Dubai (GMT +4)	China (GMT + 8)	
07:00 – 07:05	14:00 – 14:05	16:00 – 16:05	20:00 – 20:05	Opening Speech
Seismic Processing & Imaging I Session Chair: Nine Safira, SLB, Indonesia				
07:05 - 07:40	14:05 – 14:40	16:05 – 16:40	20:05 – 20:40	Keynote: SLB Asia Geosolutions
07:40 - 08:15	14:40 – 15:15	16:40 – 17:15	20:40 – 21:15	Plenary: Innovations in Subsurface Imaging Suresh Dande , ESG Solutions, Texas, USA Aaron Micallef , Monterey Bay Aquarium Research Institute, California, USA
08:15 - 08:35	15:15 – 15:35	17:15 – 17:35	21:15 – 21:35	DAS Ambient Noise Signal Reconstruction with Time-Domain Normalization Prior to Subsurface Characterization ABSTRACT Ibrahim O Mustapha , Universiti Teknologi PETRONAS, Malaysia

08:35 - 08:55	15:35 – 15:55	17:35 – 17:55	21:35 – 21:55	Performance Evaluation of Surface Distributed Acoustic Sensing Using Multiple Fiber Configurations ABSTRACT Alidu Rashid , Centre for Subsurface Imaging, Universiti Teknologi PETRONAS, Malaysia
8:55 - 9:05	15:55 - 16:05	17:55 - 18:05	21:55 - 22:05	Lumina Geophysical
09:05 - 09:15	16:05 - 16:15	18:05 - 18:15	22:05 - 22:15	BREAK
Seismic Processing & Imaging II Session Chair: Sohelkhan Pathan, CSIR - National Geophysical Research Institute, India				
9:15 - 9:50	16:15 - 16:50	18:15 - 18:50	22:15 - 22:50	Keynote: Subsurface Characterization in an Era of AI: Physics, Data, Models MORE INFO Ting Chen , Los Alamos National Laboratory, USA
9:50 - 10:10	16:50 - 17:10	18:50 - 19:10	22:50 - 23:10	Seismic Processing and Velocity Inversion for Crustal Seismicity Imaging in the Northern Central Cordillera of Colombia ABSTRACT Andrés Felipe Muñoz Calderón , National University of Colombia – Medellín, Colombia
10:10 - 10:30	17:10 - 17:30	19:10 - 19:30	23:10 - 23:30	Seismic Evidence for Mud Volcanism and Mass Flow: Implications for Geohazard Assessment along Continental Margins
10:30 - 10:50	17:30 - 17:50	19:30 - 19:50	23:30 - 23:50	Academic Career Development Panel
10:50 - 11:00	17:50 - 18:00	19:50 - 20:00	23:50 - 00:00 (+1)	Valedictory Function & Feedback Pwavodi Joshua , BRGM - French Geological Survey, France