


18 Nov 2025 - Khobar, KSA									
8:00	9:00		Grand Ballroom Onsite Registration & Exhibition Open						
9:00	9:15		Welcome by EC						
9:15	9:30		Opening Speaker						
9:30	9:40		Group Photo						
9:40	10:40		Executive Panel						
10:40	11:00		Sponsor and exhibitor Recognition						
11:00	11:15		Coffee Break - 15 min						
Fellows 1									
Venue: Grand Ballroom A, B & C									
11:15	12:15		Joseph F. Labuz - University of Minnesota		Mineral carbon storage and rock fracture experiments				
Fellows 2									
Venue: Grand Ballroom A, B & C									
12:15	13:15		John McLennan - University of Utah		An Opportunity at Any Temperature and Location				
13:15	14:15		Lunch on 1st Floor						
Venue: Coffee Foyer Area			Poster Session 1: AI and Data-Driven Methods in Petroleum Geomechanics Session Chair:		Poster Session 2: Hydraulic Fracturing: Modeling, Lab, Monitoring, Diagnostics, Operations Session Chair:	Poster Session 3: Advances and Geomechanics Applications in Mining Session Chair:		Poster Session 4: Advances and Geomechanics Applications in Geothermal Resources Session Chair:	
14:15	14:25	1	Bicheng Yan (King Abdullah University of Science and Technology) AI-Driven Laser Spectroscopy for Real-Time Rock Profiling and Hydraulic Fracturing Optimization		zhenyu wang (China Zhenhua Oil., Ltd) Research and application of temporary plugging fracturing technology combined with distributed optical fiber monitoring in the transformation of unconventional tight conglomerate reservoirs	6	11	16	
14:25	14:35	2	Ruyi Wang (CNPC Engineering Technology R&D Company Limited) Research on Intelligent Logging Prediction Method for Anisotropic Rock Mechanics Parameters Based on Machine Learning Intelligent Decision-making Algorithm		Hualzhong Shi (China University of Petroleum-Beijing) Research and parameter optimization of nitrogen foam fracturing in ultra-short radius horizontal wells	7	12	17	
14:35	14:45	3	Ahmadreza Younessi (Baker Hughes) Compaction and Subsidence Induced by Hydrate Dissociation in Deepwater Wells in Offshore Brunei		Luyao Wang (China University of Petroleum (Beijing)) Research on Real-Time Hydraulic Fracturing Prediction Based on Neural Networks	8	13	18	
14:45	14:55	4	Hongda Li (China University of Petroleum, Beijing) FDEM-DL based prediction and analysis of mechanical properties of ultra-deep heterogeneous dolomite		Dagang Ji (China University of Petroleum) Numerical Simulation of Hydraulic Fracture Propagation Mechanism in Hydrate-Bearing Sediments: A Case of the Shenhu area in the South China Sea	9	14	19	
14:55	15:05	5	Mao Sheng (China University of Petroleum (Beijing)) Data Mining Evaluation for Diverting Effectiveness of Hydraulic Fracturing		Liu Tong (Southwest Petroleum University) New criterion for the Intersection between Hydraulic Fractures and Structural Planes	10	15	20	
President Panel:									
Venue: Grand Ballroom A, B & C									
15:05	16:05		Presidents Panel: Moderated by Gang Han						
16:05	16:20		Coffee Break - 15 min						
Session 1: AI and Data-Driven Methods in Petroleum Geomechanics Venue: Grand Ballroom B & C					Co-Chair: Name, Company Co-Chair: Name, Company		Session 2: AI Data-Driven Methods in Fundamental Geomechanics Venue: Grand Ballroom A		
16:20	16:40	1	Anke Wendt (SLB)		Proxy Geomechanical Modeling for Sustainable & Efficient Well Construction	6	Co-Chair: Name, Company Co-Chair: Name, Company		Session 3: Geothermal Resource Development: Case Studies and Future Technologies Venue: Al Ahsa 1 & 2
16:40	17:00	2	Lingdan Xia (SLB)		Facilitating operational decision-making for CCUS operations through real-time acoustics processing supported by machine learning	7			Marine Deheuevels (KAUST) On the use of Distributed Acoustic Sensing displaying amplitude polarity flips: case study in KAUST, Saudi Arabia
17:00	17:20	3	Wei Yu (The University of Texas at Austin, SimTech LLC)		Next-Generation Hydraulic Fracture Optimization Enabled by AI and GPU-Based Simulation	8			Chongyuan Zhang (Institute of Geomechanics, Chinese Academy of Geological Sciences) Stress state on the Gonghe EGS (China) constrained by ensemble ASR, borehole damage and MT solutions: A new practice
17:20	17:40	4	Johannes Vossen (Baker Hughes)		Assessing Machine Learning Derived Prediction of Acoustic Logs While Drilling: Impact on geomechanics modelling in real time operations	9			Yizhi Wu (SINOPEC Geophysical Research Institute Co., Ltd) Integrated Geophysical Prospecting for Deep Geothermal Resource Assessment: A Case Study in Southeastern Coastal China
17:40	18:00	5	Mohammed Alameer (Saudi Aramco)		Data-Driven Prediction of Sand-Free Flow-Test Outcomes from Near-Wellbore Geomechanical Parameters	10			GUANYI SHANG (China University of Petroleum (Beijing)) The Study of The Impact of Lost Circulation On Wellbore Temperature During Drilling And The Establishment Of An Inversion Model
						Golabchi, Yousef (York University)		Influence of data augmentation on machine learning algorithms & predicting excavation damage zone depth	Kareem Aboaynah (University of Toronto (Toronto, ON)) Unravelling Deformation and Seismicity in Hot Dry Geothermal Reservoirs: New Insights from Real-time Full-Field Displacement Laboratory Monitoring
End of Day 1									



19 Nov 2025 - Khobar, KSA																							
8:00		9:00		Onsite Registration																			
9:00		9:15		Opening Speaker																			
9:15		10:15		Mining Panel																			
10:15		10:30		Coffee Break - 15 min																			
Session 4: In-Situ Mining Venue: Grand Ballroom B & C				Co-Chair: Name, Company Co-Chair: Name, Company				Session 5: AI and Data-Driven Methods for CO2 Sequestration and Utilization Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company				Session 6: Well Stimulation and Completion Geomechanics Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
10:30	10:50	1	Muhammad Zaka Emad (King Fahd University of Petroleum and Minerals)	Advances in In-Situ Stress Measurement for Underground Engineering Applications	6	Bicheng Yan (King Abdullah University of Science and Technology)*	Accelerating Uncertainty Quantification in Geological Carbon Sequestration Through Deep Learning	11	Osman Hamid (Saudi Aramco)	Geomechanical Characterization and Monitoring of Thermally and Hydraulically Induced Fracture Evolution during Cold Fluid Injection													
10:50	11:10	2	Mosebudi Matlou (University of the Witwatersrand)	The relationship between mining depth, excavation dimensions, fracturing of the rock ahead of the face and stress distribution on the pillars in deep-level mines.	7	Ikhnawan Musa (PETRONAS)	A Machine Learning Approach for Geomechanical Risk Evaluation during CO2 Injection Using the SPE11b Benchmark Model	12	Kaiming Xia (Saudi Aramco)	Mitigating Challenges in Open-hole Multistage Fracturing Treatment													
11:10	11:30	3	Rudrajit Mitra (SD School of Mines)	Underground Mine Deformation Monitoring: A Comprehensive Review and Vision for the Future	8	Bo Zhang (University of Alberta)	Deep Reinforcement Learning Optimizing for Geological CO2 Storage Considering Geomechanical and Leakage Risks	13	Svetlana Zhigulskiy (GPN)	Hydraulic fracture design based on anisotropic stress model for a tight oil reservoir													
11:30	11:50	4	Victor Mutambo (University of Zambia)	Designing Effective Tunnel Support in Weak Rock Mass: Case Study of Lubambe Copper Mine, Shaft 2	9	Xupeng He (Saudi Aramco)	Subsurface CO2 Leakage Detection Using Multi-Stage Well Testing and Machine Learning	14	Egor Dontsov (ResFrac)	Hydraulic fracture propagation along bedding planes in shales occurs more often than we think													
11:50	12:10	5	Lei Weng (Wuhan University)	Unsteady Diffusion Characteristics of Pulse Grouting in a Single Fracture Considering the Grout–Rock Hydromechanical Coupling Effect	10	Vincenzo De Gennaro (SLB)	Artificially Intelligent Performance Management of Carbon Storage Sites	15	John Donald (SLB)	Azimuthal Sonic Measurements for Geomechanics Modeling in Layered Formations for Horizontal Well Stimulation													
12:10	13:10	Lunch on 1st Floor																					
Venue: Coffee Foyer Area		Poster Session 5: CO2 Geomechanics Based Risk Analysis Session Chair:				Poster Session 6: Advances in Subsurface Energy Storage Session Chair:				Poster Session 7: Advances in Geotechnics and Environment Session Chair:				Poster Session 8: In-situ Stress Characterization Session Chair:				IGS Student Contest Venue: Al Ahsa 1 & 2					
13:10	13:20	1	Lei Weng (Wuhan University) Competitive Mechanism Between Dissolution and Recrystallization in SC-CO2 Mineralization within Basalt Based on the Microfluidic Technology	Mustafa Sari (CSIRO) Experimental Hydrogen mobility in a gas storage reservoir from Western Australia using Nuclear Magnetic Resonance in the context of a depleted gas reservoir versus aquifer reservoir	6	11	Prajit Chakrabarti (Baker Hughes) Getting the minimum horizontal stress right to troubleshoot drilling problems encountered in overburden formations–Results from the successful Microfrac tests in the Cretaceous located in Umm Shalf field, offshore UAE	Samantha Han (SLB) Improving geomechanical modeling through log verticalization and stress inversion	16	More information to follow closer to the date													
13:20	13:30	2	Wei Lu (Institute of Geology and Geophysics, Chinese Academy of Sciences) Mechanism of Shear Failure in Sandstone Structural Planes Induced by Supercritical CO2 Injection	Chinemerem Okezie (New Jersey Institute of Technology) Tensile Strength Characterization of Ultramafic Rocks During Stimulated Serpentinization for Geologic Hydrogen Production	7	12	Hanbing BIAN (University of Lille) Pore Structure and Hydraulic Properties of Lateritic Soil Reinforced with Ryegrass Roots: Insights from CT Scanning	Weiwei Zhou (China University of Petroleum, Beijing) A New Technique for Inverting the Orientation of Maximum Horizontal Stress from Fault Slip Observations: Peak-Finding Method	17														
13:30	13:40	3	Avirup Chatterjee Avirup Chatterjee (Baker Hughes) Addressing uncertainties in minimum horizontal stresses for cap rock integrity analysis for CO2 injection in depleted reservoirs	James Burtonshaw (Imperial College of Science, Technology and Medicine) Hydraulic Fracturing of Ultra-Low Permeability Crystalline Natural Hydrogen Reservoirs	8	13	Rabia Zainab (university of the punjab,Jahore) Innovative Geophysical and Geotechnical Solutions for Slope Stabilization in Open-Pit Mining: Strategies for Safety and Sustainability	Weiwei Zhu (Institute of Geology and Geophysics, Chinese Academy of Sciences) Advancements in Hydraulic Fracturing Simulation Considering Complex Natural Fracture Distributions	18														
13:40	13:50	4	John Donald (SLB) Essential Measurements for Geomechanical Characterization of Carbon Capture and Sequestration Projects	Chinemerem Okezie (New Jersey Institute of Technology) Mineral, Thermal, and Temporal Controls on Stimulated Serpentinization for Geologic Hydrogen	9	14	Rafia Yousaf Rafia Yousaf (Science University of Punjab) Multi-Model Landslide Susceptibility Assessment in the Himalayan Fold Belt: A GIS-Based Approach	Yuehui Yang (Institute of Geomechanics, Chinese Academy of Geological Sciences) Deep borehole in-situ stress measurements using hydraulic fracturing technique in the south of China	19														
13:50	14:00	5	Ahmadreza Younessi (Baker Hughes) Assessing the Impact of Rock Mechanical Properties Uncertainty on Upper Limit of Injection Pressure for a CO2 Storage in a Depleted Gas Reservoir in Gulf of Thailand	Olufemi Olorode (Louisiana State University) Numerical and Experimental Studies of Coupled THCM Processes in Ultramafic Rocks	10	15	Matthew Sonibare (New Jersey Institute of Technology) Predicting Mechanical Behavior of Grouted Rock Masses Using Machine Learning: A Cost-Efficient Alternative to Laboratory Testing	Koji Kashihara (JAPEX) Visualization of the Deformation Behavior of Sidewall Cores for Estimating In-situ 3D Stress Components	20														
Session 7: Constitutive Modeling & Failure Criteria – Advances in stress-strain behavior, plasticity, and damage mechanics Venue: Grand Ballroom B & C				Co-Chair: Name, Company Co-Chair: Name, Company				Session 8: Applications of Drilling Geomechanics Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company				Session 9: Advancements in Hydraulic Fracturing Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
14:00	14:20	16	Junfeng Zhu (China University of Petroleum (Beijing))	Improved Shale Microcrack Prediction via Plasticity-Modified Model	21	Elsa Maalouf (American University of Beirut)	Influence of graphene nanoplatelets and multi-walled carbon nanotubes on the performance of oil well cement: An experimental approach	26	Gang Han (ARAMCO)	Turning of Hydraulic Fracture: Near-Wellbore Complexity													
14:20	14:40	17	Adam Bere (Rockfield)	A Comparative Study of Mohr Coulomb and Critical State Material Models for Predicting Wellbore Stability and Sand Production Volume Prediction	22	Qiuguo Li (Saudi Aramco)	Impact of Diagenesis, Pore Shapes and Heterogeneity on Wellbore Stability in Carbonate Rocks	27	Jie Bai (Research Institute of Petroleum Exploration & Development)	Rock mechanical Characteristics of deep coal-rock reservoirs in the Ordos Basin and Understanding of hydraulic fracturing													
14:40	15:00	18	Alex(Abofazi) Hashemi (University of New South Wales)	Diametrical Core Deformation Analysis (DCDA) versus Acoustic Emission Analysis (AEA) to determine the in-situ stress state: a comparative study	23	Christian Bikong (King Abdullah University of Science and Technology)	Sensitivity analysis of fixed cutter PDC drill bit design on drill string lateral vibrations and induced wellbore instability using a 3D finite element model	28	Daniel Wamriew (King Abdullah University of Science and Technology)	Fiber-Optic Distributed Acoustic Sensing in Laboratory-Scale Hydraulic Fracture Experiments: Implications for Monitoring													
15:00	15:20	19	Songfeng Guo (Institute of Geology and Geophysics, Chinese Academy of Sciences)	Stress Field Characteristics and Damage Zone Features Along the Xianshuihe Fault Zone: Insights from In Situ Data, Field Investigations, and Laboratory Tests	24	Mingfei Yan (China University of Petroleum, Beijing)	Influence of drill string vibration on wellbore stability in conglomerate formation based on CFD-DEM	29	Carlos Rodriguez-Hernandez (Sinopec Tech Middle East LLC)	Discrete Element Method Simulations of Stress–Fabric Coupling during Hydraulic Fracture Propagation in Pre-Structured Rocks													
15:20	15:40	20	Margariete malenda (Lawrence Livermore National Lab)	Continuum-Scale Modelling of Elastic-Plastic Deformation Effects on Wellbore Stability Under Ambient and Elevated Temperatures	25	Beiyu Han (China University of Petroleum (Beijing))	Geomechanical Analysis of Wellbore Instability in Smectite-Rich Interbedded Formations: Addressing Drilling Challenges in the East China Sea	30	Harald Stockhausen (Three60energy)	Thermochemical fracturing as an alternative of the conventional hydraulic fracture treatment, initial experimental phase													
15:40	15:55	Coffee Break - 15 min																					
Venue: Coffee Foyer Area		Poster Session 9: CO2 Coupled Thermo-Poro-Mechanical and Geochemical Processes Session Chair:				Poster Session 10: Hydraulic Fracturing: Modeling, Lab, Monitoring, Diagnostics, Operations Session Chair:				Poster Session 11: CO2 Modeling of Coupled Physical and Chemical Processes Session Chair:				Poster Session 12: Fracture Mechanics & Crack Propagation – Experimental and numerical investigations into rock and material failure Session Chair:									
15:55	16:05	21	Yuting HE (China university of petroleum (Beijing)) Investigation of the Effects of Reservoir Fluid Composition on Mineralogy, Pore Structure, and Mechanical Properties During CO2 Injection	Wangchen Luo (China university of petroleum Beijing) Stress Sensitivity Analysis and Modeling of Tight Sandstone and Coal Seams with Nature Fractures	26	31	Nicola Castelletto (Lawrence Livermore National Laboratory) Massively Parallel Multiphysics Simulation of Subsurface Energy and Storage Systems Using GEOS	Xinyan Peng (Sichuan University) Simulation of Complex Interaction Problems in Geotechnical Hazards based on a Coupled DDA-SPH Framework	36														
16:05	16:15	22	Ashok Shinde (Baker Hughes) Integrated Risk Assessment in Carbon Capture & Storage (CCS) Operations: Two-way Coupling with Reservoir & Geomechanical Modeling	Min Zhang (University Science and Technology Beijing) Optical fiber strain induced by Swarm-like fracture propagation from Lab experiments	27	32	Mingjian Wang (china university of petroleum (east china)) Multi-scale and Multi-mechanism CO2-EOR and CCS in Shale Oil Reservoirs with Complex Fracture Network	Ravindra Burnwal (Indian Institute of Technology Roorkee) FAILURE MECHANISMS OF CYLINDRICAL CAVITY IN ROCK MASS UNDER POLYAXIAL STRESS CONDITION	37														
16:15	16:25	23	Bin Wang (China University of Petroleum (Beijing)) Phase Field Modelling of CO2 Energized Fracturing and Sequestration in Naturally Fractured Shale Reservoirs: Effect of Multiphase Fluid-Loss	Zhengpei Yu (China University of Petroleum (Beijing)) Productivity Enhancement in Unconventional Reservoirs by Supercritical CO2 Shock Fracturing	28	33	Matteo Frigo (Stanford University) Augmented Lagrangian Method With Bubble Stabilization For Frictional Contact in Coupled Poromechanics	Senlin Luo (China University of Petroleum (Beijing)) The transformation of the microscopic fracture mechanism of rock induced by confining pressure and its macroscopic fracture response	38														
16:25	16:35	24	Mingwei Jia (China University of Petroleum (East China)) Precision Sweet Spot Differential Injection In Buried Hill Condensate Reservoirs: CO2 Sequestration And Production Enhancement	Shaohua You (China University of Petroleum,Beijing) How Does Hydraulic Fracture Propagation Affect LF-DAS Signals: A Comprehensive Analysis and Interpretation Workflow	29	34	Xuehang Song (CAS Key Lab of Low-Carbon Conversion Science and Engineering, Shanghai Advanced Research Institute, Chinese Academy of Sciences) Supercritical CO2 distribution mechanisms in sandstones: joint acoustic-electrical responses under reservoir conditions	Divyanshoo Singh (Rajiv Gandhi Institute of Petroleum Technology) Mathematical Modelling and Statistical Validation of Specimen Geometry Effect on Axial Point Load Index of Anisotropic Rock	39														
16:35	16:45	25	Hao Zhang (Dalian University of Technology) Long-term dynamic stability of submarine slopes considering CO2 injection acidification	Baodong Ma (China University of Petroleum, Beijing) Liquid Nitrogen Preconditioning Strategy for Breakdown Pressure Reduction for Hydraulic Fracturing on Ultra-Dense Marble – A Laboratory Study	30	35	Jia Cunqi (The University of Texas at Austin) Numerical evaluation of different physical mechanisms on geological carbon storage in saline aquifers	Jiliang Pan (University of Science and Technology Beijing) Compressive, tensile, and fracture mechanical properties of granite modified by high temperature and chemical stimulation	40														
Session 10:EOR, Water Flooding and Induced Seismicity Venue: Grand Ballroom B & C				Co-Chair: Name, Company Co-Chair: Name, Company				Session 11: CO2 Containment Risks Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company				Session 12: Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
16:45	17:05	31	Kaiming Xia (Saudi Aramco)	Finite element modeling of fault reactivation induced by hydraulic fracturing treatment	35	Claudia Sorgi (SLB)	Integration of Quantitative Risk Assessment and Predictive Measurement Modelling for Optimized MMV in CCS Injection Projects	39	Xinhao Wang (china university of petroleum)	Assessing the Interplay of Impurities and Thermal Effects on CO2 Sequestration in Saline Aquifers													
17:05	17:25	32	Manoj Sarfare (Petroleum Development Oman (PDO)) Development Oman (PDO))	Insights from Multi-Disciplinary Approach to Optimize Waterflood Operating Envelope in Highly Depleted Sandstone Reservoirs: An Integrated Study from Marginal Fields of South Oman	36	Chee Tan (PETRONAS)	Sensitivity of Thermal Effect Simulation to Local Grid Refinement in Coupled Thermal Geomechanical Modelling of CO2 Geological Storage	40	Hamid Nick (DTU)	Coupled Geomechanical Analysis of Cold CO2 Injection in the Harald East Chalk Field													
17:25	17:45	33	Salim Al Busaidi (PDO)	Assessing Fault Reactivation Risks in Hydraulic Fracturing of an Appraisal Well Adjacent to a Major Boundary Fault: An Integrated Geomechanical and Structural Geology Approach	37	Adam Bere (Rockfield)	Efficient 3D Field Scale Geometry Construction for Geomechanical Modelling of Fault Reactivation and Induced Seismicity	41	Lei Hou (Shanghai Jiao Tong University)	Feasibility and key issues of CO2 storage in depleted shale reservoirs													
17:45	18:05	34	Sadegh Asadi (Baker Hughes)	Safe Operating Envelope for Injector Wells – A Geomechanical Risk Assessment	38	Abbas khaksar (Baker Hughes)	Risk Assessment of CO2 Sequestration in a Heavily Depleted North Sea Gas Field	42	End of Day 2														

8:00		9:00		Grand Ballroom 1+2 Onsite Registration		20 Nov 2025 - Khobar, KSA															
9:00		9:15		Opening Speaker																	
Session 13:Rock Fragmentation Mining Techniques Venue: Grand Ballroom B & C						Co-Chair: Name, Company Co-Chair: Name, Company		Session 14: Rock Fragmentation Mining Techniques - 2 Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company		Session 15: Advances in Subsurface Energy Storage Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
9:15		9:35		1		Omid Mahabadi (Geomechanica)		Reducing Uncertainty in Mining Applications Through Advanced Numerical Modelling		5		Zhongwei Huang (China university of petroleum (Beijing))		An innovative cryogenic ice–air jet coal breakage method by using Laval nozzles		9		Meitao Zou (Tongji University)		Investigation of Soil Behavior Evolution Surrounding Underground LNG Storage Tanks During Leakage Scenarios	
9:35		9:55		2		Ang Liu (The Pennsylvania State University)		Blasting Monitoring in Surface Mine Using Integrated Distributed Acoustic Sensing (DAS) and Geophone Methods		6		Wenhao He (China University of Petroleum, Beijing)		Experimental Study on Rotational Cutting Characteristics of Conglomerate by PDC Cutters		10		Ahmed Fatah (King Fahd University of Petroleum & Minerals)		Evaluating Cement Integrity and Capillary Pressure Behavior for Subsurface Hydrogen Storage Applications	
9:55		10:15		3		Rudrajit Mitra (SD School of Mines)		Rock Strength Measurement using Laser-Induced Breakdown Spectroscopy		7		shuailin li (中国石油大学)		Comparative Analysis of Innovative Cavitation Jet Nozzles: Flow Dynamics and Sandstone Breaking Performance		11		Marwah Alsinan (Saudi Aramco)		Integrated Thermo-Compositional-Mechanical Modelling of Cyclic Hydrogen Storage in Depleted Gas reservoirs.	
10:15		10:35		4		Yazhou Shen (China university of petroleum Beijing)		Controlling the caving of hard roof through hydraulic fractures: Simulation on the influence law and mechanism		8		侯 钟 (中国石油大学（北京）)		Numerical Investigation of Ice-Abrasive Jet Impingement to Coal Using a Hybrid CFD-DEM-FEM Approach		12		Zhi Fang (Petro-Geomechanics LTD)		An advanced geomechanics study to minimize the drilling risks and optimise the new wells placement for a hydrogen storage project in a Southern North Sea depleted gas reservoir	
10:35		10:55				Ahmadreza Younessi, Baker Hughes		Geomechanical Analysis of CO2 Storage in a Multi-Layered Depleted Field in Offshore Malaysia				Xiaodong Ma, University of Science and Technology of China		In situ stress characteristics and hydraulic fracturing performance – insights from key unconventional reservoirs in China and the US				Mohammed Alameen, Universiti Teknologi petronas		Comparative Analysis of Sand Production Mitigation in Semi-Consolidated and Consolidated Sandstones Through Formation Strength Enhancement	
10:35		10:50				Coffee Break - 15 min															
Session 16: Advances in Subsurface Energy Storage - 2 Venue: Grand Ballroom B & C						Co-Chair: Name, Company Co-Chair: Name, Company		Session 17: Numerical and Computational Methods in Petroleum Geomechanics Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company		Session 18: Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
10:50		11:10		13		Jose Davalos Monteiro (Sinopec Tech Middle East)		Mechanical Integrity Assessment Of Cement-Fluid Interactions: High-Performance Cements Versus CO ₂ -saturated And Sulfate Solutions		17		Wu Bangchen (Institute of Geomechanics, Chinese Academy of Geological Sciences)		Numerical Simulation Study on the Long-Term Sealing Integrity of Fault-Block Oil-Reservoir-Based Underground Gas-Storage Cluster		21		Jing Liu (Southwest Jiaotong University)		Study on the Fractal Distribution Characteristics and Hazard Assessment of Earthquake-Induced Landslides in Sichuan Province	
11:10		11:30		14		Aisha Al Hashmi (Waseda University)		Numerical Simulation Study of Underground Hydrogen Storage for Uncertainty Evaluation in Salt Domes in Oman		18		gui bo (southwest petroleum university)		Numerical Simulation Study on Fracture Pressure Prediction in Ultra-Deep Carbonate Rocks under Multi-Fluid Disturbance		22		Yijun Chen (New York University Abu Dhabi)		Thermodynamic framework of non-local continuum damage-plasticity model for geomaterials and its practical applications	
11:30		11:50		15		Chinemerem Okezie (New Jersey Institute of Technology)		Stimulated Serpentinization: Effect of Microbial Activities on Geomechanical Response of Hydrogen-Generating Ultramafic Rocks		19		Mohammed AL-Aamri (PDO)		Multi-Scale Validation of Reservoir Compaction in a Shallow Gas Carbonate Reservoir: Integrating CMI and InSAR with 3D Modelling in Oman's North Field		23		Xuejian chen (New York University)		3D Random large-deformation modelling on submarine landslide runout in spatially variable soils considering fluid-solid coupling	
11:50		12:10		16		Ahmed Fatah (King Fahd University of Petroleum & Minerals)		Displacement Behavior and Gas Saturations during Drainage Displacement in Sandstone Reservoirs: Application to Subsurface Hydrogen Storage		20		Hussein Ayed (University of Baghdad/ Collage of Engineering/ Petroleum Engineering Department)		From Trace to Reality: Depleted Reservoir Integrity through Coupled Geomechanical–Reservoir Simulation Insights		24		Mohammed Shitu (Federal College of Education, Yola)		Correlation Between Magnetic Susceptibility and Heavy Metal Concentration in Topsoil	
12:10		12:30				Saeed Salimzadeh, Commonwealth Scientific and Industrial Research Organisation		Faults reactivation during CO2 sequestration and corresponding ground deformation				Ivan Teguh Andhika Praja, Rock Flow Dynamics		An Innovative and Holistic Approach for De-risking Subsurface Uncertainties in Managing and Monitoring Deep Saline Aquifer CO2 Sequestration				Speaker Name, Company		Presentation Title	
Venue: Coffee Foyer Area						Poster Session 13: Geomechanics for Tight Reservoirs and Unconventionals Session Chair:		Poster Session 14: Well Integrity Session Chair:				Poster Session 15: Regional Case Studies Session Chair:		Poster Session 16: Rock Measurements and Characterization Session Chair:							
12:10		12:20		1		Kal Zu (CNPCC Engineering Technology R&D Company Limited, Beijing, China) Research on Geomechanical Characteristics and Hydraulic Fracturing Simulation of Deep Shale Gas in Luzhou: A Case Study of Lu 201H4 Platform		Ji Li (China University of Petroleum, Beijing) Characterization of Cement Sheath Seal Failure Based on Distributed Optical Fiber Sensing Technology		6 11		Siqueira Eudes (SLB) Comprehensive Laboratory Study to Determine Compaction Behaviour, Poroeasticity and the Effects of Multi-stage Triaxial Testing on Elastic Properties of Carbonate Oil Field in UAE		Thomas Finkbeiner(KAUST) A Deep Learning Approach for the Automated Extraction of Natural Fracture Traces from Two Dimensional Orthoimages Derived from Digital Outcrop Models		16					
12:20		12:30		2		Mohammed AL-Aamri (PDO) No-Go to Go: A Geomechanical Workflow to Unlock One of Deepest Horizontal Tight Gas well in Sultanate of Oman		Meiyang Jing (China University of Petroleum, Beijing) Restoring the Well Integrity with Full Bore Access by Using Chemical Temporary Plugging Technology: a field case study in Linxing-Shenfu gas field		7 12		Amir Ghadimipour (Baker Hughes) A Novel Multi-Disciplinary Approach in Selection and Optimization of Sand Control Techniques: Case Study from Egypt		Rached Rached (STME) Surface Roughness Effects on Indentation Testing of Drill Cuttings		17					
12:30		12:40		3		Yuxuan Deng (China University of Petroleum (East China)) Multi-scale Mechanical Characterization of Shale Reservoirs with High-density Bedding Fractures Using FE ² Framework		Xueyu pang (China University of Petroleum (East China)) Simulation of Micro-Annulus Evolution at the Casing-Cement Interface in High-Temperature and High-Pressure Gas Wells		8 13		Skaow Kusolsong (PTT Exploration and Production) Standardizing Sand Risk Evaluation Across the Gulf of Thailand Through Python Automation and 1D Mechanical Earth Modelling		Rajendra Nath (Petronas) To Fluid Substitute or Not in Geomechanical Workflows: Experimental Evidence		18					
12:40		12:50		4		Khaqan Khan (Saudi Aramco) Formation Breakdown Prediction for Penetrating and Non-Penetrating Fluid during Hydraulic Fracturing		Zhijin Xie (China University of Petroleum Beijing) Comparative Evaluation and Selection Strategy for Proppant Transport Models: Balancing Computational Efficiency and Placement Accuracy in Hydraulic Fracturing		9 14		Abbas khaksar (Baker Hughes) Validation of Geomechanical Sanding Evaluation, Examples from Australian Gas Fields		Mohammed AL-Aamri (PDO) Sonic Deception in Deep Gas Reservoirs: How Gas Affects Poisson's Ratio, Stress Modelling, and Fracture Containment- A Northern Oman Example		19					
12:50		13:00		5		Ashok Shinde (Baker Hughes) A Comparative Geomechanical Assessment of the Deep Tight Sandstones of Arabia: Qualitative Implications for Hydraulic Fracturing Simulation		Amir Ghadimipour (Baker Hughes) Geomechanical Assessment of Oriented Perforation in FracPack Sand Control Technique		10 15		HEMANT SINGH (Baker Hughes) Achieving Excellent Production Results in Fractured Reservoir by integrating Geomechanics with Geology and Reservoir Navigation-A Case Study from Libya		Chunxiao Li (China University of Geosciences-Wuhan) Texture-Based Segmentation of SEM Images of Shale Rocks and Estimation of Meso-Scale Elastic Modulus by 2D FEM		20					
13:00		14:00				Lunch on 1st Floor															
Session 19: Multi-Scale & Multi-Physics Geomechanics – THMC coupling, nano- to field-scale geomechanics Venue: Grand Ballroom B & C						Co-Chair: Name, Company Co-Chair: Name, Company		Session 20: AI Methods and Advances in Drilling Geomechanics Venue: Grand Ballroom A				Co-Chair: Name, Company Co-Chair: Name, Company		Session 21: Fracture Mechanics & Crack Propagation – Experimental and numerical investigations into rock and material failure Venue: Al Ahsa 1 & 2				Co-Chair: Name, Company Co-Chair: Name, Company			
14:00		14:20		25		Ying Zhang (University of Science and Technology Beijing)		Mechanical Behavior and Seepage Characteristics of Multi-Shaped Fractured Sandstone under Hydro-Mechanical Coupling		30		Emmanuel Cruz Vargas (SLB)		Quantifying the interplay between tectonic stresses and bedding-related failures using Bayesian inversion methods.		35		Tameem Almani (Saudi Aramco, KFUPM)		A Partially Parallel in Time Undrained Split Iterative Coupling Scheme for Modelling Hydraulic Fracture Propagation	
14:20		14:40		26		Rached Rached (STME)		Fluid-Exposure Effects on Micro-Indentation Properties of Drill Cuttings		31		Wei Yu (The University of Texas at Austin, SimTech LLC)		AI-Driven Real-Time Hydraulic Fracturing Platform: Development and Field Validation in Complex Shale Reservoirs		36		Gary Couples (Heriot-Watt University)		La Mort du 'Stress Function'? Challenging the Kirsch and Inglis Models	
14:40		15:00		27		Keyu Meng (Tongji University)		Thermo-Hydro-Mechanical DEM Modeling of Hydraulic Fracturing in Hot Dry Rock under High-Temperature Conditions		32		Tianshou Ma (Southwest Petroleum University)		A stacking ensemble machine learning approach for pore pressure prediction in real-time during drilling based on mud log data		37		Keita Yoshioka (Montanuniversität Leoben)		Nucleation of remote hydraulic fracturing	
15:00		15:20		28		HECTOR GONZALEZ (Aramco)		Numerical Modelling of Stress-Dependent Permeability in Reservoir Rocks Using COMSOL Multiphysics		33		Jianzhuang Li (China University of Petroleum (Beijing))		Leveraging Drilling Real-Time Data & Formation-Responsive Drilling (FRD) to Minimize NPT, Optimize Wellbore Placement, and Identify Natural Fracture Networks		38		Lingyun Kong (China University of Geosciences-Wuhan)*;		Crack Propagation Offset by Cemented Nature Fractures: Implication for Fracture Swarm Phenomenon	
15:20		15:40		29		Olufemi Olorode (Louisiana State University)		Geomechanical Studies of Using Biologically Induced Mineral Precipitation for Safe Geo-Energy Storage		34		Ahmed Baghdadi (Baker Hughes)		Implications of critically stressed fractures in drilling risk management and production enhancement – Case study from fractured Cretaceous carbonates		39		Rached Rached (STME)		How Small Is Too Small? Thickness Limits for Micro-Indentation Analysis of Drill Cuttings	
15:40		15:50				Coffee Break - 10 min															
Venue: Coffee Foyer Area						Poster Session 17: Sanding and Solid Production Geomechanics Session Chair:		Poster Session 18: Special Applications of Well Integrity Session Chair:				Poster Session 19: Structural Geomechanics, Tectonics, aand Pore Pressure Session Chair:		Poster Session 20: CO2 Regional Field and Case Studies Session Chair:							
15:50		16:00		21		Osman Hamid (Saudi Aramco) Impact of Drilling Fluids on Sanding Potential and Mechanical Integrity in Clastic Sandstone Reservoirs		Noor Albasheer (Saudi Aramco) Innovative Approaches to Enhance Micro-Frac Tests for Geomechanical Modeling		26 31		Jakub Fedorik (Saudi Aramco) Structural characterization of interference structures in the Arabian Platform		Maria Sierra Hernandez (KAUST) Mechanical characterization of Upper Jurassic anhydrite-carbonate sequences in Saudi Arabia and its implications for seal integrity		36					
16:00		16:10		22		Anusarn Sangnimnuan (PTTEP) Production Optimization in Sand-Prone Wells Using Sand Transport Model		HEMANT SINGH (Baker Hughes) Completion Evaluation and Optimization for Repurposing of Wells into Gas Storage Candidates in a Brown Field: A Case Study from Nile Delta		27 32		Xianghui Qin (Institute of Geomechanics, Chinese Academy of Geological Sciences) In-situ stress measurements over the eastern Himalayan Syntaxis and implications for seismicity		Eudes Muniz (SLB) Geomechanical Characterization of Turbidite Deposits in the Montney Formation in Western Canada as a Potential for Carbon Capture and Storage Site		37					
16:10		16:20		23		Eakasit Leelachutipong (PTTEP) Integrated Experimental and Numerical Study of Water Saturation-Induced Rock Weakening Effects on Sand Production		Xiaochen Wei (Chinese Society for Rock Mechanics & Engineering, CSRME) Mechanisms and Prevention of Fault Slip-Induced Casing Deformation in Faulted Shale Oil Reservoirs		28 33		Olga Lykhachova (Math2Market GmbH) Improved modeling of elastic properties in rock formations for seismic analysis		Xing Yu (China University of Petroleum, Beijing) Experimental study on oil recovery efficiency of low permeability sandstone reservoir with impure CO2 : A Case Study of the Changqing Oilfield		38					
16:20		16:30		24		Sadegh Asadi (Baker Hughes) Geomechanical Assessment of Sanding Risks in Injectivity Tests		M Faizuddin Mat Piah (PETRONAS) Fracture Propagation during Water-Alternate-Gas Injection: A Practical Workflow Based on Wellbore Storage Analysis		29 34		Sid-Ali Ouadfeul (Central Directorate of Reserach and Development, Sonatrach) Application of Seismic Genetic Inversion to Pre-drill Pore Pressure Prediction in Shale Gas Reservoirs: Application to Barnett Shale (USA)		Thomas Finkbeiner (King Abdullah University of Science and Technology) Stress Constraints and Critically-Stressed Fractures in the Basaltic Jizan Group, Saudi Arabia		39					
16:30		16:40		25		Mohammed AL-Aamri (PDO) Breaking Point: When Shale Volume Triggers Sand Failure in Clastic Plays		Pengcheng Ji (Chengdu University Of Technology) Research on Classification Optimization of Fracturing Parameters for Shale Oil Based on Geological-engineering double Sweet Spot Evaluation		30 35		Chin Tee Ang (PETRONAS Research Sdn. Bhd.) Leveraging Spatio-Temporal Attention Neural Network for Seismic Interpretation		W Nur Sawatari W Mohd Zainudin (Petronas Research Sdn Bhd) Integrated Characterization of Caprock Seal Potential Using Cuttings-Based Petrophysical Analysis: A Case Study from T-2 Well, Offshore Peninsular Malaysia		40					
16:40		17:00				Closing by Gang Han Award ceremony Announcement for 2027															
																		End of Day 3			