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TECHNICAL PROGRAMME

2021 EAGE ANNUAL

82ND CONFERENCE & EXHIBITION

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Delivering for the
ENERGY CHALLENGE
Today and Tomorrow

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18-21 OCTOBER 2021
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Technical Programme

Tuesday, 19 October | Oral presentations

This presentation is pre-recorded

ROOM 1		ROOM 2		ROOM 3	
Digitalization & AI: Seismic Interpretation (Schlumberger)		**FWI Applications**		**Gathers and Migration Approaches**	
08:30	**Deep Learning for Salt Body Detection: A Practical Approach** - E. Zabihi Naeini (Earth Science Analytics)	08:30	**Impact of streamer acquisition geometry on FWI Imaging** - H. Kerrison (Cgg)	08:30	**Elastic Dynamically Focused Beam Migration in Anisotropic Media** - Q. Liu (China University Of Petroleum(east China))
08:50	**Deep Bayesian Neural Networks for Fault Identification and Uncertainty Quantification** - E. Zabihi Naeini (Earth Science Analytics)	08:50	**FWI to full bandwidth with Vector Reflectivity and Inverse Scattering Imaging Condition, Clair field OBN** - Ø. Korsmo (PGS)	08:50	**Sparsity-Promoting Pseudo-Inverse Born Operator in the Presence of Density Variations: An Efficient Multi-Parameter Imaging Tool** - M. Farshad (MINES ParisTech - PSL Research University)
09:10	**Assisted Fault Interpretation by Multi-scale Dilated Convolutional Neural Network** - F. Jiang (Halliburton Landmark)	09:10	**Resolving 4D overburden changes with full-waveform inversion** - O. Bukola (CGG)	09:10	**Angle gathers from time-shift extended least-squares reverse-time migration** - E. Duveneck (Shell Global Solutions International B.V.)
09:30	**Characterizing Subsurface Damage Zones From 3D Seismic Data Using Artificial Neural Network Approach** - L. Cui (China University Of Petroleum (east China))	09:30	**Full Waveform Inversion in an Anisotropic Earth: A Practical Workflow** - T. Allemand (CGG)	09:30	**Inverse Hessian estimation in least-squares migration using chains of operators** - T. Tangkijwanichakul (University Of Texas Austin)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Deep Learning for Horizon Interpretation on 2D Seismic Data** - T. Zhao (Schlumberger)	10:10	**Multi-Parameter Pseudo Acoustic Full Waveform Inversion Method in Elastic World** - Q. Li (China University of Petroleum)	10:10	**Reverse time migration with frequency-dependent Q compensation accelerated with GPU computing** - R. Cheng (BGT Inc)
10:30	**Seismic FlowNet: Using Optical Flow Field for Dense Horizon Interpretation** - Z. Li (Schlumberger)	10:30	**Successive Full-Waveform Inversion of Surface Seismic and Seismic-While-Drilling Datasets without Low Frequencies** - N. Kazemi (University of Calgary)	10:30	**Preconditioning the variable-density least-squares reverse time migration via asymptotic Born inversion** - H. Chauris (Mines ParisTech)
10:50	**Deep learning seismic facies identification: the Total journey at SEAM AI hackathon** - L. Boillot (TotalEnergies)	10:50	**Simultaneous velocity and reflectivity inversion: FWI + LSRTM** - Y. Yang (PGS)	10:50	**Including Converted Waves in Full Wavefield Migration** - L. Hoogerbrugge (Tu Delft)
11:10	**GAN learning complex fluvial facies distribution from process-based modelling** - C. Sun (Heriot-Watt University)	11:10	**Unlocking unprecedented seismic resolution with FWI Imaging** - Z. Wei (Cgg)	11:10	**The establishment and application of iterative spectral inversion** - N. Guo (CNOOC Ltd Tianjin)
	Stratal Zonation using Hierarchical Deep Learning: A method to reduce labelling workload for network training - A. Maxwell (Bluware)				**Theory of Beam 15° One-Way Wave Prestack Depth Migration** - B. Zhang (Tongji University)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Digitalization & AI: Seismic Data Processing I		**FWI Methods and Elastic Approach**		**Imaging Methods**	
14:15	**Data-To-Data and Gradient-To-Gradient Translations in Geophysics Using Deep Neural Networks** - J. Yao (Imperial College London)	14:15	**Elastic Full-Waveform Inversion with Geologic Information for Tilted TI Media** - E. Zabihi Naeini (Earth Science Analytics)	14:15	**Q-Compensated Fourier Finite-Difference Wave-Equation Migration in Tilted Transversely Isotropic Media** - C. Tang (TGS)
14:35	**Filling gaps, replacing bad data zones and super-sampling of 3D seismic volumes through Machine Learning** - P. De Groot (dGB Earth Sciences)	14:35	**Explicit control of numerical dispersion and instability in elastic wavefield modeling and inversion** - O.C. Aquino De Aragão (Center for Wave Phenomena, Colorado School of Mines)	14:35	**Efficient Elastic Reverse Time Migration Using Decoupled Propagator for Multicomponent Seismic Data** - Q. Du (China University of Petroleum (East China))
14:55	**MLReal: Bridging the gap between training on synthetic data and real data applications in machine learning** - T. Alkhalifah (KAUST)	14:55	**Optimal transport FWI with graph transform: Analysis and proposal of a partial shift strategy** - F. Kpadonou (CGG)	14:55	**Estimating subsurface P- and S-wave reflectivities using elastic TTI least-squares reverse-time migration** - J. Yang (The University of Texas at Dallas)
15:15	**Deep CNN for Coherent Seismic Noise Removal: A Perspective** - A. Asgekar (Shell India Markets Private Limited)	15:15	**Wavefield Inversion with Adaptive Regularization** - H. Aghamiry (Université Côte d'Azur, CNRS, Observatoire de la Côte d'Azur, IRD, Géoazur)	15:15	**Gaussian beam migration in 3D dip-angle domain based on gather optimization** - S. Zhuang (China University Of Petroleum(East China))
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Intelligent Seismic Deblending Based Deep Learning Based U-net** - J. Li (Tongji University)	15:55	**Enhanced FWI cycle-skipping mitigation by constrained correlation-based traveltime inversion** - Q. Guo (Shearwater Geoservices)	15:55	**Asymptotic Born inversion in elastic media** - M. Farshad (MINES ParisTech - PSL Research University)
16:15	**A Self-Evolving CNN Framework for Seismic Data Interpolation** - Y. Wang (Tsinghua University)	16:15	**Mitigating Cycle Skipping in Full-Waveform Inversion Using Partial Matching Filters** - J. Cooper (CGG)	16:15	**Acoustic-elastic coupled equations for joint elastic wave imaging of TS and sparse OBN/OBS data** - P. Yu (Hohai University)
16:35	**Machine-Learning-Driven Dispersion Curve Picking for Surface-Wave Analysis, Modelling, and Inversion** - A. Kaul (Schlumberger)	16:35	**Deep Learning of Bandwidth Extension from Seabed Seismic** - M. Aharchaou (ExxonMobil)	16:35	**Image-domain least-squares reverse-time migration using point spread functions** - J. Bai (Emerson)
16:55	**Deep Learning First Break Picking Technology Based on Operation Scene** - N. Yudong (BGP Inc., China National Petroleum Corporation)	16:55	**Computationally-Efficient Frequency-Domain Wavefield Reconstruction Inversion with Direct Solver** - H. Aghamiry (Université Côte d'Azur, CNRS, Observatoire de la Côte d'Azur, IRD, Géoazur)	16:55	**Efficient snapshot-free reverse time migration and computation of multiparameter gradients in full waveform inversion** - J. Robertsson (ETH)
	An Adaptive Anomalous Amplitude Attenuation Method Based on Deep Neural Networks - X.Y. Tian (Tsinghua University)		**Robust Elastic Full Waveform Inversion Based on N-th Power Operation and Convolved Wavefields** - P. Zhang (Jilin University)		**Application of the NIP wave theorem and an approximation for RPSM to zero offset** - J. Schneider (Bureau of Applied Geophysics)

Tuesday, 19 October | Oral presentations

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ROOM 4		ROOM 5		ROOM 6	
CESM and EM Methods - Case Studies and New Developments		**Induced Seismicity (Dedicated Session)**		**Seismic Interpretation - Lithology Mapping**	
08:30	**Application of Lundin's CSEM Strategy: De-Risking of a Shallow Prospect in the Barents Sea** - L. Lorenz (Geonautika)	08:30	**Mechanism and Management of Seismicity in Depleting Gas Reservoirs** - H. De Pater (Fenix Consulting Delft)	08:30	**A New Lithological Identification Factor and Its Application in Paleogene Reservoir Characterization** - X. Xie (Bohai Oilfield Research Institute)
08:50	**Approximation of Infrastructure Effects on Marine CSEM Data** - J. Park (NGI)	08:50	**(When) Do Earthquakes Respect Traffic Lights?** - S. Baisch (Q-con GmbH)	08:50	**Inversion of the reflected SH-wave for density and S-wave velocity structures** - F. Dai (China University of Petroleum-Beijing)
09:10	**Cost-Effective Salt Exit Velocity Retrieval Using Broadband CSEM** - A. Zerilli (Petrobras)	09:10	**Forecasting Earthquake Magnitudes Induced by Groningen Gas Production** - S. Bourne (Shell Global Solutions International)	09:10	**Inversion of Thin-Bedded Multi-Lithology Settings: What Are the Critical Requirements for a Successful Seismic Inversion?** - H. Poore (Siccar Point Energy Ltd.)
09:30	**Double-difference strategy for 3D time-lapse CSEM: application to the Reykjanes geothermal field** - F. Dubois (Brgm)	09:30	**Seismicity-Permeability Coupling in the Breaching and Sealing of Reservoirs and Caprocks** - D. Elsworth (Pennsylvania State University)	09:30	**Large Scale Shale Characterisation: Composition and Permeability** - R. Beloborodov (CSIRO)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Boost the efficiency of 3D CSEM modelling using graphics processing units** - P. Yang (Harbin Institute of Technology)	10:10	**Groningen Deep-Seated Fault Systems and Fault Characteristics at Seismic Event Locations** - M. Kortekaas (EBN B.V.)	10:10	**Wave-Equation Based 4D Joint Inversion of PP and PS Seismic Data** - P.E. Dhelie (Lundin Energy Norway AS)
10:30	**Ambiguity in EM images reduced by Gauss-Newton inversion: a case study of a basement high** - R. Streich (Shell Global Solutions International BV)	10:30	**Risk Management for Induced Seismicity: A Regulator View** - W. Van Der Zee (Staatstoezicht Op De Mijnen)	10:30	**PP-PS Joint Inversion and Horizon Mapping Analysis of the 3D3C Multicomponent Dataset of Bandurria Norte, Argentina** - A. Kuha (Wintershall Dea)
10:50	**3D inversion of airborne EM data with topography** - Y. Qi (Chang'an University)				
11:10	**Adaptive finite-element method for time-domain airborne EM over an anisotropic earth** - Y. Qi (Chang'an University)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
CESM and EM Methods - Multidisciplinary Approach		**Modified Salinity Water Flooding in Carbonate Reservoirs 1 (Dedicated session)**		**Seismic Interpretation - Feasibility Studies**	
14:15	**GPR Full Waveform Frequency-Space Domain Modeling by the Full Spectral Methods** - C. Shin (Seoul National University)	14:15	**Feasibility Study of Small Scale Core Flooding Considering Low Salinity Injection in Danish North Sea Reservoirs** - S. Mohammadkhani (GEUS)	14:15	**Estimation of Seismic Response by AVO Inversion Due to Changes in Oil-Saturation and Pressure During Production** - N. Ahmed (University Of Stavanger)
14:35	**Gramian Constraints in Electromagnetic Multi-Physics Joint Inversion** - C. Shin (Seoul National University)	14:35	**Pore-Scale Imaging of Controlled-Salinity Waterflooding in a Heterogeneous Carbonate Rock at Reservoir Conditions** - A. Selem (Imperial College London)	14:35	**Examining different noise scenarios for the probabilistic inversion of seismic data** - A. Heidari (University of Tehran)
14:55	**Deep electrical structure of Cascadia derived from 3-D anisotropic inversion of USArray long-period magnetotelluric data** - Z. Rong (Jilin University)	14:55	**Experimental Investigation of Low Salinity Water-Flooding Efficiency in a Danish North Sea Chalk Reservoir** - R. Mokhtari (Technical University of Denmark (DTU))	14:55	**Seismic Reservoir Characterisation using seismic inversion: A case study showing importance of prior model** - P. Kakaire (Total E&P)
15:15	**Joint Inversion of MT and DC Resistivity using Meta-Heuristic Algorithm with Gibb's Sampler** - M. Mukesh (IIT(ISM)DHANBAD)	15:15	**Effect of Divalent Ions on Surface Charge, Wettability, and Wettability Alteration Processes in Chalk** - T. Puntervold (University of Stavanger)	15:15	**Robust Estimation of Uncertainties of AVO Attribute Anomalies** - F. Pivot (Total Sa)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**A New Centroid Frequency-Based Algorithm to Estimate the Attenuation of Ground Penetrating Radar** - J. Baniamerian (University Of Roma Tre)	15:55	**Zeta Potential in Intact Natural Carbonates at Reservoir Conditions and Implications for Controlled Salinity Waterflooding** - H. Collini (Imperial College)	15:55	**Impact of Multiple Scattering on Post-Stack Seismic Inversion: An Example from the North Sea Brasse Discovery** - D. Gisolf (Delft Inversion)
16:15	**Characterizing deep hydrothermal fluid circulation in the Upper Rhine Graben (France) with electromagnetic methods** - M. Darnet (BRGM)	16:15	**Modified Salinity Waterflood Compositions Based on Multi-Component Ion-Exchange** - M. Yutkin (King Abdullah University of Science and Technology)	16:15	**A New Integrated Workflow to Generate AVO Feasibility Maps for Prospect De-Risking** - P. Avseth (Dig Science)
16:35	**Application of geophysical tools for evaluation of adequate ponds for Aquaculture** - P.A. Chira Oliva (Federal University of Para)	16:35	**An Overview and Evaluation of the Mechanistic Models for Wettability Change in Modified-Salinity Waterflooding in Carbonates** - M. Bonto (Technical University Of Denmark)	16:35	**Analysis of the effect for strong anisotropy on AVO in TI medium with vertical symmetry axis** - K. Liang (China University Of Petroleum (East China))
16:55	**Mineral Prospecting for Copper-Molybdene Ores in Northern Kazakhstan Using Electromagnetic Sensing and Induced Polarization Technology (EMS-IP)** - Y. Davydenko (Irkutsk National Research Technical University)			16:55	**AVO Sensitivity Factors of Heavy Oil Reservoirs and the Application on Petrophysical Property Prediction** - X. Xie (Bohai Oilfield Research Institute)

Technical Programme

Tuesday, 19 October | Oral presentations

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ROOM 7		ROOM 8		ROOM 9	
Seismic Acquisition & Processing - Acquisition Geometries and Hardware I		**Multiple Attenuation - Interbed Demultiple Case Studies**		**Seismic Processing - Application Examples**	
08:30	**Design of Non-Replicated Acquisition Geometries for Time-Lapse Measurements** - G. Blacquiere (Delft University of Technology)	08:30	**Fast and efficient up-down decomposition and deconvolution for OBS data** - D. Lokshtanov (Equinor ASA)	08:30	**Imaging Rich Azimuth Towed Streamer Data West of Shetland** - H. Moore (CGG)
08:50	**Cheaper and better long offset nodal surveys based on low-frequency enhanced sources** - G. Baeten (Shell International E&P BV)	08:50	**Interbed Multiples Attenuation Using 3D Complex Wavelet Transform** - F. Chen (Tarim Oilfield Company, China National Petroleum Corporation)	08:50	**Ultra-high density land nodal seismic – Processing challenges and rewards** - F. Buriola (CGG)
09:10	**Development of Ultra-Deep Sparse Seismic Source Technology for 4D Reservoir Monitoring** - P.E. Dhelie (Lundin Energy Norway AS)	09:10	**Marchenko Multiple Elimination in a Resonant Pinch-Out Model** - E. Slob (Delft University of Technology)	09:10	**Research and Application of Static Correction Method in the Mountainous Region of the Qinghai-Tibet Plateau** - Y. Ling (Northwest Branch,Research Institute of Petroleum Exploraton&Development,Petrochina)
09:30	**Continuous Wavefields Method – The Acoustic Wavefield Generated by the Seismic Vessel** - S. Hegna (PGS)	09:30	**Sparse wave-equation deconvolution imaging for improved shallow water demultiple** - H. Moore (CGG)	09:30	**Study and Application of Static Correction Method for Complex Surface in Loess Plateau** - H. Li (RIPED--NWGI, Petrochina)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Inversion of Explosive Source Land Seismic Data to Determine Source Parameters** - A.M. Ziolkowski (University of Edinburgh)	10:10	**Internal multiple elimination in the Vøring Basin: a comparison of two approaches** - H. Masoomzadeh (TGS)	10:10	**The Application of Yu's Broadband Wavelet in Thin Reservoir Description** - D.J. Hou (Cnooc)
10:30	**Efficient Clock Drift Corrections and Self-Surveys for Nimble Nodes** - A. Crosby (BP Exploration Operating Co. Ltd)	10:30	**Deep learning-based dealiasing for estimated surface-related multiples from limited sources** - D. Zhang (Delft University of Technology)	10:30	**Application of data Regularization Based on Optimized Matching Pursuit method in Qaidam basin** - Y. Ling (Northwest Branch,Research Institute of Petroleum Exploraton&Development,Petrochina)
10:50	**High-Quality of True Seismic Amplitude, Acoustic Impedance and Broadband Data Recorded with the FreeCable Method** - E. Bathellier (Kietta)	10:50	**Advanced and comprehensive multiple attenuation in the Middle East - A case study from onshore Oman** - A. Abdullah (Schlumberger)	10:50	**Research and Application of High-precision Matching Processing Technology for Mixed Sources in Western China** - H. Meng (Research Institute of Petroleum Exploration & Development-Northwest(NWGI), PetroChina)
11:10	**Acquisition in Restricted Area with Massive Channels Digital Sensor** - H. Jaragh (Kuwait Oil Company)			11:10	**Application of Full-layer Q Compensation Technology in Shale Oil Sweet Spot Prediction in Songliao Basin** - G. Xianwei (Bgp,cnpc)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Simultaneous Sources		**Multiple Attenuation - Demultiple Developments and Case Studies**		**Seismic Interpretation - Theoretical Advances I**	
14:15	**3D Towed Marine Signal Apparition Multi-Source Acquisition over Troll: Results and Comparisons Against Conventional Production Seismics** - J. Robertsson (ETH)	14:15	**Synthesis of Multiple-Free Plane-Wave Responses** - E. Slob (Delft University of Technology)	14:15	**A New Acoustic Assumption that Mitigates the S-Waves Artifacts in Orthorhombic Media** - M.M. Abedi (BCAM)
14:35	**Acquisition and processing of Troll apparition 3D streamer data** - S. Grion (Shearwater GeoServices)	14:35	**Pre-migration residual multiple subtraction using post-migration matching for North Sea OBN data** - G. Jones (Cgg)	14:35	**Nonlinear AVA Inversion Based on Bayesian Theory for VTI Media** - L. Zhou (Hunan University of Science and Technology)
14:55	**An OBS Multiple Attenuation Approach Enabled by Signal Apparition Encoded Multi-Source Acquisition: A Case Study** - J. Robertsson (ETH)	14:55	**Removal of frequency notches in marine seismic data acquired by a deeply towed source** - H. Ozasa (Kyoto University)	14:55	**Shear waves in elliptical orthorhombic media** - A. Stovas (Norwegian University of Science & Technology)
15:15	**Six Source, Three Vessel Deblending Effects on Imaging of Real World Long Offset OBN Data** - C. Udengaard (TGS)	15:15	**Data-driven prediction of downgoing free-surface multiples for ocean-bottom node data** - P. Caprioli (WesternGeco)	15:15	**FACIVAZ - Full Azimuth Differential Seismic Facies Analysis Technology for Predicting Oil Saturated Fractured Reservoirs** - Z. Koren (Paradigm)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**High resolution meets high efficiency with an ultra-wide-tow penta source solution in the Barents Sea** - J. Oukili (PGS)	15:55	**Data-driven multiple suppression for laterally varying overburden with thin beds** - H. Peng (Utrecht University)	15:55	**Eigenray in 3D Heterogeneous General Anisotropic Media: Kinematics** - Z. Koren (Paradigm)
16:15	**Blended Acquisition with Temporally Signatured/ Modulated and Spatially Dispersed Source Array: Productivity Enhancement in a Pilot Survey** - T. Ishiyama (Inpex Corporation)	16:15	**Quality control of under-constrained Marchenko equation solvers in complex media using reference focusing functions** - M. Dukalski (Aramco Overseas Company B.V.)	16:15	**Eigenray in 3D Heterogeneous General Anisotropic Media: Dynamics** - I. Ravve (Emerson, Department of Research & Development)
16:35	**Deblending via Regularization by Denoising** - B. Bahia (University of Alberta)	16:35	**Internal multiple elimination by an extended 3D single-sided autofocusing and the application to subsalt imaging** - Z. Gu (Zhejiang University;University of California, Santa Cruz)	16:35	**Three-Dimensional Numerical Study of Frequency-Dependent Anisotropy of Cracked Rocks Due to Squirt Flow** - Y. Alkhimenkov (University of Lausanne)
16:55	**Multidimensional apparition de-blending through sparse inversion** - L. Casasanta (Shearwater Geoservices)	16:55	**Partitioned-Wavefield Adaptive Subtraction** - A. Ali (Schlumberger)	16:55	**Brittleness prediction and azimuthal AVO analysis in unconventional reservoir for multi stage hydraulic fracturing efficiency improving** - B. Plotnikov (Gazpromneft - Technological Partnership)
			The propagation phenomenon of multiple waves and ghost waves in seismic physical modeling experiment - G. Wang (PetroChina)		

Tuesday, 19 October | Oral presentations

This presentation is pre-recorded

ROOM 10		ROOM 11		ROOM 12	
Carbonates and Mixed Systems		**Wireline and LWD Logging – Analysis and Interpretation**		**Production & Management - EOR/IOR I**	
08:30	**Multiscale core-seismic analysis for karst characterisation of MX field, Central Luconia Province, Offshore Sarawak, Malaysia.** - S.S. Ab Rahman (Universiti Teknologi PETRONAS)	08:30	**"Sharing Private" Multi-task Learning for Petrophysical Parameters Prediction with Logs** - R. Shao (China University of Petroleum)	08:30	**Correction of Terminal Saturations for Capillary End Effects** - A. Alsofi (Saudi Aramco)
08:50	**3D Stratigraphic Forward Modelling of the Facies Distribution and Evolution of Llucmajor Platform, Mallorca Island** - T. Tella (University Of Potsdam)	08:50	**Fracture aperture prediction method based on hierarchical expert committee machine in tight clastic reservoir** - Y. Zhou (China University of Petroleum (East China))	08:50	**Coarsening of Foam in Two Model Fractures with Different Roughness** - K. Li (Technology University of Delft)
09:10	**Lithology of a Mixed Siliciclastic–Carbonate–Evaporite System: Triassic Jialingjiang Formation, Sichuan Basin, China** - Z. Xu (Research Institute Of Petroleum Exploration And Development)	09:10	**Fast 3D simulation of logging-while-drilling extra-deep directional electromagnetic measurements in high-angle and horizontal wells** - L. Wang (China University Of Petroleum)	09:10	**Role of Prolonged Successive Fluid Flow on the Performance of Relative Permeability Modifiers in Gas Reservoirs** - F. Alshajalee (Curtin University)
09:30	**Challenging Middle Eastern Stratigraphic Misconceptions – An Example for Creation and Infill of the Gotnia Basin** - C. Gravestock (Halliburton)	09:30	**Effect of the azimuthal fluid channel in a cased borehole on multipole dispersions** - K. Kayama (Kyoto University)	09:30	**Evaluation the Impact of Mineralogical Composition of Reservoir Rocks on Wettabiliity during Surfactant Flooding Processes** - A. Davarpanah (Aberystwyth University)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Early diagenesis of organic matter in two lacustrine evaporitic environments in Brazil** - C. Oliveira (Vrije Universiteit Amsterdam)	10:10	**Fast and efficient tool for modelling wellbore far-field sonic imaging** - T. Zharnikov (Aramco Research Center - Moscow, Aramco Innovations LLC)	10:10	**A Rapid Test to Evaluate Nanofluids for Selected Malaysian Oilfields with Limited Cores** - L. Hendraningrat (PETRONAS)
10:30	**Determination of petrophysical property cutoffs of tight lacustrine carbonate reservoir, Qaidam Basin, China** - S. Zhang (Research institute of Petroleum exploration & development-NorthWest(NWGI),PetroChina)	10:30	**Drilling Torque-Acoustic Logging: an effective duo for calibrating near -surface seismic data.** - J. Mari (Sorbonne Université)	10:30	**Transportation of Alkalinity in Sandstone for EOR Purpose** - M.A.I. Khan (University Of Stavanger)
10:50	**Precipitation of Siderite in Hydrocarbon Environment** - M. Abdulkarim (University)	10:50	**Electromagnetic Sounding with a Toroidal Source in Vertical and Deviated Oil Wells: Numerical Simulation** - I. Mikhaylov (Novosibirsk State University)	10:50	**Optimising Nanoparticles Mixture for Enhanced Oil Recovery** - H. Eltoum (China University Of Petroleum Beijing)
		11:10	**Electric imaging fusion technique combining singular spectrum interpolation with mathematical morphology in Amu Darya Basin** - X. Li (China Petroleum Logging Co. Ltd.)	11:10	**A Comprehensive Study for Evaluation of Imidazolium Based Ionic Liquid for Application in Enhanced Oil Recovery** - P. Pillai (Indian Institute Of Technology (Indian School Of Mines) Dhanbad)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Sedimentology, Stratigraphy and Reservoir Quality in Clastic Sequences		**Petrophysics – Coring, Core Descriptions & Interpretation**		**Low Frequency Seismic Data Acquisition and its Impact on Imaging and Inversion 1 - Hardware (Dedicated Session)**	
14:15	**Tertiary Technostratigraphic Evolution of the Veslemøy High and Sørvestnaget Basin, Western Barents Sea** - D. Marin (University of Stavanger)	14:15	**Numerical Investigations on the Transport Properties of Thermal Neutron in Saturated Porous Media with Digital Rock** - J. Zeng (China University Of Petroleum-Beijing)		**Land Seismic – How Low Can You Practically go** - B. Duijndam (Duijndam.dev)
14:35	**A Source-to-Sink and Reservoir Quality Prediction Workflow: The Offshore Nile Delta** - L. Fielding (Petryx Ltd)	14:35	**Method for predicting irreducible water saturation of tight sandstone reservoirs based on nuclear magnetic resonance logging** - J. Liu (China University of Petroleum)		**Seismic Equipment for Effective Low-Frequency Land Acquisition** - N. Tellier (Sercel)
14:55	**Lithological prediction in contourites and bottom-current reworked sediments: a classification that links environment, processes and facies** - F. Raisson (TotalEnergies)	14:55	**The Permeability Calculation of the Digital Rock by a New Finite Difference Method** - S. Wei (Shandong Transportation Institute)		**The Elephant ™ impulsive land source** - J. Archer (SAExploration)
15:15	**Depositional Environment, Geochemistry, Diagenesis and Stratigraphy of the Early Paleocene Hangu Formation, Salt Range, Pakistan** - S. Sajan (Student)	15:15	**Comparing Acoustic Properties of Clastic, Mixed Clastic-Carbonate, and Non-Marine to Full-Marine Carbonate Sedimentary Systems** - J.J. Reijmer (Reijmer GeoConsulting - Vrije Universiteit Amsterdam)		**Robust Inversion of Land Seismic Dynamite Data for Source Signature Determination** - A.M. Ziolkowski (University of Edinburgh)
					Tuesday Discussion 1 - N. Tellier (Sercel)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Impacts of Feldspar Dissolution, Calcite Cementation and Clay Growth on Pore Structure** - N. Zhou (China University of Petroleum (East China))	15:55	**Replication of Carbonate Reservoir Pores at the Original Scale Using 3D Printing** - S. Ishutov (University Of Alberta)		**New Marine Sources: Where Are We Now?** - J. Dellinger (BP America Inc.)
16:15	**Characteristics and Controlling Factors of Deep Buried Reservoir in the Southern Margin of Junggar Basin** - X. Si (Petrochina Hangzhou Research Institute Of Geology)	16:15	**A novel method to correct the effect of the internal gradients on the NMR T2 spectrum** - J. Liu (PetroChina Research Institute of Petroleum Exploration and Development-Northwest)		**MEMS-Based OBN: A Powerful 3C Solution for High Data Quality and Fidelity** - N. Tellier (Sercel)
16:35	**Triassic and Jurassic porosity and permeability relationships from a cross-border sequence stratigraphic framework in North Sea** - A. Kurobasa (TGS)				**Continuous Wavefields Method - Low Frequency Considerations** - S. Hegna (PGS)
16:55	**Logging Identification for Diagenetic Facies—An Example in Lower Jurassic Ahe Formation, Tarim Basin, China** - Z. Li (The university of manchester)				**Ultra Low Frequency Signal from Pneumatic Seismic Sources: How Low Can We Go?** - S. Ronen (Totum Geosolutions)
					Enhanced Low Frequency Signal-to-Noise Characteristics of an Airgun Technology Based Source - J. Brittan (ION)
					Tuesday Discussion 2 - F. Ten Kroode

Technical Programme

Tuesday, 19 October | Oral presentations

This presentation is pre-recorded

ROOM 13		ROOM 14		ROOM 15	
Time-Lapse Interpretation and Value		**Geomechanics & Pore Pressure I**		**Geothermal Energy - Regional Case Studies**	
08:30	**Integrating Time-Shift and Amplitude Signal to Resolve Complex 4D Responses** - M. Wingham (BP)	08:30	**The impact of fluid yield stress on hydraulic fracture propagation** - E. Kanin (Skolkovo Institute of Science and Technology)	08:30	**VSP Study Using DAS at the Medipolis Geothermal Well and Implication of a Deep High-Vp/Vs Zone** - J. Kasahara (ENAA)
08:50	**Time-Lapse Seismic Overburden Monitoring with Geomechnical Regularisation** - A. Cherrett (Total Upstream Danmark)	08:50	**Integrated Reservoir and Geomechanics Analysis Using Novel Thermal Constitutive Model** - T. Settari (TRS Energy Consultants)	08:50	**The Dutch SCAN Geothermal Seismic Exploration Program – Current Status and Future Plans** - J. Rehling (EBN B.V.)
09:10	**4D Seismic Geobody Propagation for Injected Volumes Estimation** - Z. Ternisien (Total)	09:10	**Subsidence Analysis in the Italian Po Plain Area: An Extended Case Study** - V. Rocca (Politecnico di Torino)	09:10	**Regional Geological Evaluation for the SCAN Geothermal Exploration Campaign, the Netherlands** - M. Ter Borgh (EBN B.V.)
09:30	**Is there value in 4D Elastic Inversion?** - T.D. Blanchard (Total SA)	09:30	**Stress Field Rotations at the Tip of Hydraulic Fractures: An Explanation for Half-Moon Events?** - N. Boitz (Freie Universitaet Berlin)	09:30	**Fracture Flow Mapping for Geothermal Energy Projects - An Example from Norway** - R. Van De Ven (Ruden As)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Seismic history matching in the pressure and saturation domain for reservoir connectivity assessment** - G. Corte (Heriot-Watt University)	10:10	**Structural Restoration of Geological Structures with Viscous Stokes Flow - Principle and First Results** - M. Schuh-Senlis (Asga)	10:10	**Seismic Monitoring of the United Downs Deep Geothermal Power Project (UDDGP) Site with Public Seismic Networks** - G. Rodríguez-Pradilla (University of Bristol)
10:30	**4D Sensitivity to Dynamic Reservoir Properties on a Carbonate Field: an Insight into 4D Monitoring Strategy** - G. Berthereau (North Oil Company)	10:30	**Numerical near-wellbore and stability analysis for inclined boreholes in plastic rocks.** - D. Sabitov (Aramco Innovations, LLC)	10:30	**A Comparison of Predicted and Actual Reservoir Quality of Geothermal Projects in the Slochteren Formation** - L. Borst (IF Technology)
10:50	**Assessing data error for 4D Seismic History Matching: Uncertainties from processing workflow** - M. Hatab (Heriot-Watt University)	10:50	**Calibration of a 3D Reservoir Geomechanics Model with GPS, Bathymetry and 4D seismic** - P. Shotton (TotalEnergies)	10:50	**Exploring New Geothermal Reservoirs in the Ohnuma Well in Honshu, Japan Using Enhanced DAS Seismic Methods** - J. Kasahara (ENAA)
11:10	**Integration of Reservoir, Rock Physics, Seismic, and Geomechanical Modelling for CO2 Injection in Carbonate Reef Reservoir** - Y. Nuwara (Research Institute of Innovative Technology for the Earth)	11:10	**Application of Stochastic Method for Geomechanical Parameters Under Uncertainty Quantification to Design Mud Window** - M.A. Ebrahimi (Amirkabir University Of Technology)	11:10	**Characterization deep geothermal resources from the Paris Basin (France) with quantitative interpretation of legacy seismic data** - M. Darnet (BRGM)
	One seismic source and receiver couple to detect steam effects on legacy data in Surmont, Canada. - V. Brun (SpotLight)		**Extension of Unified Fracture Design (UFD) Concept to Naturally Fractured Formations** - Y. Samarkin (King Fahd University of Petroleum & Minerals (KFUPM))		**Play-Based Exploration and Development Plan for Geothermal Energy in the Netherlands** - F. Vinci (Panterra Geoconsultants)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Maximising Value from Producing Fields		**Geomechanics & Pore Pressure II**		**Naturally Fractured Reservoir**	
14:15	**Seismic as the Missing Link: Unravelling Complexities and Opportunities in a Mature Brown Field** - S.A. Ahmad Hawari (Petronas Carigali Sdn Bhd)	14:15	**Integrating Rock Physics into Basin Modeling to Predict Elastic Properties** - W. Alkawai (Saudi Aramco)	14:15	**Geological Modeling and Development Strategy Optimization of Fractured-Caved Carbonate Reservoirs** - Y. Li (RIPED)
14:35	**Data Integration to Evaluate the Unquantified Upside of a Field in the Gulf of Mexico Plains** - B. Solarte (Sydri Energy)	14:35	**Subsidence, Uplift and Shift Due to Fluid Extraction and Production in a Finite Reservoir** - A. Dyskin (University Of Western Australia)	14:35	**Structural and Depositional Features Controlling Permeability on Carbonate Platforms** - R. Loza Espejel (Cardiff University)
14:55	**Delta Facies Control on Production and Development Strategy for Recovery Factor Increase in Tivacuno Oil Field** - N.H. Orellana Arichabala (Repsol)	14:55	**Numerical study of rock deformation processes at core recovery** - E. Grishko (Skolkovo Institute of Science and Technology)	14:55	**Challenging Appraisal of Tight Palaeozoic Reservoirs in Algeria; Fault and Fracture Network Analyses and Modeling** - J. Van Dijk (OCRE Geoscience Services)
15:15	**Optimization of Cold Production with Horizontal Wells in Foamy Extra-Heavy Oil Reservoirs** - Z. Yang (Petrochina Research Institute Of Petroleum Exploration And Development)	15:15	**Impact of Impurities and Structural Analysis of Salt Rock for Underground Gas Storage** - C. Martin-Clave (University of Nottingham)	15:15	**Characterization and Modeling of the Vug and Fracture Network Affecting a Carbonate Reservoir (KMZ - Mexico)** - L. Micarelli (Beicip-Franlab)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
Fields in Development - Using Integrated Modeling for Production Optimization					
15:55	**Integrated Reservoir Geology, Seismic Facies, and Production Studies to Determine the Potential of Well Development Area** - A. Zhumabekov (China University Of Petroleum, Beijing)	15:55	**Correcting Density/Sonic Logs for Total Organic Carbon to Reduce Uncertainty in Pore Pressure Prediction** - S. Green (Ikon Science)	15:55	**Natural Fractures and Sedimentology of a Heterogeneous Reservoir: The Valdemar Field, Danish North Sea** - A.C. Glad (Technical Univeristy Of Denmark)
16:15	**Efficient Development of the Formation System of the Oil and Gas Field Using Integrated Modeling** - E. Bogdanov (Gazpromneft Science & Technology Centre)	16:15	**Mechanism of Overpressure Generation in the Paleocene Shahejie Formation in in the Linnan Sag, Eastern China** - C. Li (Key Laboratory of Petroleum Resources Research, Chinese Academy of Sciences)	16:15	**Natural fractures prediction in a lacustrine carbonate reservoir integrating 3D structural restoration and seismic AVAZ techniques** - P.H. Silvany Sales (Petrobras)
16:35	**Comprehensive Validation of Current Field Development and Production Operation Strategy with Integrated Asset Modeling Approach** - J. Dudek (Polish Oil & Gas Company (PGNiG SA))	16:35	**Monitoring of CO2 saturation plume movement from time-lapse inverted-seismic and gravity data using an ensemble-based method** - T. Bhakta (Norwegian Research Centre (norce))	16:35	**The DMX Protocol; Ringing in a New Era in Discrete 3D Fault and Fracture Modeling** - J. Van Dijk (OCRE Geoscience Services)
		16:55	**Boundary Conditions for Geomechanical Simulations** - J. Herwanger (MP Geomechanics)	16:55	**Natural Fracture Prediction using Geomechanical Forward Modelling in Jabung Block, South Sumatra Basin, Indonesia** - M. Risyad (PetroChina)
					Influencing Factors of Sand Production Pressure Difference in Naturally Fractured Reservoir - Q. Chen (Petrochina)

Tuesday, 19 October | Oral presentations

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ROOM 16

Key Innovations and Potential Game Changers (Dedicated Session)

08:30	**Benefits of Digital for Better Exploration Planning and Execution -** C. Le Turdu (Schlumberger)
08:50	**Subsurface Temperature Measurement Using Electromagnetic Waves and Machine Learning for Enhanced Oil Recovery -** K. Van Den Doel (Adrok Ltd)
09:10	**Geothermal plant monitoring using innovative Distributed Fibre Optic Sensing technologies -** C. Jestin (FEBUS OPTICS)
09:30	**Operating the Absolute Quantum Gravimeter for Reservoir Monitoring -** J. Lautier Gaud (Muquans)
09:50	Coffee break
10:10	**Why FWI Isn't the Only Answer in Seismic Velocity Model Building -** J.T. Etgen (BP America Inc.)
10:30	**Exploration Drilling in Mexico through Complex Salt with Seismic While Drilling Technology -** N. Kelsall (Schlumberger)
10:50	**Demonstrating Aspects of Generative Adversarial Networks Applied to Seismic Data Processing -** A.J. Bugge (Lundin Energy Norway AS)
11:10	**What Can Quantum Computing Mean for Geoscience? -** M. Dukalski (Aramco Overseas Company B.V.)
11:30	Coffee break
12:45	Lunch

Best of Petroleum Geoscience (Dedicated Session)

14:15	**Assessment of PM-CAES Using a Coupled Power-Plant & Geostorage Model with Simplfied Reservoir Simulations -** F. Gasanzade (Institute of Geosciences, University of Kiel)
14:35	**Flow Diagnostics for Naturally Fractured Reservoirs: A Case Study -** V. Spooner (Heriot Watt University)
14:55	**The Effect of Facies and Thermal Property Heterogeneities on Aquifer Energy Storage in a Carbonate System -** C. Wenzlaff
15:15	**The Processes and Products of Salt Welding; Insights from Offshore Brazil and the Northern Gulf of Mexico -** C. Jackson (Imperial College)
15:35	Coffee break

ROOM 20

Data Driven Methodologies I (SPE)

08:30	**Conditioning Model Ensembles to Various Observed Data by Applying Machine Learning Augmented Workflows -** G. Vanegas Cabas (OMV E&P)
08:50	**Bayesian Predictive Performance Assessment of Rate-time Models for Unconventional Production Forecasting -** L. Ruiz Maraggi (The University of Texas at Austin)
09:10	**Classification and Localization of Low-Frequency DAS Strain Rate Patterns with Convolutional Neural Networks -** D. Zhu (Texas A&M University)
09:30	**Deep Learning Assisted Doppler Sensing for Hydrocarbon Downhole Flow Velocity Estimation -** K. Katterbauer (Saudi Aramco)
09:50	Coffee break
10:10	**A Novel Approach of Using Feature-Based Machine Learning Models to Expand Coverage -** M. Alghazal (Saudi Aramco)
10:30	**Season Cycling Gas Storage In Stogit Fields. A Real-time Data Transmission System -** A. Nagem (Society of Petroleum Engineers (SPE))
10:50	**The Integrated Technology of Residual Reserves Localization and Profit Increase on Brownfields -** I. Farkhutdinov (Tatneft Technological Development Centre)
11:10	**Machine Learning Application for Gas Lift Performance and Well Integrity -** M. Yakout (Gulf Of Suez Petroleum Company (gupco))
	Data-driven PHM Solution for Health Monitoring of Mud Motor Power Sections While Drilling - S. Ba (Schlumberger)
11:30	Coffee break
12:45	Lunch

Data Driven Methodologies II (SPE)

14:15	**Uncertainty Quantification by Monte Carlo Simulation of Lab-Derived Saturation Data from Sponge Cores -** M. Alghazal (Saudi Aramco)
14:35	**Indirect Estimation of Clastic Reservoir Rock Grain Size from Wireline Logs Using Supervised Nearest Neighbor Algorithm -** F. Anifowose (Saudi Aramco)
15:35	Coffee break

IOR/EOR I (SPE)

15:55	**The Impact of Surface Roughness and Injection Rate on Acid-fracture Conductivity -** C. Chen (Southwest Petroleum University)

ONLINE

11:30	Coffee break

11:45 Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era - Room 1

Production & Management - EOR/IOR II

14:15	**Immiscible Water Alternating CO2 Displacement Efficiency in Layered Water Wet Porous Media -** D. Al-Bayati (Curtin University)
14:35	**Effect of direct current on interfacial tension of condensate droplet immersed in brine -** P. Ikpeka (Teesside University)
14:55	**Investigation of Dynamic Swelling and Interfacial Tension of Crude Oil/Brine in the Presence of -** M. Simjoo (Sahand University of Technology)
15:15	**Interaction of Cationic Surfactants with Anionic Polymers for Improving Oil Production -** L. Xu (Aramco Asia Beijing Research Center)
15:35	Coffee break
15:55	**Experimental Measurement and Equation of State Modeling of CO2 and A Gas Condensate Binary Mixture -** I. Seteyeobot (Heriot Watt University)
16:15	**Simulation of Surfactant Flooding in Carbonate Reservoir Using a High-Resolution Outcrop Model -** J. Pola (Heriot-Watt University)
16:35	**Effect of Brine Chemistry on Low Salinity Water: Interplay between Wettability Alteration and Emulsion Generation -** M. Simjoo (Sahand University of Technology)
16:55	**A Synergistic Binary Viscosity Reducer System for Improved Heavy Crude Oil Production -** S. Chen (Aramco Asia)

Technical Programme

Tuesday, 19 October | ePoster presentations

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EPOSTER A		EPOSTER B		EPOSTER C	
ePoster: FWI Case Histories		**ePoster: Imaging Case Histories**		**ePoster: Wavefield Modelling I**	
08:30	**Earth model building using full-waveform inversion with short-offset seismic data from the Gulf of Thailand** - K. Wangkawong (Pttep)	08:30	**3D Errors in 2D Seismic Images: Analysis and Prediction of Errors Due to a Thrust Fault** - J. Harding (Repsol)	08:30	**A new implementation of CPML for the second-order wave equation** - X. Fang (China University Of Petroleum, Beijing)
08:50	**Exploiting Visco-Acoustic Full-Waveform Inversion and Q-Imaging to Resolve Seismic Velocity Heterogeneity, Offshore Cameroon** - M. Matta (Schlumberger)	08:50	**Least-squares Kirchhoff PSDM with a local based inversion approach and compensation for limitations in modeling.** - N. Chemingui (PGS)	08:50	**A Perfectly Matched Layer Technique for the Lattice Spring Model** - J. Tang (China Uninversity Of Petroleum (beijing))
09:10	**4D OBN processing and imaging of the Agbami field. Part II: FWI high resolution model building** - M. Vu (ION)	09:10	**Broadband Imaging for the Largest Exploration Survey in Asia** - R. Chakraborty (Schlumberger)	09:10	**Study on Absorbing Boundary Conditions of Viscous Sponge Layers Based on Lattice Boltzmann Method** - C. Jiang (China University Of Petroleum - Beijing)
09:30	**Reliability, efficiency, and robustness: enhanced template-matching full-waveform inversion using sparse ocean-bottom node data** - W. Kang (Schlumberger/westerngeco)	09:30	**De-risking pre-salt exploration: A regional scale re-imaging case study from the Greater Cavendish area** - K. Ramani (Schlumberger)	09:30	**3D Elastic Wavefield Reconstruction Method Based on Optimal Operator Boundary Storage Strategy** - Q. Li (China University of Petroleum)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**GOMCRUST - The crustal-scale extension of the 2004 BP velocity model for long-offset OBN acquisition setting** - A. Górszczyk (Université Grenoble Alpes)	10:10	**Fault Shadow Zone PSDM Imaging - Entrerrios, Llanos Basin, Colombia** - D. Negut (Z-Terra North Inc.)	10:10	**Attenuating Spurious Reflections from Unmatched Nodes Using the Discontinuous Galerkin Method** - P. Takapouy (University Of Tehran)
10:30	**Investigation on Optimal Walkaway VSP Survey for Reservoir Monitoring with FWI in Abu Dhabi** - T. Mouri (Japan Oil, Gas And Metals National Corporation)	10:30	**Multi Azimuth Imaging of an Oil-bearing Faulted Sandstone Reservoir: A Nigeria deep offshore Case study** - J. Chigbo (Ion Geophysical Corporation)	10:30	**Elastic Wavefield Decomposition Based on Eigenform Analysis in 3D Anisotropic Media** - J. Zuo (China University Of Petroleum (beijing))
10:50	**A practical approach to handle land data: full-waveform inversion case study** - X. Li (BGP INTERNATIONAL INC)	10:50	**A case study of shallow marine survey for geohazard risk evaluation, offshore Iran** - M. Shahnazi (Dana Energy)		
11:10	**Recovering fault-karst structure in the Tarim Basin using full waveform inversion** - Z. Wang (China Univercity Of Petroleum (East China))	11:10	**Research and Application of Viscoelastic Q Pre-stack Depth Migration Technology in Deep Thin Reservoir Imaging** - B. Du (NW-Research Institute of Petroleum E&D PetroChina)		
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
ePoster: Velocity Model Building		**ePoster: Migration Approaches**		**ePoster: Wavefield Modelling II**	
14:15	**Development of Seismic Velocity Combining Tomographic Inversion and Forward Modeling by Ray Tracing: Technique and Application** - J. Papoulia (Hellenic Centre For Marine Research)	14:15	**A matrix-free reformulation of the multi-parameter descent and conjugate-gradient method for isotropic elastic iterative reverse-time migration** - W. Mulder (Shell Global Solutions International BV)	14:15	**One-Way Wave Propagation and Migration in Ray Center Coordinate System of VTI Medium** - B. Zhang (Tongji University)
14:35	**Anisotropic media tomography based on automatic horizons picking** - X. Shuo (China university of petroleum (East China))	14:35	**Dynamically Focused Beam Migration in Anisotropic Media** - Q. Liu (China University Of Petroleum(east China))	14:35	**Traveltime and Relative Geometrical Spreading Approximation in Elastic Orthorhombic Medium** - S. Xu (Kyoto University)
14:55	**Elastic Seismic Inversion Using an Iterative Ensemble Kalman Filter** - Y. Zheng (BP)	14:55	**Q least-squares reverse time migration with density disturbance based on the first-order viscoacoustic quasi-differential equations** - Y. Wang (China University Of Petroleum (East China))	14:55	**Reflection Raytracing Using Snell's Law in Multi-Stage Fast Marching Method** - Y. Lu (Department Of Earth And Space Sciences, Southern University Of Science And Technology)
15:15	**Source independent velocity recovery using imaginary FWI** - S. Qin (Michigan State University)	15:15	**Investigating the influence of the free-surface ghosts to depth image through the point spread function** - B. Han (China University of Geosciences)	15:15	**Finite-Difference Frequency-Domain Modelling of Acoustic Wave in VTI Media through Plane Wave Interpolation** - S. Izadian (Heriot-Watt University)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Joint Inversion of Magnetotelluric and Ambient Seismic Noise Data using Correspondence Maps** - M. Aquino (CNRS UMR 7063 ITES)	15:55	**Elastic Gaussian Beam Migration in Tilted Transversely Isotropic (TTI) Media** - X.X. Xu (China University of Petroleum (East China))	15:55	**Converted wave triplications in transversely isotropic media with a tilted symmetry axis** - A. Stovas (Norwegian University of Science & Technology)
16:15	**Temperature Dependence of Ultrasonic Velocities in Fluid-Saturated Rocks: Experiments and Modelling** - H. Qi (Hohai University)	16:15	**Generalised Algorithm and Implementation of Topography Within Finite Difference Wave Solvers** - E. Caunt (Imperial College)	16:15	**Working around the Corner Problem in Numerically Exact Non-Reflecting Boundary Conditions for the Wave Equation** - W. Mulder (Shell Global Solutions International BV)
16:35	**Converted Wave Traveltime Approximation in Elastic Orthorhombic Media** - S. Xu (Kyoto University)			16:35	**Numerical Solution of Acoustic Wave Equation in ω-k Domain** - N. Amini (CoCoLink (Subsidiary of Seoul National University Techno Holdings))
				16:55	**Estimate optimal parameters of finite-difference scheme for wavefield modelling** - X. Fang (China University Of Petroleum, Beijing)
					Explicit simulation of seismic waves in fractured VTI media - A. Shevchenko (Moscow Institute of Physics and Technology)

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Tuesday, 19 October | ePoster presentations

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EPOSTER D

ePoster: Seismic Interpretation - Theoretical Advances I

08:30	**On-Axis Triplications in Elastic Orthorhombic Media** - S. Xu (Kyoto University)
08:50	**Investigating the Effective Properties of Multiscale Fractured Media Using Non-Periodic Homogenization** - A. Ibouriche (RING team - Géoressources - Université de Lorraine)
09:10	**Pore structure based modeling of resistivity and inversion of saturation in fractured formation** - T. Hou (China University Of Petroleum (Beijing))
09:30	**Seismic expression of cracks: reconciling discrete fracture network modelling and effective medium approaches** - A. Fuggi (University of Leeds)
09:50	Coffee break
10:10	**Application of Iterative Inversion Incorporated Prior Knowledge of Strike-slip Fault Zone in Tight Limestone Reservoir Prediction** - X. Li (China University of Petroleum-Beijing)
10:30	**Research and application of pre-stack fracture prediction based on the full azimuth common reflection angle gather** - R. He (Research Institute Of Petroleum Exploration & Development-Northwest(NWGI), Petrochina)
10:50	**Impact of Shale Anisotropy on Passive Source Microseismic Wavefield** - R. Wu (Chinese Academy Of Science)
11:30	Coffee break
12:45	Lunch

ePoster: Rock Physics I

14:15	**Rock Physics Model for Unconventional Reservoirs with Vertical Transverse Isotropy** - U. Durmus (Colorado School of Mines)
14:35	**Rock Physics Modelling of Gas Dissolved in Water Sandstone, Nakajo Field, Japan** - T. Fukano (JX Nippon Oil & Gas Exploration Corporation)
14:55	**Petrophysical Properties Estimation of Deep Dolomite Reservoir** - J. Gui (PetroChina Research Institute of Expl. & Developm.)
15:15	**A Quantitative Estimation Method of Cement Clay in Clayey Sandstone and its Rock Physics Application** - X. Han (China University of Petroleum)
15:35	Coffee break
15:55	**Creation of Lithology and Gas-Bearing Sensitive Elastic Factor Based on Xu-Payne Optimization Modeling** - Y. Li (Sinopec)
16:15	**Investigation of the Correlations between Anisotropic Properties and Kerogen Content in Organic-Rich Shale** - J. Xie (Chengdu University of Technology)
16:35	**Seismic Interpretation Based on Improved Tight Sandstone Reservoir Rock Physics Model** - Y. Zhou (China University of Petroleum (East China))
16:55	**Simulation of the effect of rock diagenetic process on seepage property** - H. Zheng (China University Of Petroleum)

EPOSTER E

ePoster: Seismic Processing - Noise Attenuation - New Developments

08:30	**Edge-Aware Image Conditioning with a Siamese Neural Network** - M. Aharchaou (ExxonMobil)
08:50	**Inversion-Based Edge-Preserving Seismic Denoising with Structural Constraints** - T. Wang (SINOPEC Petroleum Exploration and Production Research Institute)
09:10	**Microseismic Signal Recognition Based on a Single Channel PSR-ICA Method** - H. Meng (Research Institute of Petroleum Exploration & Development-Northwest(NWGI), PetroChina)
09:30	**A Random Noise Suppression Method of Seismic Data Based on the VMD-ICA Algorithm** - H. Meng (Research Institute of Petroleum Exploration & Development-Northwest(NWGI), PetroChina)
09:50	Coffee break
10:10	**Suppressing Seismic Record Linear Noise on the Common Offset Gathers Using Mathematical Morphology Filters** - G. Shang (China University of Petroleum-Beijing)
10:30	**Seismic Random Noise Attenuation via Unsupervised Sparse Machine Learning** - Y. Gao (China University of Petroleum-Beijing)
10:50	**Noise Suppression in Low SNR Area-A Case Study of the Piedmont Zone in Western China** - X. Sha (PetroChina Research Institute of Expl. & Developm.)
11:10	**An improve Convolutional Auto-Encode Denoising Method** - J. Zhang (China University of Petroleum-Beijing)
11:30	Coffee break
12:45	Lunch

ePoster: Seismic Processing - Noise Attenuation - New Developments and Case Studies "Mix"

14:15	**Multichannel abnormal amplitude preserving attenuation based on data random reconstruction and its application** - H. Li (RIPED--NWGI, Petrochina)
14:35	**Primal-Dual Optimization Strategy with Total Variation Regularization for Prestack Seismic Image Deblurring** - B. Jiang (Tsinghua University)
14:55	**Mud-Roll Removal in Shallow Water Marine Data Using the Curvelet Transform** - E. Verschuur (Delft University of Technology)
15:15	**Early stage noise removel using a convolutional autoencoder** - J. Walda (University of Hamburg)
15:35	Coffee break
15:55	**Receiver Deghosting with Blended Data Using Sparse Inversion** - J. Cao (Delft University of Technology)
16:15	**Adaptive Non-Local Means Filter and Its Application for Nonstationary Seismic Data** - F. Wang (Tongji University)
16:35	**Seismic Noise Attenuation Based on Higher-Order Directional Total Variation** - L. Zhou (Hunan University of Science and Technology)
16:55	**A random noise reduction method in f-x domain** - R. He (Research Institute Of Petroleum Exploration & Development-Northwest(NWGI), Petrochina)

EPOSTER F

ePoster: Borehole Seismic Methods

08:30	**Application of Walkaway-VSP Based on Joint Observation by DAS and Geophones in Northwest China** - C. Zhidong (BGP)
08:50	**P-Wave Anisotropy Estimation from 3D VSP Data Acquired with Geophones and DAS at Otway Site** - S. Popik (Curtin University)
09:10	**PS Converted-Wave NMO Correction and Its Application to Improve PS Reflection Imaging Quality of VSP Data** - M. Lou
09:30	**While Drilling Checkshots and Prediction Ahead of the Bit Using a Drill Bit as a Source** - A. Aldawood (Saudi Aramco)
	Application of beam migration to DAS-VSP seismic data - P. Duan (Bgp, Cnpc)
09:50	Coffee break

ePoster: Seismic Processing - Attenuation

10:10	**A New Q Estimation Method Based on Logarithmic Spectral Simultaneous Inversion** - K. Xu (Sinopec Petroleum E&p Research Institute)
10:30	**Oriented Inverse Q Filtering Using Prestack Data** - C. Li (China University of Petroleum,Beijing)
10:50	**Research of Shale Oil Reservoirs Geophysical Characteristics Based on P and S Wave VSP Data** - C. Zhidong (BGP)
11:10	**Prestack data attenuation compensation based on inversion** - W. Cheng (China University Of Petroleum (beijing))
11:30	Coffee break

11:45 **Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era** - Room 1

12:45	Lunch

ePoster: Seismic Acquisition & Processing - Micro and Passive Seismic

14:15	**Polarization analysis and 3D patterns for the six basic seismic moment tensors** - H. Li (King Fahd University of Petroleum & Minerals)
14:35	**A Maximum Projection Based Method for Estimating Relative Backazimuth between Microseismic Events** - X. Meng (Chengdu University of Tecnology)
14:55	**Compressive Sensing - Machine Learning combined for joint location and moment tensor estimation: a performance analysis** - I. Vera Rodriguez (NORSAR)
15:15	**Geometry-independent realistic noise models for synthetic data generation** - M. Ravasi (King Abdullah University of Science and Technology)
15:35	Coffee break
15:55	**Fast-Linearized Methods for Hypocentre Location, Magnitude Estimation and Site Amplification Effects of Fluid-Induced Seismic Events** - G. Rodríguez-Pradilla (University of Bristol)
16:15	**An optimized workflow for source localization and joint velocity inversion using wavefront attributes** - P. Yang (University Of Hamburg)
16:35	**Towards 3D transdimensional ambient-noise surface wave tomography of the Reykjanes Peninsula, SW Iceland** - A. Rahimi Dalkhani (Delft University Of Technology)
16:55	**Comparison of Surface and Shallow Seismological Networks Based on Experimental Data** - P. Dergach (Trofimuk Institute of Petroleum Geology & Geophysics SB RAS)

Technical Programme

Tuesday, 19 October | ePoster presentations

This presentation is pre-recorded

EPOSTER G

ePoster: Faults

08:30	**Cantarell Giant Oilfield Fault-Thrust Kinematic Evolution and Synchronous Thermo-Fluid Dynamics -** G. Perez-Drago (Beicip-franlab)
08:50	**Effects of micro-fracture and micro-coal line on tight gas accumulation, Triassic Xujiahe Formation, Sichuan Basin, China -** W. Zhao (China University of Petroleum (Beijing))
09:10	**Development and application of a new method for addressing fault compartmentalization uncertainty using probabilistic linear regression -** D. Hemingway (PDS Group)
09:30	**The Sealing Capacity of Multi-Stage Extensional Abutting Faults in the Bohai Bay Basin, China -** J. Ren (Bohai Oilfield Research Institute, CNOOC)
09:50	Coffee break
10:10	**Displacement Transfer along Oblique Faults: A Case Study of Chengbei Fault, Bohai Area, Eastern China -** S. Panpan (Cnooc (china National Offshore Oil Corporation) Ltd Tianjin Branch, Tianjin, P.r.china)
11:30	Coffee break
12:45	Lunch

ePoster: Wireline and LWD logging – Analysis and Interpretation

14:15	**A novel method of fluid identification on low contrast reservoirs -** S. Wang (China University of Petroleum)
14:35	**A new determining porosity method based on four detectors and D-T neutron source -** F. Junting (China University Of Petroleum)
14:55	**An Inversion Method to Determine Azimuthal Density for Cement Evaluation in Horizontal Well -** H.C. Song (China University Of Petroleum)
15:15	**Fluid indicators based on velocity dispersion and attenuation from acoustic waveform in the carbonate reservoirs -** X. Li (China Petroleum Logging Co. Ltd.)
15:35	Coffee break
15:55	**Multi Boundary Mapping Delivers Productive Horizontal Well in Heterogeneous Clastic Reservoir, Study from Greater Burgan Field -** D. Belal (Kuwait Oil Company)
16:15	**A New Algorithm for Electromagnetic Waves in Planar-Stratified Media with Generalized Anisotropy -** L. Wang (China University Of Petroleum)
16:35	**Advanced Ultrasonic technology measuring annulus thickness and detecting formation collapse on casing -** F. Ahmad (Kuwait Oil Company)
16:55	**Triaxial Induction Tools Responses in Layered Arbitrarily Anisotropic Medium -** X. Hu (China University of Petroleum -Beijing at KARAMAY)
	Bayesian-type TI anisotropy characterization using depth-dependent prior information - J. Jocker (Schlumberger)

EPOSTER H

ePoster: Enhanced Reservoir Simulation

08:30	**Unlocking true reservoir potential: The impact of surface constraints on future production predictions -** T. Ravestein (SJUR)
08:50	**Homogenization of Hydro-Mechanical Coupling in Shale Matrix -** X. Yan (China University of Petroleum (East China))
09:10	**Geostatistical Interpolation Constrained by Lithofacies -** B. Yu (CHINA UNIVERSITY OF PETROLEUM(BEIJING))
09:30	**A New Generalized Auto-Tune Procedure for Modeling Asphaltene Precipitation by Equation of State -** A. Daryasafar (Petroleum University Of Technology)
09:50	Coffee break
10:10	**Pore-Scale Direct Numerical Simulation of Simultaneous Marangoni-Driven Convection and Mass Diffusion in a Chemical Flooding Process -** J. Abbasi (Shiraz University)
10:30	**Impact of oil type and average reservoir pressure on dynamic heterogeneity during waterflooding -** Z. Bahmani (Shiraz University)
10:50	**Experimental Investigation on Low Salinity Effect Using Dynamic Interfacial Properties During Tertiary Water Flooding -** H. Farhadi (Sharif University Of Technology)
11:10	**Water Saturation Prediction in the Reservoir Zone of a Gas Field using SVR Method -** S.A. Afzali Fatatouei (Tehran University)
11:30	Coffee break
12:45	Lunch

ePoster: Characterization and Monitoring of Subsurface CO2 Storage

14:15	**Characterizing CO2 Plumes from High-Resolution Seismic Tomography in Shenhua CCS Demonstration Project -** Y. Zheng (Institute of Geology and Geophysics (CAS))
14:35	**Cross-Hole Seismic as a Monitoring Tool: CO2CRC Otway SRD3.3 Shallow Release Project Case Study -** K. Tertyshnikov (Curtin University of Technology)
14:55	**An Assessment of the CO2 Fate at Smeaheia, A Potential Large-Scale Storage Site in Norway -** P. Orsini (OpenGoSim Ltd)
15:15	**Dispersion Coefficient Inferred from Convection Dynamics of CO2 in Brine Saturated Porous Media -** S. Mahmoodpour (Institute of petroleum engineering-Tehran university)
15:35	Coffee break
15:55	**From CO2 Transportation to Geological Storage: The Whole Picture of a CCS Process with Chemical Thermodynamics -** E. Joonaki (Heriot-watt University)
16:15	**Quantitative Evaluation of Gas Saturation by Neutron Cross-Section from Pulsed Neutron Logging in CO2 Injection Formation -** J. Fan (China University of Petroleum(East China))
16:35	**Three-Axis Borehole Gravity Feasibility Method and Its Application to CO2 Storage Monitoring -** A. Seshia (University Of Cambridge)

EPOSTER I

ePoster: Integrated Reservoir Characterization

08:30	**Prediction of Turbidite Reservoir (Achimov Reseroirs) Based on Complexity Geological and Seismic Data to Make FID -** A. Sidubaev (Gazpromneft NTC, Ltd)
08:50	**Sandstone Payzone Determination by Using Electrofacies Analyses in Two Clastic Reservoirs of Iranian Oil Fields -** V. Mehdipour (Dana Energy)
09:10	**Analysis of Thin Sand Recognition Using Supervised Multiattribute Classification Based on ANNs -** S. Zhang (Saudi Aramco)
09:30	**Reservoir characterization using petrophysical analysis of the Volve Field, Norway -** O. Oyetunji (University of Houston)
09:50	Coffee break
10:10	**Dynamis and Static Electrofacies Analysis versus HFU in Ilam Reservoir; A Carbonate Oil Field of Iran -** H. Rastkerdar (Dana Energy)
10:30	**High Resolution Modelling for EOR Screening in Nigerian Reservoirs -** M.M. Mbusube (Heriot-watt University)
11:30	Coffee break
12:45	Lunch

ePoster: Geophysical Characterization for Mineral Exploration and Mining

14:15	**Extraction of Surface-Wave Dispersion Curves from Ambient Noise Data in a Mineral Exploration Site in Finland -** C. Colombero (Politecnico Di Torino)
14:35	**Separation of LS-Epithermal Gold Veins Deposit Alterations by Geophysics in Chucotka Region -** E. Ermolin (GM-Service ltd)
14:55	**Reducing the Cost of Microseismic Monitoring for Ensuring Safety in Mining -** L. Eponeshnikova (Novosibirsk State University)
15:15	**Marine Transient electromagnetic Exploration of Seafloor Massive Sulfide Deposits on Southwest Indian Ridge -** Z. Su (China University Of Petroleum (beijing))
15:35	Coffee break
15:55	**Imaging Dispersion of MASW Data with Post-Coding Mini-Sosie -** Z. Yang (Chang'an University)
16:15	**Shallow Geohazard Interpretation using High-Resolution Seismic Attributes and Artificial Intelligence -** C. Han (GeoTeric)
16:35	**Machine Learning integrated to pipeline monitoring with Distributed Acoustic Sensing -** C. Jestin (FEBUS OPTICS)
16:55	**Comparative study of stochastic Nature Inspired Optimization Algorithms to estimate Shear wave velocity using Ground Rolls. -** P. Kumar (Indian Institute Of Technology Kanpur)

11:45 Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era - Room 1

Tuesday, 19 October | ePoster presentations

This presentation is pre-recorded

EPOSTER J

ePoster: HSE & Sustainability - Reducing Safety Exposure and Environmental Impact of Geophysical Operations

08:30	**Derisking Marine Seismic Survey Feasibility in Shallow Waters -** E. L'arvor (Total E&P)
08:50	**Improvements in Geologic Modeling Workflows Based on Six Years of Incremental Models at Farnsworth CCUS/EOR Site -** R. Balch (New Mexico Tech)
09:10	**Optimization of Safe Distance in Pursuing Seismic Data Acquisition through Oil Fields and Populated Areas -** I. Hakam (Saudi Arabian Chevron)
09:30	**Mitigation of Safety Risks in Pursuing Mega 3D Seismic Survey in Former Battle Field Area -** A.M. Alkandari (Kuwait Gulf Oil Company)
09:50	Coffee break
10:10	**COVID-19 infection prevention measures in 2-D land seismic survey, Niigata, JAPAN -** S. Suzuki (INPEX CORPORATION)
10:30	**A standardized benthic mapping approach for offshore site characterization -** C. Jones (Integral Consulting)
10:50	**Etzel Goes Hydrogen? ... Reassessing the Structural Integrity of an Aging Salt Cavern Energy Storage -** B. Otto (Wintershall Dea)
11:30	Coffee break
11:45	**Forum Session 1: How the oil industry is addressing the energymix to meet the goals of the transition era -** Room 1
12:45	Lunch

ePoster: HSE & Sustainability - Sustainable Development

14:15	**Fast Machine Learning-Based Oil Slick Detection on Satellite Imaging -** M. Araya-Polo (Total EP Research & Technology USA, LLC.)
14:35	**Magnetometry and electromagnetic screening of dumps - fast solution for geoenvironmental information aquisition -** J. Burlakovs (University of Latvia)
14:55	**Sustainable Management of Ghana's Sanitation Using the REIM Model -** V.B. Danquah (University Of Aberdeen)
15:15	**Stabilization of Synthetic-based Mud by Renewable Resources -** J.M. B M Ibrahim (Petronas)
15:35	Coffee break

ePoster: Data and Information Management

15:55	**An Integrated Machine Learning Platform for Multi-Scale and Multi-Domain Applications in Geosciences -** P. Dell'aversana (Eni SpA)
16:15	**Performance Evaluation of Machine Learning Algorithms in Predicting Dew Point Pressure of Gas Condensate Reservoirs -** P. Ikpeka (Teesside University)
16:35	**Tsunami Predefined Charts for Rapid Energy and Amplitude Estimation and Its Relationships with Initial Water Displacement -** A. Ala Amjadi (IIEES (Int. Inst. of Earthquake Eng. & Seismology))
16:55	**Digital Sedimentology – a new tool for increasing the value of the petrographic study -** B. Belozerov (Gazpromneft NTC)
	Exploration cost optimization through value of information and digitalization of geological features. - I. Paveleva (LLC Gazpromneft STC)

EPOSTER K

ePoster: Poster Session I (SPE)

08:30	**Investigation on the Effect of Mud Additives on the Gelation Performance -** M. Shamlooh (Qatar University)
08:50	**Adapted Methodology for Evaluating EOR Reserves and Resources, Incorporated -** L. Perdomo (YPF)
09:10	**Synergistic Effects of Engineered Water Nanoparticle on Oil/Brine/Rock Interactions in Carbonates -** M.R. Hashmet (Nazarbayev University)
09:30	**An In-Depth Review of the Recovery Mechanisms for the Cyclic Gas Injection Process -** H. Martin Rodriguez (Repsol)
09:50	Coffee break
10:10	**The Potential Impact of Surfactant and Polymer Production on Separated Water Quality -** J. Almorihil (Saudi Aramco)
10:30	**Numerical Investigation of Wettability Effects on Immiscible Two-phase Flow in Naturally Fractured Reservoirs -** M.H. Sedaghat (University of Melbourne)
11:30	Coffee break
12:45	Lunch

ePoster: Poster Session II (SPE)

14:15	**Acidizing Workflow for Optimized Well Performance in Zhdanov and Lam Oil Fields Offshore Caspian Sea -** R. Kalabayev (Schlumberger)
14:35	**Offset Data Analysis and Seam Less Execution through Real Time Monitoring Results in Step Change -** A. Nagem (Society of Petroleum Engineers (SPE))

Technical Programme

Wednesday, 20 October | Oral presentations

This presentation is pre-recorded

ROOM 1		ROOM 2		ROOM 3	
Digitalization & AI: Seismic Data Processing II		**Elastic FWI**		**Velocity Model Building: Tomography**	
08:30	**Physics-Constrained Deep Learning for Solving the Eikonal Equation** - S. Grubas (University of Alberta)	08:30	**Ultra-resolution near surface FWI within a transmission surface-consistent scheme** - D. Colombo (Saudi Aramco)	08:30	**Near-surface multi-parameter estimation for VTI media by first-arrival stereotomography** - H. Sun (Tongji University)
08:50	**The eikonal solution for attenuating VTI media using physics-informed neural networks** - T. Mohammad Hasyim (King Abdullah University of Science and Technology)	08:50	**Elastic Anisotropic Full Waveform Inversion Using Probabilistic Petrophysical Constraints** - O.C. Aquino De Aragão (Center for Wave Phenomena, Colorado School of Mines)	08:50	**Near-surface Bayesian first-arrival tomography with uncertainty using natural neighbor interpolation** - A. Egorov (Aramco Research Center – Moscow, Aramco Innovations LLC)
09:10	**Is it time to swish? Comparing activation functions in solving the Helmholtz equation using PINNs** - U.B. Waheed (King Fahd University of Petroleum and Minerals)	09:10	**A practical implementation of converted-wave reflection full-waveform inversion** - N. Masmoudi (CGG)	09:10	**Joint Inversion of Surface Wave Tomography and Body Wave Tomography Applied to 2D Media** - M. Karimpour (Politecnico Di Torino)
09:30	**Physics-guided deep learning using Fourier neural operators for solving the acoustic VTI wave equation** - T. Konuk (Colorado School of Mines)	09:30	**Elastic Full Waveform Inversion with Coiled Distributed Acoustic Sensing Fibres** - M. Eaid (University Of Calgary)	09:30	**Preconditioned transmission + reflection joint traveltime tomography with adjoint-state method for subsurface velocity model building** - J. Zhang (Tongji University)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Deep-LSRTM: least-squares reverse time migration via learned projection operators** - K. Torres Bautista (University of Alberta)	10:10	**Target-oriented high-resolution elastic full waveform inversion using redatumed multi-component data** - Y. Li (King Abdullah University Of Science And Technology)	10:10	**Travel time tomography in elastic wave imaging domain based on ADCIGs** - W. Zhonghua (China University Of Petroleum (East of China))
10:30	**Seismic Registration Using Convolutional Neural Networks** - C. Bagaini (Schlumberger)	10:30	**Land Full Waveform Inversion Application from Topography** - D. Vigh (Schlumberger)	10:30	**Resolving small scale lateral velocity anomalies without FWI or stochastic approaches** - M. Reinier (CGG)
10:50	**Moving toward Direct DNN-Based Enhancement of 3D Pre-Stack Seismic Data** - K. Gadylshin (Institute of Petroleum Geology & Geophysics SB RAS)	10:50	**On the Robustness of Sparsity-Promoting Regularized Wavefield Inversion with Phase Retrieval Against Sparse Long-Offset Acquisitions** - H. Aghamiry (Université Côte d'Azur, CNRS, Observatoire de la Côte d'Azur, IRD, Géoazur)	10:50	**Method for correcting statics errors using depth misties** - P. Docherty
		11:10	**Chevron Optimization Framework for Imaging and Inversion (COFII) – open-source Julia language framework for seismic inversion** - J. Washbourne (Chevron)	11:10	**Efficient monochromatic traveltime sensitivity kernel calculation using random-boundary condition** - B. Feng (Tongji University)
					Accelerating seismic stacking methods with GPUs in the computational cloud - G. Ciotto Pinton (University Of Campinas)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Digitalization & AI: Quantitive Interpretation and Geology		**FWI Case Histories**		**Velocity Model Building I**	
14:15	**Semi-supervised seismic data and well logs integration for reservoir lateral porosity prediction** - W. Sang (China University Of Petroleum(Beijing))	14:15	**Exploiting the Full Wavefield to Overcome Limitations of Ray Based Tomography in the Central North Sea** - F. Hall (CGG)	14:15	**Neural network for misfit prediction in 2D elastic global FWI** - S. Pierini (University Of Pisa)
14:35	**Optimizing digital image analysis of thin sections for reliable pore network characterization** - V. Chandra (King Abdullah University Of Science And Technology)	14:35	**FWI velocity and imaging: A case study in the Johan Castberg area** - N. Salaun (CGG)	14:35	**Increase resolution of the seismic velocity model through seismic data** - Y. Li (Tsinghua University)
14:55	**3D Seismic Based Reservoir Property Prediction Using Deep Convolutional Neural Networks** - E. Zabihi Naeini (Earth Science Analytics)	14:55	**Gabon Offshore - New Technology Enhancing Imaging of Complex Subsurface in Gabon** - P. Gabrielli (CGG)	14:55	**Automatic unflooding for salt base using U-net in full-waveform inversion framework** - A. Alali (KAUST)
15:15	**Application of machine learning algorithms for fluid type prediction based on seismic data** - E. Karaseva (Imperial College)	15:15	**Improving Sub-Messinian Images in the Nile Delta Using FWI and Least-Squares Q Migration** - C. Chen (Cgg)	15:15	**How AI derived logs can improve the PSDM model building, an on-shore example** - M. Rauch (TGS)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**A Hybrid Image Processing Approach to Enhance Signal to Noise Ratio of Carbonate Micro CT-Images** - S. Sadeghnejad (Tarbiat Modares University)	15:55	**Uncovering the Potential Reservoir Beyond Basalt, Kutch Offshore: A Case Study of Sub-Basalt Imaging** - S. Sengupta (Schlumberger)	15:55	**Practical deep learning inversion using neural architecture search and a flexible training dataset generator** - T. Shibayama (Preferred Networks Inc.)
16:15	**Analysis of Geological Susceptibility to Induced Seismicity in the Montney Formation Using Supervised Machine Learning** - P. Wozniakowska (University of Calgary)	16:15	**Unraveling the Complex Subsurface with a High-Resolution Earth Model in the Taranaki Basin, New Zealand** - Y. Gong (Schlumberger)	16:15	**Mitigating the Near-Surface Effect in Velocity and Reflectivity Estimation with Multi-Scale Low-Rank Approximated Image Updates** - A.M. Alfaraj (Delft University Of Technology - TU Delft)
16:35	**Leveraging semantic search and advanced analytics to map studies on overpressure mechanisms across the globe** - P. Tempone (ENI E&P)	16:35	**Revisiting Mariner: Value of Multicomponent and Multimeasurement Data for Model Building** - S. Roy (Schlumberger)	16:35	**Wave-equation first-arrival tomography for 3-D near-surface velocity inversion** - B. Feng (Tongji University)
16:55	**Monitoring Geologic Change in an Evolving World** - C. Dacre (Maxar Technologies)	16:55	**Quasi-Elastic Full-Waveform Velocity Inversion with Density Constraints** - V. Valler (ION)	16:55	**3D transdimensional ambient noise surface wave tomography of the Reykjanes Peninsula – a feasibility study** - A. Rahimi Dalkhani (Delft University Of Technology)
	The Importance of Blending Different Data Types to Train Machine Learning Classifiers for Sedimentary Structure Detection - A. Nathanail (Heriot-Watt University)		**Resolving Complex Carbonate Imaging Challenges with FWI on Short-Offset Vintage Streamer Data** - P. Deng (CGG Services (Singapore) Pte.Ltd.)		**Complex Near-surface Velocity Modeling via U-net** - G. Niu (China University Of Petroleum(beijing))

Wednesday, 20 October | Oral presentations

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ROOM 4		ROOM 5		ROOM 6	
Imaging Case Histories I		**Energy Recovery from Fractured Reservoirs: Computational Challenges, Experimental Achievements and Field Applications (Dedicated Session)**		**Seismic Interpretation - Statistical Methods**	
08:30	**High Resolution Tomography in MSGBC Basin - Northwest Africa: A Case Study** - D. Tiwari (TGS)	08:30	**Flow Diagnostics for Fractured Reservoirs with Geomechanics** - V. Spooner (Heriot Watt University)	08:30	**Bayesian nonlinear rock-physics inversion for carbonate reservoirs with complex pore structure based on elastic impedance** - H. Pan (Yangtze University)
08:50	**Multi-Azimuth Acquisition and High-Resolution Model Building and Imaging - A Case Study from Offshore Morocco** - S. Chen (Schlumberger)	08:50	**It is Rough to be a Fracture – But How Rough?** - K. Bisdom (Shell Global Solutions International BV)	08:50	**Building low frequency model with Deep Learning for seismic inversion in complex geology without structural model** - C.S. Lee (CGG Services (NL) B.V.)
09:10	**Match-Filter Q Tomography - A Case Study from the Black Sea** - M. Matta (Schlumberger)	09:10	**Geologically Relevant Framework for Adaptive Fractured Reservoir Modeling** - D. Ris (TU Delft)	09:10	**Spatially Correlated Reflectivity Reconstruction via a Two-Step Scheme** - H. Li (CHINA UNIVERSITY OF PETROLEUM (BEIJING))
09:30	**Overcoming Shallow Water Imaging Challenges in Australia's North West Shelf** - X. Li (CGG)	09:30	**Study on Differentiated Production Control Conditions for Micro-Fractured Reservoirs Development** - R. Yang (Cnooc Research Institute Co. Ltd.;)	09:30	**Robust seismic inversion workflow using temporal convolutional networks: a case study on noisy field data** - H. Alfayez (Saudi Aramco, EXPEC Advanced Research Center)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Reducing Structural Uncertainty with a Modern Reprocessing Sequence: A Case Study Onshore Colombia** - E.J. Wiarda (Ecopetrol S.A.)	10:10	**An Experimental Study of the Effect of Gravity on Foam in Fractures** - K. Li (Technology University of Delft)	10:10	**Comparing Bayesian and Neural Network Supported Lithotype Prediction from Seismic Data** - S. Klarner (SKGeo LLC)
10:30	**Revealing Complex Sub-Basalt Structures Offshore India through Advanced Seismic Processing** - X. Li (CGG)			10:30	**Stochastic Inversion with Joint Optimization of Discrete and Continuous Petrophysical Properties** - L. Azevedo (Instituto Superior Tecnico)
10:50	**Thrust Fault and Sub-Thrust Imaging in the Taranaki Basin with Least-Squares Tilted Orthorhombic Q-RTM** - Z. Gong (CGG)			10:50	**Low-Frequency Impedance Inversion by Using Interpretable Gated Recurrent Encoder-Decoder Networks** - X. Jiao (China University Of Petroleum(Beijing))
11:10	**Multi-Azimuth Approach of Depth Imaging for Marine Towed Streamer Data** - O. Litvyakova (PetroTrace Ltd.)			11:10	**Machine learning based deep carbonate reservoir characterization with physical constraints** - Y. Chen (State Key Laboratory of Marine Geology, Tongji University)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Multiple Imaging		**Energy Transitions Endeavor - Successful Projects, Plans, and Creative Ideas to Move Forward (Dedicated Session)**		**Seismic Interpretation - Enhanced Methods**	
14:15	**Plane-Wave Marchenko Imaging Method: Field Data Application** - J. Van Ijsseldijk (Delft University of Technology)	14:15	**Cloud-Based Solutions for Collaborative Modeling of Geothermal Projects** - G. Sosio (Schlumberger)	14:15	**Multichannel Reflectivity Inversion Using an Adaptive Lateral Amplitude Perturbation Constraint** - X. Du (CNOOC Research Institute Ltd)
14:35	**Correcting for Imperfectly Sampled Data in the Iterative Marchenko Scheme** - J. Van Ijsseldijk (Delft University of Technology)	14:35	**Permanent Carbon Sequestration Potential in Offshore Basalt Sequences on the NW European Continental Margins** - S. Planke (Volcanic Basin Petroleum Research AS)	14:35	**Improvised Approach for Seismic-driven Water Saturation_Trend Prediction- Field B Case Study in Malay Basin** - C.L. Lew (Group Research Technology PETRONAS)
14:55	**Least-squares multiple imaging constrained jointly by OBN and towed-streamer data** - G. Poole (CGG)	14:55	**Maturing Geothermal Energy for Saudi Arabia** - V. Vahrenkamp (Kaust)	14:55	**Joint PP-PS Inversion with registration optimisation to improve geological knowledge of a deep-water field West Africa** - D. Lopez (CGG)
		15:15	**OGCI – Practical Actions from the Oil and Gas Industry to Mitigate Climate Change** - P. Mezzano (Oil & Gas Climate Initiative)	15:15	**Improved Seismic Fluid Indicator Prediction Using Fluid Bulk Modulus Inversion** - M. Jaya (Petroliam Nasional Berhad (PETRONAS))
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
Interferometry					
15:55	**Ambient Noise Reverse Time Migration Based on Velocity Flood for Fault Imaging** - H. Li (University Of Science And Technology Of China)	15:55	**Rocksalt Meets Energy Transition ... Salt Cavern Specific Subsurface Risks, Required G&G Skills and Staff Responsibilities** - B. Otto (Wintershall Dea)	15:55	**Initial Wave Impedance Modeling Method Based on Plane-Wave Destruction** - H. Li (RIPED--NWGI, Petrochina)
16:15	**Can we retrieve ultra-low frequency surface waves from blended continuous recordings?** - D. Le Meur (CGG)	16:15	**AM20-Lab: Ultra High-Density Simultaneous Sourcing Test for Near-Surface Characterization and Deep-Sea Mineral Exploration** - A.C. Ramirez (TGS)	16:15	**Automation of seismic inversion and reservoir characterization** - R. Bachrach (Slb)
16:35	**On the benefits of auxiliary transmission data for Marchenko-based Green's function retrieval** - J. Van Der Neut (Delft University of Technology)			16:35	**A Joint Inversion-Segmentation approach to Assisted Seismic Interpretation** - M. Ravasi (King Abdullah University of Science and Technology)
16:55	**Virtual checkshot reconstruction from seismic-while-drilling data** - N. Alsaad (Saudi Aramco)			16:55	**A new workflow to enhance intercept and gradient data quality** - H. Pham Huu (BP)
	Employing Internal Multiples in Time-Lapse Seismic Monitoring, Using the Marchenko Method - J. Van Ijsseldijk (Delft University of Technology)				**Joint PP-PS-SS Inversion in Native Time Domain Optimizing Registration through Travel Times Estimation** - B. Roure (CGG)

Technical Programme

Wednesday, 20 October | Oral presentations

This presentation is pre-recorded

ROOM 7		ROOM 8		ROOM 9	
Multi-Component		**Seismic Processing - Noise Attenuation - Novel Approaches**		**Seismic Interpretation - Theoretical Advances II**	
08:30	**Multicomponent 3D-3C Data Acquisition and Processing in the Bandurria Norte Concession, Neuquén Basin, Argentina -** D. Curia (Wintershall Energia S.A.)	08:30	**Multidimensional Factorial Kriging for Prestack Filtering -** T. Demongin (Estimages)	08:30	**Azimuthal Seismic Difference Inversion for Tilted Fracture Weaknesses -** H. Chen (Tongji University, School of Ocean and Earth Science)
08:50	**Bringing new insights to Central North Sea with OBN and FWI imaging -** R. Refaat (CGG)	08:50	**Surface Wave Attenuation Using Elastic Multi-Parameter Full Waveform Inversion -** L. Ren (The University Of Texas At Dallas)	08:50	**Derivation and Analysis of the Amplitude versus Incident Angle and Frequency in Fluid-bearing fractured Medium -** Y. Yang (China University of Petroleum (East China))
09:10	**Realising full value from OBS data through continuous improvements in processing at the Culzean field, UKCS. -** A. Merry (Maersk Oil North Sea UK Ltd)	09:10	**Deep reinforcement and machine learning for seismic data processing and automated QC -** J. Brittan (ION)	09:10	**A highly accurate traveltime approximation for large-offset reflections over layered VTI models -** M.M. Abedi (BCAM)
09:30	**Understanding the importance of receiver density on PP and PS data at Clair -** D. Davies (BP Exploration Operating Co. Ltd.)	09:30	**Use of Elastic Forward Modeling to Remove Complex Coherent Noises -** J. Tang (Westerngeco)	09:30	**First Order Perturbation Approximation of Azimuth Converted Wave Reflection Coefficient of HTI Media -** H. Liu (China University Of Petroleum(East China))
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Modelling the Effect of Fracture Density and Saturation on S-Wave Radiation from Vertical Sources -** J. Gaiser (GGC, Del Mar, California, USA)	10:10	**Reducing land seismic scattering noise through surface effects deconvolution -** C. Stork (Land Seismic Noise Specialists)	10:10	**Pure P- and S-Wave Equations in Anisotropic Media -** A. Stovas (Norwegian University of Science & Technology)
10:30	**A Calculation Method of PS-Wave Static Correction by Combining First Arrival Wave and Surface Wave -** H. Zhang (Bgp, Cnpc)	10:30	**A model for land seismic surface scattering noise has implications for acquisition and processing -** C. Stork (Land Seismic Noise Specialists)	10:30	**A case study of anisotropic AVO inversion and Quantitative Seismic Interpretation for deep shale gas reservoir -** J.W. Cheng (China University of Petroleum-Beijing)
10:50	**Anisotropic joint Scholte- and Love-wave inversion -** E. Gofer (Schlumberger)	10:50	**Simultaneous up-down separation and Vz denoise using joint sparsity recovery -** A. Kumar (DownUnder GeoSolutions Pty Ltd)	10:50	**Seismic dispersion and attenuation in partially-saturated layered and fractured rocks -** D. Xu (China University Of Petroleum(east China))
11:10	**P- and S-Waves Separation in Elastic Wavefield without Separation Artifacts -** X. Zhou (Chengdu University Of Technology)	11:10	**Data-driven method for training data selection for deep learning -** C. Lacombe (CGG)	11:10	**Second-Order Perturbation Approximation of HTI Medium based on Azimuthal Observation -** J. Shan (China University of Petroleum(east China))
	Multi-component Seismic Data Reconstruction based on Vector POCS Method via Complexified Quaternion Fourier Transformrev - F. Li (China University Of Geosciences (Beijing))				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals -** Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Seismic Acquisition & Processing - Time Lapse Data		**Low Frequency Seismic Data Acquisition and its Impact on Imaging and Inversion 2 - Applications and Way Forward (Dedicated Session)**		**Seismic Attributes - Computation & Application**	
14:15	**Multi-well 4D DAS VSP: A case study at Mars basin, Gulf of Mexico -** H. Gao (CGG)		**Enhancing Massive Land 3D Seismic Data Using Nonlinear Beamforming: Performance, Quality and Practical Trade-Offs -** M. Protasov (Trofimuk Institute of Petroleum Geology & Geophysics SB RAS)	14:15	**Automatic Horizon Extraction Method of Seismic Data Based on Plane Wave Similarity -** J. Li (China University Of Petroleum (beijing))
14:35	**Rapid High-Resolution Monitoring of Shallow CO2 Controlled Release Experiment: Otway Project Feasibility Study -** E. Sidenko (Curtin University)		**The Wolfspar® Experience from Concept to Field, What Did We Learn? -** A. Brenders (bp)	14:35	**A New Approach to Optimize the Stratal Slices by Using Multilevel 2D Wavelet Transform -** C. Yuan (Research Institute of Petroleum Exploration & Development-Northwest (NWGI), PetroChina)
14:55	**Revealing 4D subsidence with 3D water-bottom traveltime inversion -** S. Dega (CGG)		**Can We Retrieve Ultra-Low Frequency Surface Waves from Blended Continuous Recordings? -** D. Le Meur (CGG)	14:55	**Applying spectral information for thin-layered reservoir tracking with deep CNN -** H. Al Salmi (Imperial College London)
15:15	**A deterministic 4D processing flow to suppress acquisition-related noise at Dalia and Rosa fields -** M. Pouget (CGG)		**Additional Low Frequencies in Broadband Seismic Deliver Increased Confidence in Prestack Inversion and Prospect De-Risking -** C. Reiser (PGS)	15:15	**Improving the Inverse Spectral Decomposition by Using L1 Regularization for Geomorphology Detection and Reservoir Delineation -** M.A. Ishak (PETRONAS)
			Long Offset and Low Frequency Acquisition Aided Full Waveform Inversion Driven Velocity Model Building - D. Vigh (Schlumberger)		
			Wednesday Discussion 1 - G. Baeten (Shell International E&P BV)		
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Least-Squares dip angle 4D migration for OBN and towed streamer imaging -** M. Drwila (CGG)		**Extended Source Inversion: A Potential Alternative to Low-Frequency FWI -** W. Symes (Rice University)	15:55	**Method to Generate Meshless Geological Model from Seismic Data -** S. Lacaze (ELIIS)
16:15	**Parametric inversion of water column velocity for cold water statics correction in Ocean bottom seismic surveys -** M. Bekara (PGS)		**Multiple Pathways to Low Frequency: Key to the next advancement in imaging & inversion -** P. Routh (Exxonmobil)	16:15	**Fault enhancement method based on dynamic programming -** L. Dong (China University Of Petroleum, School Of Geosciences)
16:35	**Broadband processing improves 4D repeatability and resolution at the Sleipner CO2 storage project, North Sea -** M. Wierzchowska (PGS)		**Full-Waveform Ambient Noise Inversion -** A. Fichtner (Eth Zurich)	16:35	**Unsupervised Machine Learning for Interpreting Shelf-to-Basin Seismic Geomorphology and Paleoclimate -** S. Verma (UT Permian Basin)
16:55	**4D OBN processing and imaging of a deepwater field. Part I: 4D matched co-processing -** C. Ricardez (ION Geophysical)		**Wednesday Discussion 2 & Closing Remarks -** F. Ten Kroode		
	The impact of a multi-realisation processing approach on the 4D interpretability - M. Hatab (Heriot-Watt University)				

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LATEST VERSION ONLINE!

Wednesday, 20 October | Oral presentations

This presentation is pre-recorded

ROOM 10		ROOM 11		ROOM 12	
Lithology, Facies and Evolution of Clastic Depositional Systems		**Data and Information Management**		**Production & Management - EOR/IOR III**	
08:30	**Sedimentological and Lithofacies Analysis of the Fluvial Cambro-Ordovician Saq Formation: Reservoir Analog Study, Saudi Arabia** - M. Osman (King Fahd University of Petroleum & Minerals)	08:30	**National Data Repositories as Platforms for Success in the Energy Transition** - A. Roustiau (EBN)	08:30	**Asphaltenes versus Improved Oil Recovery Methodologies** - E. Joonaki (Heriot-watt University)
08:50	**Investigation and Mapping of Upper Jurassic Delta Channels in Central Part of the West Siberian Basin** - A. Styrliaeva (LLC GazpromNeft STC)	08:50	**GeoGraphI: An interactive graph database of openly available seismic datasets** - C. Birnie (King Abdullah University of Science and Technology)	08:50	**Improved Ooil Recovery by Low Salinity Water Injection Simulation** - J. Trivedi (Memorial University Of Newfoundland)
09:10	**Rejuvenation of the T40-T45 paleogeography model in the Flett Sub-Basin (West of Shetlands)** - R. Julien (Total Exploration North Sea And Russia)	09:10	**Extracting Knowledge with NLP from Massive Geological Documents** - C.H. Lun (CGG)	09:10	**The Performance of Viscoelastic Surfactant-Polymer Flood in Heavy-Oil Carbonate Reservoir – Simulation Study** - G. Omonte Rossi (Poweltec)
09:30	**Architecture of thin-bedded turbidites on syn-depositional structure and utilization of image logs** - K. Toda (Japan Petroleum Exploration Co., Ltd)	09:30	**Towards digital twinning for single sensor streamer platforms** - S. Rentsch (Shearwater)	09:30	**Evaluation of EDTA as an EOR Agent in Carbonate Rocks; Insight into the Mechanisms** - H. Soleimani (Shiraz University)
			Unlocking Value from 'Small Data' in Oil & Gas - S. Fielding (Petryx Ltd)		
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
		High Performance Computing			
10:10	**A 10-Myr record of Late Triassic lake deposition, Fleming Fjord Group, East Greenland** - L.B. Clemmensen (University Of Copenhagen)	10:10	**Parallel Numerical Modeling of Poroelastic Wave Propagation Using Multiple NVIDIA Volta GPUs** - Y. Alkhimenkov (University of Lausanne)	10:10	**Investigation of Performed Particle Gels on Improvement of Water EOR Performance; Using Glass Micromodel and UTCHEM Simulator** - A.A. Salehipour Bavarsad (Petroleum University of Technology)
10:30	**SEDIMENTOLOGY, PROVENANCE ANALYSIS, AND ECONOMIC IMPORTANCE OF QUATERNARY LAWRENCEPUR DEPOSITS, DISTRICT ATTOCK, PAKISTAN** - A. Munam (University Of The Punjab, Lahore, Pakistan.)	10:30	**Large Scale Seismic Processing in Public Cloud** - L. Felipe (Petrobras)	10:30	**Simulation of Smart Water Flooding in a Fractured Carbonate Reservoir for Enhanced Oil Recovery** - A.H. Eftekhari Nasab (Ferdowsi University of Technology)
10:50	**Seismic Subtle Sequence Boundary Identification, High-Frequency Sequence Framework Establishment and Lithologic Trap Exploration** - X. Sha (PetroChina Research Institute of Expl. & Developm.)	10:50	**DNN-based approach to seismic modelling: mitigation the numerical dispersion** - V. Lisitsa (Sobolev Institute of Mathematics)	10:50	**Partition coefficient of surfactant-polymer in oil and water phases for improved oil production** - J. Hou (Aramco Asia Beijing Research Center)
11:10	**Evolution of the Orange Basin; Cretaceous Deepwater Fold-and-Thrust Belts to Cenozoic Mass Transport Systems** - N. Maduna (University Of The Witwatersrand)	11:10	**Adaptation of the FWM algorithm to cloud computing** - M. Davydenko (Wavekoda)	11:10	**Understanding the Enhanced Oil Recovery Performance of Low Salinity Water Injection: Which Mechanism is Predominant?** - A. Saeibehrouzi (Coventry University)
	Seismic-Sequence Stratigraphy and Paleo-Structure Analysis of Proterozoic Sediment within Ganga Basin, India. - S. Gorain (Directorate General of Hydrocarbons)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Source Rocks		**Production & Management - Risk and Uncertainty**		**Production & Management - EOR/IOR IV**	
14:15	**Petroleum Potential of Late Cretaceous Shale of Wadi-1 Well, Chad Basin, Northeastern Nigeria** - T. Adedosu (Ladoke Akintola University of Technology)	14:15	**Production Optimization Brownfield in TLJB Field, South Sumatera (From Hazardous to Sustainability)** - M.I. Mashudi (PT Pertamina Hulu Energi (Indonesia))	14:15	**A Mechanistic Study of the Effect of Water Salinity on Partitioning of Crude Oil Polar Components** - M. Simjoo (Sahand University of Technology)
14:35	**Regional Trends in the Hydrocarbon Generation Potentials of the Fika Shales - Chad Basin, Nigeria** - H. Agbogun (Fort Hays State University)	14:35	**An Improved Methodology for Uncertainty Analysis in Reservoir Simulation Based on a Probabilistic Uncertainty Approach** - R. Anton Carro (Repsol)	14:35	**Experimental Investigation of Thermally Stable Silica Nanoparticles in Porous Media** - S.R. Mohd Shafian (PETRONAS Research Sdn Bhd)
14:55	**Hydrocarbon Generation Potential of the Albian to Turonian Lower Post-Rift Succession Orange Basin, South Africa** - N.A. Yelwa (University of Malaya, Malaysia)	14:55	**Data-Driven Approach to Quantify Uncertainty in Wellbore Management through Temperature Logs** - A. Alkhalaf (Saudi Aramco)	14:55	**Experimental Investigation of Synergism between Low Saline Water and Surfactant-Silica Nanoparticle in Enhanced Oil Recovery Processes** - A. Esfandiarian (Petroleum University Of Technology)
15:15	**Reconstruction of the Burial and Thermal History of the Beni Suef Basin, North Central Egypt** - A.Y. Tawfik (Potsdam University)	15:15	**Relevance Based Transfer Learning for Reservoir Parameters Prediction with Logs** - R. Shao (China University of Petroleum)	15:15	**Pore-Level Investigation of the Synergistic Effect of a Novel Thermoassociated Copolymer and Smart Water in Micromodel** - A. Maghsoudian (Petroleum University of Technology)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
		Well Construction & Work-Overs			
15:55	**TOC Prediction Using Delta Log Resistivity, and Its Distribution in Cyclostratigraphy-INPEFA Trend in "S-Field", Kutai Basin** - B. Reinhard (Stt Migas Balikpapan)	15:55	**A Dynamic Model for Non-Newtonian Drilling Fluid's Filtration in Casing Drilling Technology** - M. Vasheghani Farahani (Heriot-Watt University)	15:55	**Multiphase, Multidimensional and Multiphysics (M3) Modeling and Simulation of Microbial Enhanced Oil Recovery Process** - M.H. Nami (Amirkabir University Of Technology, Tehran, Iran)
16:15	**Geochemical and Petrographic Attributes of Coals from Ib Valley Basin, India for Oil and Gas Generation** - A. Sahoo (IIT(ISM) Dhanbad, India)	16:15	**Experimental Investigation of Water Based Drilling Fluids Rheological Properties Using Iron Oxide Nanoparticles** - H. Ghorbani (Sahand University Of Technology)	16:15	**Nanoscale Assessment of Sandstone Wettability During Redox Treatment by Atomic Force Microscopy (AFM)** - S. Yesufu-Rufai (Imperial College London)
16:35	**Saline Environment Source Rocks Evaluation of Continental Rift Basin: A Case Study in LZW Depression, China** - H. Cui (Cnooc Ltd. _tianjin, China)	16:35	**Selective Waterflood System Paving the Way for Effective Waterflood and Reservoir Management** - H. Tyagi (Weatherford International)	16:35	**Gravity Assisted Steam Flooding (GASF) for Improving Oil Recovery of Foamy Extra-Heavy Oil Reservoirs** - Z. Yang (Petrochina Research Institute Of Petroleum Exploration And Development)
		16:55	**Artificial-Lift Method Screening for One of the Southwestern Iranian Oil Field Based on Fuzzy Logic Approach** - H. Asaadian (Norges Teknisk-naturvitenskaplige Universitet (ntnu))	16:55	**Enhanced Oil Recovery Performance of Silica Nanofluid in Sandpack Model** - D. Joshi (IIT (ISM), Dhanbad)
					Diffusional Classification of Rocks Based on Analogy between Mass Transfer and Electrical Flow through Porous Media - P. Gheisari Karestani (Petroleum University Of Technology)

Technical Programme

Wednesday, 20 October | Oral presentations

This presentation is pre-recorded

ROOM 13		ROOM 14		ROOM 15	
Exploration - Case Studies		**Integrated Reservoir Characterization I**		**Reducing Carbon Footprint (Joint EAGE / SPE)**	
08:30	**Offshore Madagascar: Reducing Risk through Integrated Fieldwork and Seismic Interpretation -** M. Watkinson (EPI Group)	08:30	**Fold-Thrust Belt Exploration: How to Reduce Risks When Your Seismic Data Are Absent or Poor? -** O. Petrovskyy (DEPROIL)	08:30	**Streamlined Workflow from Experimental Analyses to Dynamic Geochemical Modelling -** A.M.S. Elgendy (Eni S.p.A.)
08:50	**Revealing the Hydrocarbon Potential and Quantifying the Prospectivity of the Harper Basin, Liberia, West Africa -** F. Winter (TGS)	08:50	**Probabilistic Estimation of Reservoir Parameters Using the Complementary Nature of Seismic and mCSEM Data -** S. Abolhassani (TU DELFT)	08:50	**Assessment of Seismic Risk in Geothermal and Hydrocarbon Reservoirs Using an Exact Analytical Solution -** J. Poesse (PanTerra Geoconsultants B.V.)
09:10	**The Journey of Lang Lebah Discovery and Multidisciplinary Approaches for Carbonate Sweet Spot Targeting -** D. Ittharat (PTTEP HKO)	09:10	**Unraveling Hidden Reserves in Mature Fields by Cutting-Edge Reservoir Characterization -** S. Rajput (PETRONAS)	09:10	**Deployment of Methane Detection and Quantification Technologies -** N. Abdul Talip (Petronas)
09:30	**Re-Evaluation of the Forth Approaches Basin: The debatable hydrocarbon prospectivity and the storage potential -** V.I. Makri (Institute Of Petroleum Research (IPR/FORTH))	09:30	**Utilising Carbonate Lithofacies, Diagenetic Analysis and Rock Flow Properties to Improve Accuracy of Reservoir Quality Mapping -** C. Gill (Robertson - A CGG Company)	09:30	**Research on Construction and Operation Parameters of an Underground Oil Storage In Depleted Salt Caverns -** F. Jin (CNPC Engineering Technology R&D)
09:50	**Coffee break**	09:50	**Coffee break**	09:50	**Coffee break**
10:10	**Unlocking new exploration potential in the Gulf of Suez through the application of modern OBN seismic -** G. Byerley (Neptune Energy Contractor - Resilient Geosciences)	10:10	**GeoChron-Based Restoration Workflow Applied to Clyde Seismic Dataset -** A. Tertois (Emerson)	10:10	**Petroleum Industry: An Enabler or Pariah of Net Zero? -** A. Hastings (University of Aberdeen)
10:30	**Interpreting 4D seismic for exploration purposes -** T. Røste (Equinor)	10:30	**Geological Modeling Based on a Morphing Algorithm -** F. Pivot (Total Sa)	10:30	**Integrated Strategies for Rapid Carbon Capture, Storage and Utilization (CCSU) Implementation -** A.K. Jaya (Institut Teknologi Bandung)
10:50	**Where on Curtin University campus is the dark fibre? -** K. Tertyshnikov (Curtin University of Technology)	10:50	**Reflecting on Seismic Inversion: An integrated case study of using inversion products for reservoir description -** E. Aghataghiyev (BP)	10:50	**Advanced Integrated Subsurface Studies with Seismic Attribute Analyses of CO2 Storage Site Field Case for CCS -** A. Widyanita (PETRONAS Research SDN BHD)
11:10	**Derisk Exploration Targets Offshore NW Scotland by Combination of Angle Domain Imaging and Machine Learning Techniques -** C. Yang (Seismic Image Processing Ltd)	11:10	**Bayesian linearized inversion of aspect ratio and fracture density based on seismic inversion -** R. Feng (University of Copenhagen)	11:10	**Subsurface Characterization for CO2 Sequestration in Fractured Shale Reservoirs -** S. Prajapati (Universiti Teknologi PETRONAS)
			Prediction of kNN-Based Gas-Bearing Distribution for Tight Sandstone Reservoir - Z. Song (China University Of Petroleum, Beijing)		**CO2 sequestration and ECBM recovery: A new approach for mitigating the effect of global warming -** M. Asif (Indian Institute of Technology (ISM), Dhanbad)
					A Comprehensive Review and Status of Renewable Resources and Oil and Gas - C.H. Canbaz (Ege University)
11:30	**Coffee break**	11:30	**Coffee break**	11:30	**Coffee break**
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals -** Room 1				
12:45	**Lunch**	12:45	**Lunch**	12:45	**Lunch**
Play & Prospect Evaluation		**Integrated Reservoir Characterization II**		**Unconventional and Carbonate Reservoirs (Joint EAGE / SPE)**	
14:15	**Application of Play Based Exploration to Mature Resources: A Chalk Case Study in the Dutch Offshore -** S. Korevaar (EBN B.V.)	14:15	**Far _ Near Wellbore Fracture Characterization Using High Resolution Borehole Images and Deep Shear Wave Imaging -** N. Kerrouche (Baker Hughes)	14:15	**Numerical Analysis of the Behavior of Gas Hydrate Layers After Cementing Operations -** S. Merey (Department of Petroleum and Natural Gas Engineering, Batman University, Turkey)
14:35	**Extending the Potential Prospectivity Offshore Northwest Africa with Enhanced Imaging of the Palaeo-Shelf Edge Play -** F. Winter (TGS)	14:35	**Utilizing Vintage Logs for Modern Petrophysical Property Modelling of a Rejuvenated Oil Field – Szolnok, Hungary -** P. Toth (Oil and Gas Development Central Kft.)	14:35	**Biopolymer Nanocomposite Smart Fracturing Fluids - A New Development for HTHP Stimulations -** G. Chauhan (University of Petroleum and Energy Studies, Dehradun)
14:55	**New Technology Applied in the North Carpathians Results in Significant Estimated Resource Growth -** M. Lewis (Discovery Global, LLC)	14:55	**Porosity prediction from pre-stack seismic data using bidirectional long short-term memory network -** N. Yang (China Unversity Of Petroleum (beijing))	14:55	**A multi-class approach for the pore-scale flow in unconventional reservoirs -** A. Avdonin (Gazpromneft Science & Technology Centre)
15:15	**Fault Leakage Rates Estimated In-Situ: Implications for Fault Seal Evaluation -** C. Wibberley (Total)	15:15	**Combining logging-while-drilling techniques in the interpretation of a reservoir fault -** P. Tynan (Baker Hughes)	15:15	**Characterization of Polymer-Free Foam Fluid for Hydraulic Fracturing Application -** A. Verma (Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India)
15:35	**Coffee break**	15:35	**Coffee break**	15:35	**Coffee break**
15:55	**Play-Based Yet-to-Find Resource Assessment of the West Greenland Continental Shelf -** G. Dam (The Geological Survey Of Denmark And Greenland (geus))	15:55	**Direct Bayesian seismic inversion for porosity estimation in a hard rock carbonate reservoir -** A. Heidari (University of Tehran)	15:55	**Hot Ion-Modified Water Flooding, a Key Method for Development of Tight Carbonate Reservoirs with Heavy Oils -** M. Rezaei Koochi (Kazan Federal University)
16:15	**Pre-Salt Prospectivity in Brazil and Gabon: Discriminating between Lakes and Lake-Like Water Bodies -** R. Crossley (CGG)	16:15	**Integral prediction of shale gas sweet spot based on a novel intelligent method -** K. Qian (Petroleum Exploration and Production Research Institute,SINOPEC)	16:15	**Experimental Investigation of Using Ionic-Liquids as Alternatives of Surfactants in Enhanced-Oil-Recovery Processes for Harsh Carbonate Reservoirs -** A. Esfandiarian (Petroleum University Of Technology)
16:35	**High Resolution Mega Mapping: A New Approach towards Improved Structural Understanding -** Y. Beaucaire (ebn bv)			16:35	**Increasing Medium-Heavy Oil Recovery in Carbonate Reservoirs Using Smart Water Injection -** I. Ismail (Hellenic Hydrocarbons Resource Management S.A.)
16:55	**Early tectonic structures concealed by the latest deformation phase might reveal exploration opportunities. An outcrop example. -** D. Casabianca (Total E&P UK Limited)			16:55	**The Hybrid Impact of Smart Water and Silica Nanoparticle on Oil Recovery from Carbonate Reservoirs -** A. Bazyari (Petroleum University of Technology)
	Hydrocarbon Potential of the Malvinas Basin, Southern Argentina - M. Reynald (Halliburton)				**Selection Criterion and Economical Evaluation of Refracturing in Tight Gas-Condensate Reservoirs -** N. Gasimli (King Fahd University of Petroleum and Minerals)

Wednesday, 20 October | Oral presentations

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ROOM 16		ROOM 20		ONLINE	
Petroleum Systems of NW Europe 1 (Dedicated Session)		**Dynamic Well and Reservoir Modelling (SPE)**			
08:30	**North West Europe High Impact Exploration: Activity Levels, Performance and Failure Analyses since 2015** - G. Bagley (Westwood Global Energy)	08:30	**Modeling and Analysis of Diagnostic Fracture Injection Tests (DFITs)** - R. Bakar (Koc University)		
08:50	**The Central Tertiary Basin of Svalbard – Organic Geochemical Insights from a Non-Prolific Petroleum System** - M. Doerner (Equinor Asa)	08:50	**Fast Upscaling of Polymer Flood Simulations using Fractional Flow and Scaled Mobilities** - H. Al-Ibadi (Heriot-Watt University)		
09:10	**The Importance of Provenance for Triassic Petroleum Systems on the Southwest Barents Shelf** - E. Fleming (CASP)	09:10	**An Integrated Modeling Approach to Estimate the Shut-In Wellhead Pressure for Well Integrity Applications** - H. Darwish (Schlumberger)		
09:30	**Lower Cretaceous Source Rocks on the Sw Barents Shelf** - B. Badics (Wintershall Dea Norge AS)	09:30	**History to Prediction Transition Calibration of Reservoir Simulation Model Ensemble** - B.E. Ludvigsen (Aker BP)		
09:50	Coffee break	09:50	Coffee break		
10:10	**Application of Unsupervised and Supervised Machine Learning on Geochemical Signatures of Norwegian Continental Shelf Oils** - J. Rinna (AkerBP)	10:10	**Integrated Acid Fracture Model with Reservoir Simulation Under Non-isothermal Condition** - T. Tajima (Texas A&m University)		
10:30	**New Insights on Petroleum Systems in the Vøring and Møre Basins from Regional and Multidisciplinary Perspectives** - M. Allain (Total)	10:30	**A Practical Approach to Expedite a Pore to Process Simulation Model for a Rich Gas Condensate Reservoir** - K. Mansour (Schlumberger)		
10:50	**Unlocking the Cretaceous Petroleum Systems of the Norwegian Sea** - A. Wenke (Equinor ASA)	10:50	**Optimization of Waterflood Utilizing Data Driven Models: An Application of the Two-Phase Capacitance Resistance Model** - A. Alghamdi (Saudi Aramco)		
11:10	**North Sea Prospects: Predicting Hydrocarbon Presence through Seabed Samples, DNA Fingerprinting and AI** - J. Zwaan (Biodentify)	11:10	**Inertial Effect on Spontaneous Oil-water Imbibition by Molecular Kinetic Theory** - W. Tian (China University Of Petroleum (Beijing))		
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Getting Inside the Reservoir (Dedicated Session)		**Reservoir Characterization, Surveillance and Management (SPE)**		**Seismic Processing - Attenuation**	
14:15	**Facies Modelling of Paleokarst Reservoirs; Constraints and Feasibility** - J. Tveranger (NORCE Norwegian Research Centre AS)	14:15	**Restoring Erroneous or Missing Rates in Interfering Wells Using Multiwell Deconvolution** - K. Razminia (Imperial College London)	14:15	**An Approximate Approach of Ray Velocity and Attenuation in Viscoelastic Anisotropic Media Based on Perturbation Theory** - J. Wu (Khalifa University of Science and Technolog)
14:35	**A Depositional Facies Control on Porosity Preservation in Deeply Buried Reservoirs, the Ula Formation, NOCS** - J.P. Cummings (Stratum Reservoir)	14:35	**Interpretation of Permanent Well Monitoring Data to Improve Characterization of a Giant Oil Field** - H.C. Walker (University of Stavanger)	14:35	**Inversion-Based Multitrace Absorption Compensation with Lateral Regularization** - J. Li (China University of Petroleum-Beijing)
14:55	**Decoding the Impact of Tidal Influence vs Burial Diagenesis in the Fogelberg Discovery, Halten Terrace, Norway** - P. Milstead (Spirit Energy)	14:55	**Dynamic Reservoir Analysis of Corrib Field Surveillance Data Through the Use of Advanced Deconvolution Techniques** - A. Thatcher (Opc)	14:55	**Equivalent Q Estimation Using a Deep-learning-based Decoupling Method** - L. Xu (Xi'an Jiaotong University)
15:15	**Deep-Marine Hyperpycnal Sandstones and Implications for Exceptional Reservoir Quality Preservation** - J. Cater (Petrostrat Limited)	15:15	**Integrated Brownfield Opportunity Identification Using the Efficiency Factor Approach** - R. Julier (Independent Consultant)	15:15	**Attenuation compensation based on U-Net** - C. Zhou (China University Of Petroleum(beijing))
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Creating Geological Concepts and Buzzard Infill Opportunities; An Innovative Plumbing Review Drawing Insight from Production Surveillance** - R. Webber (CNOOC International Ltd.)	15:55	**Systematic Application of Pressure and Temperature Transient Analysis in an Oil Field: A Case Study** - K. Muradov (Heriot-Watt University)	15:55	**Combination of compressional and shear attenuations to investigate a carbonate reservoir** - F. Bouchaala (Khalifa University of Science and Technology)
16:15	**Characterizing the Architectural Basis of the Slow Gas Effect** - J. Mullins (University of Aberdeen)	16:15	**Development of Time Lapse VSP Integration Workflow: A Case Study at Farnsworth CO2-EOR Project** - R. Balch (New Mexico Tech)	16:15	**Depth Domain Q Estimation and Application - Gulf of Mexico Case Study** - A. Elsabaa (Repsol)
16:35	**Rock Physics Diagnostic of Deep-Water Clastics Honoring Burial and Depositional Trends** - P. Avseth (Dig Science)	16:35	**A Novel Naturally Fractured Reservoirs Classification Plot** - R. Alcantara Viruete (PEMEX E&P)	16:35	**Near surface Q compensation technology and its application in lithologic reservoir exploration in Qaidam basin** - Y. Ling (Northwest Branch,Research Institute of Petroleum Exploraton&Development,Petrochina)
		16:55	**Cyclic Production Scheme Application in North Kuwait for Reservoir Management** - D.A. Alsubaieii (Koc)	16:55	**Near Surface Q Compensation and Its Effect on Restoring Frequency Consistency** - J. Wang (Research Institute of Petroleum Exploration & Development-Northwest, Petrochina)
			Produced Water Quality: The Effects of Different Separation Methods - J. Almorihil (Saudi Aramco)		

Technical Programme

Wednesday, 20 October | ePoster presentations

This presentation is pre-recorded

EPOSTER A		EPOSTER B		EPOSTER C	
ePoster: FWI Applications and Methods		**ePoster: Multiple Imaging**		**ePoster: Seismic Interpretation - Enhanced Methods**	
08:30	**Inversion-based Imaging: FWI beyond Velocity** - Y. He (TGS)	08:30	**Sensitivity of Marchenko Imaging to Direct Arrival Time** - Z. Gu (Zhejiang University;University of California, Santa Cruz)	08:30	**Frequency division constraint seismic stochastic inversion method and its application in Bohai Bay** - X. Duan (CNOOC)
08:50	**Full-waveform inversion with a pre-conditioned approach of Love-wave in near-surface prospecting** - J. Guan (Chang'an University)	08:50	**Stable solutions in Marchenko iterative scheme with Beyond Neumann** - J. Maciel (Senai Cimatec)	08:50	**The added value of WEB-AVO inversion for geothermal project development: a 2D reservoir characterization case study** - M. Leewis (EBN B.V.)
09:10	**Using a broadband wavelet for full waveform inversion on reflected seismic waves** - H. Liu (Saudi Aramco)	09:10	**Q-Compensated Least-Squares Reverse Time Migration of Different-Order Multiples** - Y. Qu (China University of Petroleum (East China))	09:10	**Reflection of inhomogeneous seismic waves at the free surface of an effective Biot solid** - X. Liu (King Fahd University of Petroleum and Minerals)
09:30	**Proximal-Newton Methods to Solve Non-Linear Problems with Non-Smooth Regularizations** - A. Gholami (University of Tehran)	09:30	**The Joint Imaging of Primary and Internal Multiples** - Y. Ding (China University Of Petroleum(east China))	09:30	**AVO Sparklines** - A. Crosby (BP Exploration Operating Co. Ltd)
			Research on Visco-Acoustic LSRTM of the First-Order Multiples in Survey with Acquisition Gaps - Z. Li (China University of Petroleum)		
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**On the gradient calculation in 1.5-dimensional joint migration inversion** - Y. Sun (ARAMCO)			10:10	**Extended Elastic Impedance Template** - J. Sharifi (Ferdowsi University of Mashhad)
10:30	**Augmented Lagrangian based full-waveform inversion with Anderson acceleration** - K. Aghazade (University of Tehran)			10:30	**Continuous and elastic consistent reflection and transmission at an interface separating two poro-viscoelastic materials** - X. Liu (King Fahd University of Petroleum and Minerals)
10:50	**Iterative reconstruction of data assimilated wavefields in the extended-source full-waveform inversion** - A. Rezaei (University Of Tehran)				
11:10	**An effective scheme of pseudo-time Joint migration inversion with an AVO mitigating workflow** - E. Verschuur (Delft University of Technology)				
	Central-frequency misfit function for full-waveform Q inversion in 2D/3D viscoelastic medium - W. Pan (Institute of Geology and Geophysics, Chinese Academy of Sciences)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
ePoster: FWI Approaches		**ePoster: Seismic Interpretation - Lithology Mapping**		**ePoster: Seismic Interpretation - Theoretical Advances II**	
14:15	**3D full waveform inversion for ocean-bottom seismic data based on the acoustic-elastic coupled wave-equation system** - J. Cao (University Grenoble Alpes)	14:15	**Physical model of dolomite reservoir in Gucheng area** - L. Wei (China University Of Petroleum (beijing))	14:15	**Joint Inversion of Porosity and Permeability Based on Velocity Dispersion in 3D Two-Phase Orthotropic Crack Medium** - X. Zhang (CNOOC Research Institute Co., Ltd.)
14:35	**A Dynamic Sampling FWI Method Based on 3D Seismic Wave Reverse Illumination** - Y. Qu (China University Of Petroleum (East China))	14:35	**Multi-Azimuth Quantitative Interpretation: A Case Study from the South Viking Graben, Norway** - C. Reiser (PGS)	14:35	**Experimental Study of Seismic Anisotropy in Artificial Fractured Rocks with Different Porosities** - Y. Zhang (China University Of petroleum (Beijing))
14:55	**Seismic Waveform Inversion with Source Manipulation** - R. Wang (Tsinghua University)	14:55	**Quantitatively Evaluating the Preservation of Deep-water Channel Architecture using 3D Synthetic Seismic from Outcrop** - T. Langenkamp (Colorado State University)	14:55	**Multi-Scale Fracture Prediction Technology in Tight Oil Reservoir** - P. He (Research Institute of Petroleum Exploration and Development, CNPC)
15:15	**Joint reflection and diving FWI using graph-space optimal transport and structure-guided smoothing on benchmark data** - G. Provenzano (Univ. Grenoble Alpes)	15:15	**Elastic-electrical rock-physics template of tight-oil reservoirs with high clay content** - M. Pang (Hohai University)	15:15	**A Young's modulus inversion and fracture prediction method and application for offshore wide azimuthal OBC data** - J. Wang (CNOOC Research Institute Co., Ltd.)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**A Frequency-Domain Staining Algorithm for Full Waveform Inversion with Low SNR Data** - Y. Yu (University of Science and Technology of China)	15:55	**Inversion of SH-SH wave anisotropy parameters in VTI media** - B. Wang (China University Of Petroleum (beijing))	15:55	**An approximation for calculating R/T coefficients in viscoelastic VTI media** - J. Wu (Khalifa University of Science and Technolog)
16:15	**Regularized Crosstalk-Free Simultaneous-Source FWI with Truncated SVD** - Q. Zhang (Innovation Academy for Precision Measurement Science and Technology. Chinese Academy of Sciences)	16:15	**Spherical-wave frequency-dependent inversion for density estimation** - B. Yan (China University of Petroleum)	16:15	**Study on seismic response characteristics and prediction methods of fracture** - N. Li (Zhongyuan Oilfield Company)
16:35	**Improving adaptive waveform inversion by local matching filter** - P. Yong (Université Grenoble Alpes)	16:35	**Amplitude-Versus-Angle Analysis from Fresnel Volume Migration: A Potentially Effective Tool for Hard-Rock Characterization** - T. Jusri (TU Bergakademie Freiberg)	16:35	**Integrated Characterization of Deep Karsted Carbonates by Spatially Gaussian Windowed 2D Hilbert Transform-Based Volumetric Edge Detection** - X. Chen (Chengdu University of Technology)
16:55	**Inverse Scattering for Schrödinger Impedance Equation and Simultaneous ρ-v Inversion in Layered Media** - H. He (University Of California, Santa Cruz)			16:55	**Extended anisotropic linear approximation of group velocity in TI media** - K. Liang (China University Of Petroleum (East China))
					Slowness Vector vs. Ray Direction in Polar Anisotropic Media - I. Ravve (Emerson, Department of Research & Development)

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Wednesday, 20 October | ePoster presentations

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EPOSTER D		EPOSTER E		EPOSTER F	
ePoster: Rock Physics II		**ePoster: Simultaneous Sources**		**ePoster: Carbonate Reservoir Rocks**	
08:30	**Trained BPNN Method and Application in Tight Gas Sandstone Formation Lithology classificatio -** Z. Wang (CNOOC Research Institute Co., Ltd.)	08:30	**Joint deblending and source deghosting with focal transformation -** J. Cao (Delft University of Technology)	08:30	**Localised Folding: The Role of Curvature and Thickness of the Folded Layer -** P. Behnoudfar (Curtin University)
08:50	**S-wave velocity prediction from P-wave velocity for different reservoir rocks based on deep neural network -** G. Feng (China University Of Petroleum(beijing))	08:50	**Robust multistage separation of simultaneous sources using priors -** Y.I. Kamil (Schlumberger)	08:50	**Origin and Evolution of Paleofluid of the Middle Permian Maokou Formation in Southern Sichuan Basin -** M. Ren (Research Institute Of Petroleum Exploration And Development, Cnpc)
09:10	**The characteristics of seismoelectric interface response measured in rock sample -** L. Zhang (China University Of Petroleum(Beijing))	09:10	**Inherent challenges of randomized shooting strategies on deblending and a robust multistage prior based solution -** R. Kumar (Schlumberger)	09:10	**Contribution to the Eocene Sediments in Egypt: A New Formation Name for the Early-Middle Eocene Sediment -** A. Radwan (The Jagiellonian University)
09:30	**Velocity dispersion in sandstone under partially saturated conditions -** X.Y. Ma (sinopec Geophysical Research Institute)	09:30	**Deblending using periodic time delays for hexasource variable depth streamer data -** Y. Ren (TGS)	09:30	**Evolution of Paleogeomorphy and sedimentary of the Late Cretaceous on the H oilfield, Iraq -** N. Wang (Petrochina Research Institute of Petroleum Exploration and Development)
	A method to predict S-wave velocity from wire-line logs for organic- rich shales - Z. Liu (Chang'an University)		**Seismic Simultaneous Source Separation via an unsupervised deep learning method -** W. Xu (School Of Information And Communications Engineering, Xi'an Jiaotong University, Xi'an, China)		
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
		ePoster: Seismic Acquisition & Processing - High Resolution for Shallow Subsurface			
		10:10	**High-Resolution Surface-Wave Dispersion Spectrum Imaging with a Multichannel Signal Comparison Method -** J. Yi (China Earthquake Administration)	10:10	**Carbonate Pore Systems Variability in Shallow Marine Uppermost Jubaila Fm: Arab-D Reservoir Analogue in Saudi Arabia. -** L.B. Stiawan (King Fahd University of Petroleum & Minerals)
		10:30	**P-Wave Velocity at Shallow Depths in Sand Dunes and Its Effect on Static Correction -** S. Hanafy (KFUPM)	10:30	**Diagenesis, Depositional Model and Stratigraphic Evolution of the Margalla Hill Limestone, Southeast Hazara -** M. Mehboob Gill (Institute Of Geology)
		10:50	**Assessment of Sand Dune Volume Using Seismic Refraction in the Atlantic Coast, NW of Morocco -** D. El Ouai (Institut Scientifique, Université Mohammed V de Rabat)	10:50	**Application of Spectral Decomposition as a tool for carbonate geobodies extraction. -** G. Jimenez Soto (The Southeast Asia Carbonate Clastic Labratory)
		11:10	**In-mine Underground Tunnel Seismic Experiment using High-resolution Reflection Seismic Method at Maseve Mine, Rustenburg, South Africa. -** E. Onyebueke (University Of The Witwatersrand)	11:10	**The sedimentary evolution of SEA Carbonates throughout the Oligocene-Miocene Transition: An example from Subis Limestone, Malaysia -** B.B. Saw (SEACARL, Universiti Teknologi PETRONAS)
			Shallow Water Hi-Resolution Combined Streamer and Ocean Bottom Hybrid Seismic Acquisition in the Middle East - J. Wallace (Synchroseis)		
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals -** Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
ePoster: CESM, EM Methods, Remote Sensing - Multidisciplinary Approach		**ePoster: Multiple Attenuation - Novel Approaches and Case Studies "Mix"**		**ePoster: Regional Structural Geology**	
14:15	**Near-Surface Electromagnetic Methods Joint Realization in Addition to Seismic Data in the Russian Arctic -** I. Perepletkin (Industrial University of Tyumen)	14:15	**Target Internal Multiple Removal by Using Modified ISS Internal Multiple Attenuation Algorithm -** J. Yang (SINOPEC Geophysical Research Institute)	14:15	**Geological Structure and Oil and Gas Potential of Paleozoic at the South-East of West Siberia -** M. Solovyev (IPGG SB RAS)
14:35	**Separating and Sparse Imaging of GPR Diffractions by Dictionary Learning and Least-Squares Migration -** J. Zhao (China University of Mining & Technology (Beijing)	14:35	**Fast and Robust Primary-Multiple Separation in the Curvelet Domain -** B. Jiang (Tsinghua University)	14:35	**Seismogeological Characteristics and Petroleum Potential of the Siberian Platform Arctic Regions and the Laptev Sea -** A. Kalinin (Trofimuk Institute of Petroleum Geology & Geophysics SB RAS)
14:55	**Remote sensing, geological and geophysical integration – Study case in Valinho de Fátima, Portugal -** J. Duarte (IQGeo, Lda)	14:55	**A Closed Formula for True-Amplitude Overburden-Generated Interbed De-Multiple -** M. Dukalski (Aramco Overseas Company B.V.)	14:55	**Squeezed Diapirs of the Timan Pechora Basin: Structure, Evolution and Petroleum Prospectivity -** K. Sobornov (NUPCo)
15:15	**Research on 3D Finite-element Forward Modeling for Frequency-Domain Airborne EM Using Octree mesh -** X. Han (Jilin University)	15:15	**The Separation of Irregular Multiples Based on the Focal Transform -** Z. Li (China University of Petroleum)	15:15	**Structural models in Ultra-deep layer of the Kuqa salt-bearing fold-thrust belt, West China -** B. Yan (China University of Petroleum)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Shearlet-based 3D inversion for frequency domain airborne electromagnetic data -** Y. Su (Jilin University)	15:55	**3D surface-related multiples elimination based on apex-shifted Radon transform -** F. Yang (Jilin University)	15:55	**The Geological Significance of the Seismic Events in the Jianshan Formation of the Bayan Obo Group -** F. Kewen (Research Institute of Petroleum Exploration & Development)
16:15	**Modeling magnetotelluric data from Tuzla-Çanakkale hydrothermal system with particle swarm optimization to image cap rock structure -** E. Buyuk (Istanbul Technical University)	16:15	**Surface-related multiple attenuation based on deep learning -** Q. Jiao (China University of Petroleum (Beijing))	16:15	**Deformation Patterns in Western Offshore Libya: Partial Decoupling of Strike-Slip and Salt Tectonics -** N. Khalifa (RWTH Aachen University)
16:35	**Physics-informed deep learning for magnetotelluric 2D forward modeling -** H. Wang (College Of Geoexploration Science And Technology, Jilin University)	16:35	**The method and effect of full-band suppression of the ringing and reverberation in extra-shallow water area -** Z. He (Cnpc)	16:35	**Westphalo-Stephanian syn-kinematic sedimentation revealed by growth strata in the Landroff syncline, Lorraine Coal basin, NE France -** M. Mombo Mouketo (Georessources Laboratory)
16:55	**Time-Domain CSEM Modelling Using Frequency- and Laplace-Domain Computations -** D. Werthmüller (TU Delft)				
	Appearance of magnetic storms in variations of electrical parameters in the surface layer of the atmosphere - S. Riabova (Sadovsky Institute of Geosphere Dynamics of Russian Academy of Sciences)				

Technical Programme

Wednesday, 20 October | ePoster presentations

This presentation is pre-recorded

EPOSTER G		EPOSTER H		EPOSTER I	
ePoster: Static Geomodels		**ePoster: Unconventional HCs - Laboratory and Modeling Studies**		**ePoster: Geothermal Energy - Geology, Modeling and Well Construction Case Studies**	
08:30	**An Adaptive Finite Element Method for Calculating the Stress Field of Reservoir** - R. He (Research Institute Of Petroleum Exploration & Development-Northwest(NWGI), Petrochina)	08:30	**A Mathematical Model of Water Spontaneous Imbibition into Oil-Saturated Fractures in Unconventional Reservoirs** - F. Wang (China University Of Petroleum (Beijing))	08:30	**Conceptual Geological Model of the Bedretto Underground Laboratory for Geoenergies** - R. Castilla (Geo-Energie Suisse)
08:50	**Modeling Complex Tectonic Structures in Any Kind of Grid without Space Deformation** - J. Chautru (Geovariances)	08:50	**A Novel Method for Determination of Fluid Confinement Effects on Gas Condensate Dew Point Pressure** - H. Doryani Daryuni (Heriot Watt University)	08:50	**GPOS Evaluation for Geothermal Projects in the Netherlands** - H. Van Lochem (Argo Geological Consultants B.V.)
09:10	**Forward Stratigraphic Modelling at reservoir scale, statistical comparison with common geostatistical methods and fractal behaviour** - A. Fournillon (Beicip-Franlab)	09:10	**Hydraulic Fracturing: Coulomb Failure in Shale Fracturing** - S. Prajapati (Universiti Teknologi PETRONAS)	09:10	**Geothermal fluid flow in deep carbonates and its impact on long-term reservoir performance: natural systems** - I. Kaminskaite (Northeast Petroleum University)
09:30	**Incorporating Vertical Permeability into Geological Modelling** - K. Milne (Tracs International)	09:30	**Generation of Molecular Nitrogen from Overmature Black Shales in South China: Implications from Pyrolysis Experiments** - H. Tian (Guangzhou Institute of Geochemistry)	09:30	**CORRELATION OF ARSENIC GAS WITH SUBSURFACE TEMPERATURE TO DETERMINE A HEAT SOURCE ON "U" GEOTHERMAL SYSTEM** - T. Taufiq (Pertamina)
	Fault Modeling and Analysis using implicit functions - J. Rainaud (Geosiris)				
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
ePoster: Dynamic Reservoir Characterization and Modelling					
10:10	**Pore-pressure diffusion caused by non-Newtonian fluid injection** - Y. Rao (China University of Petroleum (Beijing))	10:10	**Study of the Properties of Gas Hydrates on Model Samples by Laboratory NMR Relaxometry Method** - E. Chernova (Novosibirsk State University)	10:10	**The Validity of 2D Models in Thermal Simulation** - J. De Kok (SGS Subsurface Consultancy)
10:30	**Shallow Water Delta Reservoir Configuration Analysis in Qk Oilfield, Bohai Bay Basin** - Z. Li (Cnooc (China) Tianjin Branch of Bohai Sea Oil Field Research Institute)	10:30	**S-Wave Velocity Prediction for Pore-Filling Gas Hydrate-Bearing Sediments** - X. Liu (Qingdao Institute of Marine Geology)	10:30	**The Impact of Thermo-Hydro-Mechanical Stress on Wellbore Strengthening: An Analytical Study** - S.M. Mirabbasi (Amirkabir University of Technology)
10:50	**Principles and application of a seismic trend anomaly diagnostic technique:a case in carbonate reservoir,Tarim Basin** - H. Li (Petrochina Research Institute Of Expl. & Developm.)	10:50	**3D Characterization of Pore Microstructure and Implications for Flow Transport Property of Tight Reservoirs** - Y. Su (China University Of Petroleum)	10:50	**Upgrading a Geothermal Doublet in the West Netherlands Basin** - C. Leo (PanTerra Geoconsultants B.V.)
11:10	**Projection-based autoregressive neural network for model-reduced adjoint-based variational data assimilation** - C. Xiao (China University Of Petroleum, Beijing)	11:10	**Deep Understanding of Shale Oil Reservoir with Logging-while Drilling Electromagnetic Image in Oil-based Mud** - S. Yang (Schlumberger)		
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
ePoster: Flow Simulation		**ePoster: Naturally Fractured Reservoir**		**ePoster: Geomechanics & Pore Pressure**	
14:15	**Numerical Simulation of the Propagation of Viscous Fingering and Aspect Ratio on Surfactant Flooding** - O. Akinyele (Heriot-Watt University)	14:15	**Characterization of fractured carbonate reservoirs: preliminary data from Miocene reef outcrops of Cyprus** - I. Abdallah (University Of Nicosia)	14:15	**Mineralogy Based Geomechanical Behavior of Draupne Caprock Shales in the Northern North Sea, Offshore Norway** - M.J. Rahman (University Of Oslo)
14:35	**Pressure Transient Analysis in Vertically Fractured Multi-well System** - S. Wang (China National Offshore Oil Corporation Research Institute)	14:35	**Assessing paleo-fluid circulation in a geothermal system: from structural analysis to fracture diagenesis** - M. Perret (IFP Energies Nouvelles)	14:35	**Graphical Method for Constraining the Local Stress State in Arbitrarily-Oriented Wells Using Drilling-Induced Tensile Fracture Observations** - A. Michael (Cypriana Petroleum Technology, LLC)
14:55	**Emulsification of Surfactants during Bitumen Recovery: Molecular Dynamics Simulation** - M. Ahmadi (University of Calgary)	14:55	**Fracture Characterization and DFN Modelling of the EL Gueria Carbonate Reservoir in Zarat Field** - S. Mtir (ETAP)	14:55	**Application of the Analysis of Variance for Converting Dynamic to Static Young's Modulus** - J. Sharifi (Ferdowsi University of Mashhad)
15:15	**Integrated Mature Field Management System from Rapid Production Update to History Matching** - Q. Yan (Schlumberger)	15:15	**Application of Geomechanically-Based Fracture Models to a Fractured Chalk Field, Offshore Denmark** - M. Welch (DTU)	15:15	**Unlocking Methane Desorption Effects in Reservoir Compaction and Subsidence Computations for a Coal Seam Gas Development** - N. Hummel (Shell Global Solutions International B.V.)
			An Integrated Formation Evaluation Approach Evaluated the Basement Temperature Anomaly - C. Ciuperca (Weatherford)		
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
		ePoster: Subsurface Characterization for CO2 Storage			
15:55	**An Investigation of Practical Upscaling Parameters for Enhanced Water Alternating Gas Processes from Laboratory to Field-scale** - L. Hendraningrat (PETRONAS)	15:55	**Geological characterization of the hydraulically-connected Bunter Sandstone Formation saline aquifer in the Southern North Sea** - P. Bridger (British Geological Survey)	15:55	**Evaluation of Reservoir Compartmentalization Using Seismic Pore Pressure Modeling in an Oil Field in Persian Gulf** - P. Adabnezhad (University of Tehran)
16:15	**Molecular Modelling of Surfactant-Steam-Heavy Oil Mixture** - M. Ahmadi (University of Calgary)	16:15	**AI Fault Interpretation of vintage seismic data with implications for CCS site characterisation** - R. Williams (Geoteric)	16:15	**Campeche Deepwater Pore Pressure and Stress Modeling Using 3D Basin Simulation** - A. Parent (Schlumberger)
16:35	**Study on the Response Characteristics of Gas Reservoir in X Area by 3D Seismic Physical Simulation** - G. Wang (PetroChina)	16:35	**Analytical Modeling of Flow Regimes During Cyclic CO2 Injection in Hydraulically Fractured Tight Reservoirs for EOR** - J. Mugisha (Middle East Technical University, Northern Cyprus Campus)	16:35	**Geomechanical Study on Strengthening a Wellbore with Multiple Natural Fractures: A Poroelastic Numerical Simulation** - S.M. Mirabbasi (Amirkabir University of Technology)
16:55	**Impact of Compositional Gradient on Dynamic Heterogeneity at Different Well Patterns** - Z. Bahmani (Shiraz University)	16:55	**DAS System Modeling and Data Validation for CCS Monitoring** - A. Chavarria (OptaSense)	16:55	**New equation for predicting Critical desorption pressure of coal seam gas based on BP neural network** - H. Sun (Cnooc Research Institute Co., Ltd)
					The Application of in-situ Stress Prediction in Shale Gas Reservoir Through Pre-stack Seismic Anisotropy Inversion - B. Du (NW-Research Institute of Petroleum E&D PetroChina)

Wednesday, 20 October | ePoster presentations

This presentation is pre-recorded

EPOSTER J	
ePoster: Digitalization & AI: Physics Guided and the Markov Model	
08:30	**Traveltime computation for qSV waves in TI media using physics-informed neural networks -** U.B. Waheed (King Fahd University of Petroleum and Minerals)
08:50	**Lithology Identification Based on Hidden Markov Model and Random Forest -** P. Wang (China University of Petroleum - Beijing)
09:10	**Physics embedded machine learning for producer to injector conversion optimization in waterfloods: A field application -** C. Calad (Tachyus)
09:30	**Karst cave detection using physical model dataset and deep learning -** J. Yang (China University Of Petroleum)
09:50	**Coffee break**
10:10	**Localization of microseismic events using the physics-informed neural-network for traveltime computation -** S. Grubas (University of Alberta)
10:30	**Langevin Dynamics Markov Chain Monte Carlo Solution for Seismic Inversion -** M. Izzatullah (King Abdullah University of Science and Technology)
10:50	**Lithology prediction from seismic data using Random Forests algorithm -** G. Wang (China University Of Petroleum (East China))
11:10	**GSA - GeoScience Advisor -** R. Ferreira (IBM Research)
11:30	**Coffee break**
11:45	**Forum Session 2: Role of geoscience and engineering in meeting decarbonization goals -** Room 1
12:45	**Lunch**
ePoster: Digitalization & AI: Resolution	
14:15	**SEISMIQB - A Novel Framework for Deep Learning with Seismic Data -** S. Tsimfer (Gazpromneft)
14:35	**Evaluating Point Set Distance Measures for 2D Seismic Analysis -** R. Ferreira (IBM Research)
14:55	**Improving Seismic Resolution by a Sequential Convolutional Neural Network -** Z. Yuan (China University of Petroleum - Beijing)
15:15	**Transferring elastic low frequency extrapolation from synthetic to field data -** O. Ovcharenko (KAUST)
15:35	**Coffee break**
15:55	**Research on low frequency compensation method based on deep learning -** Z. Wang (China University Of Petroleum-Beijing)
16:15	**A high-precision diffraction multiples suppression method based on the detection neural network -** X.Y. Tian (Tsinghua University)
16:35	**Research on First-Break Picking Using Convolution Neural Networks -** W. Hsu (China University of Petroleum (East China))

Technical Programme

Thursday, 21 October | Oral presentations

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ROOM 1		ROOM 2		ROOM 3	
Digitalization & AI: Seismic Interpretation II		**FWI Case Histories: Land**		**Wavefield Modelling I**	
08:30	**An Automated and Robust Solution of K-Means Cluster Analysis Based on Most Frequent Value Approach** - M.N.A. Akbar (MOL Hungary)	08:30	**Acoustic Land Full-Waveform Inversion with Free-Surface Topography in Oman** - G. Royle (CGG)	08:30	**Seismic Wave Numerical Simulation in Seafloor Cold Seepage Plume Flow with Bubbly Liquid Acoustic Equation** - S. Zhang (China University of Petroleum)
08:50	**Deep Embedded Clustering as a Seismic Attribute: A Case Study of 2D Crustal-Scale Interpretation** - M. Mezyk (Institute of Geophysics, Polish Academy of Sciences)	08:50	**Subsurface Imaging with Elastic FWI using Surface and Diving Waves: 3d Land Data from South Oman** - M. Danilouchkine (Shell Global Solutions International BV)	08:50	**Frequency-Domain Finite Difference Heterogeneous Multiscale Method for Acoustic Wave Modelling** - W. Jiang (Chengdu University Of Technology)
09:10	**Few-shot Learning for Semantic Segmentation of Seismic Data** - T. Papadopoulos (Earth Science Analytics AS)	09:10	**Multi-Wave and Full-Waveform Inversion in Southern Oman** - S. Masclet (CGG)	09:10	**A new temporal high order and spatial implicit finite-difference scheme for acoustic wave modeling** - J. Wang (China University of Petroleum (Beijing))
09:30	**Seismic Acoustic Impedance Estimation by Learning from Sparse Wells via Deep Neural Networks** - H. Di (Schlumberger)	09:30	**Reflection Full Waveform Inversion of Walkaway VSP – Abu Dhabi Case Study** - A. Shigematsu (JX Nippon Oil & Gas Exploration)	09:30	**A Multi-Axial Perfectly Matched Layer for Finite-Element Time-Domain Simulation of Elastic Wave Propagation** - H. Li (University Of Science And Technology Of China)
			Integrated high-resolution model building: a case study from the Sultanate of Oman - M.S. Farooqui (CGG)		
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
		FWI Methods & Applications			
10:10	**Prestack AVO Attributes Inversion Using Convolutional Neural Network** - S. Sun (Tongji University)	10:10	**Full-Bandwidth FWI** - M. Warner (Imperial College London)	10:10	**Topography-Dependent Frequency-Domain Finite-Difference Visco-Elastic Wavefield Simulation** - Z. Zhao (China University of Petroleum (Beijing))
10:30	**A Case Study of Understanding the Bonaparte Basin using Unstructured Data Analysis with Machine Learning Techniques** - F. Baillard (Iraya Energies)	10:30	**Sharp-interface imaging in full waveform inversion using finite elements** - A. Laurain (University of São Paulo)	10:30	**Discontinuous Galerkin Finite Element Method Using the Modified ADE CFS-PML for Seismic Wave Modeling** - Y. Xu (Southern University Of Science And Technology)
10:50	**A physics-based loss function to constrain neural network inversion of 4D seismic data** - G. Corte (Heriot-Watt University)	10:50	**A time consistent waveform inversion (TWIN) method** - R. Valensi (Opera-Applied Geophysical Research Group)	10:50	**Elastic Wave Simulation Beyond Conventional Courant-Friedrichs-Lewy Stability Limit by Variable Length Staggered-Grid Finite-Difference** - H. Zhou (China University of Petroleum(Beijing))
11:10	**Elastic wave mode decomposition in anisotropic media with convolutional neural network** - H. Huang (Tongji University)	11:10	**Land FWI: Challenges and Possibilities** - D. Wang (CGG)	11:10	**The Effect of the Pseudo-Spherical Wave to the Reflectivity** - Y. Tao (Sinopec geophysical research institute)
	Lithology segmentation using deep neural network - J. Lin (University Of British Columbia)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Digitalization & AI: Reservoir and Wells		**Velocity Model Building II**		**Wavefield Modelling II**	
14:15	**Predicting Flow Rate from Downhole Pressure and Temperature with Deep Learning** - J. Zhao (China University Of Petroleum, Beijing)	14:15	**Extended domain FWI via time warping** - G. Huang (PGS)	14:15	**On the inverse propagation of surface receiver wavefields in 1.5-dimensional joint migration inversion** - Y. Sun (ARAMCO)
14:35	**Reservoir Productivity Prediction Based on a Hybrid Deep Neural Network** - Z. Yuan (China University of Petroleum - Beijing)	14:35	**Applicability of Migration Velocity Analysis on a Marine Real Data Set** - T. Zhou (Total SA)	14:35	**High-Precision Simulation of Transmitted Wave Field of Two-Way Wave Field in VTI Media** - B. Zhang (Tongji University)
14:55	**Game-Changing AI for Faster and Better Well Trajectory Planning Decisions (An Example Using the Volve Dataset)** - T. Savels (Brunei Shell Petroleum Company)	14:55	**Data Reconstruction Inversion: an augmented Lagrangian based full-waveform inversion in the time domain** - A. Gholami (University of Tehran)	14:55	**Higher-order mass-lumped wave propagators on variable resolution, triangular meshes** - A. Olender (Universidade De Sao Paulo)
15:15	**Machine-Learning-Assisted Field Development Opportunity Identification Through Streamlined Geological and Engineering Workflows** - A. Salehi (Quantum Reservoir Impact)	15:15	**Novel Acquisition Design to Improve Illumination for Velocity Estimation and Imaging, North Sea Case Study** - L. Limonta (PGS)	15:15	**Wavefield simulation and absorbing boundary condition of staggered time integration method** - Y. Peng (China University of Petroleum(Beijing))
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Experiences with Machine Learning and Deep Learning Algorithms for Seismic, Wells and Seismic-to-Well Applications** - H. Jaglan (dGB Earth Sciences)	15:55	**Improved direct envelope inversion and structure-guided perturbation decomposition for salt building** - P. Zhang (Jilin University)	15:55	**A domain decomposition approach for fast reduced order solutions in geophysical exploration** - D. Modesto (Barcelona Supercomputing Center)
16:15	**Missing Log Data Interpolation and Uncertainty Analysis via Deep Learning** - L. Yang (China University Of Petroleum (Beijing))	16:15	**Estimation of Thomsen VTI parameters for seismic imaging using vertical and deviated wells** - H. Miyamoto (INPEX Corporation)	16:15	**Optimized acoustic wavefield modelling in transversely isotropic media** - Y. Nikonenko (Skolkovo Institute Of Science And Technology)
16:35	**Hybrid pattern matching algorithms for automated stratigraphic well correlation and log pattern recognition in Malaysian Basin** - A.S. Abdrahman (PETRONAS)	16:35	**3D Microseismic Image-Domain Elastic Velocity Inversion** - C. Oren (Colorado School Of Mines)	16:35	**A highly accurate constant-Q viscoelastic wave equation temporal extrapolation scheme** - L. Zhang (China University of Petroleum (Beijing))
16:55	**Comparison of popular Generative Adversarial Network flavours for fluvial reservoir modelling** - C. Sun (Heriot-Watt University)	16:55	**New processing flow for surface wave dispersion curve inversion of near surface 2-D Vs model** - X. Song (University of petroleum of China (beijing))	16:55	**Numerical simulation of qP wave in TI media with the new acoustic approximation** - K. Liang (China University Of Petroleum (East China))

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Thursday, 21 October | Oral presentations

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ROOM 4		ROOM 5		ROOM 6	
Potential Field Methods - Exploration and New Developments		**Field Appraisal and Development (Joint EAGE / SPE)**		**Rock Physics I**	
08:30	**Two-Dimensional Cross-Gradient Joint Inversion of Gravity and Magnetic Data by a Sequential Strategy** - M. Tavakoli (Shahrood University Of Technology)	08:30	**Hydrocarbon Field (re-)development in a Bayesian Framework** - T. Clemens (OMV E&P)	08:30	**Rock Physics Analysis of Volcanic Lava Flows and Hyaloclastites** - P. Avseth (Dig Science)
08:50	**An empirical method for the optimal setting of the gravimetric inverse problem** - D. Sampietro (Geomatics Research & Development s.r.l.)	08:50	**Field Development Optimization Using Sequential Decisions and Analytics** - A.L. Morosov (University Of Stavanger and National IOR Centre of Stavanger)	08:50	**Seismic petrophysics workflow in data-poor environment: a case study for Petrel field (offshore Australia)** - K. Koryakova (Ikon Science)
09:10	**A Procedure for Quantifying a UAV-borne Magnetometer Vertical Setback Distance** - C. Walter (Queen's University)	09:10	**Integrated Assisted History Matching and Forecast Optimisation for More Robust Mature Field Redevelopment** - A. Kidd (Rock Flow Dynamics)	09:10	**Acoustic Emission Analysis of Brittle and Ductile Behavior of Rocks at Critical Stresses** - A. Rozanov (Saint-Petersburg Mining University)
09:30	**MEMS Based 3-C Borehole Gravity Meter Development** - G. Yu (BGP Inc. CNPC)	09:30	**Hybrid of PSO and CMA-ES algorithms for joint optimization of well placement and control** - A. Kumar (Visage Technology)	09:30	**Monitoring Chemo-Mechanical Fracture Behavior through Engineering Geophysics Experiments** - T. Vanorio (Stanford University)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Multiscale potential field modelling and integrated interpretation in the underexplored Northern Red Sea** - G. Bancalà (Schlumberger)	10:10	**Exergy Analysis of Steam Drive Recovery with Added Solvents** - H. Bruining (Delft University of Technology)	10:10	**The Impact of Pore Aspect Ratio on Elastic Parameters: A Physical Modeling Study** - K. Moravej (Memorial University of Newfounland)
10:30	**Utilisation of stochastic MT inversion results to constrain gravity inversion** - J. Giraud (Universite de Lorraine)	10:30	**A Hybrid Workflow to Locate Oil Opportunities in Mature Reservoirs** - B. Moradi (Three60Energy)	10:30	**THE PREDICTION OF S-WAVE VELOCITY USING GAUSSIAN PROCESS REGRESSION** - D. Wang (Xi'an Jiaotong University)
10:50	**3-D Gravity Data Sparsity Inversion with Discrete Cosine Transform Compression** - Z. Meng (Tianjin Navigation Instrument Research Institute)	10:50	**Experimental evaluation of residual polymer impacts on fluids separation in Colombian field conditions** - H. Quintero (Ecopetrol S.A)		
11:10	**Petroleum System Evaluation through Potential Field Data Analysis in Frontier Exploration of South Sudan** - S. Ratti (Schlumberger)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Diffraction Modelling and Imaging		**Reservoir Characterization, Surveillance and Management (Joint EAGE / SPE)**		**Rock Physics II**	
14:15	**Enhanced Full-Azimuth Q-PreSDM Imaging, Onshore Colombia – Resolving Absorption, Leveraging Rich Azimuths and Implementing Diffraction Imaging** - E.J. Wiarda (Ecopetrol S.A.)	14:15	**Advances in Cased-Hole Formation Evaluation - The Access to Untapped Tight-Gas Resources in Mature Fields** - R. Zambrano (Ukrnaftoburinnya PJSC)	14:15	**Fluid Substitution in Clay-Rich Sandstone at Seismic Frequencies** - H. Yin (Ecole Normale Supérieure de Paris)
14:35	**Diffraction Imaging in North-Western Poland, A 3D Land Seismic Case Study** - T.J. Moser (Moser Geophysical Services)	14:35	**The Application of Petroleum Geochemical Methods to Production Allocation of Commingled Fluids** - C. Barrie (Applied Petroleum Technology)	14:35	**The Logical Error in Gassmann Poroelasticity: Derivations and Data** - L. Thomsen (University of Houston)
14:55	**Diffraction Imaging of Faults, Basement Fractures and Stratigraphy in the Southern Malay Basin** - T.J. Moser (Moser Geophysical Services)	14:55	**New LWD Image Improvement Method to Mitigate Interpretation Risks** - T. Zhang (Schlumberger)	14:55	**Automatic Rock Physics Model Calibration: Optimisation Via Segmented Averages** - K. Gohel (Earth Science Analytics)
15:15	**Diffraction Separation and Holistic Migration: High-Resolution Imaging beyond Nyquist** - V. Thorkildsen (University Of Oslo)	15:15	**Slim Pulsed Neutron Spectroscopy Lands for the First Time in the Egyptian Western Desert** - H. Mokhtar (General Petroleum Company)	15:15	**Rock Physics attributes as potential rock-fluid discriminants for carbonate reservoirs in Central Luconia** - R. Jordan Leite (Petronas)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**3-D diffraction classification using wavefront attributes: extension to finite offsets** - P. Znak (St. Petersburg University)	15:55	**Evaluation of Well Interference and Injection Performance from Analysis of Time-lapse Pressure Transients** - G. Namazova (Wintershall Dea)	15:55	**Pore type classification using multi-class classifiers: Application in rock physics modeling** - J. Sharifi (Ferdowsi University of Mashhad)
16:15	**Diffraction Imaging by Changing the Acquisition Geometry with Marchenko Methods** - X. Yue (Previous: Memorial University; Now:Ansteel Beijing Research Institute)	16:15	**Towards More Accurate Phase-Field Modeling of Syntaxial Quartz Cementation in Arenitic Sandstones** - N. Prajapati (Karlsruhe Institute Of Technology)	16:15	**Calculating the electrical conductivity of digital rocks based on two-dimensional images** - H. Bao (China University Of Petroleum (east China))
16:35	**Practical aspects of the topological analysis of diffraction images for fracture characterization by seismic data** - M. Protasov (Trofimuk Institute of Petroleum Geology & Geophysics SB RAS)	16:35	**Best Practices-design for Scale Reduction During Produced Water Reinjection (PWRI)** - S.A. Mostafavi (University Of Tehran)	16:35	**Simulation of wave propagation based on the Lord-Shulman thermoelastic theory** - W. Hou (China University of Petroleum(east China))
16:55	**A diffraction separation method using variational mode decomposition** - P. Lin (China University of Mining & Technology (Beijing))			16:55	**Petrophysical Evidences for the Presence of Bornova Flysch Zone in the Gulf of Izmir, Aegean Sea** - A. Uyanik (Turkish Petroleum Corporation)

Technical Programme

Thursday, 21 October | Oral presentations

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ROOM 7

Seismic Acquisition & Processing - High Resolution for Shallow Subsurface

08:30	**Active and Passive MASW Analysis of DAS Data from an Active Landslide** - S. Cole (OptaSense)
08:50	**Distributed Acoustic Sensing for Surface Seismic: Case Study from Mineral Exploration** - A. Bona (Curtin University)
09:10	**Integrated Near-Surface Characterization, Onshore Colombia** - E.J. Wiarda (Ecopetrol S.A.)
09:30	**High-resolution processing for shallow targets through imaging of primaries, multiples and near field hydrophones** - G. Apeland (Schlumberger)
09:50	Coffee break
10:10	**Research and Application of the Uphole Constrained Tomographic Static Correction Technology** - S. Zhang (Research institute of Petroleum exploration & development-NorthWest(NWGI),PetroChina)
10:30	**Utilizing near-field hydrophone data for high-resolution shallow hazard imaging** - C. Tyagi (Schlumberger)
10:50	**Case Study: The use of miniaturized seismic sources for reduced environmental impact** - A. Crook (OptiSeis Solutions ltd)
11:10	**A high resolution method of seismic data via joint dictionary learning and sparse representatio** - Y. Wang (University of Electronic Science and Technology of China)
11:30	Coffee break
12:45	Lunch

Borehole Seismic Methods

14:15	**Effects of Cable Deployment Method on DAS VSP Data Quality: Study at CO2CRC Otway in-situ Laboratory** - R. Pevzner (Curtin University)
14:35	**Experimental Comparison of Directivity Patterns of Straight and Helically Wound DAS Cables** - E. Sidenko (Curtin University)
14:55	**Game-changing technology for low cost, high quality borehole seismic data acquisition** - A. Green (Well-SENSE)
15:15	**A DAS VSP Pilot Survey for 3D Imaging and 4D Monitoring at the Culzean Field, UKCS** - A. Merry (Maersk Oil North Sea UK Ltd)
15:35	Coffee break
15:55	**Delineating a cased borehole in unconsolidated formations using dipole acoustic data from a nearby borehole** - X. Gu (China University of Petroleum (East China))
16:15	**Non Traditional Processing of VSP Data with Dase Studies** - C. Bednar (Panorama Technologies)
16:35	**High-Frequency Resonances in Borehole Geophones Bias Source Parameters of Induced Seismicity at Preston New Road, UK** - J. Holmgren (University Of Bristol)
16:55	**Acquiring and processing seismic with the drill-bit source and wireless geophones in a desert environment** - I. Silvestrov (Saudi Aramco)
	Fundamentals and higher order harmonics separation and integration from vertical seismic profiling (VSP) data - H. Alnasser (Saudi Aramco)

ROOM 8

Seismic Acquisition & Processing - Micro and Passive Seismic

08:30	**Trialling Passive Seismic with DAS in CO2CRC Otway Project: Ambient Noise Composition and Prospects for Utilisation** - R. Pevzner (Curtin University)
08:50	**Low Frequency DAS Data Study with Integrated Data Analysis for Monitoring Hydraulic Fracture** - M. Ichikawa (JGI, Inc.)
09:10	**High-resolution time reverse imaging for microseismic event location** - P. Yang (University Of Hamburg)
09:30	**Earthquake Waveform Energy Focusing Tomography with Least Squares Moment Tensor Imaging** - J. Li (University Of Science And Technology Of China)
09:50	Coffee break
10:10	**Efficient Probabilistic Inversion of Induced Earthquake Parameters in 3D Heterogeneous Media** - L.O.M. Masfara (Delft University Of Technology)
10:30	**Moment tensor prediction from borehole microseismic data with machine learning** - M. Carrizo (TU Delft)
10:50	**Fault Reactivation Controlled by Elastic Stress Transfer During Hydraulic Fracturing at Preston New Road, UK** - J. Verdon (University of Bristol)
11:30	Coffee break
12:45	Lunch

Seismic Acquisition & Processing - Acquisition Geometries and Hardware II

14:15	**A Practical Marine-Vibrator System Optimized for Geophysical Applications** - T. Elboth (Shearwater)
14:35	**Low frequency vibrator transformation** - D.K. Reust (Servo Force, LLC)
14:55	**First wide scale field trial of autonomous underwater vehicles seismic programme** - C. Tsingas (Saudi Aramco)
15:15	**3D compressive sensing reconstruction of shot gathers under realistic acquisition constraints** - A. Guitton (Total SA)
15:35	Coffee break
15:55	**Spatial Resolution Analysis of Prestack Seismic Migration Images in Viscous Media** - W. Wei (Chinese Academy of Sciences)
16:15	**Land acquisition without data jitter made possible with MEMS sensors** - N. Tellier (Sercel)
16:35	**Will the new seismic technology shake the geothermal industry?** - C. Strobbia (Real Time Seismic)

ROOM 9

Seismic Processing - Machine Learning

08:30	**Building and Understanding Deep Neural Networks Components for Seismic Processing: Lessons Learned** - M. Chambefort (CGG)
08:50	**Compressive sensing with seismic-adapted machine-learned denoiser** - N. Kazemi (University of Calgary)
09:10	**An efficiency-improved genetic algorithm for enhancing challenging 3D prestack data using nonlinear beamforming** - Y. Sun (ARAMCO)
09:30	**Proposal of the DUnet neural network architecture: Deghosting example and theoretical analysis** - H. Peng (Cgg)
09:50	Coffee break
10:10	**Improving robustness of deep neural networks to amplitude pre-processing: Introduction of a "reweighting" layer.** - P. Jeunesse (CGG)
10:30	**Generative Adversarial Network For Seismic Data Interpolation** - Q. Wei (China University of Petroleum-Beijing)
10:50	**From Model-Driven to Data-Driven Seismic High-Resolution Processing** - X. Jiao (China University Of Petroleum(Beijing))
11:10	**HQS-HRINet: An unrolled deep learning method for seismic high-resolution inversion with an inaccurate wavelet** - H. Chen (Xi'an Jiaotong University)
	Slope Estimation by Convolutional Neural Networks - S. Zu (Chengdu University of Technology)
11:30	Coffee break
12:45	Lunch

Seismic Processing - Signal Processing Methods

14:15	**Variable depth streamer deghosting using a linear Radon transform with a time domain sparsity constraint** - T. Seher (TGS)
14:35	**Integrated source and receiver deghosting using sparse inversion** - J. Cao (Delft University of Technology)
14:55	**On the stable implementation of the obliquity factor operators for 3D marine processing** - N. El Allouche (Schlumberger)
15:15	**VwGradient Picking – An Approach to Resolve the Near-Surface in the Presence of Velocity Inversions** - C. Diggins (DUG)
15:35	Coffee break
15:55	**Datum Reconstruction Based on Virtual Medium** - S. Zhang (Research institute of Petroleum exploration & development-NorthWest(NWGI),PetroChina)
16:15	**Modelling of marine vibrator data** - A. Jafargandomi (Shearwater)
16:35	**Partial Fraction Signal Decomposition and Time-Frequency Representation** - B. Ursin (Norwegian University of Science & Technology)
16:55	**Seismic event detection on shot gathers with U-net segmentation** - P. Zwartjes (Aramco Overseas Company)
	Improving Vertical Resolution of Non-Stationary Seismic Data by Spectral Modelling in Logarithm Time–Frequency Domain - L. Sun (China University Of Mining & Technology (beijing))

11:45 Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals - Room 1

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Thursday, 21 October | Oral presentations

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ROOM 10

Seismic Attributes & Interpretation

08:30	**Accelerating the Seismic Interpretation Workflow using Machine Learning** - L. Dyer (Schlumberger)
08:50	**Deep Probabilistic Neural Networks for Geoscience** - L. Mosser (Earth Analytics AS)
09:10	**CO2 Storage Characterisation Driven by Images of a Prior Injection: CO2CRC's Otway Project** - M. Aldakheel (Curtin University)
09:30	**Interpretation of Geohazards Related to Offshore Salt Karst** - A. Laake (Schlumberger)
09:50	Coffee break
10:10	**Seismic Reservoir Characterization Based on Improved LFCA Technology** - D. Zhang (China National Offshore Oil Corporation (cnooc) Ltd Tian Jin Branch)
10:30	**Neotectonism and Its Effect on Gas Migrating Features in Offshore KG Basin India** - A. Shukla (Indian Institute Of Technology Kanpur Uttar Pradesh India)
11:30	Coffee break
12:45	Lunch

Geophysical Characterization for Mineral Exploration and Mining

14:15	**Integrated Geophysical Study for Landfill Mining: A Case Study in Denmark** - A. Sandrin (Geological Survey Of Denmark And Greenland)
14:35	**Enhancement of Automatic Signal Classification by Data Augmentation from Collapsed Mine** - W. Choi (Inha University)
14:55	**Role of advanced geophysical processing in searching for the next giant Gold-Copper deposit in North Sumatra** - H. Gibson (Intrepid Geophysics)
15:15	**Cover mapping using ambient noise surface wave tomography** - A. Lavoué (Sisprobe)
15:35	Coffee break

ROOM 11

Static Geomodels

08:30	**Entropy-driven particle swarm optimization for reservoir modelling under geological uncertainty – application to a fractured reservoir** - B. Steffens (Heriot-Watt University)
08:50	**Sketch-Based Reservoir Modelling: Fast Prototyping of Reservoir Models to Explore Interpretation-Based Uncertainty** - C. Jacquemyn (Imperial College London)
09:10	**Time-Depth Conversion with Uncertain and/or Incomplete Data** - J. Chautru (Geovariances)
09:30	**Hierarchical Workflows for Realistic Facies Modeling: A Case Study** - S. Karimi (Baker Hughes)
09:50	Coffee break
10:10	**Implicit 3D Subsurface Structural Modeling by Finite Elements** - M. Irakarama (Independent Researcher)
10:30	**Reservoir and Seal Characterizations for Composite Common Risk Maps to Support Wells Planning and Optimization** - A. Widyanita (PETRONAS Research SDN BHD)
10:50	**Sedimentology, Diagenesis and Reservoir Quality of the Bentiu Formation in the Fula Sub-Basin, Muglad Basin, Sudan** - Y. Makeen (Jilin University)
11:10	**Characteristics of Authigenic Minerals in Deep Clastic Rocks and Its Influence on Reservoir Physical Property** - Y. Guo (CNOOC China Limited,Tianjin Branch)
	Leveraging Machine Learning for Enhanced Geostatistical Modelling of Reservoir Properties - C. Daly (Schlumberger)
11:30	Coffee break
12:45	Lunch

Regional Structural Geology

14:15	**Assessing preferential orientations of fracture reactivation by iterative-statistical stress inversion from earthquakes in Taranaki, New Zealand** - M. Valcarcel Rodriguez (Petroleum Experts)
14:35	**Tie between MCS and Drilling Data on the Laptev Sea Coast and on the Lomonosov Ridge** - V. Savin (Research Institute for Geology and Mineral Resources of the Ocean)
14:55	**Eastern Black Sea Foreland Basin Architectures and Play Concepts** - A. Intawong (TGS)
15:15	**Structural/Sedimentological Interactions in the Laurentian Deep Water Basin and South Whale Sub-basin, Offshore East Canada** - D. Little (TGS)
15:35	Coffee break
15:55	**Seismic stratigraphy and structural analysis of the pre-salt of Santos Basin and implications on basin evolution** - N. Mattos (Universidade Estadual de Campinas)
16:15	**Surface and Subsurface Integration for the Mesozoic Rifting in the Eastern Cordillera, Colombia** - M. Reyes Correa (Georg-August-Universität Göttingen)

ROOM 12

Dynamic Reservoir Characterization and Modelling

08:30	**A Unified Pore Network Model for Evaluation of Flow Properties from Pore Size Distribution** - Y. Yang (Saudi Aramco)
08:50	**From Seismic Interpretation to Property Filled Gridding using the Relative Geological Model** - F. Cubizolle (ELIIS)
09:10	**Simulation of Viscous Crossflow in Fractured Media by Foam Injection** - A. Saeibehrouzi (Coventry University)
09:30	**The importance of capillary forces in oil mobilization from Sandstone cores** - P. Aslanidis (University Of Stavanger)
09:50	Coffee break
10:10	**Comparison of permeability for different fracture models in laboratory experiments on hydraulic fracturing** - E. Novikova (Sadovsky Institute Of Geospheres Dynamics Of Russian Academy Of Sciences)
10:30	**Fractures Reservoir Distribution Modeling using Kriging-Geostatistical Patterns Recognition Analysis** - H. Sarkheil (Kharazmi University)
10:50	**The estimation of permeability using grain size distribution and pore space analysis** - H. Mikada (Kyoto University)
11:10	**Hydrothermal Fluid-Rock Experiments and Geochemical Modeling of Illite Forming Processes in a Paleozoic Sandstone, Middle East** - P. Birkle (Saudi Aramco)
	Numerical Simulation of Multiscale Fracture Network Two-Phase Flow Based on Finite Volume Method - C. Tang (Chengdu Univerisity Of Technology)
11:30	Coffee break
12:45	Lunch

Flow Simulation

14:15	**Challenge Solutions for a Significant Water Cut Reduction History Match on Heavy Oil Polymer EOR** - S. Namie (Und)
14:35	**Enhanced Oil Recovery from Polygonal Pores: effects of contact angle** - A. Davarpanah (Aberystwyth University)
14:55	**Deep Learning Reservoir Parameters Prediction using Bidirectional Long Short-Term Memory Network** - L. Yang (China University Of Petroleum (Beijing))
15:15	**PIMPS3D2P: A Practical, Efficient, Three-Dimensional, Two-Phase Reservoir Simulator Written in MATLAB** - A. Michael (Cypriana Petroleum Technology, LLC)
15:35	Coffee break
15:55	**Reduced order reservoir modeling with MRST: basis reduction control using an image similarity metric** - E. Kuznetsova (Skolkovo Institute of Science and Technology)
16:15	**Adaptive reservoir model based on POD-Galerkin ROM** - D. Voloskov (Skolkovo Institute Of Science And Technology)
16:35	**Comparison of a Double-Scale Method and the PEBI Grid Method in Near-Well Flows Simulation** - N. Salmani (Engineering Support & Technology Development Company)
16:55	**Implementation of PC-SAFT Equation of State into MRST Compositional for Modelling of Asphaltene Precipitation** - M. Masoudi (University Of Oslo)
	Optimization of Two Simultaneous Water and Gas Injection Scenarios in a High GOR Iranian Oil Field - A. Izadpanahi (Persian gulf university)

11:45 Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals - Room 1

Technical Programme

Thursday, 21 October | Oral presentations

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ROOM 13		ROOM 14		ROOM 15	
Unconventional HCs - Reservoir Characterization and Production Case Studies		**Characterization and Monitoring of Subsurface CO2 Storage**		**Well Performance and Optimisation (SPE)**	
08:30	**Experimental Features for Cation Exchange Capacity Determination for Organic-Rich Mudstones -** E. Kazak (Lomonosov Moscow State University)	08:30	**Experimental Study on the Effect of Supercritical CO2 on Shaly Caprocks -** P. Hadian (Curtin University)	08:30	**Overcoming Challenges of Mechanical Lifting Capabilities on Offshore Installation by Utilizing Coiled Tubing Boat Spooling Technique -** S. Dinger (Schlumberger)
08:50	**New insight into experimental quantification of dew point pressure under confinement effects in unconventional reservoirs -** H. Doryani Daryuni (Heriot Watt University)	08:50	**Geochemical modeling of CO2-brine gabbro-diorite interaction for in-situ mineral carbonation. -** H. Abdoulghafour (University Of Evora)	08:50	**Experimental Investigation of Oil/Water Emulsion Rheology in Electric Submersible Pump -** M. Ridlah (The University of Tulsa)
09:10	**An Energy-Based Brittleness Index Introduction and Application for Unconventional Shale Reservoir: A Case Study -** A. Kolomytsev (Gazprom Neft)	09:10	**Importance of Continuous Monitoring: Case Study of Shallow CO2 Injection at the CSIRO in-situ Laboratory Site -** K. Tertyshnikov (Curtin University of Technology)	09:10	**Investigation of Well Control Parameterization with Reduced Number of Variables Under Reservoir Uncertainties -** D. Santos (University of Campinas)
09:30	**Coalbed Mathane Enrichment Rule and Sweet Spot Optimization-Case Study From Australia North Bowen Basin -** M. Li (RIPED PetroChina)	09:30	**Resource maturity and sensitivity analysis of CO2 storage capacity in the Lusitanian basin, Portugal -** P. Pereira (ICT - Universidade de Évora)	09:30	**Real-time EM Look-ahead Resistivity Mapping of Oil Water Contact While Drilling at Low Deviated Well -** N. Al-Khalifa (Kuwait Oil Company)
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**Modelling of CO2-ECBM displacement from Jharia coalfield, India -** M. Asif (Indian Institute of Technology (ISM), Dhanbad)	10:10	**Application of time-lapse acoustic FWI to cross-well seismic monitoring data sets in a CCS field -** M. Ichikawa (JGI, Inc.)	10:10	**Innovative Method to Optimize Down Hole Control Valves by Well Modeling -** A. Albarghouti (Saudi Aramco)
10:30	**Evaluation of the Unconventional Gas Potential of Diyab in West UAE and Exploration Effectiveness -** D. Xiao (BGP)	10:30	**Pore-Scale Study of the Residual Trapping of Air in a Doddington Sandstone Using In-Situ Micro-CT Imaging -** P. Bakhshi (Heriot-Watt University)	10:30	**An Integrated IR4.0 Software Enables Autonomous Casing Crossflow Rate Calculation -** A. Albarghouti (Saudi Aramco)
10:50	**Quaternary and Neogene Reservoirs of the Norwegian Continental Shelf: Evidence from New 3D Seismic Data -** B. Bellwald (Volcanic Basin Petroleum Research (VBPR) AS)	10:50	**Pore-Scale Simulations of Residual Trapping in Homogeneous and Heterogeneous Porous Media -** R. Nhunduru (Heriot-watt University)	10:50	**Development of a Gas Flow Rate Model for Multi-stage Choke System in HPHT Gas Wells -** A. Alghamdi (Saudi Aramco)
11:10	**Integration of mechanical stratigraphy with lithofacies in Goldwyer shale for selecting producible and hydraulic fracturing layers -** M.A. Iqbal (Curtin University)				
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals -** Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
Subsalt/Basalt Imaging and Tight Formation Challenges		**Subsurface Characterization for CO2 and Waste Storage**		**Unconventional Reservoirs (SPE)**	
14:15	**Overpressure Transmission through Igneous Intrusions: An Unrecognized Drilling Hazard in Volcanic Affected Basins? -** N. Schofield (University of Aberdeen)	14:15	**Distribution of Faulted Mesozoic and Tertiary Seals for CCS in the Horda Platform, Northern North Sea -** J. Osmond (University of Oslo)	14:15	**Unified Assessment of Unconventional Resource Plays: Implications for Global Exploration and Development -** T. Grover (Equinor)
14:35	**Intra-volcanic multiple scattering: using simulated wavefields to better understand the challenge at Blackrock, West of Shetlands -** H. Poore (Siccar Point Energy Ltd.)	14:35	**Effect of Mineral Heterogeneity on Fracture Dissolution in Carbonate-Rich Caprocks During Subsurface CO2 Injection -** M. Nooraiepour (University Of Oslo)	14:35	**Thermal Effects on Far-Field Distributed Acoustic Strain-Rate Sensors -** D. Zhu (Texas A&M University)
14:55	**Renewed Salt Body Interpretation with Improved Salt Flank Imaging Offshore Mexico -** K. Rodriguez (Searcher)	14:55	**CCS Monitoring by Inversion of Reservoir Pressure and Saturation Changes from Timelapse AVO Differences and Time-Shifts -** S. Carpentier (TNO)	14:55	**Geomechanically Driven Casing Deformation During Multistage Perf and Plug Fracturing Operations: Investigation and Mitigation -** R. Gomez Barker (Baker Hughes)
15:15	**Fine Characterization of Volcanic Rock Morphology by Walkaway VSP Technique -** B. Du (NW-Research Institute of Petroleum E&D, PetroChina)	15:15	**Integrated Caprock Characterization to Reduce the Uncertainty in the Geomechanical Model of Underground Storage -** H. Boro (SGS)	15:15	**Refracturing Activities in the United States — How Much Do We Know So Far? -** F. Shammam (Missouri University of Science and Technology)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Overturned Salt Roof Flaps in the Dnieper-Donets Basin – Hiding a New Giant? -** O. Petrovskyy (DEPROIL)	15:55	**Testing CO2 compatibility of a glauconitic reservoir: Case study from depleted Nini Field, Danish North Sea -** S. Mohammadkhani (GEUS)	15:55	**Aqueous Solution Of Ketone For Enhanced Water Imbibition In Shale Reservoirs -** M. Wang (The University Of Texas At Austin)
16:15	**Method for Classification of Tight Sandstone Reservoir Based on NMR Logging -** H. Wei (China University of Petroleum)	16:15	**A fill-and-spill CCS mega-fairway in the Southern North Sea: a new concept to optimise CO2 storage -** A. Green (IGI Ltd.)	16:15	**The Key Factors of Low-frequency Electric Heating Assisted Depressurization Method -** E. Zhao (China University of Petroleum (East China))
16:35	**Diffraction wave separation and imaging with deep learning network: application of GPR data -** M. Ma (Chang'an University)	16:35	**The Critical Role of Geophysical Simulations in Enhanced Carbon Storage -** A. Goertz (Octio)	16:35	**Optimization Approach for Determination of the Dosage of Diversion Agents in Temporarily Plugging Fracturing of Shale -** M. Wang (Research Institute Of Petroleum Exploration And Development, Petrochina)
16:55	**Volcanic structure underneath Benue Trough (Nigeria) derived from high-resolution airborne gravity data using horizontal tilt angle -** M. Abdullahi (Modibbo Adama University)	16:55	**Time-Lapse Topography Inversion from Gas–Plume Monitoring -** J. Gunning (CSIRO Energy)		

Thursday, 21 October | Oral presentations

This presentation is pre-recorded

ROOM 16		ROOM 20	
Petroleum Systems of NW Europe 2 (Dedicated Session)		**IOR/EOR II (SPE)**	
08:30	**East Greenland as an Analogue and Source to the Jurassic and Cretaceous Petroleum Systems of Mid-Norway** - A. Szulc (Casp)	08:30	**Monitoring Polymer Flooding Performance Using Inflow Tracer Technology in Horizontal Injection and Production Wells** - A. Janczak (OMV)
08:50	**Sorry to Intrude, but Is It Time to Checkout of the "Motel Theory" in the Faroe-Shetland?** - D. Gardiner (IGI Ltd.)	08:50	**Horizontal Versus Vertical Wells: Assessment of Sweep Efficiency in a Multi-layered Reservoir** - B. Davidescu (OMV Austria)
09:10	**Oil-Oil Correlation and Filling Modes of the Valhall Field in the Central Graben, North Sea** - J. Rinna (AkerBP)	09:10	**The Use of Controlled Dissolution Glass for the Consolidation of a High Porosity Chalk** - R. Hatlebakk (Vitritech)
09:30	**Regional Basin Modelling as Input to Play Based Exploration in the Dutch Offshore** - L. Janssen (EBN)	09:30	**Numerical Simulations of Surfactant Flooding in Carbonate Reservoirs** - J. Pola (Heriot-Watt University)
09:50	Coffee break	09:50	Coffee break
Modified Salinity Water Flooding in Carbonate Reservoirs 2 (Dedicated session)			
10:10	**Effect of Wettability on Oil Recovery in Chalk** - S. Strand (University of Stavanger)	10:10	**Successful Development and Deployment of a Novel Chemical Package for Stimulation of Injection Wells** - D.A. Alexis (Chevron USA Inc)
10:30	**Scale-Dependent Models for Modified Salinity Waterflooding** - S. Hosseinzadehsadati (Technical University of Denmark)	10:30	**From Biomedical to Oil Industry: Promising Mesoporous Materials for Oil Field Applications** - A. Alsmaeil (Cornell University)
10:50	**Numerical Analysis of Forced and Spontaneous Imbibition of Modified-Salinity Water in Chalk** - A.A. Eftekhari (Technical University of Denmark)	10:50	**Experimental Design and Evaluation of Surfactant Polymer for a Heavy Oil Field** - D. Rousseau (IFP Energies nouvelles)
			Effects of Non-Newtonian Fluid Characteristics on Flow Dynamics in Polymer Flooding: A Lattice Boltzmann Study - B. Wei (China University of Petroleum (East China))
			Study on Formulation with Lower Initial Viscosity Gel/Alkali/Surfactant/Polymer - Q. Gao (Exploration And Development Research Institute Of Daqing Oilfield Company Ltd.,cnpc)
11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals** - Room 1		
12:45	Lunch	12:45	Lunch
Depositional Processes and Stratigraphic Modelling (Dedicated Session)		**IOR/EOR III (SPE)**	
14:15	**Forward Modelling of Sedimentary Processes for Reservoir Issues: A Multi-Scale Issue** - G. Massonnat (Total)	14:15	**Modelling and Upscaling Unstable Miscible Displacement Processes: Characterisation of Physical Instabilities** - P. Ogbeiwi (Heriot-Watt University)
14:35	**Sensitivity Analysis of the Amplitude of Early Cretaceous Eustatic Changes Using Forward Stratigraphic Modelling (Resolution Guyot)** - M.M.S. Desouky Nourelyamani (Imperial College London, Carbonate Research Group)	14:35	**An Experimental Study of Steam-Solvent Coinjection for Bitumen Recovery Using a Large-Scale Physical Model** - R. Okuno (University of Texas at Austin)
14:55	**Reproducing Sedimentary Processes and Architecture in Turbidite Deposits with Forward Stratigraphic Modeling** - S. Courtade (Schlumberger)	14:55	**Advanced Fracturing Design Simulator-Assisted Modeling Coupled with Application of Enhanced Stimulation Fluids Raises Performance** - R. Kalabayev (Schlumberger)
15:15	**Six Years Exploring Offshore Newfoundland and Labrador: Insight from Forward Stratigraphic Modeling to Petroleum System Assessment** - P. Jermannaud (Beicip Franlab)	15:15	**Design of Optimal Operational Parameters for Steam-alternating-solvent Processes in Heterogeneous Reservoirs** - I. Mayo Molina (University Of Alberta)
15:35	Coffee break	15:35	Coffee break
15:55	**Stratigraphic Forward Modelling Applied to Reservoir Characterisation of Pre-Salt Carbonate Reservoirs, Santos Basin, Brazil** - A.C. Sartorato (Petrobras)	16:15	**Characterization of Fluid Drainage Mechanism at Core and Pore Scales** - A. Isah (King Fahd University of Petroleum & Minerals)
16:15	**Benefits of Forward Stratigraphic Modelling in Geostatistical Reservoir Characterization** - A. Fournillon (Beicip-Franlab)	16:35	**Comparative Evaluation of Gas-Condensate Enhanced Recovery Methods for Deep Ukrainian Reservoirs: Synthetic Case Study** - O. Burachok (Ivano-Frankivsk National Technical University of Oil and Gas)
16:35	**Carbonate Ocean: A High-Fidelity Process-Based Sediment Model Suitable for Reservoir Management Application** - M. Frazer (Chevron Energy Technology Company)	16:55	**Sharpening a Cyclic Solvent Injection Technique in a Heavy Oil Reservoir** - A. Solano (Mansarovar Energy)

Technical Programme

Thursday, 21 October | ePoster presentations

This presentation is pre-recorded

EPOSTER A		EPOSTER B		EPOSTER C	
ePoster: FWI and Velocity Analysis		**ePoster: Seismic Interpretation - Feasibility Studies**		**ePoster: Seismic Attributes and Fault Interpretation**	
08:30	**Full waveform inversion with a convolution coding-based adaptive data identification** - Y. Yin (Jilin University)	08:30	**Research on the attributes of attenuation gradient hydrocarbon detection and its application in Bohai Oilfield** - G. Liu (CNOOC China Limited, Tianjin Branch)	08:30	**Fault identification in the bedrock weathering crust by the spectral decomposition based on matching pursuit** - R. He (Research Institute Of Petroleum Exploration & Development-Northwest(NWGI), Petrochina)
08:50	**Approximate Langevin Monte Carlo with Adaptation for Bayesian Full-waveform Inversion** - M. Izzatullah (King Abdullah University of Science and Technology)	08:50	**Acoustic impedance contrast inversion with multiplicative regularization** - K. Guo (China University of Petroleum-Beijing)	08:50	**Seismic fault interpretation by using a multi-scale coherence attribute** - N. Liu (Xi'an Jiaotong University)
09:10	**Incorporating acquisition geometry in deep learning-based full waveform inversion** - M. Saadat (Institute Of Geophysics Of Tehran University)	09:10	**A Novel Nonlinear Joint AVA Inversion Method for Russell Fluid Factor** - L. Zhou (Hunan University of Science and Technology)	09:10	**First Operational A.I. Fault Interpretation Study Performed at Total** - P. Goutorbe (Total)
09:30	**Velocity and Q estimation from the separeted upgoing and downgoing wavefields in VSP data** - C. Jin (Khalifa University)	09:30	**Use of classification technique to characterize porous carbonate reservoir in Machukhy field, onshore Ukraine** - N. De Freslon (Beicip-Franlab)	09:30	**Automatic extraction of horizons through faults** - J. Li (China University Of Petroleum (beijing))
09:50	Coffee break	09:50	Coffee break	09:50	Coffee break
10:10	**A Velocity Model Building Method in the Igneous Rock Based on Facies-controlled Inversion** - W. Jia (BGP Inc. CNPC)	10:10	**Post-Stack Inversion with Uncertainty Estimation through Bayesian Deep Image Prior** - F. Picetti (Politecnico di Milano)	10:10	**Research and Application of the Efficient Reflection Coefficient Inversion Method via Toeplitz-Sparse Matrix Factorization** - Q. Wang (CNOOC Research Institute Co., Ltd.)
10:30	**Enhanced constrained velocity inversion** - A. Tertois (Emerson)	10:30	**Case of Study: Quantitative Seismic Interpretation for Mapping Carbonate Reservoir Facies in Pre-Salt Province of Brazil** - A.P. Santana (University of Cambridge)	10:30	**Seismic Quality Factor Estimation with a Simulated Annealing Approach: A Practical Example of the SiChuan Basin** - J. Gui (PetroChina Research Institute of Expl. & Developm.)
10:50	**A Pre-stack inversion method based on Bayesian Parameter Relation Constrained** - X. Cui (China University of Petroleum)	10:50	**Lithofacies prediction based on a stochastic simulation method** - J. Li (Sinopec Geophysical Research Institute)	10:50	**Investigating the effect of increasing number of angle stacks seismic toward improving seismic inversion prediction** - M.I. Ahmad Fuad (PETRONAS RESEARCH SDN BHD)
11:10	**Vector Wave Velocity Tomography Based on Horizon Constraints** - H. Li (China University Of Petroleum (east China))			11:10	**Interval velocity determination by using stratigraphic emphasis for pore pressure prediction** - R. Negrete Cadena (National Autonomous University of Mexico)
11:30	Coffee break	11:30	Coffee break	11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals** - Room 1				
12:45	Lunch	12:45	Lunch	12:45	Lunch
ePoster: Imaging Approaches and Imaging with Neural Networks		**ePoster: Seismic Interpretation - Statistical Methods**		**ePoster: Seismic Attributes & Interpretation**	
14:15	**Anisotropic parameter modeling based on BP neural network** - S. Zhang (China University Of Petroleum (east China))	14:15	**Frequency-Dependent Inversion Using Spherical-Wave Reflection Coefficient with Critical and Post-Critical Offsets** - B. Yan (China University of Petroleum)	14:15	**Stratigraphical nature and Palaeogeographical significance of the Top Albian surface in the South Cameroon Atlantic Margin.** - M.E. Mike-Franck (University Of Yaounde I)
14:35	**Least-Squares Migration with Deep Learning Based Structural Constraints** - Y. He (TGS)	14:35	**Nonlinear amplitude inversion using the exact Zoeppritz equation and Hybrid Quantum Genetic algorithm** - J.W. Cheng (China University of Petroleum-Beijing)	14:35	**Dispersion Imaged Field with No Amplitude DHI** - S. Peters (Apex Spectral Technology, Inc.)
14:55	**Anisotropic parameter modeling based on deep residual network** - S. Zhang (China University Of Petroleum (east China))	14:55	**Joint Bayesian stochastic AVA inversion of well-log and seismic data for facies estimation** - Y. Luo (BGP, CNPC)	14:55	**Application of Self- Facies-Control inversion in complex deep-water turbidite reservoir prediction** - Z. Wang (CNOOC Research Institute Co., Ltd.)
15:15	**Encoded reverse time migration with random plane-wave segments** - C. Tang (TGS)	15:15	**Acoustic Impedance Inversion Based on Transfer Learning Combined with Convolutional Neural Network and Residual Network** - J. Meng (China University Of Petroleum (beijing))	15:15	**Uncovering 3D Fracture Zones and Faults via Enhanced Network Tortuosity Decomposition: Concept and Methodology** - C.T. Ang (PETRONAS Research Sdn. Bhd.)
15:35	Coffee break	15:35	Coffee break	15:35	Coffee break
15:55	**Huber inversion-based reverse-time migration with de-primary imaging condition and sparse constraint in curvelet domain** - B. Wu (China University Of Petroleum (beijing))	15:55	**Virtual well-logging curves construction using a genetic algorithm and its application to reservoir inversion** - J. Sun (China University Of Petroleum (east China))	15:55	**Application of quantitative fracture prediction based on indicator factor in engineering fracturing** - G. Wang (BGP,CNPC)
16:15	**Elastic Least-Squares Reverse Time Migration in the Rugged Seabed Structure** - Y. Qu (China University Of Petroleum (East China))	16:15	**Seismic Stochastic Inversion Constrained by Multiple-Point Patterns** - Y. Cao (China University Of Petroleum,Beijing)	16:15	**Seismic depositional sequence characterization based on enhanced Multi-channel variational mode decomposition** - Y. Tian (Xi'an Jiaotong University)
16:35	**Source wavefield reconstruction using the Remez exchange algorithm for reverse time migration** - Z. Ren (Chang'an University)	16:35	**Prestack Inversion Based on Bayesian Theory in Ray Parameter Domain and Its Application in Hydrocarbon Detection** - D.J. Hou (Cnooc)	16:35	**An attribute-guided method for reservoir parameter prediction using relevance vector machine** - J.W. Cheng (China University of Petroleum-Beijing)
16:55	**3D Encoding Least-squares Reverse Time Migration in Curvilinear-τ Domain Based on Student's t Distribution** - H. Chongpeng (China University Of Petroleum (east China))	16:55	**Integration of Seismic Stratigraphy and Core Data to Determine Evolution of Mud Bank: A Case Study** - A. Al-Ali (Heriot-Watt University)		
	2.5D Multi-Focusing Imaging of Crooked-Line Seismic Surveys - H. Jodeiri Akbari Fam (Laurentian University)				

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Thursday, 21 October | ePoster presentations

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EPOSTER D

ePoster: Seismic Acquisition & Processing - Acquisition Geometries and Hardware

08:30	**Automated Real Time Path Planning for Land Seismic Survey Field Design** - M. Caporal (Delft University of Technology)
08:50	**Minimum-Phase Sweep Signal for Phase Controlled Vibroseis Acquisition** - I. Korotkov (SGDS Ltd.)
09:10	**Convertible Geometry Studies** - Y. Liu (Bgp,cnpc)
09:30	**Compressive sensing design of receiver carpets under field constraints** - P. Roche (OPERA (ADERA))
09:50	Coffee break
10:10	**Lightweight land nodal system: acquisition and processing insights from the Permian Basin, West Texas.** - G. Busanello (Schlumberger)
10:30	**Design of optimal sensor layouts for measuring particle motion data** - A.K. Ozdemir (Schlumberger)
10:50	**Acquisition geometry analysis when using multiples for imaging** - B. Revelo (Delft University Of Technology)
11:30	Coffee break
12:45	Lunch

ePoster: Potential Field Methods - Case Studies and New Developments "Mix"

14:15	**Interpretation of Gravity Gradiometry Data from Bonaparte Basin and Halls Creek Orogen, Northern Australia.** - M. Zengerer (Gondwana Geoscience)
14:35	**Combining Edge Enhancement Images for More Reliable Detection of Magnetic Features: A Python implementation** - V. Ribeiro (CSIRO)
14:55	**Integrated Potential Field Methods – West Siberian Reservoir Complex Case Study** - A. Volkova (Tomsk Polytechnic University)
15:15	**Multi-method pore space analysis of the Portland sandstone** - B. Mehalli (Saint Petersburg State University)
15:35	Coffee break
15:55	**Basement relief estimation through a two-parameters gravity inversion** - F. Golfre' Andreasi (Schlumberger)
16:15	**The role of model weighting functions in the gravity and DC resistivity inversion** - M. Fedi (University of Naples Federico II)
16:35	**Sediment Cover Structure in the East Siberian Sea Shelf–Podvodnikov Basin Transition Zone (Arctic Ocean)** - A. Piskarev (VNIIOkeangeologia named after I.S. Gramberg)
16:55	**Multiphysics and Multidisciplinary Integration Unravels Kirthar Fold Belt Structural Complexity** - A. Battaglini (Schlumberger)

EPOSTER E

ePoster: Seismic Processing - Signal Processing Methods I

08:30	**Structurally Constrained Multitrace Sparse Inversion** - S. Zhang (China University of Petroleum(Beijing))
08:50	**Synchroextracting S Transform and Its Application in Seismic Time-Frequency Analysis** - Q. Wang (Hubei University of Art and Science)
09:10	**3D High Order De-Aliased Radon Transform for AVO-Preserving Data Reconstruction** - W. Geng (China University Of Petroleum(Beijing))
09:30	**Noise-Tolerant Sparse Spike Deconvolution Based on Convolutional Phase Retrieval** - F. Bayati (University Of Calgary)
09:50	Coffee break
10:10	**Wigner-Ville Distribution with a Mask Filter** - H. Al Salmi (Imperial College London)
10:30	**Wavelet-Based Coherency Functional for Velocity Analysis of Seismic Reflection Data** - A. Tognarelli (University of Pisa)
10:50	**The Application of High Frequency Bright Spot Based on T-K Energy Wavelet Transform in Hydrocarbon Detection** - D.J. Hou (Cnooc)
11:10	**The Application of Compensation Method Based on Wavelet Frequency Division in Middle-Deep Layer of East Sea** - X. Wang (Qingdao Institute Of Marine Geology)
11:30	Coffee break
12:45	Lunch

ePoster: Seismic Processing - Signal Processing Methods II

14:15	**Nonparametric estimation method for array acoustic dispersion information** - X. Zhou (China University Of Petroleum (beijing))
14:35	**Well-Controlled Seismic Resolution Improvement: A Machine Learning Approach** - Y. Gao (China University of Petroleum-Beijing)
14:55	**Application of tomographic static correction technology constrained by micro logging in 3D splicing processing** - M. Li (Petrochina Changqing Oilfield Company)
15:15	**Improved Signal to Noise Ratio Estimation Based on Edge-Preserving Method** - Y. Zhang (China University Of Petroleum (Beijing))
15:35	Coffee break
15:55	**Prestack Data Enhancement with Phase Substitution and Phase Corrections Guided by Local Multidimensional Stacking** - A. Bakulin (Saudi Aramco)
16:15	**Mixed Phase Seismic Wavelet Estimation Using the Bispectrum** - M. Bekara (PGS)

EPOSTER F

ePoster: Source Rocks

08:30	**Organic Geochemistry and Hydrocarbon Generating Potential of the Miocene Bongaya Formation in the Onshore Pitas Sabah** - N.A.F. Md Nor Azam (University of Malaya)
08:50	**High-Quality Source Rock Thickness Prediction of Xujiahe Formation in the Western-Central Transition Zone of Sichuan Basin** - J. Yao (PetroChina Research Institute of Expl. & Developm.)
09:50	Coffee break

ePoster: Lithology, Facies and Evolution of Clastic Depositional Systems

10:10	**Depositional Characteristics of Shallow Water Delta in Large Depression Lake Basin and Control of Reservoir Distribution** - Z. Bai (Exploration And Development Research Institute Of Daqing Oilfield Company Ltd)
10:30	**Biostratigraphy and Paleogeography of the Miocene-Oligocene Deposits, South-Eastern Edging of the Greater Caucasus** - M. Afandiyeva (Oil & Gas Institute)
10:50	**Sedimentary Stratigraphic and Alaeoenvironmental Evolution of the Northern Outer Shelf of East China Sea since MIS6** - S. Chen (Qingdao Institute Of Marine Geology)
11:10	**Automatic facies interpretation as a basis for the transition to digital sedimentology** - M. Tugarova (Gazpromneft Science and Technology Center)
11:30	Coffee break
12:45	Lunch

ePoster: Petrophysics – Coring, Core Descriptions & Interpretation

14:15	**Predict Formation Water Salinity of Ultra-Low Permeability Reservoirs with Complex Wettability Based on Adjacent Mudstone Information** - C. Feng (China University of Petroleum-Beijing at Karamay)
14:35	**Research on Lithology Identification Method of Unconventional Reservoir Based on Optimized KNN Algorithm** - C. Xu (China University Of Petroleum (beijing))
14:55	**CNN-based Logging Lithology Identification Technique and Its Application** - W. Xiong (BGP,CNPC)
15:15	**New parameter for estimating water saturation and permeability of carbonatite** - S. Chen (China University of Petroleum - Beijing)
15:35	Coffee break
15:55	**Permeability of Porous Limestones Under a Wide Range of in situ Conditions** - P. Baud (University of Strasbourg (EOST))
16:15	**Automated Carbonate Reservoir Pore and Fracture Classification by Multiscale Imaging and Deep Learning** - J. Klaver (MaP – Microstructure and Pores GmbH)
16:35	**2D digital image segmentation techniques to characterize the porosity of carbonate rocks in Brazilian pre-salt** - A. Gonzalez (North Fluminense State University (UENF))
16:55	**An intellectual system for fast and reliable automated core description development** - E. Baraboshkin (Digital Petroleum)
	A New Method for Predicting Oil Saturation of Tight Conglomerate Reservoirs via Nuclear Magnetic Resonance Logs - C. Feng (China University of Petroleum-Beijing at Karamay)

11:45 Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals - Room 1

Technical Programme

Thursday, 21 October | ePoster presentations

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EPOSTER G

ePoster: Production & Management - EOR/IOR I

08:30	**Effect of Dip Angle on Recovery Factor During Free Fall Gravity Drainage and Forced Gravity Drainage -** M. Hasanzadeh (Persian Gulf University)
08:50	**Direct Insight to the Effect of Gel Movement During High-Saline Waterflooding in Micromodel at High Temperature -** Z. Ghaffari (Sahand University Of Technology)
09:10	**Dynamic Investigation of Silicate Preformed Particle Gels (SPPGs) Using transparent fracture model (Hele-Shaw Cell) and Simulator -** A. Paprouschi (Sharif University of Technology)
09:30	**Effect of Wettability Alteration in Chemical Enhanced Imbibition Using Surfactants with Different IFT Magnitudes for Carbonates -** Z. Qi (Aramco Beijing Research Center)
09:50	Coffee break
10:10	**The Utility of HLD/NAC to Guide Surfactant Selection and Design -** A. Alsofi (Saudi Aramco)
10:30	**Material Balance Equation of Foamy Extra-Heavy Oil Reservoirs -** Z. Yang (Petrochina Research Institute Of Petroleum Exploration And Development)
10:50	**An Improved Residual Oil Evaluating Method Using Carbon/Oxygen Spectroscopy Logging in Lime-Bearing Shaly Sand Formation -** Q. Liang (School Of Geosiciences, China university of petroleum (East China))
11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals -** Room 1
12:45	Lunch

ePoster: Production & Management - EOR/IOR II

14:15	**Advantages and Pitfalls of Water Dumpflood in a Highly Faulted and Multi Layered Reservoirs -** N.A. Mohd Radzuan (Petronas)
14:35	**Experimental Evaluation of Enhanced Oil Recovery by pH-sensitive Microgels in Carbonate Formations -** S. Sadeghnejad (Tarbiat Modares University)
14:55	**Numerical Investigation of Impact of Three Phase Relative Permeability Hysteresis Models on Performance of WAG Process -** S. Tofigh (Amirkabir University Of Technology)
15:15	**Pore-Scale Investigation of Viscous Cross-Flow in an Oil-Free Matrix-Fracture System -** P. Abolhosseini (University of Tehran)
15:35	Coffee break
15:55	**Increasing Oil Recovery in Naturally-Fractured Carbonate Reservoirs Using Microemulsions -** I. Ismail (Hellenic Hydrocarbons Resource Management S.A.)
16:15	**Tuning of Peng-Robinson Equation of State for Simulation of Oil Compositional Change during EOR Processes -** M. Majidi (Heriot-Watt University)
16:35	**Applying the Synergistic Effect of Chemically Low Salinity Water Flooding Assisted Fines Migration in Coated Micromodel -** A. Maghsoudian (Petroleum University of Technology)
16:55	**What is the Benefits of Carbonated Water Injection in Heavy Oil Reservoirs: A Case Study -** M. Shokriafra (University of Manchester)

EPOSTER H

ePoster: Exploration - Case Studies

08:30	**A Enhanced Method Utilizing PGNAA for Evaluating Hydraulic Fracturing in Unconventional Reservoirs -** Q. Chen (China University of Petroleum)
08:50	**Application of 2W1H Seismic Data in Deep Reservoir Prediction -** J. Gui (PetroChina Research Institute of Expl. & Developm.)
09:10	**Study of Typical Strike-Slip Fault and Their Influence on Reservoir and Hydrocarbon Enrichment in Tazhong Area -** L. Bo (Tarim Oilfield)
09:30	**Improved Workflow for Identifying Fault Controlled Fractured-vuggy Body Sweets of Ultra Deep Tight Limestone -** X. Li (China University of Petroleum-Beijing)
09:50	Coffee break
10:10	**Research on joint identification of basement faults by Gravity, Magnetic and Seismic technologies in Sichuan Basin -** Y. Zhong (BGP, CNPC)
10:30	**A two-step method for prediction of fractured tight sandstone reservoir in northeast Sichuan Basin -** K. Qian (Petroleum Exploration and Production Research Institute,SINOPEC)
10:50	**Detection of seismic velocity traps with MT data -** W. Sun (Bgp Inc.,cnpc)
11:10	**Seismic Stratigraphy and Deep Structure of the Kribi Basin (Cameroon Atlantic Margin) -** M. Lionel (Université de Yaoundé I)
11:30	Coffee break
12:45	Lunch

ePoster: Play & Prospect Evaluation

14:15	**Manometric Method for Sorbed Gas Estimation in Organic-Rich Shales Considering Matrix Swelling: An Overview -** A. Michael (Cypriana Petroleum Technology, LLC)
14:35	**Triassic Play Analysis in the Northern Dutch Offshore -** L. Hanemaaijer (EBN)
14:55	**Sub-Thrust Exploration Plays in South Sumatra Basin, Indonesia. Case Study: Southwest Jirak Block -** A. Permana (Pertamina EP)
15:15	**Stratigraphic Features of Impregnated Sand within the Ratawi Shale and Their Hydrocarbon Prospectivity in Bahrah, Kuwait -** P.K. Nath (Kuwait Oil Company)
15:35	Coffee break
15:55	**Geological Equiprobable Multi-Models for Resources Assessment. Carson, Bonnition and Salar Basin, NL, Canada -** E. Le Guerroué (Beicip-Franlab)
16:15	**Frequency Analyzing Based Hydrocarbon Prospects Characterization of Palaeogene High Amplitude Seismic Anomalies in Bohai Oilfield -** X. Xie (Bohai Oilfield Research Institute, Tianjin Branch of CNOOC Ltd.)

EPOSTER I

ePoster: Time-Lapse Interpretation and Value

08:30	**Repeatability Analysis of Time-Lapse Vertical Seismic Profiling Data Acquired Using Distributed Acoustic Sensing: Harvey, South-West Hub -** S. Yavuz (Curtin University, Exploration Geophysics)
08:50	**4D Time-Lapse Full Waveform Inversion Case Study for SAGD Steam Chamber Imaging -** H. Feng (Cenovus Energy Inc.)
09:10	**Time-Lapse Monitoring of Variation of Pore Fluids Distribution and Reservoir Properties Using FWI in Foam-Assisted EOR -** H. Mikada (Kyoto University)
09:30	**Exploring Value in Pre-Stack Time-Shifts with Ekofisk PRM Data -** S. Izadian (Heriot-Watt University)
	Joint PP-PS Time-Lapse Difference Inversion Based on Improved Blocky Constraint - W. Tang (China University of Petroleum(Beijing))
09:50	Coffee break

ePoster: Maximising Value from Producing Fields

10:10	**New Look at Abandoned Gas Reservoir: Case Study Pannonian Basin -** A. Gogic (NTC NIS - Naftagas LLC Novi Sad)
10:30	**Water Flood Optimization Opportunity in PAD Well in Greater Burgan -** K. Al-Resheedi (Kuwait Oil Company)
10:50	**Experimental Study of the Interaction between Oil and Reservoir Rock on the Relative Permeability and Wettability -** M. Rajabi-Kochi (Amirkabir University of Technology)
11:10	**The Impact of Ultrasonic Waves on the Elimination of Asphaltene Precipitates from Porous Media -** H. Naderi (Research Institute of Petroleum Industry)
	Case Study on Optimizing Flare Gas Recovery System of FPSO through FGRC - D. Pandey (University of Petroleum & Energy Studies)
11:30	Coffee break
12:45	Lunch

ePoster: Geochemistry

14:15	**Insights into the Stable Isotope of the Coalbed Gas: A Neural Network Approach -** M. Asif (Indian Institute of Technology (ISM), Dhanbad)
14:35	**Silurian aged bitumen from Huy; Belgium's first and Western Europe's oldest petroleum system -** M. Arts (Universite de Liege)
14:55	**Mineralogy, Geochemistry and Hydrocarbon Potentiality of Eocene-Oligocene Black Shale Deposits of Beni Suef Area, Egypt -** Z. Abd-Allah (Beni-suef University)
15:15	**Combination of Inorganic and Organic Geochemistry to Study Mechanism of Carbon Isotope Anomalies of Natural Gas -** W. Han (Research Institute of Petroleum Exploration & Development, PetroChina)
15:35	Coffee break
15:55	**Chemically active elements trace hydrocarbon migration with a perspective of fluid-rock interaction -** H. Li (Petrochina Research Institute Of Expl. & Developm.)

Thursday, 21 October | ePoster presentations

This presentation is pre-recorded

EPOSTER J	
ePoster: Digitalization & AI: Inversion	
08:30	**Deep Learning for Anisotropy Parameters Estimation in Oil/Gas Fractured Reservoirs -** G. Sabinin (Lomonosov Moscow State University)
08:50	**Shale Anisotropic Parameters Predicting Based on Deep Neural Networks -** F. Wu (China University of Petroleum,Beijing)
09:10	**Data-driven prestack simultaneous inversion for impedance and gas saturation -** W. Sang (China University Of Petroleum(Beijing))
09:30	**A deep learning approach for joint inversion of DC Resistivity and MT data -** A.P. Singh (IIT (ISM), Dhanbad)
09:50	Coffee break
10:10	**Inversion of Magnetic Anomaly using Machine Learning Regression Techniques along with PSO -** A. Kumar (Indian Institute Of Technology (indian School Of Mines) Dhanbad)
10:30	**Seismic inversion based on 2D-CNN and multi-task learning -** Q. Wang (Tsinghua University)
10:50	**High-Performance Deep Learning Models for Seismic Noise Detection and Quality Control in the Processing Workflow -** P. Webster (Shell)
11:30	Coffee break
11:45	**Forum Session 3: Great Career Challenge – the changing education and opportunities for tomorrow's energy professionals -** Room 1
12:45	Lunch
ePoster: Digitalization & AI: Interpolation and Interpretation	
14:15	**Propagation of Well-Log Data Imputation Uncertainties Towards the Interpolated 3D-Petrophysical Map Using Epistemic Kernels and Kriging -** J.L. Guevara Diaz (Ibm Research)
14:35	**Seismic Interpolation Based on the Random Forest Method -** K. Xu (Sinopec Petroleum E&p Research Institute)
14:55	**Seismic Data Denoising and Interpolation Using Deep Learning -** R. Zhang (Tsinghua University)
15:15	**Consistent kernel size selection for seismic interpolation with an improved U-net -** D. Han (Tongji University)
15:35	Coffee break
15:55	**Segmentation of Digital Rock Images Guided by Edge Feature Using Deep Learning -** Z. Hou (China University of Petroleum (East China))
16:15	**Deterministic Smart Tools to Predict Recovery Factor Performance of Saline Water Injection in Carbonated Reservoirs -** A. Izadpanahi (Persian gulf university)
16:35	**Artificial Intelligence Assisted Horizon Interpretation -** J. Lowell (Geoteric)

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