Society of Petroleum Engineers

Host Organisation: SOCAR

SPE Virtual Annual Caspian Technical Conference

Adapting to New Realities — Maximising Efficiencies and Productivity

5–7 October 2021 | Online

www.spe.org/go/21ctc

Conference Preview

Free registration – thanks to the generosity of the event sponsors.

Dear Colleagues,

On behalf of the Executive and Programme Committees, we are pleased to welcome you to the eighth **SPE Annual Caspian Technical Conference (CTC)**. This year, due to the continuing uncertainties surrounding the global pandemic, we will be transitioning to a virtual format. Despite this change, the objectives for holding the conference will continue to be about bringing together oil and gas professionals in Azerbaijan and the Caspian region to discuss the latest technical developments and to promote the region as a hub for technical innovation and expertise in the oil and gas sector.

The oil and gas industry has experienced highs and lows in recent times but the challenges it has faced over the last year have been unprecedented. The COVID-19 pandemic has impacted demand and changed working practices and the transition to a lower carbon environment has placed an increased focus on the application and viability of new technologies.

On a regional level, with the technical challenges of extracting oil and gas in the Caspian and the increasing maturity of many fields, the industry has sought ways to adapt to these challenges and improve its performance. The priority is maximising productivity and efficiency to reduce exploration costs, improve oil recovery and to identify and exploit more complex reserves. Central to this effort will be improving competitiveness, working with fewer resources and sustaining efficiencies post pandemic.

Delivering long term and sustained value through digital technologies and initiatives are also key to the discussion as is attracting and retaining talent particularly against a backdrop of changes in demography and perceptions of the industry.

As with the 2020 Caspian Technical Conference, which successfully ran as a virtual event, the conference will include the full 2021 technical programme and all panel sessions as well as the other features that were planned for the in-person event including the Regional Student Development Summit. The three plenary panel topics include: *Unlocking Value through New Technology and Digitalisation*; *Attracting and Retaining Talent in a Challenging Market* and *Maximising Efficiencies in Today's Evolving Landscape*.

There will also be a unique opportunity to engage with industry leaders and E&P experts from the region and across the globe through our virtual platform's advanced networking capabilities.

We look forward to welcoming you in October.

Kindest Regards,

Khoshbakht Yusifzade,
First Vice-President,
SOCAR

Regis Agut,
Managing Director
and Country Chair,
TotalEnergies
Azerbaijan

Roshni Moosai,
Vice President
Subsurface,
Azerbaijan, Georgia
and Turkey, **BP**

Meet the Executive Committee Co-Chairs

Khoshbakht Yusifzadeh Baghi Oglu

First Vice President of State Oil Company of Azerbaijan Republic (SOCAR) Academician of the Azerbaijan National Academy of Sciences (ANAS)

Professor Khoshbakht Yusifzadeh Baghi Oglu graduated from the Azerbaijan Industrial Institute (now Azerbaijan State Oil and Industrial University) with a degree in Geology and Exploration of Petroleum Reservoirs in 1952. He started his career in the Baku branch of USSR Oil Ministry's "State Special Oil Project" Department, then in the "Azerdenizneft" (Azerbaijan Offshore Oil) Production Union and "Azneft" Onshore Oil Production Union In 1954 he was appointed as a Senior Geologist at the first field of "Gurgan Oil" Oil Fields Department (now "Oil Rocks").

In 1970-1992 he worked as a Deputy Director/Senior Geologist at the "Khazardenizneft" (Caspian Offshore Oil) Production Union, "Khazardenizneftgaz" (Caspian Offshore Oil and Gas) Industrial Union and "Khazardenizneftgaz" (Caspian Offshore Oil and Gas) Production Union. In 1992-1994 he was first vice-president of the "Azerineft" State Concern and Advisor to the President of SOCAR. In 1994-2004 he became Vice President of SOCAR for Geology, Geophysics and Reservoir Development. From 2004 he took on the role of First Vice President of SOCAR.

In 2005 he was awarded academic title of Professor and in 2007 was elected academician of the ANAS. He is an author of more than 200 scientific works, including 18 monographs and 8 inventions. He has been awarded for his contribution in the development of the petroleum sector, which includes the "Red Banner of Labor" (1963 and 1976), "Badge of Honor" (1971), the order of "Istiglal" (2000), "Shohrat" (2004), "Sharaf" (2010) and "Order Labor of I degree" (2017) of independent Azerbaijan, the order of "Friendship" (2011) of the Socialist Republic of Vietnam, and the Honorary Diploma of the President of the Azerbaijan Republic (2015).

In 2010, with a group of specialists from SOCAR he was awarded the UNESCO medal for his contribution in the field of development and application of nanotechnology in oil production. In 2016 a special scholarship was named after him in the geology and exploration department at the Azerbaijan State Oil and Industrial University.

Roshni Moosai

Vice president subsurface, Azerbaijan, Georgia and Turkey region and Russia BP

Roshni has been with BP for 18 years and has held several leadership roles in reservoir development function. She has a huge expertise in reservoir management including existing field programme development, life-of-field depletion planning, reservoir uncertainty and mitigation generation, opportunity progression as well as resource and reserve estimation. Roshni holds a bachelor's degree in chemical and process engineering and a master's degree in petroleum engineering.

Regis Agut

Managing Director of TotalEnergies Azerbaijan

Regis Agut is the Managing Director and Country Chair of TotalEnergies Azerbaijan since December of 2019.

Prior to this role, he was Asset Director of TOTAL E&P do Brazil.

He began his career with TOTAL in 1998 as a reservoir engineer. He has held several technical and leadership positions in Geosciences, Exploration and Development Engineering with a large international experience in several TOTAL affiliates: United Kingdom, Argentina, Syria, Gabon and Colombia.

Regis Agut holds master's degrees in applied mathematics (ENSEEIHT, Toulouse, France) and Petroleum Engineering Research diploma from Stanford University, California, USA.

Event focus

SPE brings you the 8th edition of the Caspian Technical Conference with the central theme of *Adapting to New Realities – Maximising Efficiencies and Productivity.*

Energy experts from the Caspian oil and gas industry along with international technical experts will analyse and discuss the current climate and look at the latest technologies, new developments and first-hand insights in upstream oil and gas.

Who should attend?

- Oil and gas professionals, experts, and managers
- Service, supply, and consulting companies
- Government regulators
- Health, safety, and environmental professionals and representatives
- Local, national, and international governmental organisations
- Non-governmental organisations
- Professional societies
- Universities, research centres, and institutes

Who will you meet? (Based on 2019 CTC attendees)

Organisation Type

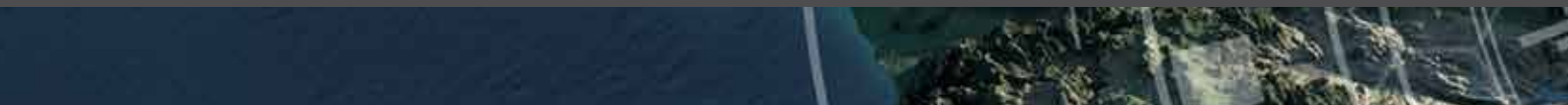
NOCs	29%
IOCs	23%
Service Companies	19%
Academia	15%
Other	8%
Government	6%

> SOCAR has been heavily involved with this unique and inclusive event where the whole Azeri upstream technical oil & gas community can meet, exchange technological ideas with an ever growing international list of attendees.
>
> Khoshbakht Yusifzade, **First Vice President** | **SOCAR**

Registration is now open. Visit **www.spe.org/go/21ctc** to register your place.

Disciplines

- Multi-disciplinary
- Drilling
- Management
- Health, Safety, Environment, and Sustainability
- Completions
- Data Science and Engineering Analytics
- Projects Facilities and Construction
- Production and Operations
- Reservoir



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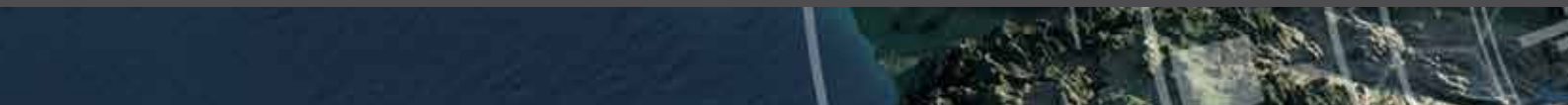
Virtual Conference Schedule

(please note all sessions and timings are subject to change. All times given are AZT Time (UTC +4).

	STREAM 1	STREAM 2
Tuesday, 5 October 2021		
1000 – 1030	**Conference Opening Ceremony**	
1030 – 1200	**Opening Keynote Panel Session: Maximising efficiencies in today's evolving landscape**	
1200 – 1230	Online Networking	
1230 – 1400	**Technical Session 1:** Management, HSE and Projects	**Technical Session 2:** Production & Operations
1400 – 1420	Online Networking	
1420 – 1550	**Technical Session 3:** Drilling and Completions I	**Technical Session 4:** Field Development
1550 – 1720	**Knowledge Sharing ePosters** – *available on-demand throughout the event* **and Online Networking**	
Wednesday, 6 October 2021		
0940 – 1115	**Keynote Panel Session: Unlocking value through new technology and digitalisation**	
1115 – 1145	Online Networking	
1145 – 1315	**Technical Session 5:** Drilling and Completions II	**Technical Session 6:** Geoscience I
1315 – 1415	Online Networking	
1415 – 1545	**Technical Session 7:** Geoscience II	**Technical Session 8:** Data Science
1545 – 1700	**Knowledge Sharing ePosters** – *available on-demand throughout the event* **and Online Networking**	
Thursday, 7 October 2021		
0930 – 1100	**Keynote Panel Session: Attracting and retaining talent in a challenging market**	
1100 – 1130	Online Networking	
1130 – 1300	**Technical Session 9:** Reservoir Simulation	**Technical Session 10:** Drilling and Completions III
1300 – 1400	**Online Networking**	
1400 – 1530	**Technical Session 11:** Reservoir Monitoring	**Technical Session 12:** Formation Evaluation
1530 – 1730	**Knowledge Sharing ePosters** – *available on-demand throughout the event* **and Online Networking**	
Close of conference		

Sessions
- Opening / Plenary Session
- Panel Session
- Special Session

Technical Sessions
- Multi Discipline
- Reservoir Description & Dynamics
- Drilling and Completions
- Completions
- Management & Information
- Facilities Engineerings and Projects
- Production and Operations



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Roshni Moosai, **BP**
Regis Agut, **TotalEnergies**

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Elchin Bagirov, **SOCAR**
Carlo Betrame, **Baker Hughes**
Elizaveta Bydanova, **French-Azerbaijani University**
Ramiz Hasanov, **Azerbaijan State Oil Academy**
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Vyacheslav Sabaev, **DeGolyer & MacNaughton**
Diana Shigapova, **Roxar**
Colton Thomas, **Halliburton**
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Chair

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Khusain Oryngaliev, **TCO**
Nurlan Seilov, **NCOC**
Baghir Suleymanov, **Oil and Gas Scientific Research Project Institute**
Mikhail Varfolomeev, **Kazan Federal University**
Aytan Zeynalli, **SOCAR AQS**

Conference Programme (as of July 2021)

Thursday, 5 October 2021

1000 – 1030 **Conference Opening Ceremony**

10.30-12.00 Opening Keynote Panel Session: Maximising Efficiencies in Today's Evolving Landscape

Increased oil price volatility and the effects of the pandemic have emphasised the importance of improving efficiencies within the oil and gas industry. During this period of rapid change, these new challenges have become the drivers of improved performance within the industry as it reviews and enhances operational processes in order to reduce costs, add value and boost financial performance. Prioritising competitiveness and adopting new working models in the post-COVID era all have their part to play in the new landscape of business efficiency. This panel will bring together key industry stakeholders in the Caspian region to discuss these challenges and explore viable solutions

1200 – 1230 **Online Networking and ePosters**

1230-1400 Technical Session 1: Management, HSE and Projects

Session Chairs: Matteo Ce, **Equinor** and Aytan Zeynalli, **SOCAR AQS**

This session will provide advice on how to address business continuity during a pandemic, including aspects related to HSE.
In addition to this we will also see a separate example of how to track productivity in a specific project phase.

Time	Paper #	Presentation
1230	SPE-207050	**COVID-19 Health Management and Business Continuity,** Sayamak Aminzada, SOCAR AQS
1300	SPE-207051	**Response, Retune, Revive: The Duty of Producing Never Cease in Pandemic,** Zhehao Wang, Saudi Aramco
1330	TBC	
Alternate		
	SPE-207053	**Emerging Patterns of Learning in Oil and Gas Industry,** Farid Hajiagabayli, SOCAR AQS
	SPE-207054	**To Increase the Efficiency of Low Pressure Gas Transportation in the Gunashli Energy Sector** Mansur Elkhan Shahlarli, SOCAR
	SPE-207055	**The UNFC Concept and the Possibility of Its Application in Azerbaijan,** Narmina Garayeva, Baku Higher Oil School
	SPE-207056	**Transition to New Reserves Reporting System in Kazakhstan: Challenges and Benefits** Adil Rashidenovich Mukanov, PetroKazakhstan
	SPE-207057	**Utilisation of Abandoned Wells in Geothermal Energy,** Adilzhan Kozhamurat, North Caspian Operating Company

Conference Programme

1230-1400 Technical Session 2: Production and Operations

Session Chairs: Bagilya Karsybayeva, **NCOC** and Khusain Oryngaliev, **TCO**

Production and operations activities are the core of the oil and gas business, therefore, there is a continuous process of searching for more economical and efficient field development. This session will cover a wide range of topics starting from well surveillance with a new generation of array passive acoustic technology, a real case of application of new tracers for water injection and thermal EOR.

Time	Paper #	Presentation
1230	SPE-207058	**Diagnostic Results of Current Distribution Injected Water Flow the in the Productive Formation for "Neft Dashlary" Oilfield,** Khidir M. Ibragimov, Oil Gas Scientific Research Project Institute, SOCAR
1300	SPE-207059	**Designing the Thermal Enhanced Oil Recovery as a Key Technology of High Viscosity Oil Production,** Мухтар Шакенулы Шакен, Atyrau branch of KMG Engineering LLP
1330	SPE-207060	**Holistic Approach in Integrating Passive Acoustic Logs with Static and Dynamic Data Improved Wells Integrity Understanding at Field Scale,** Fuad Aziz Atakishiyev, BP
Alternate		
	SPE-207061	**Application of Hybrid Biosystems for Stimulation of Oil Production,** Baghir A Suleimanov, Oil Gas Scientific Research Project Institute, SOCAR
	SPE-207062	**Concentric Coiled Tubing, Proven Sand Cleanout Technology for Sub-hydrostatic Wells in Caspian Sea,** Emil Hasanov, Baker Hughes
	SPE-207063	**Application of Nonstationary Thermoactive Polymer Flooding in Offshore Fields,** Baghir A Suleimanov, Oil Gas Scientific Research Project Institute, SOCAR
	SPE-207064	**The Use of Tracer Based Dynamic Production Profiling in Estimating Hydrocarbon Recovery in Directional Wells,** Pavel Myakishev, Lukoil Western Siberia LLC, Langepasneftegaz

1400 – 1420	Online Networking and ePosters

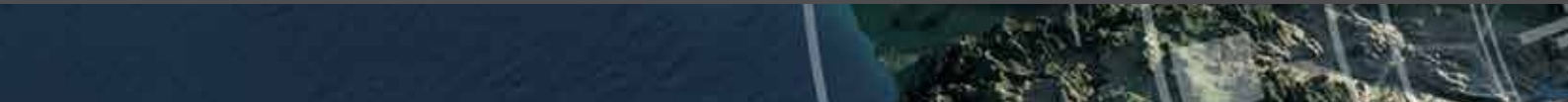
Conference Programme

1420-1550 Technical Session 3: Drilling and Completion I

Session Chairs: Subhan Bashirli, **Schlumberger** and Reza Majidi, **BP**

This session covers variety of challenges of drilling and completion of wells in Caspian basin and other regions, including well construction in complex environment such as narrow pressure margins and severely depleted formations with main focus on performance improvement.

Time	Paper #	Presentation
1420	SPE-207006	**Challenges of Drilling Deep Wells in a Complex Overburden with Severe Depletion and Experiences from Caspian Sea,** Anwar Juma Al Saadi, Dragon Oil
1450	SPE-207007	**Mitigating Well Construction Challenges of a Caspian Deepwater Exploratory Well: A Cementing Perspective,** Irfan Kurawle, Schlumberger
1520		**TBC**
Alternate		
	SPE-207009	**The implementation of Laser Shaft Alignment System on Rotating Machines in the Bulla Field, Platform 6,** Emil Asgarov, SOCAR AQS
	SPE-207010	**Continuous Improvement in Well Delivery,** Elshan Ismayilov, SOCAR AQS
	SPE-207011	**Healthy Caspian Experience Helps Boost Drilling Performance in Turkey's Onshore UGS Project,** Narmina Rufat Mammadbayli, SOCAR AQS



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Conference Programme

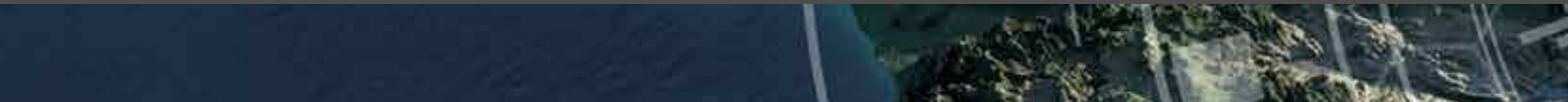
1420-1550 Technical Session 4: Field Development

Session Chairs: Mikhail Varfolomeev, **Kazan Federal University** and Shahriyar Alkhasli, **Khazar University**

Efficient field development strategies become the key point in production of hydrocarbons due to growth of mature oilfields and shift to hard-to-recovery resources of oil and gas. Novel technologies and field trials will help to find the best way to develop oil and gas reservoirs with complex conditions. This session will be devoted to a wide range of important topics including efficiency analysis of waterflooding for complex reservoirs, new enhanced oil recovery techniques and workflows for full cycle development of tight and clastic deposits with integration of several industries. Presentations will include experimental and field studies as well as simulation results for upscaling.

Time	Paper #	Presentation
1420	SPE- 207024	**Propagation of Nano Sized CDG Deep Into Porous Media,** Elchin F. Veliyev, Oil Gas Scientific Research Project Institute, SOCAR
1450	SPE- 207025	**Adjusting Waterflood in a Geologically Complex High-permeable Field Using Multiwell Retrospective Testing Findings,** Batyrzhan Shylanbayev, KazGerMunai JV LLP
1520	SPE- 207026	**An Integrated Approach to Evaluate Achimov's Deposits to Pilot Miscible Gas Injection (MGI) Technology,** Pavel Razinov, Gazpromneft Science & Technology Center
Alternate		
	SPE- 207027	**How to Find the Reservoir Boundaries? Integrated Application of Seismic Attribute Analysis and Welltest on the Miocene Sediments of White Tiger Field, Cuu Long Basin, Vietnam,** Vasif Kurbanov, Vniineft JSC (Zarubezhneft JSC)
	SPE- 207028	**Sweep Improvement Options for Highly Heterogeneous Reservoirs with High Temperature and Ultra-high Salinity: A Case study in Tarim Basin, China,** Chengdong Yuan, Southwest Petroleum University
	SPE- 207029	**Integration of Thermodynamics in Ensemble Modeling for Gas Development Project,** Rovshan Mollayev, BP

1550 – 1720	Online Networking and ePosters



Conference Programme

Wednesday, 6 October 2021

0940-1115 Keynote Panel Session: Unlocking Value through New Technology and Digitalisation

New technology is fundamentally transforming how the oil and gas industry operates and is ushering in a period of change and innovation. Digital technologies, data science, artificial intelligence, autonomous systems are among some of the latest initiatives driving improvements in efficiency. How can the oil and gas industry leverage the latest digital technology and what changes in approach are required by companies in their successful adoption? The panel will share their experiences of digital technology, how it is currently being deployed to improve productivity and how future developments will deliver sustained value.

1115 – 1145	Online Networking and ePosters

1145-1315 Technical Session 5: Drilling and Completion II

Session Chairs: Emmanuel Ellenberg, **Schlumberger** and Teyrun Gahramanov, **Halliburton**

This session covers a wide spectrum of industry challenges all related to well integrity. The subjects that will be discussed range from the recent enhanced ultrasonic technology used to improve cement sheath evaluation, to CO2 injection wells consideration, through novel fluid design utilized for mud-removal spacer while cementing.

Time	Paper #	Presentation
1145	SPE-207012	**Case Study in Well integrity Assurance with Enhanced Ultrasonic Technology for Highly Attenuative Environment,** Tahmina Mirzayeva, Halliburton
1215	SPE-207013	**Mud-Removal Efficiency Boost by Engineered Scrubbing Spacer in Cementing Operations at Caspian Sea,** Amanmammet Bugrayev, Schlumberger
1245	SPE-207014	**Overcoming CO_2 Injector Well Design and Completion Challenges in a Carbonate Reservoir for World's First Offshore Carbon Capture Storage (CCS) SE Asia Project,** Mahesh Shrichand Picha, PETRONAS
Alternate		
	SPE-207015	**Assurance of Long-term Well Integrity in Highly Corrosive Downhole Environment,** Mohammad Arif Khattak, Schlumberger
	SPE-207016	**Heavy Weight Cement System for Corrosive Environment: Preventing Strength Retrogression and H2S Corrosion,** Ilshat Akhmetzianov, Schlumberger
	SPE-207017	**Mitigating Lost Circulation Across Permeable Formations of the Gunashli Field in the Caspian Sea with a New Tailored Spacer System,** Tom Farrow, Halliburton

Conference Programme

1145-1315 Technical Session 6: Geoscience I

Session Chairs: Amanbay Chalak, **TCO** and Marat Nauryzgaliyev, **Almex Plus**

Despite the global rhetoric to abandon investments into new exploration projects, the world demand in fossil fuels is forecast to remain high for several decades to come while transitioning into alternative clean energy sources. To make new discoveries, we require sophisticated techniques such as basin modeling, integrating the regional geological knowledge and data. This session will exhibit studies in Azerbaijan & Kazakhstan sedimentary basins that will shed light on untapped potential of these regions.

Time	Paper #	Presentation
1145	SPE-207036	**Petroleum Systems Modeling and Hydrocarbon Migration and Oil Potential Assessment, of the Southern Side of Pre-Caspian Basin, Kazakhstan,** Dilyara Urmanova, Satbayev University
1215	SPE-207037	**Application of Biomarkers and Oil Fingerprinting for Genetic Classification of Oil Families and Prediction of Petroleum Migration Pathways of Aryskum Downfold of South-Torgay Depression** Yessimkhan Sherekhanovich Seitkhaziyev, KMG Engineering
1245	SPE-207038	**Prospect Evaluation Based on Integrated Petroleum System Analysis: Block E Case Study, South-Eastern Edge of Precaspian Basin (Kazakhstan),** Zhanserkeyeva Ainura, Satbayev University
Alternate		
	SPE-207039	**Investigation of the Dependence Between the Uncertainties of the Volume of Hydrocarbon Reserves of Productive Series in the South Caspian Basin with Geological and Technical Criteria,** Elvin Ahmadov, SOCAR, Azneft PU
	SPE-207040	**Tectonic Criteria of Oil and GAS Potential at the Transitional Part of the "Susha-sea" Along the Western Coast of the South Caspian Depression,** Baylar Aslanov, SOCAR, NIPI "Neftegaz"
	SPE-207041	**Hydrocarbon Generative Properties and Maturity of Upper Cretaceous and Lower Eocene Sediments in the Middle Kura Depression,** Shahin Akhundov, SOCAR
	SPE-207042	**New Structural-Tectonic Model for an Old Field in the Greater Caucasus,** Tatyana Alexandrovna Yurkina, Baker Hughes

1315-1415	Online networking and ePosters

Conference Programme

1415-1545 Technical Session 7: Geoscience II

Session Chairs: Assem Bibolova, **TCO** and Joanna McKidd, **BP**

During the exploration, development and production phases, interpretation of subsurface data is very important for analysis of petroleum systems, characterization of reservoirs and assessment of subsurface uncertainties. This session will focus on integrated evaluation of various subsurface data to enhance understanding of hydrocarbon reservoirs, optimize field development and maximize recovery.

Time	Paper #	Presentation
1415	SPE-207043	**The State of Stress in Azeri-Chirag-Gunashli Anticline Structure, South Caspian, Azerbaijan,** Reza Majidi, BP
1445	SPE-207044	**Organic Geochemical Characteristics of Rock Samples from Primorsk-Emba Region, Precaspian Basin Kazakhstan,** Tolganay Jarassova, Satbayev University
1515	SPE-207045	**The Influence of Lithofacies Features of a Deposit on the Efficiency of Reserves Recovery,** Shamil Hanifovich Sultanov, НЦМУ УГНТУ
Alternate		
	SPE-207046	**Clarification of the Geological Structure of the Cilov Field and Determination of the Speard Boundary of QA and QaLD Horizons,** Sabuhi Vaqif Kerimov, SOCAR Oil Gas Scientific Research Project Institute
	SPE-207047	**Seismic Facies Analysis of Lower Productive Series of Gurgan-Deniz Field in South Caspian Basin with the Aid of Seismic Attributes,** Ulvi Zamanbayov, SOCAR
	SPE-207048	**Application of Principal Component Analysis Biplots to Reservoir Characterization and Classification for Low Permeability Carbonate Reservoirs in the Middle East,** Liang Sun, PetroChina Research Institute of Petroleum Exploration & Development
	SPE-207049	**Influence of Secondary Alterations on the Structure of the Pore Space of the Upper Permian Carbonate Deposits of the Northern Side Zone of the Caspian Basin,** Amir Rustamovich Ayupov, Nostrum Oil and Gas

Conference Programme

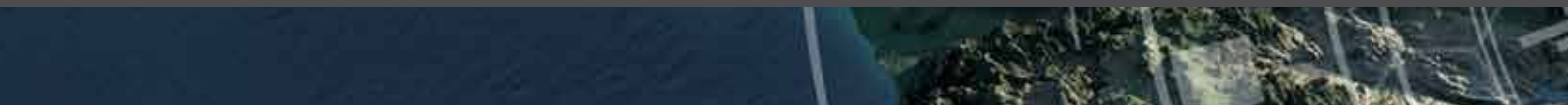
1415-1545 Technical Session 8: Data Science

Session Chairs: Akgun Kilic, **TotalEnergies** and Izat Shahsenov, **Khazar University**

The 'real-time pandemic' related challenges and threats to the oil and gas industry highlighted again the importance of communication, digitalisation, data management, machine learning and remote automated digital rooms for the drilling and field operations. Digital solutions and data science are getting more crucial to optimize the interfaces between machines and different disciplines with potentially providing more space for improvement and invention initiatives. This session aims to help enlighten the dimmed and uncovered digital, data, and real-time solutions in your respective areas while potentially providing quick gains for your daily business decisions.

Time	Paper #	Presentation
1415	SPE-207000	**Real-time Prediction for Sonic Slowness Logs from Surface Drilling Data Using Machine Learning Techniques,** Vagif Suleymanov, King Fahd University of Petroleum and Minerals
1445	SPE-207001	**Gas Export Volumes Prediction Using Machine-learning Techniques,** Abdulmalik Abdulmalik, KMG Karachaganak
1515	SPE-207002	**Expand Excellence: Business Intelligence Tools for Drilling Data Analysis as Enhanced Efficiency Approach,** Farit Rakhmangulov, Halliburton
Alternate		
	SPE-207003	**Well Performance Monitoring Using Management by Exception Rules and Alerts,** Maruan Nadirov, Tengizchevroil
	SPE-207004	**The Use of Neural Network Technologies in Prediction the Reservoir Properties of Unconsolidated Reservoir Rocks of Shallow Bitumen Deposits,** Marat Validov, Kazan Federal University
	SPE-207005	**Integration of Blockchain-based Technology to Improve Drilling and Well Construction Automation,** Pavel Kashirskiy, The Drilling DAO

1545-1700	Online networking and ePosters



Conference Programme

Thursday, 7 October 2021

0930-1100 Keynote Panel Session: Attracting and retaining talent in a challenging market

Shifts in the nature of the oil and gas industry have impacted the relationship between the industry and its current and future workforce. The lower carbon agenda and recent low oil prices have changed perceptions of the industry as a long term career option among the younger generation offering new opportunities for them to help change the energy mix and the goal of a net zero carbon future while the ever increasing application of new digital technology has meant the need for upskilling and knowledge transfer has never been more acute. Responding to the challenges of the pandemic has fundamentally altered working practices. This panel will explore how the industry can attract, develop and retain talent and how the capabilities of both a new generation and current oil and gas professionals can be mobilised in the pursuit of a high performance workforce.

1100-1130	Online networking and ePosters

1130-1300 Technical Session 9: Reservoir Simulation

Session Chairs: Samat Kabdenov, **TCO** and Daud Machukaev, **EMERSON**

This session will focus on new and existing workflows and methodologies to enhance reservoir understanding, improve decision making, and optimise field development. Case studies will be presented covering a range of approaches and applications applied in the Caspian region leading to improved reservoir characterisation and performance prediction, efficient integration of the multiple reservoir models for combined field development, and timely and informed investment decisions supported by systematic approach for risk framing and assessment.

Time	Paper #	Presentation
1130	SPE-207071	**Uncertainty and Risk Assessment Using Ensemble Modeling for Major Development Decision,** Murad Asgarov, BP
1200	SPE-207072	**Understanding Gas Breakthrough in Karachaganak Gas Condensate Field,** Abdulmalik Ibragimov, KMG Karachaganak
1230	TBC	
Alternate		
	SPE-207074	**A New Simulation Layer Optimization and Permeability Upscaling Method for Preserving Critical Reservoir Heterogeneity,** Dachang Li, North Caspian Operating Company N.V.
	SPE-207075	**Objective Function (OF) as a Novel Approach in Qualitative Analysis of History Matched Reservoir 3D Models: Case Study from Karachaganak Field,** Daniyar Ybray, Agip Karachaganak
	SPE-207076	**A Tool and Mathematical Model for Estimation of Wells Initial Water-cut and Residual Oil Reserves on Large-sized Oil Fields,** Anar Sharifov, Gazprom Neft Science and Technology Center

Conference Programme

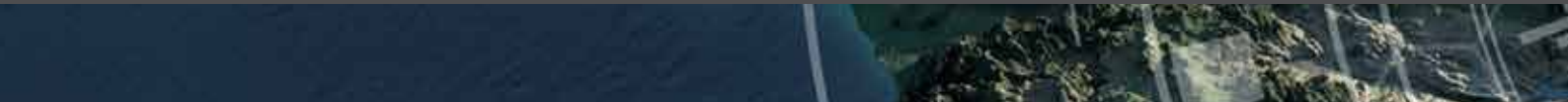
1130-1300 Technical Session 10: Drilling and Completion III

Session Chairs: Reza Majidi, **BP**

This session covers a wide range of topics varying from zonal isolation, coiled tubing for hydraulic fracturing, the application of robotic for horizontal wells, ERD drilling and wellbore strengthening.

Time	Paper #	Presentation
1130	SPE-207018	**New Horizons of Well Bonding: Cement Expansion in Absence of Water Access,** Elizaveta Bakhareva, Schlumberger
1200	SPE-207019	**Optimised Coiled Tubing Approach in Offshore Multi -Stage Hydraulic Fracturing Project,** Khalid Rahimov, Baker Hughes
1230	SPE-207020	**Eline Deployed Robotics and Stimulation Workflow for Pilot Horizontal Well,** Campbell Kinnear, Tengizchevroil
Alternate		
	SPE-207022	**Challenges of Upper and Intermediate Completion Design and Installation in Shallow ERD Wells Through the Real Case Study,** Artur Abalian, Repsol
	SPE-207023	**A Fast Method of Selecting Offshore Oil Well Candidates for Multi Zone Cased Hole Frac Pack or Open Hole Completions for CNPC-Dagang Zhaodong Mature Oilfield: Case Study,** Heqiang Wang, Dagang Zhaodong Oil Company of PetroChina

1300-1400	Online networking and ePosters



Conference Programme

1400-1530 Technical Session 11: Reservoir Monitoring

Session Chairs: Artem Galimzyanov, **RESMAN** and Sevinj Gasimova, **SOCAR AQS**

Efficient reservoir surveillance is key in taking important reservoir management decisions. The monitoring is carried out by data collection and analysis of the different parameters of well production and formation in order to identify and rectify deviations and also optimise the reservoir performance. This session will focus on how different monitoring techniques can be used to improve reservoir characterisation and will include case studies that demonstrate how reservoir information translates into better management of oil and gas fields.

Time	Paper #	Presentation
1400	SPE-207065	**Offshore Caspian Sea Exploration Well Monitoring Using Inflow Tracer Technology,** Orkhan Heydarov, JOCAP
1430	SPE-207066	**Nano Composite Polymer Composition for Water Shutoff Treatment at High Formation Temperature,** Alekper B. Suleymanov, Umid Babek Operating Company (UBOC)
1500	SPE-207067	**Vertical Fracture Monitoring by Multi-Rate Through-Barrier Diagnostics,** Doszhan Yeleussinov, Total EP
Alternate		
	SPE-207069	**Application of Autonomous Inflow Control Valve (AICV) in Increasing The Field Recovery in One of The Matured Fields in Oman: Case Study,** Tejas Kalyani, InflowControl AS
	SPE-207070	**Field-Proven Well Surveillance Techniques Designed for an Early Well Scaling Diagnosis and Timely Well Performance Reinstatement: Case Studies from the Kashagan Field,** Aktoty Kauzhanova, North Caspian Operating Company (NCOC)

Conference Programme

1400-1530 Technical Session 12: Formation Evaluation

Session Chair: Joanna McKidd, **BP** and Elshan Rzayev, **BP**

Formation evaluation is a key element in successful well delivery. This session will look into a variety of data acquisition tools which allow assessment of the uncertainties associated with the subsurface. The presentations will focus on the use of new and existing technology which underpin formation evaluation through a range of measurements and analytical models.

Time	Paper #	Presentation
1400	SPE-207030	**A Workflow to Derive Rock Mechanics Correlations and Stress Profile by the Integration of Dynamic and Static Formation Evaluation Data,** Ammar Qatari, Saudi Aramco
1430	SPE-207031	**Exploration and Formation Testing of Low Permeability Clastic Reservoir in Hot Slim-diameter Open-hole Well,** Muratbek Zhabagenov, Schlumberger
1500	SPE-207032	**Advanced Gases-while-drilling Analysis Based on New Generation Gas Analyzer System Trial,** Marat Sargunanov, Tengizchevroil
Alternate		
	SPE-207033	**Expanding the Capabilities of Modern Wireline Formation Testers for Understanding the Structure of Tight and Fractured Suprasalt Carbonate Field in West Kazakhstan,** Vladislav Blinov, Schlumberger
	SPE-207034	**Combining Usage of Different Geosteering Methods and Vendor Independent Bed Boundary Mapping in Complex Geological Environment on a Real-life Example from West Kazakhstan,** Tejas Kalyani, Damir Skorokhodov, Rogii
	SPE-207035	**Combined Application of Deep Boundary Detection Tool, Multilayer Data Inversion and 3D Visualization of Seismic Data in Real-Time for Geosteering on a Field in the Russian Federation,** Chingis Oshakbayev, Baker Hughes

1530-1730	**Online networking and ePosters**
	Close of Conference

Student Development Summit

The SPE Virtual Regional Student Development Summit, will once again be held in conjunction with the Caspian Technical Conference.

Selected students from Russian and Caspian Universities will convene virtually for two and a half full days of technical lectures, debates, competitions, special expert sessions, intellectual games and group projects.

As a separate SPE Event Summit , we provide students with the opportunity to collaborate with experts, apply their knowledge and skills through trainings and projects, and extend their professional network.

Further details to follow.

Host Organisation

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If you have any questions or would like to participate, please contact Yaroslava Orlova yorlova@spe.org

General Information

To register please visit the SPE events page at www.spe.org/go/21ctc

Posters

A variety of poster presentations will be available to view on-demand throughout the conference. We would encourage all attendees to take a moment during the session breaks to view these posters covering a range of related subjects.

Conference Registration includes access to:

- **Opening Session**, **Plenary** and **Technical session presentations** including **live Q&A** with the technical authors
- **The interactive Exhibition Area**
- **e-Poster presentations including Q&A with the technical authors**
- **'On-Demand' content** – gain access to all technical and e-Poster presentations up to 30 days after the event
- **Enhanced networking opportunities** including an AI match-making tool to align attendees directly with their interest area
- **Conference Proceedings** – one copy of the digital proceedings will be provided for all registrants (excluding students)
- **Audience polling** and **surveys**

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As a digital event, attendees and sponsors can join the conference from anywhere in the world. As the event will be free to attend, the new format will give sponsors access to an even wider audience of targeted professionals.

A range of sponsorship opportunities are currently available.
Please email Dean Guest for details at dguest@spe.org

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550+ attendees

80% of attendees were from the Caspian region

156 different organisations represented

26 countries represented

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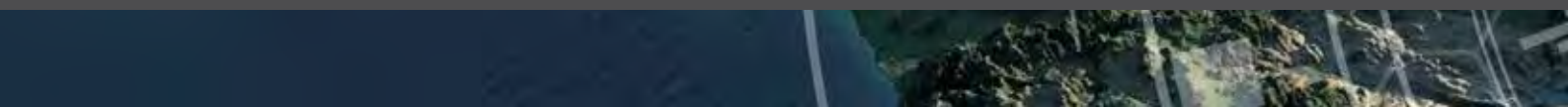
Society of Petroleum Engineers

About the Society of Petroleum Engineers

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