

1-3 December 2025 | Jumeirah Messilah Beach
Kuwait City, Kuwait

6TH EDITION AAPG SILICICLASTIC RESERVOIRS OF THE MIDDLE EAST GTW



TECHNICAL PROGRAM COMMITTEE

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WORKSHOP OUTLINE

WORKSHOP OVERVIEW

The Middle East has long been a global energy powerhouse, with its hydrocarbon production historically dominated by carbonate Cenozoic and Mesozoic reservoirs. However, major oil and gas accumulations also exist in supergiant fields within Mesozoic clastic reservoirs in the Arabian Gulf (both onshore and offshore, contributing to major hydrocarbon production). In fact, some combine to form the largest offshore field in the world, the Safaniya oil field in the northern Arabian Gulf, offshore of Saudi Arabia. Similarly, other giant and supergiant oil fields, in southern Iraq and Kuwait, for example, contain hydrocarbons trapped in Mesozoic siliciclastic reservoirs. In addition to the classic Mesozoic clastic reservoirs, large discoveries have been made in the Paleozoic clastic successions since the mid-1980s. These Paleozoic sandstone reservoirs form important productive intervals in the Arabian Plate. However, they have often been overshadowed by the younger, more prolific carbonate plays.

The economic development of these prolific clastic reservoirs would not have been possible without an improved understanding of the geological controls on reservoir performance. Significant risks are associated with the exploration and development of clastic reservoirs in the Arabian Plate, nonetheless these can be mitigated through the use of multiple innovative and applied geoscience techniques.

The 6th Edition of the AAPG Siliciclastic Reservoirs of the Middle East Geosciences Technology Workshop (GTW) will incorporate studies on a wide variety of topics of these prolific clastic reservoirs of the Arabian Plate, including regional and sub-regional petroleum potential, sequence stratigraphy, depositional systems, and integrated geological controls on reservoir development. Additionally, this year's workshop will address carbon capture and storage, application and management of digital transformation, and emerging topics such as sand injectites and mineral exploration in clastic depositional systems. These studies will showcase the recent advancements in understanding clastic reservoirs of the Arabian Plate that has been aided by technological innovations in reservoir exploration, development, and performance.

PARTNER SOCIETY



الجمعية الكويتية لعلوم الأرض
Kuwait Geosciences Society

WORKSHOP GUIDELINES

FORMAT

The workshop will be 3 days, consisting of oral presentations, poster presentations, core display sessions and breakout sessions where participants can discuss and investigate a specific theme that is of mutual interest. The first day will feature an inaugural keynote speech by a high-profile professional from the industry.

ATTENDANCE

Registrations are invited from all relevant disciplines with experience and/or knowledge of the subject areas being addressed in the workshop. Registrations will be accepted on a first-come, first-served basis.

CALL FOR POSTERS

You are invited to prepare a poster for presentation at the workshop. If you are interested in participating, please send a short abstract to cnavarro@aapg.org by **3 November 2025**. All posters will be produced as pull-up banners and delivered by AAPG. There will not be any other format available for poster display.

REGISTRATION TYPES & FEES

Fees are inclusive of onsite documentation, coffee breaks and luncheons.

\$1,850 Non-Member
\$1,850 Join & Save
\$1,650 Member *
\$1,550 Committee/Presenter
\$850 Young Professional **
\$500 Academia
\$350 Student (Masters)

*To avail the Member rate you must be an active member of AAPG, KGS, GSO or DGS.

**To register as a Young Professional you must be under the age of 35 with less than 10 years of work experience.

REGISTRATION DEADLINE

To guarantee your seat, please make sure to register by **24 November 2025**.

CANCELLATION POLICY

AAPG will refund the tuition, less a \$100 processing fee, if the request is received no later than 30 days prior to the workshop. Cancellations must be made in writing. The registrar will accept cancellation notices by telephone, but all such notices must be followed up by fax or e-mail. No refund will be made for cancellations received less than 30 days prior to a workshop being given. Nonpayment of tuition does not constitute automatic cancellation. If no cancellation notice is received by 30 days prior to a workshop, participants are liable for full tuition. AAPG reserves the right to cancel a workshop if enrollment is insufficient to ensure proper effectiveness. Substitutions for individuals can be made at any time. A paid enrollment may be transferred one time to a future workshop if the request is received prior to the 30-day cut-off date.



DAY 1: MONDAY 1ST DECEMBER

SESSION 1: STRATIGRAPHIC ARCHITECTURE AND DEPOSITIONAL CHARACTERISTICS OF CLASTIC SYSTEMS

The Arabian Plate hosts one of the world's most prolific petroleum province, namely the Arabian Gulf-Mesopotamian Basin, where clastic sediments play a major role in the production of hydrocarbon. The deposition of these clastic systems spans the whole geologic time from the Precambrian to the present, including various environments such as fluvial, glacial, lacustrine, aeolian, deltaic, shallow to deep marine, and mixed carbonate-clastic systems. Revealing the importance of these environments in reservoir exploration and development can not be a reality without a robust stratigraphic and sedimentological understanding. Namely, through establishing sequence stratigraphic framework, outcrop and subsurface core facies characterization and correlation in time and space (facies extension and thicknesses). This is ultimately to produce depositional facies models that can be utilized in sweet spots mapping in reservoir exploration and development campaigns.

SESSION 2: REGIONAL AND SUB-REGIONAL STRUCTURAL CONTROLS ON THE SEDIMENTATION OF CLASTIC SYSTEMS: AN IMPLICATION FOR PLAY CONCEPT

Developing play concepts and generating new ideas requires a robust understanding of regional and sub-regional structural controls which play an important role in shaping sediment routing systems, depositional environments, and the distribution of sedimentary facies across the basin. These controls also influence critical factors associated with prospect and play assessments such as reservoir development, trap formation, seal integrity and migration pathways. Understanding regional and sub-regional structural controls is essential for developing local and regional models, accurately characterising hydrocarbon plays and consequently help guide exploration strategies and reduce geological play risks. This session aims to provide insights into these structural controls, offering case studies and examples that illustrate how they can inform and shape new play concepts.

DAY 2: TUESDAY 2ND DECEMBER

SESSION 3: INTEGRATED CLASTIC RESERVOIR STUDIES

Comprehensive, multidisciplinary studies are essential to unravel the complex interplay of geological, geophysical, geochemical, and engineering factors that influence reservoir quality and performance in clastic systems. This session will provide in-depth understanding required to optimize the exploration, development, and management of clastic reservoirs in the Arabian Plate. The objective of this session is to enhance the understanding of the geological and geophysical factors controlling reservoir quality and productivity, in addition to showcasing the latest cutting-edge technologies and methodologies in integrated reservoir studies. This session is aimed at acting as a platform for sharing successful case studies and best practices in clastic reservoirs and foster collaboration between multidisciplinary petrotechnical domains, such as petrography, reservoir quality assessment, structural geology, geomechanics, geophysics, geochemistry, petrophysics, and reservoir and basin modeling.

SESSION 4: CARBON CAPTURE AND STORAGE IN CLASTIC DEPOSITIONAL SYSTEMS

One of the applications of geoscience technology in mitigating greenhouse gas emissions through Carbon Capture and Storage (CCS). Clastic systems, with their diverse sedimentary environments and reservoir characteristics, hold significant potential for long-term CO₂ storage. Understanding the dynamics of clastic depositional systems through the characterization the clastic reservoir architecture, evaluation of rock storage capacity and the assessment of seal integrity is critical to address effective carbon containment and environmental safety which contribute to development of reliable and sustainable CCS solutions. The session aims to highlight the role of advanced geophysical and geological techniques in identifying suitable storage sites and assessing their performance to provide a deeper understanding of how clastic systems can be leveraged for effective carbon injection and storage.

DAY 3: WEDNESDAY 3RD DECEMBER

SESSION 5: THE APPLICATION AND MANAGEMENT OF DIGITAL TRANSFORMATION IN CLASTIC RESERVOIRS

In the last few years, the oil and gas industry has made rapid development and implementation of digitalization technologies, Artificial Intelligence (AI), Machine Learning (ML) in geoscience applications. This workshop will set up the industry standards on wide range of clastic reservoir topics investigating the role of AI and ML. These topics cover data processing & analysis; data integration and business applications. This will help in improving our understanding of processes, unlock the potential in clastic reservoirs data, mitigate the risks associated with the exploration and economic development of our clastic reservoirs, and ultimately re-shape the energy sector. Specifically, it will show that we have the technical strength to contribute to the significant advances in digitalization in clastic reservoirs with the support of the technology in hand.

SESSION 6: EMERGING TOPICS AND CLASTIC RESERVOIR EXPLORATION AND PRODUCTION

Relevance of Sand Injectites to Fossil-Fuel Energy Systems

Sand injectites, formed by the intrusion of fluidised sand into host (usually finer grained) strata, are significant in hydrocarbon exploration and production. Sand injectites, often found in deep-water clastics, offer excellent reservoir properties due to their excellent porosity, permeability and vertical and lateral connectivity. Their irregular geometry forms intrusive and stratigraphic traps, where sand extrusion occurs. During production, sand injectites support high flow rates and have excellent hydrocarbon recovery factors, their connectivity facilitating water or gas injection. To optimize development, their non-stratiform geometry requires enlightened well design and placement with rigorous seismic interpretation and incorporation of outcrop analogue data. Sand injectites are increasingly recognized as valuable E&P targets, contributing to exploration success and optimized production strategies, with prominent roles in extending the life of mature basins.

Mineral Exploration in Clastic Depositional Systems

Historically, the exploration for mineral occurrences targeting the sedimentary cover has been solely commissioned by the mining industry, though rarely communicated across both industries. Thus, the clastic sedimentology experts in the oil gas industry can bridge this gap, enhance the workflows and approaches that are adapted by the mining industry. The addressed approaches can act as a road map for surface and subsurface data collection and analysis. For example, gravity and magnetic mapping of the sedimentary cover at depths of 200 and 500 meters (minable depths), with the reference to the basement, can help in tracing the mineral accumulation along Wadis down dip in the sedimentary cover knowing the mineral types and locations in the nearby shield. As a result, these Wadis are controlled by the deep-seated structural elements that can reappear along the drainage systems in the subsurface, impacting sediment transport and deposition.

Additionally, the interpretation of unconformities can act as best geological settings to deliver the weathered minerals from the shield to the catchment areas through rivers, deltas and beach sands. Therefore, mapping of these sandstone facies along with the interpreted geochemical data is optimum.

TO REGISTER, PLEASE CLICK [HERE](#)



6TH EDITION: AAPG SILICICLASTIC
RESERVOIRS OF THE MIDDLE EAST GTW

FIELD TRIP & CORE DISPLAY

1-3 December 2025
Jumeirah Messilah Beach, Kuwait City, Kuwait

FIELD TRIP

KUWAIT FORMATION EXPOSURE AT JAL AZ-ZOR ESCARPMENT BEACH, KUWAIT

4th December 2025 (1-day field trip)

FIELD TRIP INTRODUCTION

We are excited to announce an exclusive geological field trip to the Jal Az-Zor Escarpment in Kuwait, as part of the 6th edition of the AAPG Siliciclastic Reservoirs of the Middle East GTW. This field trip offers a unique opportunity to explore one of the most geologically significant outcrops in the Northern Arabian Gulf region, providing invaluable insights into the complex facies architecture of siliciclastic systems. During this trip, participants will visit key outcrop sites showcasing estuarine, estuarine mouth bar/shoreface, microbial facies, and more. These exposures provide an excellent analogue for understanding the depositional environments and lateral/vertical facies variability critical for reservoir modeling. This field trip is a must-attend for geologists, sedimentologists, and reservoir engineers interested in high-resolution depositional analogues and facies-based reservoir characterization.



FIELD TRIP INFORMATION

Field Trip Organizer



الجمعية الكويتية لعلوم الأرض
Kuwait Geosciences Society

Field Trip Leader



Dr. Aimen Amer, Slb

MORE INFORMATION TO FOLLOW SOON!

CORE DISPLAY SESSION



CORE INFORMATION

In conjunction to the siliciclastic sessions being presented, we are pleased to hold a session displaying a series of cores from around the Arabian Peninsula. These cores will focus on understanding shallow marine clastic environments from different localities and ages. The core sessions will be an interactive environment showcasing elements of fluvial, estuarine, mouth bar and shoreface depositional environments. Participants will be able to evaluate and discuss variations in transgressive versus regressive cycles, sand-to-shale ratios, facies associations, and dominant sedimentary processes whether fluvial, wave borne or tidal. In addition there will be a particular focus on understanding of the regional variability of the Jauf Formation, along the depositional dip from Saudi Arabia to Bahrain.