



AAPG

5TH EDITION:
**STRATIGRAPHIC TRAPS
OF THE MIDDLE EAST
GTW**

23–25 NOVEMBER 2026 | MANAMA, BAHRAIN

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WORKSHOP OUTLINE

WORKSHOP OVERVIEW

This workshop continues its successful legacy as a premier platform for sharing recent advances in stratigraphic trap exploration. It brings together case studies, emerging technologies, and collaborative industry-academia initiatives to address increasingly complex subsurface challenges.

While most traditional structural traps are exhausted in mature basins, recent stratigraphic discoveries kept these basins alive and open new opportunities. They also draw attention to the challenge of recognizing and assessing subtle trapping geometries such as pinch-outs, channelized systems, carbonate buildups, and unconformity related traps.

Successful exploration increasingly depends on integrated, multidisciplinary workflows that combine geology, geophysics, and petrophysics with advanced seismic imaging, sequence stratigraphy, rock physics, basin scale understanding, and AI-driven modeling techniques. This workshop will focus on how these elements are brought together to improve subsurface interpretation, reduce uncertainty, and enhance prospect definition.

The program will highlight modern exploration approaches, including the use of 3D seismic data, seismic attributes, and direct hydrocarbon indicators (DHIs), supported by advances in data analysis, interpretation techniques, and quantitative workflows. In addition, the workshop will explore the potential of stratigraphic traps in emerging energy domains such as carbon capture and storage (CCS) and subsurface energy storage. These areas demand careful attention to containment, reservoir performance, and long-term integrity.

Real world case studies will showcase exploration outcomes, including comparisons between pre-drill predictions and drilling results, as well as lessons learned in risk and resource assessment. This workshop aims to strengthen predictive capability, reduce exploration risk, and support effective maturation of stratigraphic traps opportunities across both conventional and emerging energy domains.

ATTENDEES AND BENEFITS

The workshop is designed for every geologist, geophysicist, petrophysicist, reservoir specialist, and researcher seeking to advance stratigraphic trap exploration through integrated workflows. Throughout the event, participants will gain practical insights into predictive stratigraphic analysis, 3D seismic interpretation, DHIs identification, rock physics analysis, uncertainty reduction, and AI-driven anomaly detection and scenario modeling. The program will help participants de-risk subtle traps, improve prospect ranking and exploration success rates, and apply stratigraphic concepts across hydrocarbon exploration, CCS, and subsurface energy storage.

SESSIONS' DESCRIPTIONS

1

THE ART AND STRATEGY OF EXPLORING STRATIGRAPHIC TRAPS

Theme: *Building predictive understanding of stratigraphic systems*

This session establishes the geological and stratigraphic framework for trap formation, focusing on how sedimentological evolution controls trap effectiveness. It emphasizes multi-scale integration and predictive approaches linking depositional systems to trapping geometries, while addressing the influence of facies variability and diagenesis on trap integrity and reservoir performance. The session also highlights how integrated geological modelling improves predictability in complex settings.

Topics of Interest

- Multi-scale integration and data conditioning to understand erosional truncation surfaces and sealing relationships
- Predictive frameworks linking sedimentological evolution to trap effectiveness
- Sequence stratigraphy and seismic sequence stratigraphy
- Evaluation of pinch-outs, channelized reservoirs, and carbonate buildups
- Facies variability and depositional and diagenetic controls on reservoir quality and trap distribution
- Enhanced predictability through integrated geological modelling
- Seismic imaging in carbonate and clastic environments
- Regional stratigraphic trap play concepts

2

ADVANCES AND INTEGRATED WORKFLOWS IN STRATIGRAPHIC TRAP EXPLORATION

Theme: *From data to prospect through integrated workflows*

This session focuses on modern exploration approaches combining geophysics, geology, and data analytics to detect subtle stratigraphic accumulations. It highlights the transition toward data-driven prospectivity assessment and the integration of advanced technologies into exploration workflows.

Topics of Interest

- Multidisciplinary workflows integrating geophysics, geology, and data analytics
- Transition from structurally dominated exploration to stratigraphic prospectivity assessment
- Use of 3D seismic data and direct hydrocarbon indicators (DHIs)
- Integration of seismic attributes, rock physics, and forward modelling
- Risking, uncertainty analysis, and probabilistic prospect ranking
- AI-driven detection of subsurface anomalies
- Digital transformation technologies to accelerate decision-making
- AI for subsurface scenario modelling and pattern recognition

3

INTEGRATED CASE STUDIES: FROM DISCOVERY TO DEVELOPMENT

Theme: *Translating interpretation into exploration performance*

This session presents global case studies demonstrating the successful identification and development of stratigraphic traps. It focuses on how geological understanding is translated into operational decisions and measurable outcomes.

Topics of Interest

- Global case studies of stratigraphic trap exploration and development
- Operational insights linking geological interpretation to performance
- Drilling outcomes compared with pre-drill predictions
- Risk and resource estimation
- Lessons learned and practical challenges in exploration and development

4

DE-RISKING STRATIGRAPHIC TRAPS: REDUCING UNCERTAINTY AND ACCELERATING DECISION-MAKING

Theme: *Reducing uncertainty for successful project delivery*

This session focuses on reducing subsurface uncertainty and improving exploration outcomes through integrated subsurface studies, supported by advances in drilling and completion technologies.

Topics of Interest

- Integrated subsurface characterization and play-based exploration for uncertainty reduction: play-fairway analysis and petroleum-system evaluation to improve exploration decision-making
- Advanced seismic imaging, interpretation, and quantitative interpretation response of stratigraphic traps: seismic acquisition, processing, inversion, attribute analysis, quantitative interpretation (QI), and AI-assisted workflows
- Quantification and management of exploration uncertainty: risk assessment, probabilistic workflows, uncertainty analysis, and decision-based prospect evaluation
- Innovative drilling and completion technologies for improved exploration success: advanced drilling, formation evaluation, geosteering, and completion solutions that reduce subsurface uncertainty
- Case studies and lessons learned from stratigraphic trap exploration: successes, failures, and best practices from mature and frontier basins

5

AI-DRIVEN STRATIGRAPHIC TRAP EXPLORATION: FROM DATA INTEGRATION TO PREDICTIVE MODELLING

Theme: *Leveraging AI and machine learning to discover, characterize, predict, and unlock the full potential of stratigraphic traps*

This session explores how modern data-driven artificial intelligence (AI) and machine-learning (ML) techniques are reshaping the way geoscientists identify and evaluate stratigraphic traps, both for conventional hydrocarbon exploration and emerging energy-transition applications.

Topics of Interest

- Evolution of computational power and breakthroughs in machine-learning algorithms for handling subsurface data
- Accelerated decision cycles, reduced exploration risk, and cost-effective field development
- Moving from proof-of-concept studies to operational workflows
- Training-data challenges and opportunities
- Creation of synthetic seismic datasets for model training and risk analysis
- Prediction of depositional environments
- Modelling stratigraphic stacking patterns and predicting facies transitions
- Explainable AI and uncertainty quantification

To register, click or
scan the QR code



WORKSHOP GUIDELINES

FORMAT

The workshop will be 3 days, consisting of oral presentations, poster presentations 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

Registration is open to participants from all relevant disciplines with experience or knowledge relating to the workshop subject areas.

Registrations will be accepted on a first-come, first-served basis.

CALL FOR POSTERS

Participants are invited to prepare a poster for presentation at the workshop.

A short abstract should be submitted to cnavarro@aapg.org.

Abstract deadline: **20 October 2026**

All posters will be produced as pull-up banners and delivered by AAPG. No other poster-display format will be available.

REGISTRATION TYPES & FEES

Fees include onsite documentation, coffee breaks, and lunches.

\$1,850	Non-Member
\$1,850	Join & Save
\$1,650	Member*
\$1,550	Committee Member/Presenter
\$850	Young Professional**
\$500	Academia
\$350	Student — Master's

**To qualify for the Member rate, the participant must be an active member of AAPG, KGS, GSO, or DGS.*

***To register as a Young Professional, the participant must be under 35 years of age and have fewer than ten years of professional experience.*

REGISTRATION DEADLINE

To guarantee a place, participants should register by **18 November 2026**.

CANCELLATION POLICY

AAPG will refund the registration fee, less a \$100 processing fee, when a cancellation request is received no later than 30 days before the workshop. Cancellations must be made in writing. Cancellation notices may initially be provided by telephone but must be followed by fax or email. No refund will be provided for cancellations received fewer than 30 days before the workshop. Nonpayment of the registration fee does not constitute automatic cancellation. Participants who do not provide a cancellation notice at least 30 days before the workshop remain liable for the full registration fee. AAPG reserves the right to cancel the workshop if enrolment is insufficient to ensure its effectiveness. Participant substitutions may be made at any time. A paid registration may be transferred once to a future workshop, provided the request is received before the 30-day cancellation deadline.