



ONSITE BROCHURE



12-14 October 2026
Crowne Plaza Muscat by IHG
Muscat, Oman

3RD EDITION AAPG STRUCTURAL STYLES OF THE MIDDLE EAST GTW

TECHNICAL PROGRAM COMMITTEE

Co-Chairs

Ivan Callegari
GUTech

Meshal Al-Wadi
KOC

Andreas Scharf
Sultan Qaboos University

Majid Aljamed
Aramco

Antoine Delaunay
KAUST

Elias Kharusi
Petrogas E&P

Oskar Vidal-Royo
Terractiva

David Repol
PDO

Christian Heine
Shell

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شركة تنمية نفط عُمان
Petroleum Development Oman



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Table Top Exhibitors



DAY 1: MONDAY 12 OCTOBER

07.30-08.30 **Workshop Registration**

08.30-08.45 **Workshop Co-Chairs' Welcome and Introduction**

08.45-09.00  **Inaugural Keynote**
Mohammed Al-Mazrui
Exploration Director, PDO

09.00-09.30  **Technical Keynote**
Simon Stewart, Aramco
Structural Style Frontiers - A Perspective from Saudi Arabia

09.30-10.05 **Poster Presentations Summary Session**

SESSION 1: LATEST ADVANCES ON TECTONIC EVOLUTION OF THE MIDDLE EAST

Session Co-Chairs **David Repol, PDO**
& **Antoine Delaunay, KAUST**

10.05-10.30 **Irene Gomez-Perez, Independent**
Late Neoproterozoic Tectonic Evolution of Oman: From Rifting to Orogeny

10.30-11.05 **Coffee Break & Posters**

11.05-11.30 **Andreas Scharf, SQU**
Permian Fossil Hyperextended Rifted Margin with Exhumed Mantle in Eastern Arabia (NE Sultanate of Oman)

11.30-11.55 **Lukasz Gagala, Aramco**
Pre-Ordovician Paleotopography in the Subsurface of the Arabian Platform Revealed by Integrated Seismic and Magnetic Constraints: Inselbergs or Possible Carbonate Build-Ups?

11.55-12.15 **Q&A Session**

12.15-13.25 **Lunch**

SESSION 2: CASE STUDIES IN THE STRUCTURAL EVALUATION OF COMPLEX RESERVOIRS, TRAPS & STORAGE

Session Co-Chairs **Majid Aljamed, Aramco**
& **David Repol, PDO**

13.25 -13.50 **Philip Bassant, Aramco**
Structural Doming Caused by a Large Asteroid Impact in the Devonian of Northern Saudi Arabia

13.50-14.15 **Christian Heine, Shell**
Paleostress Evolution of the Arabian Plate: The Effects of Changing Plate Boundary Configurations Since the Jurassic

14.15-14.40 **Alan Vaughan, PE Limited**
Structural Modelling in Complex Traps – Zagros Belt Case Studies

14.40-15.00 **Coffee Break & Posters**

15.00-15.25 **Jeres Cherdasa, Aramco**
Fault Stress Modeling Impact on CO2 Sequestration Potential within Rift Basin Settings

15.25-15.50 **Alan Wood, Shell**
Integrating Structural Restoration and Paleo-Contact Prediction to Explain Differences in Well Performance

15.50 -16.10 **Q&A Session**

DAY 2: TUESDAY 13 OCTOBER

SESSION 3: SALT TECTONICS IN THE MIDDLE EAST

09.00-09.30  **Technical Keynote**
Wilfried Bauer, GUTech Oman
The Neoproterozoic Basement of Oman

Session Co-Chairs **Christian Heine, Shell**
& **Andreas Scharf, SQU**

09.30-09.55 **David Repol, PDO**
New Insights on the Structural Styles and Mechanism of Deformation of Southern Oman

09.55-10.20 **Alejandro Amilibia, Terractiva**
Salt-related Early Inversion in the Anaran Anticline, Lurestan Province, Iranian Zagros

10.20-10.45 **Saif Harthy, PDO**
Gravity-Driven Salt Deformation Event in the Fahud Salt Basin, Northern Oman: A Regional to Field Scale Structural Study

10.45-11.10 **Coffee Break & Posters**

11.10-11.35 **Arindam Pal, Aramco**
Integrated Reservoir Modeling for CO2 Storage within Salt-Influenced Clastic Depositional Systems

11.35-12.00 **Abdullah Al Gahaffi, PDO**
Structural Evolution of Al Huwaisah South Area

12.00-12.30 **Breakout Session**

12.30-13.30 **Lunch**

SESSION 4: DIGITAL TOOLS, DATA ANALYTICS AND AI IN STRUCTURAL GEOLOGY

Session Co-Chairs **Majid Aljamed, Aramco**
& **Meshal Al-Wadi, KOC**

13.30-13.55 **Pascal Richard, PRgeology**
Virtual Reality: The Solution to Inaccessible Fault Zones

- 13.55-14.20 **Amani Mohammed Al Rubaiey, Slb**
Agile Structural Modelling: Using AI Towards Fully Automated Seismic Interpretation
- 14.20-14.40 Coffee Break & Posters
- 14.40-15.05 **Christopher Wibberley, TotalEnergies**
Fault Damage Zone Prediction – Statistical Analyses of Outcrop Analogues
- 15.05-15.30 **Ranjan Das, Aramco**
3D Modeling of Basalt Fracture Networks for CO2 Mineralization: A Case Study
- 15.30-16.00 **Breakout Session**

DAY 3: WEDNESDAY 14 OCTOBER

- Session Co-Chairs** **Ivan Callegari, GUTech & Oskar Vidal Royo, Terractiva**
- 09.00-09.25 **Amanda Pouwel, PDO**
Evolution of Ediacaran Carbonate Platforms in North Oman: Insights from Seismic Attribute Analysis and Tectonic Load Modeling
- 09.25-09.50 **Yasir Ghorashi, Aramco**
Structural Controls on Hydrocarbon Accumulation: Case Studies from the Middle East/Saudi Arabia
- 09.50-10.15 **Pascal Richard, PRgeology**
Deciphering the Evolution of a Complex Subsurface Structure Using the Combined Input of 3D Seismic and Experimental Analogue Models
- 10.15-10.35 Coffee Break & Posters
- 10.35-11.00 **Sawaa Sawaei, PDO**
Examples of Structurally Influenced Resource Plays & Hydrocarbon Fields of the Middle East
- 11.00-11:25 **Jakub Fedorik, Aramco**
Interference Structures in the Arabian Platform
- 11.25-11.50 **Jason Roberts, PDO**
Characterizing Quaternary to Pliocene Uplift in North Oman – A Hidden Gem
- 11.50-12.10 Wrap Up Session
- 12.10-12.20 **Closing Remarks and Adjournement**
- 12.20-14.00 Lunch



Poster Presentations

Zainab Alibrahim, Aramco

Thermally Induced Fracturing and Geomechanical Weakening in Synthetic Rocks: Implications for Structural Styles and Reservoir Integrity

Ehsan Daneshvar, Future Geoscience

Chemostratigraphic Constraints on Structural Compartmentalization and Lateral Heterogeneity in a Carbonate Reservoir, Southern Arabian Plate

Salim Shuaili, PDO

In Situ Stress Orientations and their Regional & Local Structural Influence Across Oman

Riyam Al Riyami, PDO

Structural Analysis and Derisking of Haima Opportunities in Ramlat Rawl AOI-Ghaba Salt Basin

Reem Aboushoug, NOC Libya

Tectonic Evolution of Offshore Central Libyan Margin (Offshore Sirt Province)

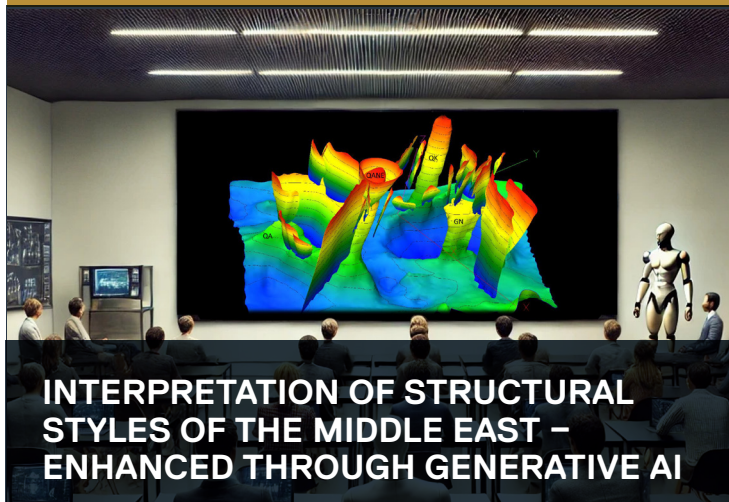
Salwa El-Sattar, Sultan Qaboos University

Tectonic Setting and Fluid Source of Carbonated Ultramafic Rocks from Northeastern Sultanate of Oman

Wala Al-Lawati, Sultan Qaboos University

Fracture Development and Fluid Flow During Multi-Phase Post-Obduction Deformation of the Muri Anticline, Jabal Akhdar Dome, Sultanate of Oman

Short Course



INTERPRETATION OF STRUCTURAL STYLES OF THE MIDDLE EAST – ENHANCED THROUGH GENERATIVE AI

11th October 2026

INSTRUCTOR



Pascal Richard
PRgeology

SHORT COURSE OVERVIEW

This one-day advanced course delivers a focused and highly practical framework for interpreting structural styles in the Middle East, combined with the unique advantage of applying Generative AI (GenAI) to elevate geological understanding and decision-making. Built for geoscientists working in exploration, development, or basin modeling, the course emphasizes practical techniques, hands-on interpretation, and modern tools that increase accuracy, speed, and confidence in structural workflows.

We begin with a foundational module designed to unify all participants, regardless of background, around the principles of fault mechanics and structural style recognition. Participants will revisit faulting fundamentals, mechanical stratigraphy, and structural style classification. The goal is to align interpretation techniques with geological processes, and to establish a shared vocabulary for the day. An introduction to GenAI highlights its role in managing structural ambiguity and enhancing workflows, helping geoscientists clarify options when data is incomplete or conflicting.

Field Trip



A JOURNEY FROM THE CRYOGENIAN TO THE CRETACEOUS WITHIN THE JABAL AKHDAR DOME

15-16 October 2026

FIELD TRIP LEADERS



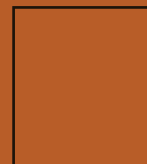
Ivan Callegari
GUtech Oman



Wilfried Bauer
GUtech Oman



Andreas Scharf
Sultan Qaboos
University



Salwa El-Sattar
Sultan Qaboos
University

FIELD TRIP INTRODUCTION

The Jabal Akhdar in the Central Oman Mountains forms a ~90 km × 60 km dome. The core of this dome consists of Cryogenian to Ediacaran siliciclastics and carbonates, including source rocks. These rocks are separated from the overlying rocks by a spectacularly exposed angular unconformity. The rocks above this unconformity are Permo-Mesozoic shelf carbonates of the Arabian passive margin. The rocks below the unconformity are folded twice, while those above show no such folding. During the Late Cretaceous, Arabia was overthrust by the Samail Ophiolite and Hawasina deep-sea sedimentary rocks. Final doming occurred during the late Eocene to early Miocene. The Jabal Akhdar Dome is a textbook example of stratigraphy and structural geology development from the Cryogenian to the present. Furthermore, findings from the dome can be used as a natural laboratory and serve as an analogue for the hydrocarbon-bearing sequences in interior Oman.

The two-day field trip will start at the Saiq Plateau where we will examine Cryogenian Snowball-Earth diamictites with cap carbonates, blended within the scenic landscape of Jabal Akhdar. The second day will start at a breath-taking vista point at Wadi Bani Awf. From there we will descend into the core of the Jabal Akhdar and explore the structural style of the Cryogenian and younger succession.