

GEO 2018

13th Middle East Geosciences Conference and Exhibition

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CONFERENCE **5-8 MARCH 2018**

EXHIBITION **6-8 MARCH 2018**

BAHRAIN INTERNATIONAL EXHIBITION & CONVENTION CENTRE

MESOZOIC CARBONATE PLATFORM OF THE ARABIAN PLATE: FROM STRATIGRAPHY AND RESERVOIR QUALITY TO FAULT GEOMETRIES AND FRACTURES PATTERN



FIELD TRIP DETAILS

Organizer:



Field Trip Leaders:

Dr. Mia Van Steenwinkel
Dr. Mohammed Al Kindi
Dr. Henk Droste
Dr. Mohammed Al Wardi

Dates: 9 - 11 March 2018

Location: Southern flank of Jebel Akhdar and the Adam Foothills, Oman

Start / Return Point: Muscat

Fee: US\$ 2,444 for 3 days

(staying in a guest house - no camping)

OBJECTIVES

- To illustrate the evolution of the Mesozoic carbonate platform on the Arabian Plate.
- To discuss the stratal geometries and facies/reservoir distribution within epeiric platform carbonates.
- To discuss concepts related to fault geometries, fracture patterns, structural and stratigraphical seals, in carbonate rocks in the outcrop for both hydrocarbon exploration and production purposes.

EXPECTED LEARNING

- Understand the evolution of the Mesozoic carbonate systems from an initial extensional rift setting to a passive-margin epeiric platform.
- Understand stratigraphic architecture of the different carbonate systems, the nature of the regional unconformities between these systems and their impact on the petroleum geology of the Arabian Plate.
- Understand the development of intra-platform basins in the Cretaceous and the distribution of source rock, seal and reservoir facies.
- Understand the difference between Jurassic and Cretaceous intra-platform basin systems in Oman and other areas of the Arabian Plate.
- To raise awareness about the following structural topics:
 - Fault geometries, fault segmentation and fault-damage zones.
 - Fault-rock properties, fault fluid-flow barriers and permeability enhancements
 - Fracture generation and growth, fracture-set interactions, fracture relation to mechanical stratigraphy and fracture sampling in subsurface well data
 - Static and dynamic fault modeling, fracture modeling and fault-seal analysis in prospect evaluation and static/dynamic modeling

Participants are required to purchase their own flight tickets to Muscat • Travel dates to consider: arrival on 8th March, and departure on the 11th evening • Booking deadline is 8th February 2018 • Fees include local transportation, accommodation and F&B. Please note that accommodation will be only provided for 2 nights during the field trip. The participants should make their own booking in hotels upon their arrival to Oman the night before the field trip starts.

