**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.