# CARBONATE RESERVOIR GEOLOGY

#### Summary

This course provides keys to understanding carbonate reservoir rock deposition and diagenesis, as well as integrating data for reservoir characterization and detailed analysis of the factors affecting reservoir quality. Reservoir quality analysis focuses on carbonate pore system evolution, which results from the complex interaction between deposition and diagenesis. Understanding this complex relationship leads to a more confident prediction of reservoir presence, quality and distribution that is key to volumetric assessments (static geomodeling).





November 1-4, 2021 13:00-17:00 Abu Dhabi (UTC+4)



Petroleum geoscientists involved in the exploration of carbonate plays and development of carbonate reservoirs



\$1,600 (excluding taxes) per registration



Contact us

## Day 1

Applied sedimentological analysis of carbonate systems ("Carbonates are born, not made") detailing carbonate mineralogies, skeletal
and non-skeletal grain composition, classification(s) of carbonate rocks (e.g., Dunham, 1962), controls on carbonate production, types
of carbonate accumulations, carbonate geometries/geobodies, applied carbonate "facies" analysis, typical carbonate lithofacies
observed (e.g., in core and thin section)

#### Day 2

 Diagenetic analysis to assess the types and relative timings of the post-depositional processes that have modified the pore network (pore types, volume and connectivity)—a key element to assessing the controls on reservoir quality (presence and distribution of reservoirs)

#### Day 3

• A presentation of the different platform types (e.g., ramp, rimmed shelf) and their associated "geobodies" along with keys to interpret depositional environments—also detailing diagenetic processes associated with specific depositional settings

#### Day 4

• Reservoir quality analysis as an integrated process consisting of the assessment of the controls on reservoir quality - these are typically a combination of depositional and diagenetic processes. The results allow the grouping of rocks presenting similar depositional, diagenetic and reservoir quality properties (i.e., "qeological rock types")

### **Instructor: William MILLS**

- Carbonate sedimentologist with extensive experience in carbonate petrography, carbonate core description, wireline log interpretation and sequence stratigraphy
- Having worked on and managed reservoir evaluation and multi-well correlation studies, Will has
  experience on a range of projects mainly focusing on carbonate formations, including multidisciplinary
  studies involving the integration of sedimentological, seismic, geochemical, engineering and
  structural data
- Key areas: Kuwait, Kurdistan, Oman, Abu Dhabi, Norway, Barents sea, Brazil, Pakistan



