

Applied Middle East Late Palaeozoic Palynology: Solving Geological Problems



Course Content

This course will cover aspects of Palaeozoic applied palynology for the Middle East – an area where palynology still has a significant impact. The course begins with a basic description of the lithology, structure and geological history of the Middle East Late Palaeozoic. It then describes some of the problems solved by palynology in sequences where seismic and logs do not provide the certainty required. It looks into the chief groups of spores and pollen in Middle Eastern Late Palaeozoic successions, spending time on around 20 of the most important single palynomorph taxa that have special stratigraphic significance for correlation and palynological characterization.

The last part of the course concentrates on case studies and real applications of Late Palaeozoic palynology in problem-solving both in relation to Earth history but also specific to industry. Regional case studies will cover the Carboniferous-Permian of Oman, the Devonian of Saudi Arabia, the Hercynian unconformity in Iraq, the Carboniferous-Permian of the Pakistan Salt Range, and the Permian-Triassic of Israel and Jordan. Industry case studies will cover the Jauf and Unayzah formations, and the Al Khilata and Gharif formations, as well as palynology and reservoir heterogeneity, well steering and facies time slices.

Why This Course Stands Out

No other course covers applied Middle East Late Palaeozoic Palynology, nor has the regional and industry focus on solving geological problems.

Topics

- Regional geology and structure of the Late Palaeozoic of the Middle East and Levant
- Basic Late Palaeozoic palynological taxonomy and key stratigraphically important taxa
- Uses of palynology in stratigraphy and correlation, particularly in relation to petroleum geology at a regional and field scale
- Uses of palynology in specific petroleum geological problem solving
- Uses and abuses of palynology

Who Should Attend

- Explorationists and regional geologists interested in the Middle East
- Geologists that have to read palynology, biostratigraphy and stratigraphy reports and interpret and apply them
- Palynologists and stratigraphers with Early Palaeozoic, Mesozoic or Tertiary Middle Eastern experience who want a useful introduction to the Late Palaeozoic

Objectives

At the end of the course attendees will have:

- An understanding of the basic geology of the Late Palaeozoic of the Middle East and Levant
- Knowledge of the main spore and pollen groups useful in stratigraphy and correlation, particularly in relation to petroleum geology at a regional and field scale
- Knowledge of case studies that indicate the value of palynology in elucidating basic structure, geological history and palaeoenvironments as well as specific industry-focused case studies showing how palynology can be vital to the bottom line.
- Understanding of the limits of applied palynology: what it can and cannot do.

Course will be held via



1–3 June 2020 • 8:00am–12:00pm (CDT)

Learn more: AAPG.to/palynology2020mer

