

# **An Introduction to Petroleum Geology for Non Geologists**

## **A Basic Level Course**

### ***Course Objective***

The course covers the fundamental principals of Petroleum Geology and the activities of the Oil Industry from basin analysis and prospect definition to drilling, field development, transportation and refining.

### ***Course Outline***

The geological characteristics of the Earth are described briefly before focussing on the sedimentary rock fill of depositional basins. The course reviews the fundamental principals of Petroleum Geology, covering the different settings in which accumulations of conventional oil and gas are found. The features of a good source kitchen are described followed by migration pathways and reservoir traps. Procedures adopted for assessing resources and reserves are described, how exploration and production are undertaken and the infrastructure required for field development and oil and gas transportation and refining. Numerous actual examples are used throughout the course to illustrate the points covered.

### ***Who Should Attend***

Oil company staff with little or no technical background in geology, including geophysicists, petroleum engineers, and support personnel in administration, human resources, accounting, legal and finance and technical.

### ***What You will Learn***

How to recognise the components of the structure of the Earth.

How to identify the main rock types, their origins and their roles in petroleum generation and entrapment.

How to describe the main features of geology, such as structural geology, stratigraphy and geological time.

Knowledge of sedimentary basins and their global distribution within a plate tectonic setting; their significance in terms of hydrocarbon occurrence.

Basic principles of petroleum generation, hydrocarbon migration, oil and gas traps and the relevance of the timing of these events, all set within a Play Fairway and Petroleum System Analysis framework.

Elements of global distribution of reserves of oil and gas and the workings of the oil industry (production, transportation and refining) on an international scale.

***Course Duration*** – 5 days