# Applied Reservoir Petrophysics and Characterization

**BTS**
Training & Consultancy

1st floor, Incubator Building, Masdar City, Abu Dhabi, UAE

00971-2-6452630

00971-50-6652671

info@btsconsultant.com

www.btsconsultant.com

## Table of Contents:

- Introduction
- Objectives
- Who should attend?
- Course Outline

# Course Outline:

**Day 1**

- Welcome and Introduction

- Process and Introduction Case Studies

- Workshop - Using the Gameboard Method

- Geological Framework

- Integrated Porosity, Permeability and Relative Permeability (Day focus is on core)

- Workshop - Facies and Petrophysical Rock Types and Designing a core data program

- Workshop - Quality assurance for routine core analysis

**Day 2**

- Intgrated Porosity (continued) - Log porosity

- Workshop - Log based porosity and cross plots

- An overview of permeability and relative permeability

- Workshop - Designing a series of relative permeabilty tests

- Petrophysical Rock Types and Capillary Pressure Concepts

- Workshop - Using capillary pressure concepts to distribute initial fluids

- Workshop - Creating a Winland Plot

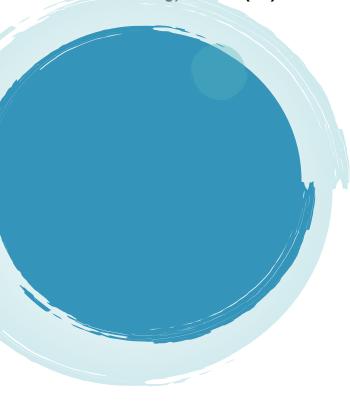- Workshop - Creating a Excel Basic QuickScan Analysis

**Day 3**

- 3-Line Log Analysis "quicklook analysis", Log Based Water Saturation, Electrical Rock Properties and Capillary Pressure
- Workshop - 3-Line Log Analysis and Interpretation

- Workshop - Interpreting electrical rock properties
- Workshop - Selecting a water saturation model

**Day 4**

- Core-Log Integration and Using Merecury Injection Capillary Pressure Data to Confirm Petrophysical Rock Types, Clays and Pore Geometry
- Workshop - Interpreting Petrophysical Rock Types from high pressure mercury injection data
- Workshop

**Day 5**

- Flow units and integrated petrophysical interpretations
- Workshop
- Final Workshop -Core-Log Petrophysical and QuickScan Well Evaluation

# Who should attend?

Petro physicists in the Oil & Gas Industry