



Training Course :

## Special Core Analysis Course for Oil and Gas Professionals

Training Course For One Week In

UAE, Dubai, Royal Continental  
Hotel Deira

Which Be Held As Under Details :



## Abar Solutions Petroleum Consultancy Invite Your Employee To Participate With Us In Special Training Course As Under Details :

Course Name		Special Core Analysis Course for Oil and Gas Professionals				
Code	Period	Language	Start	End	Location	Fees KD
EL 27	5 Days	Bilingual	15/10/2017	19/10/2017	UAE, Dubai, Royal Continental Hotel Deira	1195
		(Arabic &	19/11/2017	23/11/2017		
		English)	03/12/2017	07/12/2017		

\*\*The Fees Includes: Lecturer, Training Material, Training Room With One Coffee Break Daily, Certificate Of Attendance In Last Day Training Course\*\*

### Course Description

- This course covers the steps in assessing results contained in special core analysis reports, and in particular those from relative permeability tests. This includes how to:
  - (a) review laboratory reports
  - (b) assess the procedures used and
  - (c) make refinements before use in reservoir simulation studies.
- While the course focuses on relative permeability, capillary pressure concepts are also discussed. The link between relative permeability and rock type is illustrated. The course contains information that can be used to define relative permeability relationships when reliable laboratory results are not available.

### Designed For You, If You Are...

- A reservoir engineer involved with reservoir simulation and / or classical hand calculations
- A supervisor or manager who reviews simulation results carried out by others
- Laboratory personnel involved with SCAL measurements who wants to learn how your results are used and gain insights into how laboratory programmes might be improved

- A production geologist or petrophysicist working in an integrated team as it will help you select samples for analysis and assist in relating relative permeability and capillary pressure to rock type

### The Benefits From Attending

- By the end of the course you will feel confident in your understanding of how to:
  - Carry out a systematic review of a laboratory report and distinguish results that are clearly invalid from those that may be reliable
  - Define the strengths and weaknesses of the various laboratory measurement techniques and identify which portions of reported relative permeability curves are likely to require refinement
  - Analyse and evaluate reported relative permeability curves and make necessary adjustments and refinements
  - Relate relative permeability results to rock types
  - Formulate a special core analysis program for a new well or field

### Course Content & Outlines

- **Uses and importance of accurate special core analysis results in reservoir engineering calculations.**
- **Key - challenges in using results.**
- **Validating SCAL data:**
  - What to look for during review of SCAL reports.
  - A systematic approach to data validation.
  - Review checklists.
- **Wettability:**
  - Wettability concepts and measurement techniques.
  - Types of wettability.
  - Factors which effect reservoir wettability and how natural wettability can inadvertently be altered during core handling.
  - Wettability restoration.
- **Using of capillary pressure to define connate water saturation**

- Measurement techniques
- Systematic analysis of results
- Adjusting laboratory data to reservoir conditions
- Relating capillary pressure data to height above original oil-water contact
- **Water-oil relative permeability**
  - Measurement methods and techniques
  - Wettability considerations
  - Importance of test procedures and test conditions
  - Special problems with intermediate wettability reservoirs
  - Refining laboratory results. Integrating, grouping and averaging
  - Hysteresis in water-oil relative permeability
- **Gas-oil relative permeability**
  - Measurement techniques
  - Differences between gas-oil and water-oil data
  - Critical gas saturation
  - Efficient gravity drainage mechanism and extending oil relative permeability curves
- **Reservoir characterization**
  - Examples of relationships between relative permeability and other rock characteristics
  - Characterisation techniques for differentiating rock types and assigning results to those rock types
- **Residual oil saturation**
  - Ambiguity and alternative definitions
  - Difficulties in determining
  - Estimating from relative permeability data
  - Effect of wettability

*With Best Regards From Abar Solutions Petroleum Consultancy*