

# PETROPHYSICAL PROPERTIES: LOG, CORE AND TEST DATA

GEOSCIENCES  
Reservoir Geology

E-267

## COURSE OBJECTIVES

To provide geoscientists with a sound information on how reservoir petrophysical properties are obtained from core, log and test data and how they are correlated and integrated for reservoir characterization and modeling.

On completion of the course, participants will be able to:

- list the various core laboratory measurements,
- obtain reservoir properties from log interpretation and compare them to core measurements,
- know the way to obtain rocktypes and electrofacies and derive K-Phi relationship,
- explain how to integrate core, log and well test data for reservoir modeling.

This course is based on a real case study with core, logs and test data.

## COURSE CONTENT

### RESERVOIR PROPERTIES FROM CONVENTIONAL TO SPECIAL CORE ANALYSIS

1 day

Porosity, permeability, saturation, grain density  
Wettability, relative permeability and capillary pressures  
Electrical properties (m and n exponents)

### RESERVOIR PROPERTIES FROM LOG EVALUATION

2 days

Determination of reservoir properties from log interpretation: lithology, porosity and water saturation (Case study)  
Core - log correlation and comparison of petrophysical results  
Permeability estimation from logs and core data  
Reservoir summations results (Cut-offs, Net to gross ratio, average values, etc.)

### ROCK TYPING

0.5 day

Rock typing and facies identification from core description and logs

### CORE, LOG AND TEST DATA INTEGRATION FOR RESERVOIR MODELING

1.5 days

Introduction to reservoir modeling  
Well test analysis and integration with Petrophysics  
Reservoir static geocellular Model  
Upscaling  
Dynamic Modeling  
Pseudo Kr and Pc  
Zonation of Model for Kr and Pc

### ▲ Who should attend?

Petrophysicists, reservoir engineers, geologists, geophysicists with a few years of professional experience in their respective discipline.

### ▲ Duration

5 days

### ▲ Dates & Location

October 19-23, 2009  
Rueil-Malmaison (Paris)

### ▲ Registration

Fees: € 2,020

Contact:

gre.rueil@ifptraining.com  
Fax: (+33) 1 47 52 74 27

### ▲ Course Coordinator

Jacques DELALEX

Ref. RES / ROCKTYP