

E-213

▲ **Who should attend?**

Geologist, geophysicist or geochemist involved in petroleum potential evaluation or in reservoir management.

▲ **Duration**

5 days

▲ **Dates & Location**

June 22-26, 2009
Rueil-Malmaison (Paris)

▲ **Registration**

Fees: € 2,020

Contact:

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

▲ **Course Coordinator**

Laurence BOVE

Ref. **GEO / GEOCHIM**

PETROLEUM ORGANIC GEOCHEMISTRY: FROM KEROGEN TO RESERVOIR

COURSE OBJECTIVES

To be familiar with the different geochemical techniques and the interpretation of their specific results, in order to best evaluate the petroleum potential of sedimentary basins or the hydrocarbon migration pathways (at a basin or field scale). Exercises will be included during the seminar.

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

- have solid overview of the analytical and modeling methods used by oil/gas industry and services companies,
- interpret geochemical data issued from the main current techniques,
- have a critical view on geochemical data,
- evaluate the potential and maturity of a source rock.

COURSE CONTENT

PETROLEUM FORMATION AND OCCURRENCES

1 day

Petroleum system definition
Nature and origin of fossil hydrocarbons
Source rocks
Oil and gas generation
Expulsion and migration

GEOCHEMICAL AND OPTICAL ANALYSIS OF THE KEROGENS

1 day

Rock Eval analysis
Significance and interpretation of Rock Eval parameters
Application to basin analysis and to oil and gas exploration
Optical analysis of kerogens: methodology and applications
Regional case studies

KINETICS OF HYDROCARBON FORMATIONS

1 day

Kinetic models and kinetic parameters
Introduction to a software for the quantification of hydrocarbon generation and expulsion in a basin
Benefits for petroleum exploration

APPLICATIONS OF GEOCHEMICAL ANALYSIS TO BASIN EVALUATION

1 day

Current procedures for oil analysis
Oil / source-rock correlations, Bio-markers
Prospect assessments
Regional case studies (North sea and Eastern Europe)

RESERVOIR GEOCHEMISTRY

1 day

Parameters controlling the fluid composition
Distribution and degradation of oils
Characterization of heavy oils and tar mats
Regional case studies