

Basic Petroleum Geochemistry

In-Person Course List of Modules

1. Introduction to petroleum geochemistry
2. Source rock characterisation
3. Source rock maturity
4. Workshop 1: Source rock potential assessment
5. Molecular maturity parameters
6. Oil alteration processes
7. Source identification for oils
8. Correlations
9. Workshop 2: Oil correlation exercise
10. Introduction to gas geochemistry
11. Workshop 3: hydrocarbon gas geochemistry data for petroleum exploration

Online Course List of Modules

1. Basics of petroleum geochemistry
2. Source rock sampling and screening
3. Introduction to molecular geochemistry
 - a. Types of molecules
 - b. Fluid sampling
 - c. Sample preparation for analysis
 - d. Stable carbon isotope analysis
 - e. Introduction to biomarkers
 - f. GC & GC-MS analysis
4. Basic interpretation of oil and extract data
 - a. Biomarkers and organic matter sources
 - b. Biomarkers and depositional environments
 - c. Biomarkers as maturity indicators
 - d. Correlations