



Crude Oil Fundamentals, Acceptance, Valuation & Flexibility

Consultant / Trainer:

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The **Petrogenium**. Crude Oil Fundamentals course explains the basics of crude oil characterization (crude assay), and how this impacts Product slate and Processing of crude. It describes relevant activities along the supply chain: Trading, Supply & Refining and explains the use of crude assay for different roles and responsibilities of those in the crude acceptance and valuation process. Finally it covers the importance of Crude Flexibility and its impact on improving margins. The course can be given remotely in 4 half-days or face-to-face in 2 days.

Participants

All **Petrogenium**. courses can be tailored for awareness/inexperienced staff, for intermediate and for experienced personnel. Furthermore courses can be customized for a specific refinery, plant or unit. The option for post-course consultancy/help-desk support is also available.

Participants may include: the course is ideally suited for anyone who needs a better understanding of how the world of crude oil works. It is particularly useful for people involved with the crude oil supply chain (Traders, Schedulers, Economists, Modelers, Crude Unit Engineers, etc.). It can also be appropriate for additional roles (Upstream, Process Engineering, Laboratory, etc.) that need and use knowledge concerning crude oil characterization and how that characterization is utilized for decisions within Refining.

Learning Objectives

After completion of the course participants will have solid understanding of:

- Explain the general principles of crude oil origin, composition and relevance to processing
- Discuss the most significant issues related to exploration and production

- Describe the impact of crude composition and properties on transportation and storage
- Explain the significant of crude composition and properties on valuation
- Describe the main principles and practices related to crude oil trading
- Explain how crudes are characterised, the uses and pitfalls of crude assays, and how crude data should be managed and used
- Identify the most significant crude oil properties and discuss their implications on refinery processing and product quality
- Describe measurement, custody transfer and loss management in relation to crude oil
- Identify the most significant HSE issues related to crude oil

Programme

1st half day

- Introductions
 - Welcome, safety, arrangement
 - Introduction of participants
 - Programme & course objectives
- Crude Oil and other fossil fuels origin and evolution.
- Exploration and Production

2nd half day

- Transport and Storage of Crude Oil
- Crude Oil Characterisation
- Crude Oil Assay

3rd half day

- Crude Oil in the Refinery
- Crude Oil Trading and Supply Planning
- Crude Oil Scheduling

4th half day

- Crude Oil Valuation
- Loss Abatement, Measurement & Custody Transfer
- HSE Aspects
- Course review & close out