



Project Management of Fuels

Consultant / Trainer:

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The **Petrogenium**. Project Management of Fuels course will provide an overview on crude oil and the refining process but the focus will be gasoline fuels, diesel fuels and biofuels. This also includes how gasoline and diesel engines work including product performance differentiation.

Participants

This **Petrogenium**. course can be tailored for awareness of new hires with limited experience in the fuels industry and even for intermediate and experienced personnel who need to have a deeper understanding in this area. Furthermore the course 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: product quality leads, refinery personnel, technical service engineers, laboratory staff, procurement, product management, customer service and even sales and marketing.

Learning Objectives

- Obtain a basic understanding of crude oil composition and how this is processed in the refinery to produce main fuels
- Gain knowledge on the different fuel standards and specifications and how these relate to the different stakeholders across the supply chain
- An appreciation of how gasoline and diesel engines work
- Learn the key properties of gasoline and diesel fuels and impact on engine performance
- Understand the different fuel additives and product performance differentiation
- Learn about biofuels (fatty acid methyl ester and ethanol), their properties and impact when blended into main fuels

- Get an understanding of the different vehicle emission standards
- Acquire information on typical product quality issues and frequently asked questions

Programme

Day 1

Overview of Crude Oil and Refining

- Introduction to crude oil
- Crude oil and product quality
- Refinery processes
- Types of refineries
- Product quality issues for refineries

Day 2

Gasoline Fuels

- How a gasoline engine works
- Gasoline standards and specifications
- Main gasoline properties
- Frequently encountered problems
- Additives
- Differentiated gasoline fuels

Day 3

Diesel Fuels

- How a diesel engine works
- Diesel fuel standards and specifications
- Diesel fuel main properties
- Frequently encountered problems
- Additives
- Differentiated diesel fuels

Day 4

Biofuels

- UN Sustainable Development Goals
- Why use biofuels?
- Biofuels: Fatty Methyl Ester (FAME) and Ethanol
 - Production
 - Specifications
 - Handling
 - FAME in diesel and ethanol in gasoline
 - Blending limits
 - Product quality issues

Day 5

Fuel specifications

- Product quality and specifications
- Different types of specifications
- Emission regulations
- Reading and understanding a specification
- Participants' assessment
- Course evaluation