

## **Petroleum products: Specifications Properties Market Demand**

This course is designed to provide you with a deep knowledge of petroleum products' **properties, specifications, markets and demands**.

The petroleum products covered are the following:

- **LPG**
- **Automotive Gasoline**
- **Kerosene / Jet fuel**
- **Gas oil**
- **Heating oil**
- **Heavy fuel oil**
- **Naphtha**
- **Asphalts**
- **Lubricating oil**

The course also provides technical knowledge related to the **standard quality control tests** performed in refineries and petrochemical plants to ensure that the finished products are in line with commercial specifications.

**You will learn:**

***Volatility specifications for:***

- Automotive gasoline
- Jet fuel
- Diesel fuel
- Heating fuel
- Heavy fuel oil
- Paraffinic base oils

- Asphalts

***Combustion specifications for:***

- Automotive gasoline
- Jet fuel - Jet A1
- Diesel fuel
- Heating fuel
- Heavy fuel oil

***Cold condition behavior and flowing specifications for:***

- Jet fuel - Jet A1
- Diesel fuel
- Heating fuel
- Heavy fuel oil

***Pollution and corrosiveness specifications:***

- Sulfur content
- Corrosiveness
- Miscellaneous pollutants

***Stability specifications:***

- Automotive gasoline
- Jet fuel
- Diesel fuel
- Heating fuel
- Heavy fuel oil

***Asphalts specifications***

***Lube base oil specifications***

**STANDARD QUALITY CONTROL TESTS OF PETROLEUM PRODUCTS**

***TESTS RELATED TO VOLATILITY:***

- ASTM distillation test

- Reid vapor pressure
- Flash point

**TESTS RELATED TO COMBUSTION:**

- Octane number of gasoline
- Cetane number of diesel fuel
- Smoke point for aviation turbine fuels
- Standard test related to fuel combustion

**TESTS RELATED TO STORAGE AND FLOWING:**

- Viscosity measurements
- Lubricating properties of diesel fuel
- Cloud point
- Pour point
- Filterability limit
- Freezing point

**TESTS RELATED TO AIR POLLUTION AND CORROSIVENESS:**

- Air pollution and corrosion due to sulfur
- Sulfur measurements
- Copper strip corrosion
- Doctor test

**TESTS RELATED TO STABILITY OF MOTOR GASOLINE, TURBINE FUELS AND DISTILLATES:**

- Gum content
- Induction period
- Fuel stability
- Oxidation stability of diesel fuel
- Water and sediment
- Asphaltene precipitation with normal heptane
- Insoluble content test
- Color and color stability tests

## **TESTS RELATED TO ASPHALTS:**

- Needle penetration
- Softening point

### **This course for:**

- Technicians
- Petroleum Engineers
- Production Engineers
- Marketing teams
- Petrochemical Engineers
- Automotive Engineers

### **Course Duration**

5 Days