



T R A I N I N G

ADV04: Advanced Petroleum Product Training



Crude is called the “black gold” because it has a high energy density and is the feedstock for many petrochemical and energy products. The demand for liquid fuels is increasing every day and petroleum products are still under development to improve in performance and become more environmental friendly. Driven by climate change alternative automotive fuels are entering the transport market to complement and enhance the fossil fuel products.

Course Objective

The program is designed for **professionals who are involved in production, quality control, sales and marketing of petroleum products** and want to enhance their knowledge of the products and how they will develop the next decades. The following topics are covered:

- Deep dive into petroleum product specifications and performance requirements for the transport sector
- Overview of test methods to show compliance to specifications
- Applications for gaseous, base oil and bitumen products
- Developments in fuel standards & specifications
- Product safety & registration
- Development of renewable fuels

This is a **theoretical** course covering all aspects of final product quality. The course is given by KPRT experts in the fields of product quality and alternative fuels

Course Modules

Module 1: Crude Oil Refining

As an introduction basic knowledge about crude and oil refining is taught. A quick helicopter view on the main refining processes: distillation, processing and blending will give a first insight in the potential of the “black gold”.

Module 2: The gas phase of distillation

At the top of the distillation column the gases are the first to separate from the crude. The gases are not only used as fuel, but can also be used for domestic applications and as nice product in aerosol spray. This module will give an overview of possible applications.

Practical

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|------------------|------------|
| Course duration: | 4 days |
| # participant: | max. 15 |
| Location: | on request |

Course Modules

Module 3: Automotive fuels

This is a first deep dive of the course into gasoline and diesel. Starting from engine performance requirements, we will explain the fuel performance specifications. Next to technical performance, the health and environmental impact of fuels is the driver for a set of specification requirements to make the fuels more environmental friendly.

Module 4: Jet Fuel

This module zooms in on aviation fuel addressing the specification requirements for civil aviation fuel based on technology and environmental developments. The set-up of the module is comparable to the one of the automotive fuels.

Module 5: The bottom of the barrel

Next to the high quality transport fuel, there is still a lot of value at the bottom of the barrel. This session will give an overview of heavy fuel oil, base oil and bitumen and its applications. The developments in the Marine fuel following the International Maritime Organisation requirements.

Module 6: Future Fuel Developments

In order to reduce the impact of fossil fuels on the environment the automotive industry continuously improves engine technology to use fuels more efficiently and to reduce emissions. Fuels specification become stricter and alternatives in the form of so-called renewable fuels will become important blend components for final products.

This module give insight in developments in engine technologies, fuels of the future and how the oil industry can turn this into opportunities

Module 7: Safe handling of fuels

Fossil fuels are toxic and dangerous goods. Safe handling of those products is essential. This section gives an overview of safety and health regulation for fuel transport and labelling.

For more information: please visit www.Q8Research.com

For questions, please call +32 496 58 00 86 or send an email to mahaute@Q8.com