

Petrogenium.

Combustion, Fired Heater Operation & Flue Gas Treatment.

PREMIUM

Consultant/Trainer: Dirk-Jan Treur & Louis Jacobs & Jan van Opstal.

The Petrogenium Combustion, Fired Heater Operation & Flue Gas Treatment course will provide an introduction to the basics of Fired Equipment, theory of combustion and different forms of fired equipment in practice. Applications in refinery units are discussed in detail.

Participants

This Petrogenium course can be tailored for awareness/inexperienced staff, for intermediate and for experienced personnel. 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: operational staff and (process) engineers on all levels working on fired equipment in distillation units, process units, utilities, treatment units etc.

Learning objectives

Combustion theory, Burners, Environmental aspects, Heat Transfer and 2-phase flow phenomena

Programme

Day 1

Introduction and Basics

- *Theory of Combustion*
- *Efficient operation*
- *Heat Transfer in fired equipment*
- *Two-phase flow in heater tubes*
- *Failure mechanisms process side*

Day 2

- *Environmental aspects*
- *Burner functionality, types, Low NOx*
- *Combustion control and safeguarding*
- *Failure mechanisms combustion side*

Day 3

Applications of Fired Equipment

- *Boilers*
- *Distillation heaters*
- *Cracking heaters*
- *Hydrogen manufacturing*
- *Exercises*

Contact

Gary Hays

Organisation & People Practice Lead
Phone number: +31 (0) 6 55 838 162

Gary.Hays@petrogenium.com

Anna Kryzhanovskaya

Client Manager

Phone number: +31 (0) 6 30016327

Anna.Kryzhanovskaya@petrogenium.com

Because Experience Matters

www.petrogenium.com