



Fluid Catalytic Cracking

Consultant / Trainer:

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The **Petrogenium**. Fluid Catalytic Cracking (FCC) course is intended for oil refining professionals active in process technology, operations, refining economics, or oil trading, who need a solid understanding of the main aspects of FCC.

Participants

The Participants may include: oil refining personnel especially those involved with FCC; researchers & professionals; catalyst manufacturing staff, especially those in the production & research of FCC catalysts; staff involved in refinery optimization & maximizing synergies between refinery processes.

The course can be customized for specific refinery staff members at beginners or experienced levels or needing a better understanding of certain aspects of Fluid Catalytic Cracking like Catalyst Testing and Selection or Unit Monitoring or Troubleshooting.

Learning Objectives

After completion of the course the participant will have a good understanding of catalytic cracking and the role of the Fluid Catalytic Unit in a complex refinery to enhance profitability. The main aspects of unit monitoring and optimization, catalyst manufacturing, composition and selection, as well as basic troubleshooting will be covered.

After the course, the participant is capable to assess the impact of processing heavy feeds/residues. Tools are given to optimize product selectivity and unit profitability.

Programme

Day 1

- Fundamentals
 - Process flow
 - Reaction chemistry and kinetics
 - Impact conditions
 - Heat balance

Day 2

- Process equipment
- Feed quality and Residue processing
- Pilot plant testing

Day 3

- Catalyst & catalyst additives technology
- Equilibrium catalyst quality
- Maximum propylene operations
- Fluidization
- Troubleshooting:
 - catalyst losses
 - fouling
 - coking in reactor vapor line
 - coking in fractionator
- Economics