



Catalytic Resid Upgrading-Ebbulated Bed Process

Consultant / Trainer:

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The **Petrogenium**. Catalytic Resid Upgrading (EB) Course is an awareness skills course aimed at professionals that deal with Ebbulated Bed Conversion units at a refinery.

Separate courses can be offered on Catalytic Resid Upgrading using Fixed Bed technology as well as courses in Fuel Oil blending.

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: Unit technologists, process engineers, experienced operations- and laboratory staff who are working on or exposed to Resid Upgrading technology or its feeds and products (fuel oil blending operations). Further the course will be valuable to anybody that wants to gain better perspective on how Resid Upgrading Units fit into the refining scheme.

Learning Objectives

This one-day course provides a general introduction to Catalytic Resid Upgrading and more specifically Ebbulated Bed units. The basis and theory behind the process will be addressed including properties of feed and products as well as stability theory. Further elements are main process equipment including their constraints, unit operation as well Catalyst Addition Rate optimization. The workshop can be concluded with an interactive discussion and analysis on the current challenges and issues of the unit at hand.

Programme

Part 1

Introduction

- Basics of Catalytic Resid Upgrading
- Line-ups of Resid Upgrading units
- Yields and Properties of Resid Upgrading-products
- Marine fuel oil: specification and application aspects

Part 2

Operating conditions and performance optimization

- Important process parameters and their impact on performance
- Performance monitoring and optimization

Part 3

Selecting a new catalyst system

- Setting-up Invitation to Bid
- Options for catalyst evaluation
- Requirements for technical proposal

Part 4

Discussions on issues in unit at hand