



Fluid Catalytic Cracking Process Technology Course

May 20 - 22, 2008
The Inn at the Ballpark
Houston, Texas

ABOUT THE COURSE

This highly practical course will give you a thorough understanding of the importance of the FCC process in your refining operation. You'll learn about the entire Fluid Catalytic Cracking process, including process equipment design and operation, unit operations, catalyst and additive technology, fluidized solids fundamentals, and basic unit troubleshooting. Sessions will address real-world FCC issues in an enjoyable seminar format that maximizes interaction between course participants and facilitators. You'll return to your job with a valuable reference binder containing copies of all course materials and presentations.

WHO SHOULD ATTEND

This course is designed primarily for personnel relatively new to fluid catalytic cracking, but those with considerable experience also will find the sessions valuable.

FACILITATORS

Session leaders are all Albemarle Fluid Catalytic Cracking Technical Service Specialists with years of hands-on experience and a wealth of practical knowledge.

ADDITIONAL INFORMATION

If you have questions about course content, coverage depth on a particular topic, or the technical scope of the course, please contact John Zoller at (281) 283-1540 or john.zoller@albemarle.com.

C O U R S E O U T L I N E

Process Fundamentals

Introduction to the FCC process, description of commercial unit configurations, process basics, flow schemes, and the position and importance of FCC in the modern fuels refinery

FCC Heat Balance

Reactor/regenerator energy balance as the basis for FCC operations and optimization

Reaction Chemistry & Kinetics

Overview of primary catalytic & thermal cracking reaction mechanisms

Catalyst Handling

Typical procedures and loading equipment for continuous addition of catalyst and additives

FCC Catalyst Technology

Zeolite synthesis, matrix technology, catalyst manufacture, and the impact of catalyst on unit operation

Process Variables

A detailed description of the effects of primary dependent and independent operating variables

Feed & Product Treating

Objectives and benefits of FCC feed pretreatment on FCC performance, along with typical product treating requirements

CONTINUED



REGISTRATION

The fee for the course is \$1345/person if registered before April 29, 2008 and \$1545/person thereafter. Breakfast and lunch are included each day, and so is the Tuesday-night group activity. Hotel and travel costs are not included in these fees.

To Register:

Please complete the following information and FAX or e-mail it to:

Linda Lopez
Albemarle Corporation
2625 Bay Area Blvd., Suite 250
Houston, Texas 77058
Phone: (281) 283-1502
Fax: (281) 283-1519
e-Mail: linda.lopez@albemarle.com

Name _____

Title _____

Company _____

Address _____

City/State/Province _____

Zip (Postal) Code/Country _____

Telephone _____

E-mail _____

Any Special Needs? _____

HOTEL RESERVATIONS

Albemarle has arranged a discounted room rate at the Inn at the Ballpark for \$159/night, single or double occupancy. Rooms must be booked through Linda Lopez at Albemarle to obtain this rate.

Please reserve a room for me on the following nights:

Arriving _____

Departing _____

Single / Double Room _____

Smoking Preference _____

Convertor Pressure Balance

The importance of the reactor/regenerator pressure balance as a diagnostic tool

Fluidization & Standpipe Operation

Fundamentals of fluidized solids as they apply to the FCC process, and diagnosis of catalyst standpipe instability and catalyst circulation problems

Resid Processing Options

The benefits of processing heavy residual feedstocks in the FCC, along with the impact on catalyst, unit operation and hardware considerations

Process Equipment

Detailed discussion of the equipment utilized in the reactor/regenerator, main fractionator, and vapor recovery sections, typical design criteria, equipment reliability, and normal operations

FCC Additives Technology

Optimum use of additives in the circulating catalyst inventory, environmental considerations and yield selectivity shifts

Catalyst Evaluation Techniques

Determining performance of fresh catalyst candidates and equilibrium catalysts, and applying test results to commercial operation

Diagnosing Catalyst Losses

Diagnosing and minimizing FCCU catalyst losses, which have environmental and economic impacts for the FCCU

Equilibrium Catalyst Analysis

Interpretation of the chemical and physical properties of FCC equilibrium catalyst and use of the Ecat analysis report as a diagnostic tool

Unit Optimization

Techniques for manipulation of various cracking severity variables to optimize yield patterns and profitability

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