

The FCCU is no longer just a fuels producer but is producing petrochemical feedstocks, pretreating tar sands and producing biofuels. The FCC can change operations from the production of large volumes of gasoline blending components (up to 70 volume percent of the pool), to the production of large volumes of diesel blending components (up to 40 volume percent of the pool). The FCCU also produces approximately 110 barrels of product for every 100 barrels of feed. With this range of demonstrated flexibility and volume expansion, the FCCU is one of the most valuable process units in the refinery.

### You will learn

Increase awareness of process fundamentals and operating principles for a broader understanding of the various FCC, RFCC and High Olefin FCC (HOFCC) unit process design differences, operating flexibilities and potential equipment revamp opportunities for more operating mode flexibility and future process development.

Introduction to the FCCU

Process Flow

FCCU Process Differences

Key Equipment

- FCCU Cracking Reactions and Chemistry
- Catalyst Components and Function

Pressure Balance

- Heat Balance Effects
- Feed Properties and Operating Variables
- Understanding E-Cat Analyses and Catalyst Testing
- Fluidization Issues

Future FCCU Technology Development and Operation

- High Olefin FCCU
- FCCU & Petrochemical Integration
- New FCCU Processes

### Who should attend

Unit operators and supervisors, refinery plant engineers, technical service and process engineers both experienced and new to the FCC.

FCC equipment and process licensors, and service providers who want a better understanding of the FCC process can also benefit.

#### Prerequisites

An understanding of refining processes and petroleum refinery terminology is expected, having some experience with the FCC unit is helpful.

1-2 Oct. 2018

Training starts at 0900 and finishes at 1730 both days. The program includes catered lunch and breaks. Attendees also receive a training manual that can serve as a valuable office reference. Dress code is casual.



Christopher F. Dean

Christopher F. Dean has over 35 years in the refining business. His emphasis has been on high severity Fluid Catalytic Cracking operations with petrochemical integration. Before forming the consulting service firm High Olefins FCC Technology Services LLC, he spent fifteen years as a Research and Process Engineering Consultant with Saudi Aramco.

He initiated research and commercialization studies in catalytic naphtha cracking utilizing the HS-FCC downer reactor technology. In addition he was active in the development of the PetroRabigh integrated refinery and petrochemical joint venture complex and with the future Ras Tanura Refinery expansions and joint venture.

He has published over 30 papers and articles and has been issued two patents on FCC gasoline desulfurization with three other FCC pending process patents.

#### Training Pass

Includes catered lunch and breaks.

FCCU Process Fund. and Recent Developments (1-2 Oct. 2018)

Before 20/8

\$1,495

After 20/8

\$1,595

## Conference Pass Options

Conference pass includes catered lunch, breaks, and cocktail receptions.

**Early**  
Before 20/8

**Regular**  
After 20/8

Refiner Pass (Tue-Thu, 2-4 October 2018)

\$1,090

\$1,290

Vendor Pass (Tue-Thu, 2-4 October 2018)

\$1,480

\$1,580

## Registration Form

Early registration ends  
20 Aug. 2018

## Conference Schedule

	1-Monday	2 <sup>nd</sup> -Tuesday	3 <sup>rd</sup> -Wednesday	4 <sup>th</sup> -Thursday	5 <sup>th</sup> -Friday
0900-1730	Training	Training	Conference & Exhibition	Conference & Exhibition	Training
1730-1830		Reception & Exhibition	Reception & Exhibition		

Please indicate your area of interest in a percentage equaling 100%. For example DCU 70% SRU 30%

DCU \_\_\_\_\_ SRU \_\_\_\_\_ FCCU \_\_\_\_\_

### Send this page to:

fax +1 (360) 544-0126  
email RefComm@RefiningCommunity.com  
mail Coking.com Inc  
520 Fieldston Rd.  
Bellingham, WA 98225  
USA

### Or register online at

[Regonline.com/RefCommSpain](http://Regonline.com/RefCommSpain)

## Registrant Info and Payment

Prefix \_\_\_\_\_ First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Job Title \_\_\_\_\_ Company \_\_\_\_\_

Mailing address \_\_\_\_\_ City \_\_\_\_\_

State/Province \_\_\_\_\_ Postal code \_\_\_\_\_ Country \_\_\_\_\_

Registrant's email \_\_\_\_\_ Registrant's phone \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Payment amount \_\_\_\_\_ Check \_\_\_\_\_ Wire Transfer \_\_\_\_\_ Mastercard \_\_\_\_\_ American Express \_\_\_\_\_ Visa \_\_\_\_\_

Name on credit card \_\_\_\_\_ Card expiration date \_\_\_\_\_

Credit card number \_\_\_\_\_ Security code \_\_\_\_\_

Payment is due prior to the start of the conference or training. Fees will be charged to your credit card at the time of registration unless other arrangements have been made. Make checks payable to "Refining Community".

### Refund Policy

Fees are fully refundable until 10 September 2018 (three weeks before the event), after which a \$200 USD fee will be charged for cancellations. Registering for this training course prior to 10 September 2018 will help maximize the probability that the course will proceed as planned. Cancellations after 24 September 2018 (1 week before class until 24 hours before class) are charged a 50% fee. All other cancellations and no-shows are non-refundable. Substitutions are allowed. Submit all cancellations and transfers in writing, by email or by fax.

Prices are in US Dollars

### Checklist

**Register early** to benefit from scheduled advertising and promotions.

**Send a separate form for each person** or register online at your convenience.

**Make checks payable to** "Coking.com Inc."

**Bank Transfer**  
Please contact Marlea Stockenberg  
marlea@coking.com