



Presentations

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- ♦ **Blac Inc:** FCC Valve Actuator Information systems
- ♦ **AltairStrickland:** FCC Revamps Constructability Issues in the Reactor and Regenerator
- ♦ **Sunoco:** Troubleshooting FCC Catalyst Losses.
- ♦ **Amistco Separation Products:** Design Considerations for FCC Fractionators
- ♦ **Zero Injury Institute:** Safety Leadership
- ♦ **Intercat Inc:** Pollution Control in Regenerators
- ♦ **Grace:** The Role of the FCCU in a diesel world
- ♦ **Aquilex:** Advanced Technology adds safety to FCC upgrades
- ♦ **Peccatiello Engineering:** Case Histories of FCC Incidents. Find out why in spite of PHA and HAZOP these common incidents continue to occur and what you can do about them
- ♦ **RSI Simcon Inc:** Simulator Training-Operator competency, the existing gap between capabilities and demands, the consequences of that gap and methods for closing the gap
- ♦ **Zimmermann & Jansen:** FCCU Overhead Isolation Valves save time and money while reducing risk during shutdown and startup
- ♦ **FCC Equipment Improvements:** Using Boron Diffusion Coatings
- ♦ **Structural Preservation Systems:** Concrete Fireproofing – Analysis, Evaluation & Repair Strategies



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- ♦ **Aquilex:** Continuous Evolution of Technology Delivers Safety & Performance Improvements.
- ♦ **Thorpe / Orloff:** A Case History of Refractory Lining Improvements for O2-Enriched Furnace Service (You Don't Know What You Don't Know)
- ♦ **Merichem Chemicals & Refinery Services:** Treatment Options for Molten Sulfur Storage.
- ♦ **United Laboratories:** Sulfur unit decontamination to facilitate maintenance.
- ♦ **Zero Injury Safety Institute:** The path to Zero Injury - No At-Risk Behavior
- ♦ **COPPE - URFJ:** Control integrated system for H2S leak.
- ♦ **Structural Preservation Systems:** Capacity for in-Ground Reinforced Concrete Sulfur Pits.
- ♦ **Refined Technologies:** Reducing Differential Pressure - Amine Regenerator.
- ♦ **INEOS Oxide:** Optimizing Refinery Amine System Performance without Capital.
- ♦ **Dopak Sampling:** Closed loop & closed vent systems for liquids, gases, and liquefied gases.
- ♦ **Callidus Technologies by Honeywell:** Sulfur Tail Gas Thermal Oxidizer Systems.
- ♦ **RSI Simcon:** Increasing operator competency through simulator training
- ♦ **Sulfur Operations Support:** Sultraps Additional presentations under consideration:
 - ♦ Cost effective combustion solutions.
 - ♦ Contactor process improves mass transfer efficiency and minimizes aqueous phase carryover.
 - ♦ Solving problems with bolt-on jackets.

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- ♦ **ExxonMobil:** Brief update on 2009 Torrance Bottom Deheading Fatality
- ♦ **Marathon Petroleum:** Feed interruption, foamover, tarball & cooked drum experiences
- ♦ **LyondellBassell:** Surveillance rounds using Intellitrack – the latest findings
- ♦ **Risk Based Inspection:** assesses fatigue, creep and cracking on coke drums and the piping. A “damage to cladding” scenario predicting its life based on those conditions.
- ♦ **Scorpion Tools:** Hydraulic Pipe Makeup/ Break up Tongs
- ♦ **Structural Preservation Systems:** Successful Coker Repair Design Model
- ♦ **Zero Injury Institute:** Safety Leadership
- ♦ **Marsulex:** Coke Handling. Successful coke cutting business reliability model
- ♦ **CSI Controls Southeast Inc:** Stop plugging those coker lines Areas susceptible to plugging and solutions.
- ♦ **RSI Simcon Inc:** Simulator Training-Operator competency, the existing gap between capabilities and demands, the consequences of that gap and methods for closing the gap.
- ♦ **COMIMSA Zona Norte:** Risk based inspection in cokers.

Heaters

- ♦ **Increase Performance Inc:** Prolonging Heater Run Length to eliminate poor burner combustion, draft limitations, tube overheating, and allow increased product throughput and overall system efficiency.
- ♦ **Sonomatic Ltd:** Predicting and preventing carburization-induced failures of coker heater tubes.
- ♦ **Champion Technologies:** Heater Pilot Plant - Chemical injection to help reduce fouling in the heater, different than the “traditional” anti-foulant programs.
- ♦ **FosterWheeler:** Coker Heater Design - features that could offer better maintenance, more flexible operation or on existing units incorporate current trends on retrofits.
- ♦ **KBC:** Coker heater design and evaluation
- ♦ **Hamworthy Combustion:** Operational and Design Issues Faced by Low & Ultra Low NOx Burners.

Breakout Discussion / Workgroup Format

This is where the heavy lifting takes place. Breakout Workgroups are made up of 20 to 30 people—you and your peers, refiners and vendors. Groups are organized around process, operation, and maintenance/reliability or by subject matter like equipment and catalyst.

Within their area, group members list the topics that interest them most, prioritize them based on everyone's input, then launch into the top 4 or 5 issues.

Two facilitators guide the group and take notes. A summary of 2 or 3 key points is reported back to the general assembly and published on the CatCracking, SulfurUnit and Coking.com.com discussion forum.

Conference Schedule

CatCracking.com		SulfurUnit.com	Coking.com[®]
Monday, April 12			Monday, April 19
08:00	Overview Training - 1 Day Trainees attend exhibition		Overview Training - 1 Day Trainees attend exhibition
5:00	Exhibition and cocktail reception		Exhibition and cocktail reception
Tuesday, April 13			Tuesday, April 20
08:00	Seminar Presentations		Seminar Presentations
1:00	Breakout Work Groups on Safety, Operations, Process, Maintenance/Reliability		Breakout Discussion Groups on Safety, Operations, Process, Maintenance/Reliability
5:00	Exhibition and Cocktail Reception		Exhibition and Cocktail Reception Paddlewheel Boat Tour Sponsored by DeltaValve
6:30			
Wednesday, April 14			Wednesday, April 21
08:00	Seminar Presentations	Overview Training - 1 Day	Seminar Heater Presentations
1:00	Breakout Work Groups on Catalyst, Operations, Process, Maintenance/Reliability		Breakout Work Groups on Heaters: Operations, Process, Maintenance/Reliability
5:00	Seminar ends	Training Ends, option for trainees to attend Exhibition & Cocktail Reception	Exhibition and Cocktail Reception
5:30			
Thursday, April 15			Thursday, April 22
08:00	Process and Mechanical Training 2 Days	Equipment Reliability Workshop Presentations and Exhibition	Seminar Presentations Seminar ends after lunch
1:00		Breakout Discussion Groups on Safety, Process, Maintenance/Reliability, Operations	Heater and Fractionator Training 1.5 Days
5:00	Training ends for the day	Exhibition and Cocktail Reception.	5:30 Training ends for the day
Friday, April 16			Friday, April 23
08:00	Process and Mechanical Training	Seminar Presentations	Heater and Fractionator Training
4:30	Training ends	4:45 Seminar Ends	4:00 Training ends

Registration and Contact Information

Name

Job Title

Company

Mailing Address

City

State / Province

Zip

Country

Phone

Cell

Fax

Email

Registrar (contact person)

Phone

Email

Selection and Payment

CatCracking.com

Seminar \$650 early / \$750 regular
Overview Training \$550/650
Process/Mechanical Training \$975/1100

SulfurUnit.com

Seminar \$650/750
Overview Training \$550/650

Coking.com

Seminar \$850/950
Overview Training \$550/600
Heater/Fractionator Training \$750/850
Networking Dinner \$40

Cash

Check, P.O.

Wire

Visa

M.C.

Amex

Credit Card #

Expiration Date

Amount

Signature

Print name on credit card

Early rates
apply until
March 11

Training Classes



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Overview Training - 1 Day

- ◆ Introduction to FCCU's
- ◆ Why FCCU
- ◆ An Overview (the equipment and its purpose)
- ◆ Heat Balance (the secret to understanding the FCCU)
- ◆ Pressure Balance (why the FCCU works)
- ◆ Incidents Review (an addition to PHA and Hazop)
- ◆ List of 25 Things to Watch on an FCCU
- ◆ Trouble-Shooting / Problem Solving

Advanced FCC Training - 2 Days

Day 1

- ◆ Safety Shutdown Systems & Safety Interlocks
- ◆ Procedures: Shutdown, Startup, On the Run
- ◆ Startup Checklists
- ◆ Shutdown Philosophy and Planning
- ◆ Troubleshooting (if needed)

Day 2

- ◆ S/D Equipment Design and Inspection:
 - ◆ Regen
 - ◆ Reactor
 - ◆ Standpipe and Risers
 - ◆ Flue Gas System
- ◆ FCC Incidents (If needed)

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Overview Training - 1 Day

Overview of Sulfur Recovery

- ◆ Sources of Refinery H₂S
- ◆ Properties of Hydrogen Sulfide
- ◆ Handling of H₂S in Refineries
- ◆ Refinery Flow scheme and H₂S Flow

Amine Treating Units

- ◆ Fundamentals of Amine Chemistry
- ◆ Description of Common Amines
- ◆ The Physical Amine Unit
- ◆ Amine Treating Process Equipment

Sour Water Treating

- ◆ Sour Water Chemistry
- ◆ Feed Preparationment
- ◆ Sour Water Stripping
- ◆ Sour Water Oxidixers

Claus Units

- ◆ Fundamental Sulfur Plant Chemistry
- ◆ Controlling the Process Front End
- ◆ Mechanical Description of the Plant
- ◆ Thermal Reactor and Energy Balance
- ◆ Catalytic Reaction Section
- ◆ Sulfur Recovery, Loading, and Forming

Sulfur Plant Incinerators

- ◆ Thermal Incinerators
- ◆ Process Conditions/Control

Review of Tail Gas Treating Process

- ◆ Fundamental Process Routes
- ◆ Impact of Emission Targets
- ◆ Commercial Examples

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Overview Training - 1 Day

1. Heavy Oil Processing
2. Specialized Equipment
3. Facilities Design and Operator Rounds
4. Emerging Technologies and Safety Events

Heater and Fractionator Training - 1.5 Days

Day 1:

- ◆ Basic Yields
- ◆ Furnace Fouling
- ◆ General Furnace Optimization
- ◆ Furnace Modeling
- ◆ De-Coking Heaters - Spalling/Pigging
- ◆ Coke Drum Operations
- ◆ Drum Cycle Times
- ◆ Drum Safety Issues
- ◆ Drum Cooling Issues
- ◆ Anti-Foam Best Practice

Day 2:

- ◆ Slide Valves - Delta Valves
- ◆ Fractionation Best Practices
- ◆ Gas Oil Quality ◆ Naphtha Quality
- ◆ Flash Zone Design - Minimize Recycle
- ◆ Coke Fines & Water Separation
- ◆ Sludge Injection
- ◆ Coke Cutting & Coke Handling
- ◆ Blow Down System
- ◆ Trouble Shooting

Exhibition



- ◆ Catalyst and Additive Providers
- ◆ HPU Actuators and Control Systems
- ◆ Engineering, Procurement, Construction, Revamp & Turnaround, Field Service and Repair Companies
- ◆ Process and Technology Licensors
- ◆ Decontamination, Sampling Systems
- ◆ Valves, Expansion Joints and Pumps
- ◆ Testing, Inspection and Diagnostics
- ◆ Welding and Fabrication
- ◆ Simulator Training
- ◆ Refractory
- ◆ Scrubbers
- ◆ Column Internals

- ◆ Incinerators, Combustion & Burner Tips
- ◆ Engineering, Procurement, Construction, Field Service and Repair Companies
- ◆ Process and Technology Licensors
- ◆ Sampling Systems, Decontamination
- ◆ Valves and Equipment
- ◆ Testing, Inspection and Diagnostics
- ◆ Welding and Fabrication
- ◆ Refractory
- ◆ Filters and Filtration
- ◆ Simulator Training
- ◆ Scrubbers

- ◆ Bottom and Top Unheading.
- ◆ Engineering, Procurement, Construction, Revamp & Turnaround, Field Service and Repair Companies
- ◆ Inspection & Monitoring
- ◆ Process and Technology Licensors
- ◆ Heater Fouling and Coating
- ◆ Coker Block and Switch Valves
- ◆ Pigging and Industrial Services
- ◆ Water Filtration
- ◆ Structure Repair
- ◆ Actuators and Control Systems
- ◆ Simulator Training

Refining Community

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Bellingham, WA 98229
USA

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- Safety Seminar
- Exhibition
- Overview Training
- Mechanical and Process Training

League City, Texas
USA

April 12-16, 2010

- Safety Seminar
- Exhibition
- Overview Training

League City, Texas
USA

April 14-16, 2010

- Safety Seminar
- Exhibition
- Overview Training
- Fractionator and Heater Training

Galveston, Texas
USA

April 19-23, 2010

MORE PRODUCTION - LESS RISK!

Why attend this conference?

- Experienced, senior people are retiring or resigning before benefits packages decrease any further.
- Funding and staffing for the training departments have been cut.
- Mentoring programs lack both the time and availability of qualified staff.

Come network and make connections outside your company with your **Refining Community**

