

AFPM 2019 Operations & Process Technology Summit - P & P Sessions

Maximizing Your Molecular Advantage

October 14 – 16, 2019

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	San Antonio, TX
	Monday, October 14 th
9:00 AM Champions: Adam Ali, AFPM; Liz	Emerging Leaders Town Hall: Join us for a lively, interactive discussion with other emerging leaders in the industry. We will kick things off with an ice breaker and then delve into topics that will help you build a successful
Manning, ; Kathleen Wills Athlon, A Halliburton Company	1. How to Veni, Vidi, Vici Your Career with these V's of Career Management - Meha Jha, Emerson
	 Transforming Culture: Where Do You Start? - Ande Morin, Chevron Mentoring Works - Liana Siegel, Marathon Petroleum Corporation Petroleum Corporation Transitioning from Peer to Leader - Chris Turbeville, Valero Energy Corporation
9:00 AM Champions: Bill Cates, Hunt Refining; Sam Lordo	Emerging Subject Matter Experts Forum discussion on the processes involved with becoming an SME for your company and Industry This is to be facilitated by Industry SME's Topics
	SME Attributes - Phillip Oberbroecking, LyondellBasell Mentoring
	 Resources available (Internal, conferences, technical training, etc.) Experience
	 Common concerns in moving to a SME role – Vance Varner, John Zink Still a pathway to manager levels – Todd Marut, Becht Engineering Value statement for SME's, way to define value - Dennis Haynes, NalcoChampion
2:00 PM	Gasoline P&P
Champions:	Alternative alkylation technologies - current and emergent.
Rob Carpenter, United Rentals; Russell Wiltse, Valero	Dominic Varraveto, Burns & McDonnell
	General Reforming Overview. Main process objectives. Typical Block Flow Diagram. General Feed/Product Properties. Types of Reforming – Fixed Bed, Cyclic, CCR. General descriptions of what makes them different. Michael Condens (1908)
	 Michael Crocker, UOP Impact of Low Coke Operation and CCR Reforming Units Factors that Impact Coke production in Reforming. General summary of problems in the
	Regen Section when the coke is too low. Process impact of on/off Regen Section operation – potential yield impact. Actions to try to increase coke. Potential revamps for low coke operation of a Regen Tower. Rick Grubb, Chevron
	 Introduction to Light NAPHTHA Isomerization and the Impact of Heavy Feed to a Light NAPHTHA Isomerization Unit Jocelyn Daguio, UOP
2:00 PM	Auxiliary Facilities
Champions: Chris	1. Introduce Virtual Reality Demo
McDowell, Marathon	2. Controlling CO ₂ Corrosion In Steam Systems - Gregory Robinson, SUEZ
Petroleum Corporation	a. Boiler Pretreatment Source of CO ₂
Petroleum; Harold	b. Chemical Treatment
Eggert, Athlon, A	i. Internal ii. Satellite Feed
Halliburton Company	c. Operations-Best Practices
	i. Vent Reboilers
	3. Amine Unit – Greg Sweatt, Huntsman
	a. Best Practices
	b. Operation
	c. Maintaining Amine Quality
	4. Optimizing Critical Exchanger Performance – Stanislav Barskov, Halliurton
	a. Defining Critical Exchangers
	b. Best Practices
	c Online Cleaning

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Tuesday, October 15th

9:00 AM

Champions: Sergio Robledo, Haldor Topsoe; Wendy Wildenberg, FHR

Hydroprocessing

- 1. High Salt Diet: Chloride Management –Sources and Effects
 - Co-presentation chloride contamination in naphtha unit; its effect and possible sources.

Steve Treese, Becht; Rudy Torres, Lion Oil

- 2. Reactor Effluent Diseases: Mechanisms, Case Studies, and Key Points for Long Life
 - Discuss the changes to API RP 932 B, what it means to refiners and what it means for the unit engineer.

Mike Cayard and Wendy Wildenberg, FHR; Montri Vichailak, Marathon Petroleum Corporation

- 3. Digital Medicine for Living a Long Healthy Life: Refinery of the Future
 - Discuss digital twin/remote monitoring services and their potential benefits for hydroprocessing and hydrogen plant units.

Robert Ohmes – KBC; Michael Fjording, Haldor Topsoe; Tom Berry and Alejandro Vasquez, Shell

- 4. Having a Growth Spurt: Revamps for Capacity Increase in Hydrotreaters and H2
 Units
 - -Discuss what are the considerations, pitfalls and challenges when revamping a hydrocracker or a hydrogen plant for increased capacity.

 Simerjeet Singh, UOP; Brian Bumgarner, Matheson

2:00 PM

Champions: Eric Legare, Marathon Petroleum Corporation Petroleum; Jeff Zurlo, SUEZ; Maureen Price, Fluor

Crude/Vacuum Distillation & Coking:

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.. Caustic Use in Crude Units – Benefits and Risks

Caustic use in refinery crude units is an established process within many refineries across the globe. Recent refinery incidents linked to caustic injection have increased the level of interest around why it is used and what safeguards are employed to ensure reliable unit operations. A panel of industry experts will discuss the basics around caustic injection in crude units while covering the process benefits and risks associated with its use. Their presentation will be followed by a town hall where the audience can ask questions of the panel members.

- a. Caustic Use & Chemistry Raul Romero, NALCO Champion
- b. Injection Systems & Control Sylvain Fontaine, SUEZ
- c. Downstream Impacts Randy Rechtien, BHGE

2. Reflections on Crude Unit Monitoring

This session will focus on crude unit monitoring with a focus on what good looks like and how to interpret your unit data to ensure the unit operates reliably and profitably. Two engineers from an operating company will share best practices with the audience. This is sure to be a captivating session.

Andrew Riehl and Jim Johnson, Marathon Petroleum Corporation

3. Use of Advanced Analytics in Crude Blending and Quality Control

Crude assays are utilized in many value-added applications within the refining industry such as influencing crude purchases, predicting refinery yields and profitability, supporting the LP and process development for new projects. This session will have experts in this field present the latest in crude assay tools and applications. Following the presentations, a town hall will be held allowing the audience to ask questions to the panel.

- a. Alex Woods, Aveva
- b. Shinoj Bhaskar, AspenTech

Wednesday, October 16th

8:00 AM

Champions:

Eric Legare, Marathon Petroleum Corporation Petroeum; Robert Ohmes, KBC

Fostering Profitability:

Session 1: Market Overview

This Principles and Practices session will focus on the impacts of the market and industry economics on refinery and petrochemical industry. In particular, the discussion will cover areas such as the latest on the impact of IMO on the industry, how sweet / sour crude differentials are shifting, what changes in pipelines and mid-stream logistics system are occurring and how they impact our industry, and other market drivers that will affect profitability in the next few years. Linda Giesecke, ESAI

Session 2: Energy Improvement in a Low-Price Environment

Energy remains one of the highest operating costs for any facility, but in a low energy cost environment, justifying profit improvement projects to optimize energy use can be difficult. This session will focus on unique and holistic ways that operating companies can utilize to identify, justify, implement, and sustain energy projects that positively impact the bottom line and help organizations meet their corporate energy efficiency targets *Dr. Kimberly Fick, PTAI*

Session 3: Improving Profitability through Digitalization: A Practical Viewpoint

Digitalization, Artificial Intelligence, IIoT, Machine Learning, and Analytics are buzz words that are prevalent in our industry, but how do refiners and petrochemical companies actually improve profitability through Digitalization? A panel of industry specialists in Digitalization have been assembled and will discuss both the theoretical as well as practical aspects of improving profitability, along with real case studies and industry learnings. From this session, the attendees will gain valuable insight that they can use to help their own organizations along the digital transformation journey.

Doug White, Emerson; Simon Rogers, Yokogawa; Katherine Jones, Honeywell UOP

8:00 AM

Champions: Rob Riley, Grace; Alexandra Sakamoto, Shell; Ziad Jawad, P66; Matthew Wojtowicz, Honeywell; Richard Grove, Chevron; Darin Foote, CHS.

FCC:

Optimizing the FCC Unit Life Cycle – Turnaround to Turnaround

This Principles and Practices session will look at the FCC through a lens of a full turnaround cycle – start-up to start-up. A comprehensive overview spanning tactics to maximize or hit desired run lengths while maintaining margins through proactive monitoring and utilization of emerging digitalization tools, turnaround benchmarking and scope development, planning strategies, turnaround execution best practices, and safety lessons learned. With more and more FCC engineers rotating through FCC positions without having the benefit of participating in a full turnaround cycle, this session is intended to compliment new engineers' learnings, and facilitate a good stewardship of the FCC, while providing them with knowledge/tools to impact a successful future TA.

- 1. Darin Foote, CHS
- 2. Tom Duffy, Shell Convent Refinery
- 3. Kevin Proops, Solomon & Associates