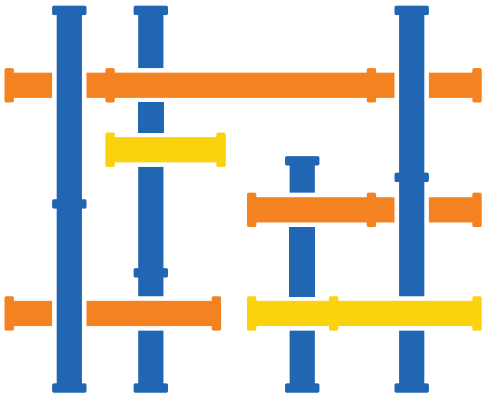


2020 AFPM
SUMMIT
Excellence in Plant Performance

THE **NEW** 2020 AFPM SUMMIT **IS GOING VIRTUAL**

August 25 – 27, 2020

The ONLY conference for the petroleum refining and petrochemical industries focused on improving plant-wide performance

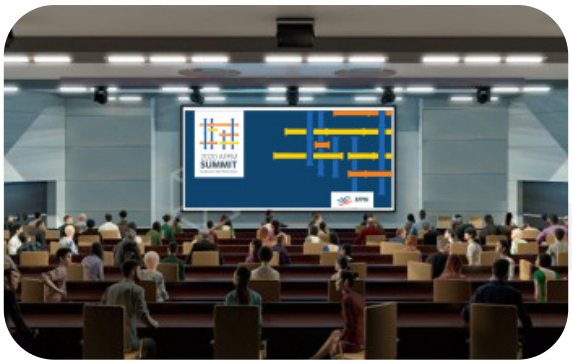
FREE to AFPM members through August 9.
Non-members are welcome for a nominal fee.

REGISTER TODAY

www.afpm.org/2020Summit

AFPM

LEARN AND CONNECT IN A NEW WAY



The 2020 AFPM Summit is going virtual! This exciting three-day event will provide technical resources for professionals from the refining and petrochemical industries who are focused on improving plant-wide performance.

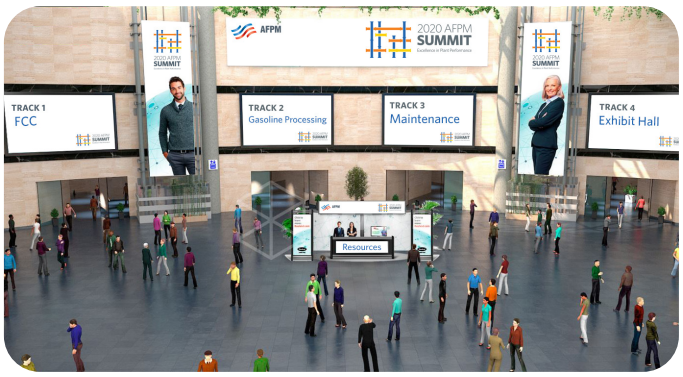
Attend world-class technical seminars, engage in roundtable discussions, discover the latest strategies and emerging innovations, and find immediate solutions to implement at the site level — all in a new, cutting-edge format.

Three events come together for
ONE POWERFUL SUMMIT

The Summit will continue its mission to showcase a combination of the best elements from AFPM's Reliability and Maintenance Conference, Cat Cracker Seminar, and Operations & Process Technology Summit, with added benefits of an integrated approach to problem-solving across disciplines.

The 2020 Virtual Summit will include:

- Live-streamed industry topics and education sessions
- Interactive, online networking events
- Access to emerging technologies, process safety, insights into operations
- A virtual exhibit floor with the ability to interact and engage through live chats
- Content targeted at owner and contractor personnel from maintenance, operations, engineering, and more



The AFPM Virtual Summit will be hosted on a user-friendly interactive virtual platform. Like a live event, you will begin the conference by entering a lobby with videos and directional signage to help guide you through the virtual experience.

The three-day summit will be packed with the same content originally planned for the live event. Sessions will be held in a variety of auditoriums, all with optional chat boxes or Q&A. Following the event, all approved sessions will be available on-demand.

TECHNICAL EXPERTISE. ACTIONABLE SOLUTIONS.

While the format of the event has changed, you can expect world-class technical content focused on emerging technologies, process safety, maintenance and turnaround, improved reliability and operations, mechanical integrity, training, leadership, and culture.

AGENDA
TUESDAY, AUGUST 25
10 a.m. – 6 p.m. EDT
WEDNESDAY, AUGUST 26
10 a.m. – 6 p.m. EDT
THURSDAY, AUGUST 27
10 a.m. – 6 p.m. EDT

DAY 1: TUESDAY, AUGUST 25

10:00 a.m. EDT *(15 min.)*	**ROOM 1:** **Kick-Off Keynote:** Chet Thompson, *President and CEO, AFPM*
(60 min.)	**Industry Leadership Panel** Join us for a conversation with leading industry executives discussing perspectives on the state of the industry and the "new normal." MODERATOR: Chet Thompson, *President and CEO, AFPM* PANELISTS: Daniel Coombs, *Executive Vice President of Global Manufacturing, Projects & Refining, LyondellBasell Industries,* Michael Coyle, *President, Manufacturing, Chevron Corporation USA,* Robert Herman, *Executive Vice President, Refining, Phillips 66* and Michael Nagle, *President & CEO, INEOS Olefins & Polymers USA*

	ROOM 1: PROFITABILITY	ROOM 2: FUTURE OF INDUSTRY	ROOM 3: PRACTICAL TOOLS FOR SITES	ROOM 4: USES OF DATA	ROOM 5: DATA AND PROCESSES
11:30 a.m. EDT *(60 min.)*	**The Outlook for Road Fuel Demand** FACILITATOR: Susan Grissom, *AFPM* SPEAKER: Linda Giesecke, *ESAI* **Learning objectives:** Learn about the link between the economic slowdown and road diesel demand, how transportation trends like electric vehicles could affect gasoline and diesel demand, and the impact on road fuels from policies and regulations affecting fuel efficiency, electric vehicles, and renewable fuels. Identify public policies that drive new product development.	**Leveraging Extended Reality for Training and Maintenance** FACILITATOR: Adi Punuru, *ExxonMobil Research and Engineering* SPEAKERS: Athicha (M) Dhanormchitphong and Kyle Daughtry, *ExxonMobil IT/IT Strategy/Architecture & Technology* **Learning objective:** Gain insight from operating company discussions on their use of XR for training and maintenance.	**Refining Case Studies on Leveraging Data Analysis and Reporting Tools for Decision Making** FACILITATOR: Abbas Dhalla, *Chevron Corporation USA* SPEAKERS: Miguel F. G. Sison, *Chevron Corporation USA,* Dan Oliveira, *Flint Hills Resources* **Learning objective:** Leverage domain knowledge to help develop and create "easy-to-use" applications without requiring software coding/programming knowledge from existing data. Demonstration of Power BI tools will be provided.	**Applying Now to the Future: Technology Lessons Learned from the Pandemic** FACILITATOR: Maggie O'Connell, *AFPM* PANELISTS: Blake Larsen, *Sinclair Oil Corporation and* Stephanie Franklin-Thomas, *Motiva Enterprises LLC* **Learning objective:** Learn how to apply cyber and OT industry best practices from COVID-19 response to potential future emergency situations and the "new normal."	
12:45 p.m. EDT *(60 min.)*	**Crude to Chemicals — The Reality vs. Perception** FACILITATORS: Eric Legare, *Marathon Petroleum Corporation* and Robert Ohmes, *Becht* SPEAKERS: Anne Huber, *Argus* and Keith Couch, *Honeywell UOP* **Learning objectives:** Gain insight into market drivers that are encouraging refiners to examine a departure from traditional fuels production to chemical production. Gather information on process technologies that enable conversion of fuels stream to chemical products and understand what options currently exist to begin transforming your facility now.	**Workforce Training and Knowledge Retention** FACILITATOR: Adam Ali, *AFPM* SPEAKERS: Juan Hurtado, Alvin Chen, Andrew Novotny, Mark Schmalfeld, *BASF Corporation* **Learning objective:** Gain insights from flexible training options tailored to compliment your educational needs.	**Ten Years of Advancing Process Safety — Industry Tools** FACILITATOR: Lara Swett, *AFPM* SPEAKERS: Ryan Wong, *Exxon Mobil Corporation* and Shanahan Mondal, *CVR Energy* **Learning objective:** Learn how your company can leverage the AFPM process safety tools to reduce risk. Industry case studies provided.	**Increasing the Return on Investment from Operational Data** FACILITATORS: Vikram Gokhale, *Chevron Corporation USA,* Sam Lordo, *Consultant* and Ziad Jawad, *Phillips 66* SPEAKERS: Yugender Chikkula, *Motiva Enterprises,* Jacqueline Guobadia, *Motiva Enterprises* and Krista Novstrup, *Seeq Corporation* **Learning objective:** Learn how you can improve operational decisions with data and its proper analysis and how to face the challenges in data availability, quality, analysis and sharing.	**Validate LOPA Assumptions with Data from your Own Processes** FACILITATOR: Tracy Sadowski, *Monroe Energy* SPEAKER: Tony Downes, *Honeywell PMT* **Learning objective:** Learn how to leverage historian data to field verify your HAZOP/LOPA assumptions. Operating company case studies will be provided.

DAY 1: TUESDAY, AUGUST 25 cont.

	ROOM 1: PROFITABILITY	ROOM 2: FUTURE OF INDUSTRY	ROOM 3: PRACTICAL TOOLS FOR SITES	ROOM 4: USES OF DATA	ROOM 5: TURNAROUND AND EMERGING LEADERS
2:00 p.m. EDT *(60 min.)*	**Renewable Diesel Production — 100% and Co-Processing Options for Refiners** FACILITATORS: Eric Legare, *Marathon Petroleum Corporation* and Robert Ohmes, *Becht* SPEAKERS: Henrik Rasmussen and Jostein Gabrielsen, *Haldor Topsoe* **Learning objectives:** Basics of Renewable Diesel Production; credits, feedstocks, and product placement. Learn about 100% and co-processing renewable diesel production flowsheets, main equipment, and process considerations.	**Exploring Challenges in the U.S. Refining Sector** FACILITATOR: Susan Grissom, *AFPM* SPEAKER: John Auers, *Turner Mason & Company* **Learning objectives:** Learn about the outlook and challenges facing the U.S. and global refining industries, including how COVID-19 has affected the short-term global demand for refined products, the prospects for demand longer term, how refineries have adapted in the short-term and how the global refining industry will change going forward.	**Human Organizational Performance (HOP)** FACILITATOR: Abbas Dhalla, *Chevron Corporation USA* SPEAKERS: Sahika Korkmaz and Chelsea Miller, *Chevron Corporation USA* **Learning objective:** Discussion on company applications of HOP, achieved benefits, and case-study examples.	**Organizational Learning through Investigations (Fin Fan and Heater Case Studies Discussed)** FACILITATOR: Alyse Keller, *AFPM* SPEAKER: Joanne Caldwell, *Phillips 66* **Learning objective:** A change in investigation methodology is used to promote broader learning across the organization while engaging the people who do the work as subject matter experts. This shift promotes visual look at multiple causes, where multiple solutions can be applied like Layers of Protection to reduce risk, improve safety and reliability. Case studies discussed.	**Roundtable: FCC Turnaround Safety** FACILITATOR: Richard Grove, *Chevron Corporation USA* PANELISTS: John (Andy) Kite, *Chevron Corporation USA* and Andrew Mezera, *Valero Energy Corporation* **Discussion summary:** FCC Turnaround Safety — Shutdown and Clean up, Maintenance Execution, and Restart
3:15 p.m. EDT *(60 min.)*	**Storytelling Using Data Science** FACILITATORS: Robert Ohmes, *Becht* and Eric Legare, *Marathon Petroleum Corporation* SPEAKER: Adam Richards, *Galvanize, Inc.* **Learning objectives:** • Discuss how to use data science tools to help you improve your technical communication and storytelling skills • Explain specific examples of how predictive modeling and statistical techniques can improve production capabilities	**Understanding Digital Process Monitoring in Refineries Through Connect'In™: A Case-Studies Approach** FACILITATOR: David Sacks, *Delek US* SPEAKERS: Montri Vichailak, *Marathon Petroleum Corporation and* Nandita Akunuri, *Axens North America* **Learning objective:** Case studies on how refiners and catalyst vendors can work together through process monitoring tools to maximize unit performance and troubleshoot.	**AFPM Walk the Line Practice Share Program** FACILITATOR: Andy Woods, *ChevronPhillips Chemical Company* SPEAKERS: Tjokro Hermanto, *AmSty* and Mike Shivers, *CVR Energy* **Learning objectives:** • Walk the Line from a maintenance perspective • How to utilize the WTL toolbox • Case study on how WTL has helped improve site safety and culture	**Real-Time Crude Oil Data for Refinery Decision Making** FACILITATOR: Bill Poe, *AVEVA* SPEAKER: Alex Woods, *AVEVA* **Learning objective:** Understand the impact of timely and high-quality crude oil knowledge on purchasing and planning decisions.	**Introduction to the 4 Disciplines of Execution** SPEAKER: Harvey Young, *FranklinCovey* **Learning objective:** Foster a culture of getting the most important things done. This session will help you achieve high-quality implementation in the shortest possible time and create maximum leader and team engagement with minimum disruption to business operations.

	ROOM 1: CRUDE/COKING	ROOM 2: FCC	ROOM 3: HYDROPROCESSING	ROOM 4: GASOLINE PROCESSING	ROOM 5: CONNECTED WORKER
4:30 p.m. EDT *(90 min.)*	**Roundtable: Reliability and Maintenance** FACILITATORS: Bill Cates, *Hunt Refining* and Eric Legare, *Marathon Petroleum Corporation* SPEAKERS: Andrew Jabukowski, *Flint Hills Resources, LP* and Ryan Miller, *RTI,* Bill Parente, *Fluor Corporation* **Learning objectives:** Two mini panels covering equipment decontamination, specifically, primarily desalters, lessons learned, new improvements/ procedures, and working capital project inside a turnaround.	**FCC 101: FCCU Pressure Balance Fundamentals** FACILITATOR: Ann Benoit, *W.R. Grace & Co.* SPEAKER: Drey Holder, *W.R. Grace & Co.* **Learning objective:** Gain a better understanding of how pressure balance is related to standpipe aeration, circulation, slide valves, and reactor and regenerator pressures. **FCC Catalyst Hot Topics: Latest Developments and Advances** FACILITATOR: CJ Farley, *G.W. Aru, LLC* PANELISTS: Cliff Avery, *Albemarle,* Representative, *BASF,* Bob Riley, *W.R. Grace & Co.* and Todd Hochheiser, *Johnson Matthey* **Learning objectives:** Octane balance, maximizing diesel, maximizing butylenes, and environmental compliance.	**Hydrocracker Temperature Excursion Session** FACILITATORS: Wendy Wildenberg, *Flint Hills Resources* and Ken Chlapik, *Johnson Matthey* PANELISTS: Jeff Johns, *Chevron,* Christoph Schmitz, *BP,* John Kulach, *Honeywell UOP,* Taylor Fama, *Daily Thermetrics,* Robert Torgerson, *WIKA* and Rodney Braun, *Flint Hills Resources, LP* **Learning objectives:** Understanding the hazard and mitigations; assessing the risk; design for defense; hydroprocessing safety and temperature instrumentation; hydrocracker temperature excursion including safety instrumented systems and auto-arming and auto-disarming.	**Increased Octane Demand — Investment Strategy for the Future (Traditional Technologies vs. Emerging Technologies)** SPEAKER: Matt Hutchinson, Mukund Yallambalse and Olivier Le-Coz, *Axens North America* **Learning objective:** Discussion of the benefits, applicability and limitations of reforming, alkylation and oligerimization.	**Connected Worker** FACILITATOR: Rebecca Bourg, *PBF Energy* PANELISTS: Jordan Oligmueller, *AdvanSix* and Ben Way, *Phillips 66* **Learning objective:** Panel discussion on different operating companies approach to implementing a connected worker program. Rounds and LOTO applications will be highlighted.

DAY 2: WEDNESDAY, AUGUST 26

	ROOM 2: CRUDE/COKING	ROOM 3: FCC	ROOM 4: MECHANICAL INTEGRITY	ROOM 5: ROUNDTABLE: TURNAROUND SCOPE AND PLANNING
10:00 a.m. EDT *(90 min.)*	**Crude and Coking Town Hall** FACILITATORS: Sam Lordo, *Consultant* and **Harold Eggert,** *Athlon, A Halliburton Service* PANELISTS: **Chris Behr,** *Valero Energy Company,* **Rene Nowalk,** *LyondellBasell Industries* and **Joel Lack,** *Nalco Water* **Learning objectives:** Selection criteria for opportunity or new crudes and crude compatability.	**Current Refractory Experiences: Failure Mechanisms, New Technology, and Best Practices** FACILITATORS: **Ziad Jawad,** *Phillips 66* and **Marc Secretan,** *Suncor Energy* PANELISTS: **Representative,** *Alliance Refractories,* **Chase Drake,** *Diamond Refractory Services,* **Jackson Espinoza,** *Turnaround Specialty Group* and **Kristian Richards,** *Irving Oil,* **Don Bremault,** *Alliance Refractories*	**Roundtable and Case-Study Session: Integrity Operating Windows** FACILITATOR: **Scott Hinds,** *Marathon Petroleum Corporation* SPEAKERS: **John Reynolds,** *Intertek Asset Integrity Management* and **Chad Patschke,** *Ethos Mechanical Integrity* **Learning objectives:** Discussion of IOW implementation, ongoing management and sustainability, and review of IOW white paper and other resources.	**Routine Maintenance Planning and Scheduling — Best Practices to Improve Craft Work Productivity** FACILITATORS: **Clayton Shoemaker,** *Valero Energy Corporation* and **Abbas Dhalla,** *Chevron Corporation USA* SPEAKER: **Joel Levitt,** *Springfield Resources* **Learning objectives:** Review techniques and tools for evaluation of your crews and develop techniques to reduce indirect (non-productive) time.
11:45 a.m. EDT *(90 min.)*	**Panel Discussion: Monitoring and Improving Equipment Operations** FACILITATORS: **Maureen Price,** *Fluor Corporation* and **Sam Lordo,** *Consultant* SPEAKERS: **Garry Jacobs** and **Jesus Cabrera,** *Fluor Corporation,* **Pat Cooper** and **Richard van Brecht,** *Becht* **SESSION ONE:** Performance Benchmarking: integrating reality into process modeling and using readily available data to bring reality into process modeling to improve decision making. **SESSION TWO:** Equipment Discussion — Pumps 101: types, curves, turn-down, single stage vs. multistage and matching control valves to pumps.	**Roundtable: Turbulent Markets — Optimization of the FCC at Lower Feed Rates; Getting the most out of the FCC during COVID-19** FACILITATORS: **Darin Foote,** *CHS* PANELISTS: **David Hunt,** *W.R. Grace & Co.,* **Edward Dobyns,** *Honeywell UOP,* **Jon Peters,** *Chevron Corporation USA,* **Alex Lueker,** *Marathon Petroleum Corporation* **Learning objective:** The supply and demand impacts from COVID 19 and their effect on refiners was and continues to be extraordinary. This session focuses on how the flexibility of FCC helped refiners meet these challenges. You'll hear from operators, technology companies, and catalyst companies in a roundtable format discussing their real-life examples, technology solutions, market trends, and insights.	**Update on API RP 751, *Safe Operation of Hydrofluoric Acid Alkylation Units* Section 6 Inspection and Maintenance** SPEAKER: **Monica Plowman,** *HollyFrontier Corporation* **Learning objective:** Update on Section 6, of API RP 751, Rev 5 — Inspection and Maintenance.	**Roundtable: Turnaround Planning and Scope** FACILITATORS: **Hardy Kemp,** *Flint Hills Resources* and **Gerard Celestine,** *Motiva Enterprises*

REGISTER TODAY!

www.afpm.org/2020Summit

DAY 2: WEDNESDAY, AUGUST 26 cont.

	ROOM 2: GASOLINE PROCESSING	ROOM 3: HYDROPROCESSING	ROOM 4: MACHINE LEARNING AND DECISION MAKING	ROOM 5: EMERGING LEADERS
1:30 p.m. EDT *(45 min.)*	**Lessons Learned: PES Incident** FACILITATOR: Rainer Bass, *HollyFrontier Corporation* SPEAKER: Lauren Grim, *Chemical Safety Board*	**Unloading Your Reactor: A Primer** FACILITATORS: Christy Anderson, *Albemarle Corporation,* Sergio Robledo, *Haldor Topsoe* and Brian Watkins, *Advanced Refining Technologies* SPEAKERS: Alfredo Romero, *Eurecat U.S. Incorporated,* Danny Kurtz, *Cat-Spec, Ltd.* and David Wilkins, *Petroval* **Learning objective:** Understanding available technology options and planning implications.	**Dynamic Real-Time Optimization for Value Sustainment: The Same Silos Are Not Going to Cut It** FACILITATOR: Tim Olsen, *Emerson Automation Solutions* SPEAKER: Brian Burgio, *KBC Advanced Technologies* **Learning objective:** Gain insight into the connectivity tools that will expand on the structural improvements that allow DCS raw data to be converted to value, through industry-leading reactor simulations, to rigorous modelling and finally to the applied advanced process control gain matrix.	**Strengthening Your Career by Building Webs and Developing Spidey Senses** SPEAKER: Meha Jha, *Emerson Automation Solutions* **Learning objective:** This session will cover tools, tips, and exercises for how to become the Spiderman of your career, from developing webs, or networks of people, to the career instincts needed to make strategic career decisions.
2:30 p.m. EDT *(45 min.)*	**Alkylation Unit Risk Management** SPEAKERS: Tim Shepperd, *Becht,* Jon Keuler, *Honeywell UOP* and Gary Kemeny, *PBF Energy* **Learning objective:** Gain insight from recent risk reduction strategies being evaluated for alkylation units.	**Effective Catalyst Selection Strategies** FACILITATORS: Christy Anderson, *Albemarle Corporation,* Sergio Robledo, *Haldor Topsoe* and Brian Watkins, *Advanced Refining Technologies* SPEAKERS: Rahul Singh, *Haldor Topsoe* and Steve Aycox, *Albemarle Corporation*	**Deep Learning/Machine Learning with APC and Online Optimization** FACILITATOR: Atique Malik, *Phillips 66* SPEAKERS: Yugender Chikkula, *Motiva Enterprises,* Dave Seiver, *Valero Energy Corporation,* Sriram Ramaganesam and Darrin Feather, *Phillips 66, and* Alberto Bemporad, *ODYS Srl* **Learning objective:** Obtain insight on the technical and organizational issues of the combination of machine learning and optimization-based control within APC leading to Non-Linear Model Predictive Control and the new approach this brings to the workplace. These issues will affect recruitment, application maintenance, career development and project costs as well as realized benefits.	**Managing Yourself and Teams During Extreme Change** SPEAKER: Mark Tanenbaum, *Lee Hecht Harrison* **Learning objective:** This session will cover some best practices for leading and engaging the workforce or your colleagues in today's period of extreme change.
3:30 p.m. EDT *(90 min.)*	**Gasoline Processing Town Hall** SPEAKERS: Randy Peterson, *DuPont-Stratco,* Steve Philoon, *Honeywell UOP,* Bill Kostka, *Axens North America,* Russ Wiltse, *Valero Energy Corporation,* Dominic Varraveto, *Burns & McDonnell,* and Rainer Bass, *HollyFrontier Corporation* **Learning objective:** Unique challenges around preparation for TA of gasoline units with recent regulation updates. **Topics include:** Corrosion in alkylation units, issues with higher utilization of naphtha reformers, chloride management issues with reformer/ ISOM units, unique challenges around preparation for TA of gasoline units with recent regulatory changes, light naphtha balance challenges, and issues around gasoline blending qualities.	**Turnaround Scope Development 101** SPEAKERS: Joe Rydberg, *Citgo Petroleum Corporation,* Hardy Kemp, *Flint Hills Resources,* Bob Steinberg, *Motiva Enterprises* and Ryan Roth and Brian Beard, *RTI – Cruz Alta* **Topics include:** • Overview of turnaround scope development process • Process engineer interface in determining scope and critical path • Shutdown and decontamination • Discovery scope of work • Commissioning Startup (CSU)	**Improve Decision Making with Improved Mass Balance** FACILITATOR: Bill Poe, *AVEVA* SPEAKERS: Julie Valentine, *Emerson Automation Solutions,* Bill Fairleigh, *KBC Advanced Technologies* and Elizabeth Swinney, *Chevron Corporation USA* **Learning objective:** Gain insight into measurement technologies, software and procedures for improving mass balance closure as well as operating company experience in justifying investments to improve the balance on either specific process units, or refinery-wide.	**A Native American in the Industry** SPEAKER: Fred Brown, *Athlon* **Learning objective:** This session will walk through a personal story about a Native American's experience in our industries. The story will be followed by an open discussion about how there are perceived advantages and disadvantages to minorities in the industry. One takeaway will be how we handle these difficult situations and conversations with more sensitivity.

DAY 3: THURSDAY, AUGUST 27

4:30 p.m. EDT *(60 min.)*

ROOM 1: Diversity and Inclusion

FACILITATOR: **Eboni Adams,** *W.R. Grace & Co.*

Dr. Simone Ahuja, innovation expert and bestselling author, shares engaging stories from her work in emerging markets to Fortune 500s that get to the why of diversity, equity, and inclusion — and specific steps individuals and organizations can take to harness the power of difference.

10:00 a.m. EDT *(60 min.)*

ROOM 1:

It's a Wrap! Join our thought leaders and subject matter experts in a wrap up of the 2020 Summit's top takeaways.

	ROOM 1: CRUDE/COKING	ROOM 2: HYDROPROCESSING	ROOM 3: MAINTENANCE AND RELIABILITY	ROOM 4: LEVERAGING DATA FOR ANALYTICS	ROOM 5: AUTOMATION TECHNOLOGY INTEGRATION
11:00 a.m. EDT *(90 min.)*	**Coking Lessons Learned and Troubleshooting** FACILITATOR: **Raul Romero,** *NALCO Water* PANELISTS: **Mitch Moloney,** *Becht,* **Al Faegh,** *Chevron Lummus Global,* and **Sam Lordo,** *Consultant* Topics: • DCU Troubleshooting and Lessons Learned • Impact of different feed qualities on product yield and coke mophology • Optimizing drum cycle to increase feed • Best practices for DCU furnace design and operation • Slop reprocessing in DCU		**Roundtable: Wireless Technology** FACILITATORS: **Hardy Kemp,** *Flint Hills Resources,* **Jimmy Jernigan, Ryan Murphy** and **Ben Hoff,** *LyondellBasell Industries* **Learning objective:** Discussion on what technologies companies are leveraging for maintenance, reliability, and turnaround activities.	**Preventative Maintenance Reliability and Machine Learning** FACILITATORS: **Blake Larsen,** *Sinclair Oil Corporation* SPEAKERS: **Major General Edward Dorman,** retired *US Army* and **Cheryl Wiebe,** *Teradata* **Learning objective:** Industrial AI will be discussed through the lens of Army machine reliability. Key steps for success will be highlighted through case studies.	**Comprehensive Blend Optimization and Analyzer Performance Monitoring** FACILITATOR: **Bill Poe,** *AVEVA* SPEAKER: **Eric Gildea,** *AVEVA* **Learning objective:** Obtain insight on the importance of a comprehensive system to manage all relevant blend optimization and quality measurement data and showcase options for online analyzer measurement validation and online release/certification criteria.
12:45 p.m. EDT *(60 min.)*	**Crude Lessons Learned and Troubleshooting** FACILITATORS: **Jeff Zurlo,** *SUEZ Water Technologies & Solutions* and **Chris McDowell,** *Marathon Petroleum Corporation* PANELISTS: **Ken Thomas,** *PBF Energy Inc.* and **Harold Eggert,** *Athlon, A Halliburton Service* Topics: • Maximizing asset value • Trouble from outside the battery limit • Troubleshooting exercises	**Regulatory Compliance: Perception vs. Reality Session** FACILITATOR: **Mel Larsen,** *Becht* SPEAKERS: **Robert Ohmes** and **Mel Larsen,** *Becht,* **George Hoekstra,** *Hoekstra Trading* Topics: • Share and exchange lessons learned from previous regulatory implementations such as Tier III and IMO 2020, especially forward looking perceptions versus final reality. • Options to rationalize and close performance benchmarking gaps on regulatory driven units. • Provide information on potential programs and regulations that will impact our industry • Provide insights into meeting Energy Usage, CO2 Reduction, Bioprocessing, and Renewables within the Hydroprocessing space • Ability to take information back to your organizations on how these regulations could impact your site and how you can start assessing and addressing these regulatory changes on site strategy.	**Improving Machinery Reliability — Defect Elimination: Tools for Today and Tomorrow** FACILITATORS: **Scott Hinds,** *Marathon Petroleum Corporation* and **Jimmy Jernigan,** *LyondellBasell Industries* SPEAKER: **Ian McKinnon,** *Reliability Solutions* **Learning objective:** Evaluate how captured data can determine how work is executed on the floor with applicable demonstration.	**Using Data Visualization and Advanced Analytics Methods for Troubleshooting Column Flooding Events** FACILITATOR: **Bill Poe,** *AVEVA* SPEAKER: **Jose Bird,** *Valero Energy Corporation* **Learning objective:** Employ advanced analytics methods to identify operating conditions prior to and during a process unit event.	**Digital Transformation: Case Studies on Developing Programs at Your Companies** FACILITATOR: **Peter Reynolds,** *ARC Advisory Group* SPEAKERS: **Douglas White,** *Emerson Automation Solutions,* **Todd Dixon,** *Marathon Petroleum Corporation* and **Bruce Taylor,** *Sinclair Oil Corporation* **Learning objective:** Case studies will be provided from an operating company and solution provider perspectives on how to develop and execute a digital transformation program at your company. Presentation and panel discussion.

DAY 3: THURSDAY, AUGUST 27 cont.

	ROOM 1: GASOLINE PROCESSING	ROOM 2: FCC		ROOM 4: LEVERAGING DATA FOR ANALYTICS	
2:00 p.m. EDT *(45 min.)*	**BenzOUT™ — A Commercially Proven Process for Benzene Reduction and Maximum Reformate Octane Barrels for Gasoline Blending** SPEAKERS: Jennifer Muir, *TechnipFMC* and Erik Moy, *TechnipFMC* and Terry Helton, *Exxon Mobil Corporation* **Learning objective:** Discover changing drivers for MSAT-2 compliance.	**Key Equipment Fundamentals and Maintenance** FACILITATOR: Matt Wojtowicz, *Honeywell UOP* SPEAKERS: Mike Sandacz, *Honeywell UOP* and Rich Johnson, *Honeywell UOP* **Learning objective:** Design basics, maintenance, health monitoring, impact on process safety, calibration, decision strategy regarding repair. Catalyst Slide Valves, Flue Gas Slide Valves, Orifice Chambers and Variable Orifice Valves. Will also include latest equipment developments and response to industry incidents.		**Smart Manufacturing Platform and Its Application to Equipment Monitoring** FACILITATOR: Tim Olsen, *Emerson Automation Solutions* SPEAKERS: Jesus Flores-Cerillo, *Praxair* and Pete Sharpe, *Emerson Automation Solutions* **Learning objective:** Review new wireless sensors, the advances in predictive monitoring technologies of a cloud-based platform and its application to a facility.	

	ROOM 1: GASOLINE PROCESSING	ROOM 2: FCC	ROOM 3: MAINTENANCE AND RELIABILITY ROUNDTABLES	ROOM 4: LEVERAGING DATA FOR ANALYTICS	ROOM 5: MECHANICAL INTEGRITY
3:00 p.m. EDT *(45 min.)*	**Naptha Reforming Unit Reliability** SPEAKERS: Russ Wiltse, *Valero Energy Corporation,* Matthew Hitchinson, *Axens North America* and Steve Philoon, *Honeywell UOP* **Learning objective:** Discuss current issues with regard to reliability and approaches to manage them in aging units and higher maintenance equipment in UOP units.	**FCC 201: Operational Changes with FCC Model Runs Using FCC-Sim** FACILITATOR: Lee Wells, *LyondellBasell Industries* SPEAKER: Paul Haugseth, *KBC Advanced Technologies* **Learning objective:** This will be an interactive session that is a blend of fundamental FCC principles and the use of advanced tools to help FCC engineers and those that support them understand basic operational moves, how to estimate their benefits, and how to optimize them.	**Flange Assembly Demonstration Unit** FACILITATOR: Scott Hinds, *Marathon Petroleum Corporation* SPEAKER: John Jenco, *JJenco, Inc.* **Learning objective:** Demonstration, training, and best practices discussion.	**Industrial Autonomy in the Process Industries** SPEAKER: Thomas Fiske, *Yokogawa* **Learning objective:** Identify industrial autonomy and how it is different from automation.	**Mechanical Integrity Subgroup (MISG) for API/AFPM Advancing Process Safety (APS) Initiative** SPEAKERS: Allison Hardy, *LyondellBasell Industries,* Josh Yoakam, *HollyFrontier Corporation,* John Reynolds, *Intertek Asset Integrity Management, and* Mark Geisenhoff, *Flint Hills Resources* **Learning objective:** The purpose of the MISG is to reduce the process safety risks and number of events associated with the operation, inspection and maintenance of fixed equipment in refineries and petrochemical plants. The presentation is an overview of the MISG initiative and review of recent work products. (Fixed Equipment KPI's, Ammonium Chloride Corrosion and IOW's, which is a separate session)

Members are FREE through August 9.

Non-members are welcome for a nominal fee.

DAY 3: THURSDAY, AUGUST 27 cont.

	ROOM 1: GASOLINE PROCESSING	ROOM 2: FCC		ROOM 4: HYDROPROCESSING	ROOM 5: MECHANICAL INTEGRITY
4:00 p.m. EDT *(45 min.)*	**Gasoline Molecular Management** FACILITATOR: Dominic Varraveto, *Burns & McDonnell* SPEAKERS: Andrew Becker, *Burns & McDonnell* and Randy Petersen, *Dupont Stratco* **Learning objective:** Gain in-depth knowledge on implication of composition on optimal naphtha separation.	**FCC Catalyst Withdrawal Line Reliability** FACILITATOR: Ziad Jawad, *Phillips 66* SPEAKER: Chris Oliver, *Chevron Corporation USA* **Learning objective:** Topics include, damage mechanisms, piping design elements, lessons learned, recommended practices for effective operation, monitoring, and turnaround maintenance activities.		**ASK THE EXPERT: Hydroprocessing SME Q&A Panel** FACILITATOR: Sravan Pappu, *Crystaphase* PANELISTS: Andy Moreland, *Valero Energy Corporation,* Wendy Wildenberg, *Flint Hills Resources,* Jay Parekh, *Chevron Corporation USA,* Paul Zimmerman, *Honeywell UOP* and Representative, *Catalyst Company* **Learning objective:** Forum for anyone, particularly young engineers to have their specific questions answered by experts. Learn different operating company perspectives on the same problems.	**MI Regional Networks** SPEAKERS: John Reynolds, *Intertek Asset Integrity Management and* Mark Geisenhoff, *Flint Hills Resources* **Learning objective:** Introduction to the concept of Mechanical Integrity Regional Networks (MIRN). MIRN will provide a forum for the sharing of common Fixed Equipment Mechanical Integrity issues that MI practitioners (inspectors and engineers) are facing. These networks will support the APS program by facilitating interaction and practice sharing between site MI Practitioners and APS program resources in easily accessible, local areas.
	ROOM 1: QA TRANSCRIPTS	**ROOM 2: FCC**			
5:00 p.m. EDT *(45 min.)*	**AFPM QA Transcript Database Tutorial** SPEAKER: Representative, *AFPM* **Learning objectives:** Learn how to access and use one of AFPM's newest technical resources, the QA transcript online search. Access discussions from the past several years of Question and Answer sessions online.	**Future of the FCC** FACILITATORS: Steve Gim, *BASF Corporation* and Warren Letzsch, *Consultant* **Learning objective:** Where is the FCC going in the next 10 years in regards to FCC configuration, unit integrated in the overall refinery flow, and advances to FCC design and products? There will also be an opportunity to address any unanswered questions from the conference.			

PRE-RECORDED SESSIONS

Gain access to a library of sessions covering a wide range of topics. The videos will remain available on-demand through the end of November.

Case-Study Analysis of the World's First Commercial Fixed-Bed Catalyst Removal Robot

INVITED SPEAKER: Christopher Jansen, *Worley Parsons*

Learning objectives:

- Identify ways to overcome the challenges associated with implementing new technology in a turnaround
- Identify where the CAROL technology might add benefit to catalyst handling operations at their sites
- Identify general information on the process involved in commercialization of a new product in the oil and gas industry

Avoiding Issues with Non-Decomposed Mercaptans During Sulfiding

INVITED SPEAKERS: Paul Temme and William Alexander, *Reactor Resources*

Learning objectives:

- Become familiar with non-decomposed mercaptans that cause SOx emissions
- Identify reactor temperatures critical to avoid this issue
- Examine online analyzer systems available to measure non-decomposed mercaptans in the gas stream in real time

Using Step-Out Catalyst Technology to Drive Refinery Efficiency

INVITED SPEAKERS: David Leach, *Albemarle Corporation* and Dean Parker, *ExxonMobil Chemical Co.*

Learning objectives:

- Examine development in bulk metal catalysts showing an activity advantage up to three times that of conventional supported catalysts
- Gain insight into the Galexia™ Alliance between ExxonMobil and Albemarle to refiners in the Middle East. Alliance leverages the technical experience, refinery operating know-how, and successful track record of both companies
- Learn how users are given access to state-of-the-art hydroprocessing catalysts and the vast experience in catalyst load optimization
- Learn how distillate hydrotreaters and LCO/VGO hydrocrackers' catalyst yields exceptional returns

Maximization of High-Value Transportation Fuels and Petrochemicals with Refinery Conversion Processes

SPEAKERS: Arun Arora, *McDermott-Lummus* and Dan Gillis, *Chevron Lummus Global*

Learning objectives:

- Recognize high conversion residue hydrocracking (RHC) is designed to meet the future transportation fuel and petrochemical requirements
- Conclude that the key to the successful application of RHC is the effective utilization of its products in processes
- Gain insight on how RHC can be successfully integrated within a complex

K-SAAT™: Next-Generation Solid Acid Alkylation Technology

SPEAKER: Edward Griffiths, *KBR*

The next-generation solid acid catalyst, ExSact, was developed over many years of R&D to compete with liquid acids. ExSact catalyst offers 24-hr. alkylation cycles with robust resistance to typical poisons and the ability to handle a variety of feedstocks. ExSact catalyst is the key to a K-SAAT process that generates high-octane alkylate using a simple adiabatic fixed-bed reactor design and in-situ catalyst regeneration with hydrogen. K-SAAT is the best technology available to refiners worldwide, offering a commercially proven process with high return on investment through yield and octane gains. K-SAAT offers a relatively low-cost revamp of liquid acid alkylation units by replacing the alkylation reactors and reusing the existing recovery system.

New Technology for the Removal of Sulfur Compounds from Hydrocarbon Products

INVITED SPEAKER: Jefferey St. Amant, *Vapor Point*

Helping Combat Economic Strains Caused by Tier II and III Sulfur Credits.
This presentation will discuss existing applications where Vapor Point has assisted clients with improving the quality of both feedstocks and saleable fuels by removing unwanted sulfur contamination such as hydrogen sulfide, methyl mercaptan, ethyl mercaptan, propyl mercaptan, and butyl mercaptan.

Are We Ahead of a Slow Change or Facing a Turbulent Energy Transition?

SPEAKER: Andrew Mcintee, *KBC Advanced Technologies*

Learning objective: Obtain insight on developing actions for an economic mitigation path with doing nothing being the most costly and riskiest approach.

PROGRAMS & AGENDA HIGHLIGHTS

In addition to technical education sessions and interactive roundtables, The Summit offers opportunities for attendees to come together to learn from one another and celebrate our industry's achievements.

2020 PETER G. ANDREWS LIFETIME SERVICE AWARD

Tuesday, August 25 | 10:00 a.m. EDT

The Peter G. Andrews Lifetime Service Award honors those who have made significant long-lasting contributions to the value and quality of the AFPM Summit. This year's recipient is Harold J. Eggert, Chief Global Technical Advisor, Athlon, A Halliburton Service.

EMERGING LEADERS

Tuesday, August 25 | 3:15 p.m. EDT

Wednesday, August 26 | 1:30 p.m. EDT

These sessions allow junior and senior leaders to unify around innovative leadership practices, practicable methods to execute work effectively, and key considerations for managing teams in today's virtual environment.

DIVERSITY AND INCLUSION SESSION

Wednesday, August 26 | 4:30 p.m. EDT

Dr. Simone Ahuja, innovation expert and bestselling author, shares engaging stories from her work in emerging markets to Fortune 500s that get to the why of diversity, equity, and inclusion — and specific steps individuals and organizations can take to harness the power of difference.

WOMEN IN INDUSTRY

Wednesday, August 26 | 5:30 p.m. EDT

AFPM networking event for and by women — Engage, Learn, Connect.

Facilitators: Cheryl Scott, Perficient, Christina McDowell, Marathon Petroleum Corporation, Kris Torberson, Motiva Enterprises LLC

Guest: Dr. Simone Ahuja, best-selling author and founder, Blood Orange, a global innovation and strategy firm.

NETWORKING EVENTS

Throughout The Summit, attendees will have an opportunity to engage with other attendees, speakers, and exhibitors in The Summit Networking Lounge. There will also be ample opportunity to engage with peers through online chats during each session.

NETWORKING LOUNGE

SAVE THE DATE

Mark your calendar for October 5 – 7, 2021, when the AFPM Summit: Excellence in Plant Performance makes its face-to-face debut at the Hyatt Regency New Orleans.

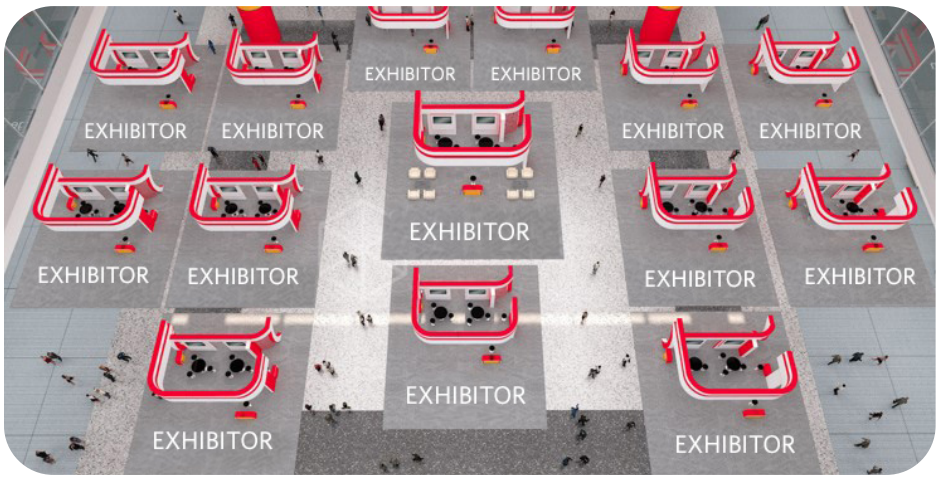
VISIT THE VIRTUAL EXHIBIT HALL

AFPM's Virtual Summit will have no shortage of exhibitors providing the latest developments, information, and demonstrations, with the ability to interact through live chats.

Connect with vendors to fulfill all your business needs in just a few days, and if you miss anyone during the conference, you can go back and visit the booths after the conference has concluded.

EXHIBITORS AS OF JULY 27, 2020:

Advanced Refining Technologies
AIS Software
Albemarle Corporation
AltairStrickland/Diamond Refractory
Athlon, a Halliburton Service
AVEVA
BASF Corporation
Becht Engineering Co., Inc.
BrandSafway
Carestream NDT
Carolina Filters, Inc.
Chem32 LLC
Clean As New
CPRS Inc
Delta Tech Service, Inc.
DeltaValve USA
Dorf Ketal Chemicals, LLC
DuPont Clean Technologies
Dynamics Scientific Production Center USA, Inc.
EMCOR Industrial Services
The Equity Engineering Group
Eurecat U.S. Incorporated
Everlasting Valve
Groome Industrial Service Group
Gulfspan Industrial, LLC
Haldor Topsoe, Inc.
Hason Steel Products, Inc.
HCpect
Honeywell Process Solutions
Hoover Ferguson
Integrated Global Services, Inc.
J.J. White, Inc.
JCL Safety Services
Johnson Matthey



Explore the halls or find an exhibitor through a search feature. Simply click on an exhibitor in the hall and you will be directed to their booth. Engage in chats, watch videos, and download information packets.

KBC — A Yokogawa Company
KnightHawk Engineering
Koch-Glitsch LP
Matrix Service
MISTRAS Group, Inc.
Ohmstede
ParFab Companies
Petroval S.A.
PK Technologies
Porocel International, LLC
Refractory Construction Services Co., LLC
Repcon/TWS
Resco Products, Inc.
Sabin Metal Corporation
Seeq Corporation
SILICON Rapid Arc Welding Contracting & Services, Inc.
Stress Engineering Services, Inc.
SUEZ Water Technologies
TapcoEnpro, LLC.
TEAM, Inc.
TechnipFMC
Turner Industries Group, LLC
Voovio Technologies
W.R. Grace & Co.
WIKA Instrument, LP
Woven Metal Products
Wyatt Field Service Company

Want to see your company listed above and have the opportunity to make valuable contacts while earning more business?

Sign up to exhibit today!

ATTENDING A VIRTUAL CONFERENCE FOR THE FIRST TIME?

KEEP THESE TIPS IN MIND FOR A SUCCESSFUL EXPERIENCE.

- **FIRST, BLOCK YOUR CALENDAR.** Attending live has huge benefits, such as asking questions of the speaker in real time and interacting with other attendees.
- **MINIMIZE DISTRACTIONS,** turn off notifications, and avoid multitasking like checking emails, etc.
- **ENGAGE EVERY FEATURE** available from sessions to chats to exhibit booths. All are designed to foster cross-functional learning and break down knowledge silos.
- Missed a session or a detail in a session you did attend? Don't worry. The content from The Summit will remain accessible to attendees for three months.
- Remember, virtual conferences can offer either distraction or complete focus and comfort, depending on the individual. So, pour a cup of coffee and take responsibility for your experience.

AFPM IS THANKFUL FOR THE SUPPORT OF OUR SPONSORS AND PRESS SUPPORTERS

PRESENTING SPONSORS

BASF We create chemistry

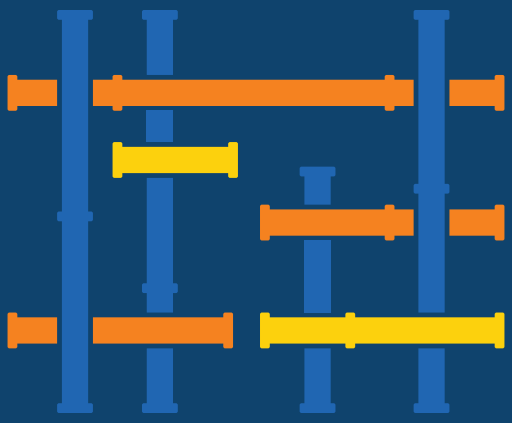
HALDOR TOPSØE CATALYZING YOUR BUSINESS

SUPPORTING SPONSORS

ALBEMARLE · ART HYDROPROCESSING · Athlon A HALLIBURTON SERVICE · GRACE · GULFSPAN INDUSTRIAL LLC · HYDROCARBON PROCESSING · PETROVAL REFINING & PETROCHEMICAL PROCESS SOLUTIONS · sabin METAL CORPORATION Refining • Precious Metals • Recycling · SUEZ

PRESS SUPPORTERS

BIC · Hydrocarbon Engineering · Hydrocarbon Processing · PTQ



2020 AFPM SUMMIT

Excellence in Plant Performance

REGISTER TODAY!

www.afpm.org/2020Summit

August 25 – 27, 2020

FREE to AFPM members through August 9.

Non-members are welcome for a nominal fee.