

AFPM Annual Meeting 2017

San Antonio, Texas, USA
19-21 March 2017

ISBN: 978-1-5108-4823-8

Printed from e-media with permission by:

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**MONDAY, MARCH 20, 2017
2:00 PM TO 5:00 PM**

| | MANAGEMENT | ALKYLATION | CRUDE OIL/RESID |
|---------|---|---|--|
| 2:00 PM | What Happens to U.S. Refineries When Demand Declines? Andrew Shepard Wood Mackenzie AM-17-01 1 | ISOALKY: Next Generation Alkylate Gasoline Manufacturing Process Technology Hye Kyung Timken Chevron AM-17-07 46 | Canadian Oil Sands at the Crossroads: Can Its Tremendous Potential Still be Realized? Damir Raos IHS Inc. AM-17-13 109 |
| 2:30 PM | Can U.S. Refiners Snatch the Global Bunker Crown? Alan Gelder Wood Mackenzie AM-17-02 12 | Higher Octane Gasoline via Olefins Management and Alkylation Josephine Elia UOP LLC AM-17-08 58 | What is Next for Canadian Heavy Crude? Mike Wojciechowski Wood Mackenzie AM-17-14 N/A |
| 3:00 PM | The Impact of New Fuels and New Vehicles on the Refining Industry Tiffany Groode IHS Inc. AM-17-03 21 | Alternatives to Alkylation; Flexible Approaches to Light Olefin Management Vital for the Dynamic Fuels Market Geoffrey Dubin Axens NA AM-17-09 N/A | Feed Entry Systems for the Modern Delayed Coking Unit Steve Beeston Amec Foster Wheeler AM-17-15 N/A |
| 3:30 PM | The Fuels Clockspeed Dilemma Andrew Steinhubl KPMG AM-17-04 34 | A New Era in Alkylation - BTA & PTA Nicolas Wright DuPont Clean Technologies AM-17-10 79 | Eni Slurry Techology: Maximizing Value from the Bottom-of-the-Barrel Valentina Fabio Eni AM-17-16 126 |
| 4:00 PM | Asphalt in a Changing Market Environment Nasreen Tasker Argus Media AM-17-05 43 | From C3 to C5 Feedstocks, Alkylation Units Are Being Designed for Greater Flexibility to Take Advantage of Market Dynamics Arvids Judzis CB&I AM-17-11 91 | Crude Oil Fingerprinting and Advanced Predictive Analytics Conrad Teran GE Water & Process Technologies AM-17-17 135 |
| 4:30 PM | Setting Targets for Turnaround Durations and Budgets Gary Fuller Solomon Associates AM-17-06 N/A | Maximizing Light Olefins and High Octane Gasoline Through INDMAX FCC Technology Rama Rao Marri CB&I (Lummus) AM-17-12 N/A | What Happens When U.S. Crude Oil Production Recovers? Matthew Chadwick Wood Mackenzie AM-17-18 N/A |

2017 Annual Meeting Program Table
 Titles and topics are subject to change.

March 2, 2017

**MONDAY, MARCH 20, 2017
2:00 PM TO 5:00 PM**

| | FUEL REGULATIONS | MARGIN IMPROVEMENT |
|---------|--|--|
| 2:00 PM | Industry Response to Irrational Environmental Regulations Joseph Gentry GTC Technology AM-17-19 160 | 1.2 Million B/D Margin Improvement Opportunity at U. S. Refineries Timothy Gillis Genesis Reliability Group, Inc AM-17-25 232 |
| 2:30 PM | Meeting New Fuel Requirements – Providing a Compass in Uncertain Times Bill Keesom Jacobs Consultancy AM-17-20 171 | Leverging the Cloud to Drive Complex-wide Profitability Katherine Jones UOP LLC AM-17-26 239 |
| 3:00 PM | Operating Refineries in a High Cost Environment – Options for RFS Compliance Daniel Finelt Baker & O'Brien, Inc AM-17-21 207 | Prepare, Produce, Profit: Debottlenecking Refineries through Comprehensive Feedstock Preparation Austin Schneider Crystaphase AM-17-27 248 |
| 3:30 PM | How will the New Bunker Fuel Rules Affect the Refining Industry? Sandeep Sayal IHS Inc. AM-17-22 N/A | Strategies for Fouling Abatement Pankaj Desai Shell Global Solutions AM-17-28 268 |
| 4:00 PM | The Future of Gasoline: The Growing Linkages Between Mobility, CAFE, Octane and Ethanol Kevin Lindemer IHS Inc. AM-17-23 224 | Improved Refining Margins through Feedstock Management Chayan Bhalla Mangalore Refinery and Petrochemicals Limited, India AM-17-29 286 |
| 4:30 PM | The Outlook for U.S. Transport Fuels: A Bumpy Road Ahead? Linda Giesecke Wood Mackenzie AM-17-24 N/A | Utilizing Cheap Gas to Maximize Refinery Profits in North America Daniel Gillis Chevron Lummus Global AM-17-30 298 |

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March 2, 2017

**TUESDAY MORNING MARCH 21, 2017
9:00 AM TO 11:30 AM**

| | RELIABILITY | HYDROCRACKING | TECHNICAL ADVANCES |
|----------|--|---|--|
| 9:00 AM | Enhancing Refinery Reliability and Availability through Online Corrosion Monitoring Tom Champlin Permasense AM-17-31 319 | Hydroprocessing and Hydrocracking DAO: Achieving Unlimited Cycle Lengths with the Most Difficult Feedstocks David Schwalje Axens, NA AM-17-35 375 | Novel Approach to Controlling Contaminant Levels in Vacuum Gas Oil Kaushik Majumder Shell Projects & Technology AM-17-40 438 |
| 9:30 AM | New Perspectives on Refinery Corrosion, Integrity Management, Communications and Optimizing Opportunity Crudes Kjell Wold Emerson AM-17-32 331 | Leveraging Hydrocracking to Upgrade Heavy, Low Value Streams Adrienne Van Kooperen Criterion Catalysts & Technologies AM-17-36 393 | Improve Energy Efficiency of DWCs with Overhead Heat Integration Manish Bhargava GTC Technology AM-17-42 449 |
| 10:00 AM | Minimum Disruption Plan (MDP) to Asset Life Extension Brian Murphy Advisian / WorleyParsons AM-17-33 348 | Repurposing Existing Hydroprocessing Assets to Maximize Refinery Gross Margin Jay Parekh Chevron Lummus Global AM-17-37 410 | Explosive Rate Increases Using Shaped Charges James Esteban Criterion Catalysts and Technologies L.P. AM-17-39 459 |
| 10:30 AM | The Importance of Pyrometer Temperature Measurement Corrections to Safe and Reliable Reformer Operation Oliver Smith Air Products AM-17-34 363 | Understanding Catalytic Solutions for Increasing Middle Distillate Yields Brian Watkins Advanced Refining Technologies AM-17-38 424 | Where do RIN Obligations Belong? Mark Broadbent Wood Mackenzie AM-17-43 N/A |
| 11:00 AM | | MIDW™ Technology as a Drop-in Catalyst Solution: Benefits of Upgrading to a Highly Isomerization-Selective Distillate Dewaxing Catalyst Kathryn Peretti ExxonMobil AM-17-41 N/A | RINs, Biofuels, and Margins: Outlooks and Strategies for RFS Compliance Paul Niznik Argus AM-17-44 N/A |

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March 2, 2017

**TUESDAY MORNING MARCH 21, 2017
9:00 AM TO 11:30 AM**

| | FCC | PLANT AUTOMATION/ CYBERSECURITY | PROCESS SAFETY |
|-----------------|--|---|--|
| 9:00 AM | Improvements in FCCU Operation through Controlled Catalyst Withdrawals at a Marathon Petroleum Refinery Martin Evans Johnson Matthey AM-17-45 481 | ICS Cybersecurity: Protecting the Industrial Endpoints that Matter Most Eddie Habibi PAS AM-17-50 568 | Process Safety Site Assessment Program – Promoting a Culture of Process Safety Andrew Broadbent American Petroleum Institute AM-17-55 598 |
| 9:30 AM | Performance Assessment of Feed Nozzle Upgrades David Hunt Shell Global Solutions AM-17-46 495 | Cyber Security for Operational Technology – Lessons Learned, from Super Majors to Independents Gavin Mead KPMG AM-17-51 582 | Process Safety Site Assessments – MI Results – The Good, the Bad and the Ugly John Reynolds Intertek AM-17-56 N/A |
| 10:00 AM | Motiva Unlocks Value in the FCCU Through an Innovative Catalyst Solution from Rive Technology and Grace Catalysts Technologies Karthik Rajasekaran Motiva AM-17-47 514 | Cyber Security Issues Facing the Petrochemical Industry Jonathan Pollet Red Tiger Security AM-17-52 N/A | What is Your SIS Doing When You're Not Watching? Mark Carrigan PAS AM-17-57 605 |
| 10:30 AM | An Action Plan to Improve FCC Unit Performance at the Marathon Galveston Bay Refinery George Yaluris Albemarle Corporation AM-17-48 538 | Drone Cyber-Physical Attacks against Industrial Wireless Jeff Melrose Yokogawa AM-17-53 N/A | Transforming the Safety Culture – Luberef Case Study Alfonsius Ariawan DuPont Sustainable Solutions AM-17-58 N/A |
| 11:00 AM | Iron Poisoning Investigations Enable Opportunities for Success Alexis Shackelford BASF AM-17-49 556 | Life Cycle Management for Non-SIS IPL's Keith Farrell K and K Process AM-17-54 589 | Leadership's Role in Catastrophic Incident Prevention - Developing Influence through the Principals of High Reliability Safety Michael Snyder DEKRA Insight AM-17-59 618 |

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March 2, 2017

**TUESDAY AFTERNOON MARCH 21, 2017
2:00 PM TO 4:30 PM**

| | ENVIRONMENTAL | HYDROCRACKING II | REFINERY OPERATIONS |
|---------|--|---|---|
| 2:00 PM | Characteristics of Sour Flare Gas Streams that Impact H2S Treatment Technologies Kenneth McIntush Trimeric Corporation AM-17-60 <p style="text-align: right;">628</p> | The Case for Hydrocracking Jim Jones Turner, Mason & Company AM-17-82 <p style="text-align: right;">N/A</p> | Mastering the Work Process of People Performance Christopher Anderson PeopleCore, Inc AM-17-70 <p style="text-align: right;">N/A</p> |
| 2:30 PM | Cost of Carbon - It's Not Just Social Anymore Larry Darcey CITGO Petroleum Corporation AM-17-61 <p style="text-align: right;">648</p> | The Building Blocks of Robust Hydroprocessing Unit Operations Amit Kelkar Criterion Catalysts and Technologies L.P. AM-17-66 <p style="text-align: right;">678</p> | New Technology Addresses Operator Training Challenges John Roffel Honeywell Control Systems Ltd AM-17-71 <p style="text-align: right;">728</p> |
| 3:00 PM | Meeting 15 PPM SO2 Emissions from an FCC Unit without a WGS or CFHT Steve McGovern CVR Energy AM-17-62 <p style="text-align: right;">N/A</p> | ART Commercialization of New 5th Generation ISODEWAXING Catalyst Kenny Peinado ART (Advanced Refining Technologies) AM-17-67 <p style="text-align: right;">694</p> | Why Amine Systems Fail Eduardo Sanhueza-Yanez Amine Experts Inc AM-17-72 <p style="text-align: right;">N/A</p> |
| 3:30 PM | Implementing Membrane Bioreactor Technology to Upgrade Marathon Petroleum's Detroit Refinery Wastewater Treatment Brian Arntsen GE Power, Water & Process Technologies AM-17-63 <p style="text-align: right;">665</p> | Tailored Hydrocracking Catalysts for Demetallized Oil Service Omer Koseoglu Saudi Aramco AM-17-68 <p style="text-align: right;">698</p> | Implementing Best Practice Shutdown, Turnaround, Outages (STO) Strategies via Integrated Planning Matthew Popovacki T.A. Cook Consultants AM-17-73 <p style="text-align: right;">743</p> |
| 4:00 PM | Emerging Use of Optical Gas Imaging to Determine Environmental Noncompliance Brian Kapavik DiSorbo Consulting, LLC AM-17-64 <p style="text-align: right;">N/A</p> | Refining Canadian Bitumen and Intermediate Ebullated Bed Hydrocracking Products John Petri UOP LLC AM-17-69 <p style="text-align: right;">707</p> | Early Alerts of Flare Events Noel Bell Emerson PSS AM-17-74 <p style="text-align: right;">N/A</p> |

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**TUESDAY AFTERNOON MARCH 21, 2017
2:00 PM TO 4:30 PM**

| | FCC II | GASOLINE |
|----------------|---|--|
| 2:00 PM | Driving Octane in an Ultra-Low Sulfur Gasoline Market Andy Huang Grace Catalysts Technologies AM-17-75 N/A | BenzOUT™ Technology A Cost Effective Process for Octane Increase, Not Just Benzene Compliance Terry Helton ExxonMobil AM-17-79 N/A |
| 2:30 PM | FCC Product Fractionation for Maximum LCO Production Phillip Niccum KPE AM-17-76 755 | Production of Gasoline from Naphtha and Methanol at 1/3 the Current Cost Stephen Sims NGTS North America AM-17-80 801 |
| 3:00 PM | Improving FCC Economics Through Computational Particle Fluid Dynamics Simulation Peter Blaser CPFD Software AM-17-77 773 | Global Low Carbon Fuels & Vehicles Developments: What's in Store for the Industry? Tammy Klein Future Fuel Strategies AM-17-81 819 |
| 3:30 PM | Increase Propylene & Alkylate Production and Operational Flexibility through Low Cost FCC Revamp Michael Dorsey CB&I AM-17-78 787 | Tier III Ready: Maximizing Octane Barrels While Producing Ultra Low Sulfur Gasoline Jignesh Fifadara Albemarle AM-17-65 N/A |
| 4:00 PM | | Sulfur, Octane, and Petrochemicals Rick Kolodziej GTC Technology AM-17-83 850 |

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