|         | MONDAY MARCH 12, 2012<br>2:00 PM TO 5:00 PM   |   |   |  |  |  |  |
|---------|---|---|---|--|--|--|--|
|         | STRATEGIC ISSUES  | GASOLINE/PETROCHEMICALS   | PROCESS SAFETY  | REFINERY OPERATIONS  | FCC TECHNOLOGY   |  |  |
| 2:00 PM | Regional Pivot Points in<br>Global Refining<br>Karl Bartholomew<br>KBC Advanced<br>Technologies, Inc.<br>AM-12-01                         | Assessing the Potential for Disruptive Demand Reduction in US Transport: A Framework for Industry and Policy Makers Khush Nariman McKinsey & Company Inc AM-12-07 | PSM ≠ Process Safety Leadership: Practical Actions that Set PS Leadership Apart Dawn Wurst Flint Hills Resources AM-12-13   | High Frequency Technology Shows Significant Improvement Over Conventional AC Electrostatic Desalter S. Pavan Kumar Mandewalkar Cameron AM-12-19                    | Molecular Highway <sup>TM</sup> Technology<br>for FCC Catalysts in a Commercial<br>Refinery<br>Gautham Krishnaiah<br>Rive Technology, Inc<br>AM-12-25            |  |  |
| 2:30 PM | US Downstream<br>Transformation to Global<br>Export Centre<br>Alan Gelder<br>Wood Mackenzie<br>AM-12-02                                   | Addressing Tier 3 Specifications in a Declining Gasoline Market: Options for the Future Bill Flanders Axens North America AM-12-08                                | Predictive Analytics in Safety and<br>Operational Risk Management<br>Mark Weitner<br>IBM Global Business Services<br>AM-12-14   | How to Treat Refinery Gases to Make<br>them Suitable to Produce Polymer<br>Grade Olefins<br>Zaheer Malik<br>Linde Process Plant<br>AM-12-20                        | Innovative Technology to Improve FCC Flexibility Matthew Lippmann UOP LLC AM-12-26   |  |  |
| 3:00 PM | Insight to Chinas Oil & Refining Growth Na Liao ICIS China AM-12-03   | CCR Reforming Reload Economics Matthew Young National Cooperative Refinery Association AM-12-09   | New Perspectives on Process Safety Performance Indicators and Metrics Thomas Lemm DuPont Sustainable Solutions AM-12-15   | Selection of Hydrogen Sulfide<br>Scavengers for Minimal Refinery Impact<br>Joseph Stark<br>Baker Hughes<br>AM-12-21  | Successful Conversion of a Catalytic<br>Cracking Unit to Riser Cracking<br>Paul Wendt<br>Lummus Technology<br>AM-12-27   |  |  |
| 3:30 PM | Impact of US Shale Gas and<br>Liquids on the Refining<br>Sector<br>Praveen Gunaseelan<br>Vantage Point Energy<br>Consulting<br>AM-12-04   | Where to From Here? Perspectives on<br>the Global Petrochemicals Industry<br>Michael Krenek<br>Deloitte Services LB<br>AM-12-10                                   | Risk-Based Approach to Evaluate Atmospheric Release from Pressure Relief Devices Casey Houston ioMosaic Corporation AM-12-16  | Mercury in Hydrocarbon Process Streams: Sampling/Analysis Methods, Exposure Monitoring, Equipment Decontamination and Waste Minimization Ron Radford, PEI AM-12-22 | Applying Low Rare Earth Technology<br>in Demanding Fluid Catalytic<br>Cracking Operation<br>Raul Arriaga<br>Albemarle Corporation<br>AM-12-28                    |  |  |
| 4:00 PM | Maximizing Petroleum<br>Refining Profitability<br>through Lean Excellence<br>Program: A Case Study<br>Jimmy Crosby<br>AlonUSA<br>AM-12-05 | Refinery Integration with Petrochemicals to Achieve Higher Value Uplift Keith A. Couch UOP LLC AM-12-11   | A Comprehensive Approach to Program Development, Integrity Management, and Long-Term Compliance Tank Overfill Protection and Industry Implications Michael Erickson, Antea Group AM-12-17 | Process Unit Cold Eyes Review Scott Sayles KBC Advanced Technologies, Inc. AM-12-23  | Alternatives to Rare Earth – Commercial Evaluation of REpLaCeR <sup>TM</sup> FCC Catalysts at Montana Refining Company Ron Colwell Montana Refining Co. AM-12-29 |  |  |
| 4:30 PM | Improving Contractor Risk Management Brian Delaney PWC AM-12-06   | Gasoline Demand – Analysis and Outlook Ed Arnold Jacobs Engineering AM-12-12  | Creating a Heightened Awareness of Safety Among Plant Personnel Accenture Ken Johnson AM-12-18  | Refinery Blend Optimization: BP s Approach in Implementing the Best Practices in Product Blend Shih-Chen Wang BP AM-12-24  | Computational Fluid Dynamics (CFD) - An Effective Tool for FCC Design, Improvement and Troubleshooting Steve Shimoda Shaw Energy & Chemicals AM-12-30            |  |  |

|          | TUESDAY MARCH 13, 2012<br>9:30 AM TO 12:00 PM  |   |   |   |  |  |
|----------|--|---|---|---|--|--|
|          | ISSUES   | CRUDE OIL SUPPLY  | HYDROCRACKING   | FCC OPERATIONS  | HYDROGEN   |  |
| 9:30 AM  | David Friedman - AFPM  Brendan Williams - AFPM  Richard Moskowitz - AFPM   | Evolution of Global Crude Market Dynamics Tim Fitzgibbon McKinsey & Company, Inc. AM-12-33  | Mild Hydrocracking in a Moderate Pressure Hydrotreater Kaspar Vogt Albemarle Corporation AM-12-56   | Maximizing Diesel Production in<br>the FCC-centered Refinery<br>Phillip Niccum<br>KBR<br>AM-12-43                 | Air Products - Port Arthur, TX CO2 Capture from Hydrogen SMR's and Sequestration Project William Baade Air Products and Chemicals, Inc. AM-12-48 |  |
| 10:00 AM |  | Carbon Intensity Assessment of<br>Gasoline and Diesel from Crude<br>Oils, Bitumen and Synthetic Crude<br>Oils in a European Context:<br>Bill Keesom<br>Jacobs<br>AM-12-34 | Dual Service Hydrocracking: Marathon Garyville Hydrocracker Case Study Robert Redelmeier Shell Global Solutions AM-12-39                                    | Optimizing FCC Catalyst Formulation in a High Rare Earth Cost Environment Joseph McLean BASF Corporation AM-12-44 | Hydrogen Management Rick Manner KBC Advanced Technologies, Inc. AM-12-49   |  |
| 10:30 AM | 10:30-12:00 pm Technology Pathways to Advanced Biofuels Panel:  •Marathon Petroleum - Michael Leister  •Valero Energy – Jim Gillingham | Heavy Oil Upgrading Maria Aldescu KBC Advanced Technologies, Inc. AM-12-35  | New process for controlling Heavy Poly-Nuclear Aromatics (HPNA) in a hydrocracker Michael Hunter Haldor Topsoe Inc, AM-12-40                                | RFCC Units Set New Standards for<br>Contaminated Resid<br>Patrick Walker<br>UOP<br>AM-12-45                       | Recommended Practice for Valves Used in Hydrogen Service Tito Sequeira Tyco Flow Control AM-12-50  |  |
| 11:00 AM | Mustang – Rick Kolodziej     CRI catalytic biomass to fuels -  | Rocks, Rail and Refining How<br>Shale Plays and Logistics Reshape<br>the N.A. Crude Market<br>Stephen Jones<br>Purvin & Gertz, Inc.<br>AM-12-36                           | Hydroprocessing to Maximize Refinery Profitability Natalia Koldachenko Chevron Lummus Global AM-12-41   | How to Operate Your FCC in an Ultralow SO2 Emissions Environment Ray Fletcher Intercat AM-12-46                   | Reducing Hydrogen Production Costs Using Foster Wheeler s Terrace WallTM Reforming Technology Chris Davis Foster Wheeler AM-12-51                |  |
| 11:30 AM |  | Shale Oil: the Key to American Energy Independence Howard Feintuch Samsung Engineering AM-12-37   | Increase the Value of Your Hydrocracker When Making Naphtha with Z-NP10 Paul Robinson Criterion Catalysts and Technologies / Zeolyst International AM-12-42 | The World's Next SOxy Super<br>Model<br>Alan Kramer<br>Albemarle<br>AM-12-47                                      | Steam Methane Reforming Low Cost Efficiency Improvement Charles Der Praxair AM-12-52   |  |

| <b>TUESDAY MARCH 13, 2012</b> |
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| 2:00 PM TO 4:30 PM            |

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|         | HYDROPROCESSING  | WORKFORCE ISSUES   | PLANT AUTOMATION   | RELIABILITY   | RESID PROCESSING  |  |
| 2:00 PM | Novel R&D Tools for the Development of Hydroprocessing Catalysts: Next Generation High Throughput Experimentation Systems Sascha Vukojevic hte AG AM-12-53 | Developing and Enabling the Next<br>Generation of Refinery Process<br>Engineers<br>Robert Ohmes<br>KBC Advanced Technologies, Inc.<br>AM-12-58 | Empowering Operations and Maintenance through Wireless Technologies Soroush Amidi Honeywell Process Solutions AM-12-63 | REAL WORLD IMPLEMENTATION OF A "BEST IN CLASS" RBI PROGRAM Jake Dawson Flint Hills Resources AM-12-67                               | Coker Furnace On-Line Spalling The devil is in the details." Jack Adams Adams Project Managers, Inc AM-12-72  |  |
| 2:30 PM | Challenges with Synthetic Crude Processing - Enabled with Increased Hydrotreating Performance Jonathan Konen Criterion Catalysts & Technologies AM-12-54   | Field Coaching Leads to Organization Effectiveness Lynn Bourgeois PeopleCore, Inc AM-12-59   | Advanced Control of Multiple Sulfur Recovery Units Darwin Logerot ProSys, Inc. AM-12-64                                | Operator Driven Reliability Tony Covato Reliability Management Group AM-12-68   | LC-MAX and Other LC-FINING Process Enhancements to Extend Conversion and On-stream Factor Mario Baldassari Chevron Lummus Global AM-12-73                             |  |
| 3:00 PM | Maximize Yields of High Quality Diesel Greg Rosinski Advanced Refining Technologies AM-12-55   | Slowing down the operational excellence mission due to ""career sunset" phenomenon Reid Morrison PWC AM-12-60                                  | Suncor Simplifies Implementation of Total Feed Controller for its No. 2 Crude Unit Kim Kjeldsen Suncor Energy AM-12-77 | New Monitoring Strategy improves<br>Reliability and Operations at<br>Chevron<br>Tim Olsen<br>Emerson Process Management<br>AM-12-69 | BEST COKE DRUM PRACTICES - Real<br>World Improvements for Delayed<br>Coker Safety and Reliability<br>Brian Doerksen<br>Bechtel<br>AM-12-74                            |  |
| 3:30 PM | Commercial Operation of<br>IsoTherming® Technology for FCC<br>Feed Pre-treatment<br>Carmo Pereira<br>DuPont<br>AM-12-38                                    | The Resilient Plant: The Truth About Workforce Enablement Charles Mohrmann Invensys Operations Management AM-12-61                             | Protecting Control Systems from<br>Advanced Threats<br>Andrew Ginter<br>Waterfall Security Solutions<br>AM-12-65       | Reliability and Maintenance (RAM) The Path to World Class Performance Alan Poling Solomon Associates AM-12-70                       | Debottlenecking a Delayed Coker to<br>improve overall Liquid Yield and<br>Selectivity towards Diesel Fuel<br>Lawrence Wisdom<br>Axens North America, Inc.<br>AM-12-75 |  |
| 4:00 PM | Using FCC feed hydrotreating to meet the new challenges in the Brazilian fuel market William Gilbert PETROBRAS AM-12-57                                    | Delivering Engineering Talent for the Future Vance Scott A.T. Kearney AM-12-62   | Advanced Process Control Costs Slashed with Pre-engineered Solutions Gary Hawkins Emerson Process Management AM-12-66  | Only You Can Prevent MI Failures Moody International / Intertek John Reynolds AM-12-71  | Slurry phase hydrocracking - The new era in resid upgrading Anand Subramanian KBR Houston AM-12-76  |  |