## 2006 NPRA Annual Meeting Technical Program

Monday, March 20, 2006  
2:00 pm to 5:00 pm

<table>
<thead>
<tr>
<th>ISSUES SESSION</th>
<th>ULSD HYDROTREATING</th>
<th>FCC OPERATIONS</th>
<th>CRUDE OIL FLEXIBILITY</th>
<th>PLANT OPERATIONS</th>
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</thead>
<tbody>
<tr>
<td>Strategies for Converting High-aromatic Streams into Ultra Low Sulfur Distillate</td>
<td>FCC Operations Benchmarking: A Valuable Tool for Identifying Opportunities for Improved Profitability</td>
<td>Design of a Crude/Vacuum Unit Revamp for Refinery Flexibility</td>
<td>Lessons Learned from CSB Investigation of BP Texas City Accident</td>
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<td>ISSUES SESSION</td>
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<tr>
<td>Solutions to Common Problems in Scoping, Designing, Implementing and Operating ULSD Units</td>
<td>Development of a Refinery SOx Emission Reduction Strategy at the Chevron Canada Ltd. Burnaby Refinery</td>
<td>Revamp Existing Units to Process Less Expensive Crude Oils</td>
<td>Effective Procedural Operations</td>
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<tr>
<td>Scott Sayles</td>
<td>Michael Maholland</td>
<td>Rashid Iqbal, KBR</td>
<td>Richard Kucharyson</td>
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<tr>
<td>KBC Advanced Technologies, Inc.</td>
<td>Intercat, Inc.</td>
<td>AM-06-15</td>
<td>Honeywell – AM-06-20</td>
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<tr>
<td>Severe Gas Oil Hydrotreating Using IsoTherming</td>
<td>Double Riser FCC - An Opportunity for the Petrochemical Industry</td>
<td>Upgrading Residuum to Finished Products in Integrated Hydroprocessing Platforms - Solutions and Challenges</td>
<td>Low Investment Energy Cost Reduction Methodology Consistently Delivers</td>
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<tr>
<td>Michael Ackerson</td>
<td>Andrea Pinho</td>
<td>Sigrid Spieler, Chevron Lummus</td>
<td>Eva Heyman</td>
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<tr>
<td>Process Dynamics, Inc.</td>
<td>Petróleo Brasileiro S.A.</td>
<td>Global – AM-06-64</td>
<td>Shell Global Solutions (US) Inc. – AM-06-23</td>
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<tr>
<td>No Need to Trade ULSD Catalyst Performance for Hydrogen Limits: SmART Approaches</td>
<td>Recent Commercial Experience in Improving Refinery Profitability with Grace Davison Alumina Sol Catalysts</td>
<td>Changing Refinery Configurations for Heavy and Synthetic Crude Processing</td>
<td>Global Deployment of Best Practices</td>
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<tr>
<td>Charles Olsen</td>
<td>Natalie Petti, Grace Davison</td>
<td>Gary Brierley, UOP LLC</td>
<td>Ralph Phillip, Valero Energy</td>
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<tr>
<td>ULSD: Ensuring The Unit Makes On-Spec Product</td>
<td>Evolution and Recent Advances in Third Stage Separator (TSS) Technology for Applications in the FCC Process</td>
<td>Economic Extraction of FCC Feedstock from Residual Oils</td>
<td>DynaWave Wet Gas Scrubbing: A New Alternative for Claus Unit Tail Gas Treating</td>
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<tr>
<td>George Hoekstra, BP Chemicals</td>
<td>Ye-Mon Chen, Shell Global Solutions (US) Inc.</td>
<td>Phillip Niccum, KBR</td>
<td>Steve Meyer, MECS, Inc. – AM-06-61</td>
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<tr>
<td>Kevin Carlson, Criterion Catalysts &amp; Technologies</td>
<td>Keith Couch, UOP LLC</td>
<td>Bill Trapp, Eastman Gasification Services Company</td>
<td>Glen Francisco, L-3 Communications Infrared Products</td>
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<td>– AM-06-45</td>
<td>– AM-06-10</td>
<td>– AM-06-17</td>
<td>– AM-06-21</td>
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Lessons Learned from Katrina  
- David Kortum  
  U.S. EPA  
- Michele Joy  
  Association of Oil Pipelines  
- Jim Greenwood  
  Valero Energy Corporation

RFS Implementation Panel  
Moderator: Steve Cousins  
- Lion Oil  
  Paul Machiele  
  U.S. EPA  
  Mike Leister  
  Marathon Petroleum Company LLC  
- Eugene Burden  
  Tesoro Petroleum Corporation

Effective Procedural Operations
- Richard Kucharyson  
  Honeywell – AM-06-20

Low Investment Energy Cost Reduction Methodology Consistently Delivers
- Eva Heyman  
  Shell Global Solutions (US) Inc. – AM-06-23

Global Deployment of Best Practices
- Ralph Phillip, Valero Energy – AM-06-22

DynaWave Wet Gas Scrubbing: A New Alternative for Claus Unit Tail Gas Treating
- Steve Meyer, MECS, Inc. – AM-06-61

Afraid of the Dark? Not with Thermal Imaging
- Glen Francisco, L-3 Communications Infrared Products – AM-06-21
## 2006 NPRA Annual Meeting Technical Program

**Tuesday Morning  March 21, 2006**  
*9:30 am To 12:00 pm*

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<tr>
<th>ISSUES</th>
<th>HYDROCRACKING</th>
<th>CRUDE OIL SUPPLY</th>
<th>PETROCHEMICALS</th>
<th>LUBRICANTS &amp; WAXES</th>
</tr>
</thead>
</table>
| ULSD-Refinery to Retail Panel  
- Cheryl Trench, Allegro Energy Consulting  
- Timothy Columbus, Collier, Shannon, Scott PLLC  
- Paul Moote, Sinclair Oil Corporation | LCO Hydrocracking at Moderate Pressures  
Bill Novak, ExxonMobil Research and Engineering Company – AM-06-26 | Markets for Canadian Oil Sands Products  
Steven Kelly, Purvin & Gertz, Inc. – AM-06-28 | Natural Gas Supply  
David Friedman  
NPRA – AM-06-24 | Trends in Lube Refining  
Jamie Brunk, Solomon Associates – AM-06-60 |
| Refining Capacity  
- Harry Quarles, Booz Allen Hamilton, Inc.  
- Glenn McGinnis, Arizona Clean Fuels  
- Lawrence Kumins, Congressional Research Service | Integrated Hydrogen Solutions: Combining Hydrogen Recovery and Optimized Steam Reforming  
James Fleshman, Foster Wheeler North America Corporation – AM-06-27 | New Chemical Processes Removes Crude Oil Contaminants  
Jerry Weers, Baker Petrolite – AM-06-31 | Petrochemicals and the Price of Oil  
John Jenkins, Jacobs Consultancy – AM-06-32 | PC–10: Progress and Timeline Summary  
William Runkle, The Valvoline Company – AM-06-69 |
| | Temperature Accuracy and Low Sulfur Requirements  
Michael Strebel, Gayesco LLC – AM-06-57 | New Electrostatic Technology for Desalting Crude Oil  
Gary Sams, NATCO Group Inc. – AM-06-30 | Certainty of Outcome in Uncertain Times: Efficient Execution of Large-Scale Capital Projects in an Era of Rapid Growth  
Amos Avidan, Bechtel Corporation – AM-06-34 | Dexron®-VI: Automatic Transmission Fluid  
Steven Kemp, General Motors Powertrain – AM-06-58 |
| | Innovative Hydrocracker Fractionation Modification to Process High Sulfur Crude Feed  
Ken Sherman, Colt Engineering Corporation – AM-06-25 | Calcium Removal and It’s Impact on Downstream Processes  
Sandra Garcia-Swofford, Nalco Company – AM-06-35 | Commodity Management Strategies for Newest Challenges  
Paul Weissgarber, A.T. Kearney, Inc. – AM-06-65 | Advances in Food-Grade Lubricants  
Joe Kaperick, Afton Chemical Corporation – AM-06-67 |
**2006 NPRA Annual Meeting Technical Program**

**Tuesday Afternoon   March 21, 2006**  
**2:00 pm To 4:00 pm**

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<tr>
<th>MANAGEMENT</th>
<th>GASOLINE PROCESSES</th>
<th>RELIABILITY</th>
<th>PLANT AUTOMATION</th>
<th>WORKFORCE ISSUES</th>
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</table>
| **Refining Outlook 2006**  
Coby Stewart, Chicago Bridge & Iron – AM-06-48 | A Refinery of the Future (Plant Automation View)  
Mike Sarli, ExxonMobil Research and Engineering - AM-06-53 | A Holistic Approach to Safety: Methodology for Improvement  
Peter Jofriet, Honeywell Process Solutions – AM-06-44 |
| **Potential Impact of GTL Commercialization on the Fuels and Specialty Product Markets**  
Iraj Isaac Rahmim, E-MetaVenture, Inc. – AM-06-36 | Gasoline Production in the Post Energy Bill, Benzene Restricted World  
Marty Moran, Meridium Inc. – AM-06-51 | Cyber Security and Your Plant’s Bottom Line  
Steve Elwart, Ergon Refining, Inc. – AM-06-56 | Moving to World Class Safety  
Darrell McQuigge, Colt Engineering Corporation – AM-06-59 |
| **Shutdown, Revamp or Upgrade – The Big Question**  
Jennifer Pearse, Det Norske Veritas (US) Inc. – AM-06-63 | Catalytic Reformer Modifications to Increase Refinery Profitability at Frontier El Dorado Refining Company  
David Dotson, Frontier Oil Company – AM-06-40 | Real-time Management of Condition-Based Plant Integrity  
Milton Altenberg  
Quest Tru Tec and Emil Pena, Quest Integrated – AM-06-50 | Refinery Operational Planning Using Rigorous Optimization  
Lanny Carr, Invensys Process Systems – AM-06-55 | Succession Planning For the Maintenance Workforce  
Clarence Trowbridge, BP and Barbara Trautlein, Systems Research and Consulting - AM-06-42 |
| **The New Competitive Edge: Integrating Physical and Market Data In Real Time**  
John Gieseman, ABB Lummus Global Inc. – AM-06-41 | Asset Management: If You’ve Got It, Optimize It!  
Richard Morgan, Celerant Consulting, Inc. – AM-06-49 | ULSD Production, Prediction, and Monitoring with Advanced Simulation Tools  
Robert Ohmes, KBC Advanced Technologies, Inc. – AM-06-54 | The All Out War for Talent  
Stephen Toups, Turner Industries Group, LLC - AM-06-43 |