

Houston, Texas

**NPRA International  
Lubricants & Waxes Meeting**

Marriott Westchase Hotel  
Houston, Texas  
November 12-13, 2009



## Schedule of Events

<b>Wednesday</b> 4:00 pm – 6:00 pm	<b>November 11, 2009</b> Registration Grand Ballroom Foyer
<b>Thursday</b> 7:30 am – 6:00 pm	<b>November 12, 2009</b> Registration Grand Ballroom Foyer
7:30 am – 8:30 am	Coffee Service Grand Ballroom Foyer
8:30 am – 10:00 am Grand Ballroom Salons A - D	<b>Wax Session</b> <ul style="list-style-type: none"><li>The Petroleum Wax Trade: A Very Global Market</li><li>Petroleum Wax Market Dynamics</li></ul>
10:00 am – 10:30 am	Coffee Break Grand Ballroom Foyer
10:30 am – 11:30 am Grand Ballroom Salons A - D	<b>Special Presentation</b> Inside the Lion's Den – Refiners on the Menu in Washington
11:30 am – 2:00 pm Westchase 1 - 2	Lubricants & Waxes Committee Meeting <i>Members and invited guests only please.</i>
2:00 pm – 4:30 pm Grand Ballroom Salons A - D	<b>Base Oils Session Part I</b> <ul style="list-style-type: none"><li>The Impact of Emerging Industry Trends on Lubricant Formulations</li><li>New Lube Technologies: Solvent Extraction/Dewaxing and Hydrotreating</li><li>Commercial Technology to Convert Group I Facilities to Group II/III Lube Production</li></ul>
3:00 pm – 3:15 pm	Refreshment Break Grand Ballroom Foyer
4:30 pm – 6:00 pm	Reception Sponsored by SK Lubricants Grand Ballroom Salon E
<b>Friday</b> 7:30 am – 11:00 am	<b>November 13, 2009</b> Registration Grand Ballroom Foyer
7:30 am – 8:00 am	Coffee Service Grand Ballroom Foyer
8:00 am – 9:30 am Grand Ballroom Salons A - D	<b>Base Oils Session Part II</b> <ul style="list-style-type: none"><li>Finding Energy Efficiency in the Heavy Duty Sector</li><li>New Heavy Synthetic Base Fluids For Automotive And Industrial Applications</li></ul>
9:30 am – 11:00 am Grand Ballroom Salons A - D	<b>International and Future Developments Session</b> <ul style="list-style-type: none"><li>Aromatic Extract Oil Replacement Strategy</li><li>Chemicals Policy: A Changing Landscape</li></ul>

## Sponsors

NPRA thanks the following company for sponsoring the reception.



## Wax Session

Thursday, November 12

8:30 am – 10:00 am

Conference President:  
*Dr. H. Ernest Henderson, CITGO*

### The Petroleum Wax Trade: A Very Global Market

*Amy Claxton, My Energy*

The global petroleum wax trade is massive. At over 5 billion pounds per annum exported by seventy countries around the world, we are truly a global industry. This session will explore the key importing and exporting countries of fully refined paraffin, higher oil content waxes, and petrolatums – and take a look at future trends.

### Petroleum Wax Market Dynamics

*Heather Doyle, ICIS*

For years, the paraffin wax market was steady and predictable, with few changes in price, supply or demand from one year to the next. But since the U.S. Gulf hurricanes of 2005, the ups and downs of pricing alongside volatile and unpredictable supply have forced dramatic changes. The trying economic times have deepened the uncertainties for the global petroleum wax industry.

### Special Presentation

Thursday, November 12

10:30 am – 11:30 am

### Inside the Lion's Den – Refiners on the Menu in Washington

*Greg Scott, NPRA*

Change has come to Washington during the first year of the Obama Administration coupled with both chambers of Congress controlled by the Democrats. The federal legislative and regulatory challenges facing the refining and petrochemical industries in 2009 and 2010 are daunting, diverse, and real. NPRA Executive Vice President and General Counsel will provide an “insider’s” perspective on the major challenges facing NPRA members through the next 18 months – climate change legislation and regulation, CFATS reauthorization, federal tax policy and implementation of federal fuels programs – and the efforts NPRA is under-taking to meet these challenges in 2009 and beyond.

## Base Oils Session Part I

Thursday, November 12  
2:00 pm – 4:30 pm

### The Impact of Emerging Industry Trends on Lubricant Formulations

*Laura Oliver, Infineum*

The lubricants arena is changing quite rapidly to keep up with global trends in basestocks and hardware as well as increasing consumer demand for higher performance, longer drain engine oils. Dealing with these changes requires careful consideration of the various constituents of engine oil. This presentation will discuss the critical role of viscosity modifiers and how the choice of viscosity modifier can affect a lubricant formulator's ability to meet the significant challenges posed by these emerging global trends.

### New Lube Technologies: Solvent Extraction/Dewaxing and Hydrotreating

*Mike Ackerson, Process Dynamics*

For years, refiners have had no new options for cost improvement for existing or new solvent extraction and hydroprocessing plants. Process Dynamics' new solvent technology combines solvent extraction and solvent dewaxing into a single processing unit utilizing common solvents resulting in dramatically reduced operating costs. In addition, with the much more selective solvent system used by Process Dynamics, refiners can expect yield increases in finished lube oils of 5 to 20 percent, depending on the stock, or increased product quality at the same yield. In the area of hydroprocessing, Process Dynamics has developed a lower cost lube hydroprocessing technology called IsoTherming®. IsoTherming®

incorporates liquid full hydrotreating reactors which allows capacity expansion of existing units at costs much less than conventional technology. An overview of the technologies will be presented.

### Commercial Technology to Convert Group I Facilities to Group II/III Lube Production

*Michael Davis, ExxonMobil*

World lubricant production continues a trend toward higher-quality Group II and Group III products, pressuring the standard Group I material. Grass roots capacity is now targeted almost exclusively to Group II/III+ and Group III lube base oils. More Group I units are developing projects to revamp production up to the Group II/III level.

For Solvent Plant (Group I) retrofits, RHCTM technology converts solvent raffinate to Group II/III+ lubricants while maintaining wax production through existing solvent dewaxing units at lower cost than Grass Roots Hydrocracking cost with the potential for increasing production. This has the added benefit of producing a very high quality wax because of the hydrotreating step. Alternatively, ExxonMobil Research and Engineering Company's (EMRE) commercially proven RHC/RHT, will provide feeds to EMRE's Selective Isomerization Dewaxing catalytic process (MSDWTM) for grades from very light neutrals through Bright Stock, with the same superb performance as with hydrocracked feeds, again with the opportunity for increasing production.

## International and Future Developments Session

Friday, November 13  
9:30 am – 11:00 am

### Aromatic Extract Oil Replacement Strategy

*Marcela Balige, YPF S.A.*

A latest European regulation for extender oils used for tire production, that will be mandatory starting 2010, will limit the polycyclic aromatic content of such oils.

Since 2006 an industry team in Argentina was formed with the participation of the main tire industries players (suppliers and manufacturers) to assess alternative options to DAE (distillate aromatic extract).

### Chemicals Policy: A Changing Landscape

*Jim Cooper, NPRA*

The Toxic Substances Control Act (TSCA) gives the Environmental Protection Agency (EPA) broad authority to regulate chemicals in commerce. It is one of the few laws that can restrict a company's ability to do business in the United States. If your company deals with chemicals, you will be affected by TSCA.

The EU REACH system is only in its infancy but is having a dramatic effect on the issue of chemicals management. The U.S. Congress has experienced a shift in power, not only in terms of political parties, but also in terms of key committee leadership. This session will cover the status of REACH, its impact on other regions and how the U.S. regulatory landscape for chemicals is changing.

## Base Oils Session Part II

Friday, November 13  
8:00 am – 9:30 am

### Finding Energy Efficiency in the Heavy Duty Sector

*Nathan Betner, CITGO*

Energy conservation in the fleet sector has become a primary goal in recent years. Achieving these goals has required utilizing many strategies. Lubrication is another source of energy conservation as fleets and transportation companies evaluate all possibilities in the future.

### New Heavy Synthetic Base Fluids For Automotive and Industrial Applications

*Ray Rice & D. McKeegan, R.B. Products*

This presentation will describe new heavy synthetic base fluids for the lubricant industry with beneficial properties.



**NPRA**

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