



The Newsletter of
AIChE's Fuels and
Petrochemicals Division

Flashpoint

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The Chair's Corner By Ralph Pike

F&PD past-chair Dennis Griffith who serves on the AIChE Commission on Energy Challenges (CEC), was appointed to a Department of Energy's national panel to review United States Energy Efficiency Policy. We look forward to Dennis' description of the results.

The F&PD web site <http://www.aiche-fpd.org> has the latest information on meeting and events, a members center, awards, resources and webinars. On the site is a **Call-for Nominations for Officers** with a deadline of November 23rd. Past Chair James Turner is Chair of the Nominating Committee, pastchair@aiche-fpd.org, and more details on the officers' election and awards are on the Division's web site.

Nominations are solicited for the **Division Award** and the **Division Service Award**, due October 26th. The Division Award is for substantial technological contributions to the advancement of the fuels and petrochemicals industries, and the Division Service Award is for outstanding service to the

Fuels and Petrochemicals Division. **Nominations for F&PD Scholarships** for graduating high school seniors with exemplary academic records and demonstrated leadership potential are due January 31, 2010, and nominations for the **Harry West Student Paper Award** are due February 15, 2009. Your help is needed to ensure worth persons are recognized.

At the **2009 Regional Process Technology Conference held in Galveston on Oct 1-2nd**, one of the program organizers and F&PD vice-chair Syamal Poddar reported that the conference was a big success with an attendance of 380, beyond expectations. The session, "Current Issues and Opportunities in Refining" co-chaired by F&PD past-chair, James Turner and Syamal Poddar was well attended, and all five invited speakers did a great job.

Paper submissions are open until December 1st for the San Antonio Spring National Meeting. Contact Tim Olsen, programming@aiche-fpd.org, for more information or look on the web at <http://www.aiche.org/Conferences/Resources/Group16.aspx>.

AIChE Highlights—Spring 2010 Keynotes, Galveston, Nashville,

The 2010 AIChE Spring Meeting in San Antonio will kick off on Monday with two prominent, highly respected, keynote speakers. More details on their topics and arrangements will come in later issues, but highlights are given here.

John D. Hofmeister, Founder and CEO, Citizens for Affordable Energy will be the Division's featured speaker. John was formerly the President of Shell Oil Company, and as also worked at Allied Signal, Northern Telecom and General Electric. John is a Dynamic Speaker and we are very lucky to have him speak at our meeting.

Lisa Jackson, US EPA Administrator will also be a featured Keynote Address. Look for Lisa to address some issues that are key for the future of Fuels and Petrochemicals.

The recent **Process Technology Conference in Galveston** was a huge success. With over 380 attendees, all the sessions were well received. F&PD, along with the South Texas Region were key in planning this meeting. Look for similar meetings in the future!

The **2009 Annual Meeting in Nashville** will be here soon. Energy is a key highlight of this meeting. For more details, go to AIChE's website at <http://www.aiche.org/Conferences/AnnualMeeting/index.aspx>.

AIChE's webinars, offered free to members through ChemE OnDemand have been quite successful. F&PD Vice Chair, Syamal Poddar, recently presented a webinar on Effective Communication Driven Leadership Skills. Look for F&PD to start their own webinar series soon. More details are on page 3.

The Lighter Side contributed by Bob Dye

Loudmouthed Tourists Endangering Rare Species:

What's threatening the Amazon jungle? Tourists flapping their lips! At least, that seems to be the opinion of the hoatzin, a large bird popular with the tourists in the Amazon. Researchers approached the birds, first with silence, and then with a recording of tourists. Even the quiet conversations stressed out the birds. They started clucking and pooping, their standard defense, before flying off. Since freaked out birds are less likely to reproduce, conservationists suggest taking a quiet approach. Of course, if pooping is its major defensive move, it's not a huge shock that this bird is on the endangered species list in the first place. **Source: Environmental Compliance Alert, Aug. 10, 2009**

Doo Doo that Zoo-Doo that Zoos Do So Well: Gardeners in Seattle will have to go elsewhere for their zoo manure. The Woodlands Park Zoo recently had to suspend sales of its popular zoo manure. Sales were cancelled when it became clear the fertilizer was more likely to kill plants than grow them. When the zoo took a close inspection of the compost, they found a variety of animal poop, leaves, grass, wood chips, and heavy levels of herbicide. Fortunately, it's pretty much impossible to stop zoo animals from pooping, so a new (presumably non-poisonous batch) of zoo doo should be ready in the fall.

Source: Environmental Compliance Alert, July 24, 2009.

Call for Papers—Topical 7 - Refinery Processing Sessions

The Fuels & Petrochemicals Division will host refining tutorials on current challenges related to CO₂ reduction and GHG emission reporting. Additional tutorials will include the desalter and hydroprocessing along with a special session for young professionals on process control, environmental, and patents. Complimentary to these tutorials will be sessions on energy conservation along with heater operation and safety. Topical 7 on refinery processing will be offering 21 sessions and tutorials addressing current and future challenges related to the refining industry. Please submit an abstract by December 1st to be part of this comprehensive information exchange.

Chair – Kirtan Trivedi (kirtan.k.trivedi@exxonmobil.com)

Vice-Chair – Frank del Nogal (frank.delnogal@kbr.com)

- Advances in Catalysis and Biocatalysis in Refining
- Advances in Separation
- Advances in Fired Heater Operations & Safety
- Biofuels and Sustainability
- CO₂ and GHG Issues Related to the Refining Industry Tutorial (Technical)
- CO₂ and GHG Emissions Reporting Tutorial (Regulations)
- Desalting Tutorial
- Energy Optimization
- Expansion, Debottleneck, Revamp Opportunities for Refinery Optimization, Improved Utilization and Reliability
- Fouling Mitigation
- Heavy Oil Upgrading
- Hydroprocessing Tutorial
- Logistics and Information Management
- Maximizing Diesel Production
- Model Predictive Control (MPC)
- Process Control and Optimization
- Refinery Gas Management, Including Waste Gas
- Strategies for Low Sulfur Marine Fuels
- Sulfur Plants, Tgcu and Environmental Regulations
- Technologies for Gasoline
- Young Professionals Special Session – Process Control, Environmental, Patents

Fuels and Petrochemicals Programming Update

By Tim Olsen

The Fuels & Petrochemicals Division (FPD) is looking forward to the upcoming Annual Meeting at the Gaylord Opryland Hotel in Nashville followed by the Spring Meeting at the Grand Hyatt in San Antonio next year in March. Please join us to learn more about current and future challenges along with the ideas and solutions that impact and shape the fuels and petrochemicals industries.

Annual 2009 Meeting, November 8-13 in Nashville

The sessions are driven more from an academic focus, so the presentation material includes non-traditional refining. I would encourage people to have an open mind and learn more about how these technologies are advancing and how they will integrate with traditional fuels refining.

Fuels & Petrochemicals Track:

<http://aiche.confex.com/aiche/2009/webprogrampreliminary/16.html>

Spring 2010 Meeting, March 21-25 in San Antonio

The "Call for Papers" deadline is December 1st. The deadline is a firm date since the meeting will take place in March rather than April.

Submit abstracts website: <http://aiche.confex.com/aiche/s10/cfp.cgi>

The FPD programming committee encourages you to participate as a presenter for one of our session tracks (web links listed below). We are anticipating a larger regional audience

with the San Antonio location, thus more peers to interact with during the event. Even if you do not plan to be a presenter, we hope you attend to learn more about industry trends, challenges, ideas, and solutions. Key topics will include Greenhouse Gas reporting based on new EPA regulations.

Please consider submitting an abstract within the FPD programming by December 1st.

Topical 7 on Refinery Processing:

<http://aiche.confex.com/aiche/s10/webprogrampreliminary/T7.html>

Topical 6 on Gas Utilization:

<http://aiche.confex.com/aiche/s10/webprogrampreliminary/T6.html>

Group 16 on Aromatics:

<http://aiche.confex.com/aiche/s10/webprogrampreliminary/16.html>

The keynote speaker at the Spring National Meeting is usually sponsored and selected by the Division. This year, the Spring Meeting will feature two Keynote Speakers. Lisa Jackson, Director of the US EPA will give an address on Monday morning. Additionally, F&PD will sponsor a presentation John Hofmeister, CEO Citizens for Affordable Energy, later that morning. F&PD again plans a coffee break before this session, where you can meet the speaker and key F&PD and AIChE officers. More details to come as meeting plans progress.

Request for Input: F&PD WEBINAR PROGRAM by Stuart Shih

F&PD will be sponsoring a series of webinars. These webinars will be available at no cost to F&PD members. While we already have some potential topics for the first few webinars, we are looking for input from our members. If you would like to be the speaker or to recommend a speaker or topic for a future webinar, please contact one of the committee members.

Objectives: To provide training and information to F&PD members

Audience:

Students and young professionals

Experienced professionals

Duration: 30 minutes to 60 minutes

Output Format: Flash, Quicktime, Windows Media Player or MPEG-4

Potential Topics include, but are not limited to

Tutorial on unit operation, process, or technology.

Overview on F&PD member's working areas (LNG, EPC, refining, chemicals, industrial gases, control, instrumentation, optimization, and)

Best practices related to professional activities.

Analyses/comments on timely issues including R/D innovations.

Personal experiences that can be beneficial to the F&PD members.

Any other topics that may be of interest to F&D Members

F&PD Webinar Program Committee:

Stuart Shih (stuart.s.shih@exxonmobil.com)

Tim Olsen (tim.olsen@emerson.com)

Lori McDowell (Lori_McDowell@praxair.com)

Richard Mallinson (mallinson@ou.edu)

22nd ETHYLENE PRODUCERS' CONFERENCE**AICHe Spring 2010 Meeting****March 21-25, 2010, Grand Hyatt, San Antonio, TX**

Ethylene is the most produced organic chemical in the world. This year's conference, sponsored by the Ethylene Producers' Committee, covers manufacturing and technical topics of critical importance to the manufacture ethylene. Presentations and workshops will also cover emerging technologies and issues of growing importance to the industry, such as greenhouse gas emissions.

This year's Ethylene Producers' Conference will include sessions focused on the following topics:

- Ethylene Plant Operations
- Ethylene Plant Rotating Equipment
- Ethylene Plant Safety
- Ethylene Plant Maintenance
- Ethylene Plant Feedstocks
- Ethylene Plant Process Control
- Ethylene Plant Pyrolysis Furnace Technology
- Ethylene Plant Fundamentals and Innovation
- Ethylene Plant Process Drier Technology
- Ethylene Plant CO₂ Emissions

A complete 2010 Spring Meeting Proceedings CD-ROM set will be available at the conference and may be ordered in advance using the conference registration form. All submitted papers received prior to the pre-conference deadline will be included and where papers are not uploaded, paper proposal abstracts will be used. E-mail addresses for all authors will also be included. A paper copy of the Ethylene papers with full Spring Conference CD set will be available as well.

Associated Events:

Ethylene Producers Reception – Sunday Evening, March 21
Ethylene Producers Ticketed Networking Lunch – Tuesday, March 23. Advance ticket purchase required.

**Call for Papers, AICHe Spring Meeting,
 DUE: December 1, 2009**

<http://www.aiche.org/Conferences/SpringMeeting/>

Gregory Yeo
 ExxonMobil Chemical Company
 P.O. Box 4900
 Baytown, TX 77522-4900
 Tel: 281 834-5990
gregory.yeo@gmail.com

Stephen Stinnette
 Flint Hills Resources
 4241 Savannah Ave.
 Port Arthur, TX 77640
 Tel: 409 989-6731
stinnsk@gmail.com

Notes from the Editor by Lori McDowell

Welcome to the second electronic issue of Flashpoint. Feedback on our first issue was positive, so either everyone liked it, or those who didn't were kind enough to keep quiet! In this issue, there is a lot of focus on upcoming meetings. The Annual meeting is just around the corner and Spring will be here before you know it. With the tough economy and more companies having travel restrictions, AICHe and F&PD are trying to make these meetings as relevant as possible. We are also looking for ways to benefit our members that cannot attend meetings (see the webinars, webpage, newsletter) so we'd like your suggestions! Send them to me at communications@aiche-fpd.org.

This is also the time of year when F&PD looks for new officers and Award recipients. If you don't like the way things are going, this is your chance for input. Being an Officer or Director of the Division is a great way to make a difference in AICHe, and also to get to know some great people. And don't let those deserving award winners get overlooked! One award I'd like to highlight is our **scholarship**. F&PD awards two \$1000 scholarships to seniors who plan on majoring in science or engineering, and the scholarship is only open to those nominated by F&PD. \$1000 is not much, but it can pay for books, fees and other miscellaneous college costs!

Lastly, I would like to make this Newsletter more interactive, with links, etc. If anyone is an expert in Microsoft Publisher and would like to help, please contact me. Happy Halloween!

*Upcoming Meetings***AICHe Day at Chem Show**

November 17, 2009

Javits Convention Center, New York, NY

(see <http://www.aiche.org/Conferences/AICHeDay.aspx> and <http://chemshow.com/forvisitors/education2.php>) for full info.

2009 Annual Meeting

Gaylord Opryland Hotel—Nashville, TN

November 8-13, 2009

2010 Spring National Meeting

Grand Hyatt—San Antonio, TX

March 21-25, 2010

2010 Annual Meeting

Salt Lake City, UT

October 17-22, 2010

AIChE Spring 2010 Meeting Call for Papers: Biofuels and Sustainability 13th Topical Conference on Refinery Processing

Biofuels could become important transportation fuels to reduce carbon dioxide emission. Ethanol, and higher alcohols, and biodiesel derived from vegetable oils are the current focus. Alcohols from cellulose plant mass and biodiesel from photosynthetic algae could have longer term potential. The session will focus on fundamental, technology, policy, and sustainability related to the biofuels. Since Europe is implementing biodiesel refining in petroleum refineries, technology, chemistry, catalysis, process, and R/D advances for the biodiesel production are particularly welcome.

Abstract due: Dec. 1, 2009

<http://aiche.confex.com/aiche/s10/cfp.cgi>

Session Co-Chairs: Nazmul M. Karim (naz.karim@ttu.edu), Stuart Shih (stuart.s.shih@exxonmobil.com),

David Wishnick (david.winshnick@gmail.com)

AIChE Spring 2010 Meeting Call for Papers: 10th Topical Conference on Gas Utilization

Utilization of gas continues to gain more attention because of higher oil price. The use of LNG is gaining popularity for power generation, industrial basic materials and household usage. Governments and companies are looking for more opportunities to convert the alternative carbonaceous feed-stocks into valuable products such as fuels and chemicals. This year's program will cover the following areas:

Coal, Biomass and Natural Gas to Liquids – This session will focus on the fundamentals and processes for the conversion of coal, natural gas, biomass and other carbon-bearing materials to fuels and chemicals.

Kinetics, Design and Modeling of Fischer-Tropsch Catalysts and Reactions – This session will focus on advances in catalyst development and reaction kinetics, including all aspects of the design, characterization, and modeling of Fischer Tropsch synthesis catalysts and reactions for gas-to-liquids (GTL), coal-to-liquids (CTL), and biomass-to-liquids (BTL) applications.

Production of Fuels and Chemicals from Fischer-Tropsch Hydrocarbons – This session will review the advances in the upgrading processes and technologies to produce fuels and chemicals from Fischer-Tropsch products.

Syngas to Ammonia – This session will review the advances in the technologies to produce ammonia from syngas.

CO₂ Conversion – This session will focus on the conversion of CO₂ to valuable products by catalytic, electrochemical/electrocatalytic, photochemical/photocatalytic, enzymatic/biochemical and plasma processes.

Gas Separation Technologies – This session will feature research presentations on novel processing techniques, process chemistry, reactor development, catalyst development, and catalyst deactivation for natural gas conversion as well as gas separations.

Advancements in Hydrogen Technologies – This session will cover all aspects of "The Hydrogen Chain" including hydrogen production, purification and storage. It will primarily discuss technologies that are new, alternative, or under development.

Greenhouse Gases Sequestration – This session will review the advances in the sequestration technology for greenhouse gases .

LNG Equipment – This session presents papers in LNG equipment developments in pumps, drivers and compressors, heat exchangers, liquid expanders and others.

LNG Regasification – This session presents papers in LNG receiving terminals technology, process, regasification, and liquid extraction advancements

LNG Safety – This session presents papers in LNG safety developments in LNG baseload plants, LNG receiving terminals, LNG ships and off-shore LNG facilities.

LNG Technology – This session is to present papers relating to baseload LNG plants technology development in liquefaction, process, and commercial activities.

Topical Conference Proceedings: CDs will be available as listed on the registration form or at the registration site at the Conference

Associated Event: will feature a Gas Utilization Luncheon

Call for Paper for AIChE Meeting, DUE: December 1, 2009

<http://www.aiche.org/Conferences/SpringMeeting/>

Contact information:

Belma Demirel

bdemirel@rentk.com

Chen-Hwa Chiu

Chen-Hwa.Chiu@Chevron.com

INTRODUCING THE

Arctic

TECHNOLOGY CONFERENCE

November 2010 | Houston, Texas, USA

The Arctic is one of the few places on the globe which still holds enormous new petroleum reserve potential. A recently completed USGS survey estimated that 20% of the world's remaining reserves are trapped beneath the Arctic Circle.

Organized by the Offshore Technology Conference, this new conference will address the cutting-edge technologies and innovative practices needed for exploration and production in the Arctic region.

CALL FOR VOLUNTEERS!

Contact tech-prog@otcnet.org if you'd like to be a part of this event.

Sign-up for email updates at www.otcnet.org as more information becomes available.





Fuels and Petrochemicals Division 2009-2010 Executive Committee

CHAIR:

Ralph Pike
Louisiana State University
[Email: chair@aiche-fpd.org](mailto:chair@aiche-fpd.org)

TREASURER:

Dennis O'Brien
Jacobs Consultancy
[Email: treasurer@aiche-fpd.org](mailto:treasurer@aiche-fpd.org)

COMMUNICATIONS DIRECTOR:

Lori McDowell
Praxair, Inc.
[Email: communications@aiche-fpd.org](mailto:communications@aiche-fpd.org)

FIRST VICE CHAIR:

Syamal Poddar
Poddar & Associates
[Email: vicechair@aiche-fpd.org](mailto:vicechair@aiche-fpd.org)

SECRETARY:

Rick Mallinson
Institute for Gas Utilization Technologies
[Email: secretary@aiche-fpd.org](mailto:secretary@aiche-fpd.org)

R&D TECHNOLOGY LIAISON:

Galen Suppes
The University of Missouri
[Email: rancliason@aiche-fpd.org](mailto:rancliason@aiche-fpd.org)

SECOND VICE CHAIR:

Colin Bowen
Shaw Group
[Email: secondvicechair@aiche-fpd.org](mailto:secondvicechair@aiche-fpd.org)

COUNCIL (CTOC) LIAISON:

Lori McDowell
Praxair
[Email : ctocliason@aiche-fpd.org](mailto:ctocliason@aiche-fpd.org)

AICHE STAFF LIAISON:

Nina Scatton
AIChE
[Email: ninas@aiche.org](mailto:ninas@aiche.org)

PAST CHAIR:

James Turner
Fluor Corporation
[Email: pastchair@aiche-fpd.org](mailto:pastchair@aiche-fpd.org)

WEBMASTER:

Gabriel Garcia
[PollutionTech, LLC](http://PollutionTech,LLC)
877-VOC-CTRL

PROGRAMMING CHAIR:

Tim Olsen
Emerson Process Management
[Email: programming@aiche-fpd.org](mailto:programming@aiche-fpd.org)

NEWSLETTER EDITOR:

Lori McDowell
Praxair, Inc.
[Email: newsletter@aiche-fpd.org](mailto:newsletter@aiche-fpd.org)

DIRECTORS ONE YEAR

Bill Turk
Chevron Phillips Chemical Co.
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

Tim Olsen
Emerson Process Management
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

James Harris
UOP
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

DIRECTORS TWO YEARS

Laura Leonard
UOP
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

Larry Kremer
Baker Petrolite
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

Tom Marrero
University of Missouri Columbia
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

DIRECTORS THREE YEARS

Steve Stinnette
Flint Hills Resources
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

Aivars Krumins
CB&I
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)

Richard Isherwood
UOP
[Email: director@aiche-fpd.org](mailto:director@aiche-fpd.org)