

AIChE®

Chicago Columns

Chicago Section e-newsletter

February 2007

CHAIR'S CORNER: VALUE ADDED MEMBERSHIP

Upcoming Events:

February 22:

Chemistry of Gasoline Sulfur Reduction, Bruce R. Cook, ExxonMobil

March 30:

IIT AIChE Alumni Dinner

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Welcome back to the second half of our 2006-2007 AIChE Chicago Section season! We actually got started in January with a combined social activity as 25 members from our AIChE section and local YPAB witnessed a Chicago Bulls blowout over the Memphis Grizzlies at the United Center. Additional social activities for our section are under consideration, and we welcome your thoughts and ideas. We want to initiate the exchange of technical information and ideas, but additionally support other areas of professional growth, networking and camaraderie.

In this second half of our season, your Board of Directors will be working hard to bring new ideas to yield additional added value to your membership. We are looking to other sections and other similar organizations to better understand what they do best, and how their best practices might fit into our group. We have attempted to go "back to basics" to better understand how any

improvements to our group's structure and function may bring about a more valuable organization for all its members.

In addition to improved services, we are looking for opportunities to get more of you actively involved in your organization. There are opportunities to volunteer your time and skills in committees, annual events, and elected offices. For those concerned about limited time in your schedule, not all positions require a large time commitment. You can split responsibilities up with a coworker or friend, which gets you both involved with a lower time commitment. For younger members, activity in a professional organization can provide a boost in your resume and marketability, and a chance to learn from some seasoned professionals. The reverse is also true – our experienced members have an opportunity to give back to their profession and help mentor the newer ranks.

We will be contacting you more in the near future to solicit thoughts and opinions on how we can make improvements to your organization. The Board of Directors is committed to bring about improvements to your local section, but it can't be done without your help! We want the AIChE Chicago Section to become a greater part of your professional career and an organization you can turn to for support and encouragement. This is a membership organization which operates with its members at its core.

We look forward to your participation and contributions. You can contact us at bod@aiche-chicago.com or come visit with your fellow members at our upcoming events.

-Brian C. Gahan
AIChE Chicago Chair



FEBRUARY MEETING: FEBRUARY 22, 2007
CHEMISTRY OF GASOLINE SULFUR REDUCTION
DR. BRUCE R. COOK
EXXONMOBIL RESEARCH AND ENGINEERING COMPANY

Location: European Crystal Banquet Center, 519 W. Algonquin Rd, Arlington Heights, IL

Please Register at <http://www.aiche-chicago.org>

Price: \$30.00 members , \$32.00 non-members, \$5 for students

6:00 - 7:00 PM: Social Hour

5:30 - 6:30 PM: Job Club

7:00 PM: Dinner

8:00 PM: Program



Regulations to reduce the sulfur level in gasoline to less than 50 wppm are in place or planned in many countries. The primary source of sulfur in gasoline is FCC cat naphtha, which contributes approximately 50 wt% of gasoline pool volume but nearly 95% of gasoline sulfur. Critical to the economics of any gasoline desulfurization process is the ability to effectively remove sulfur from the mercaptans, thiophenes, and benzothiophenes in FCC naphtha without saturating the important high octane olefins present. Several processes have been developed to meet these goals and have seen broad commercial application. For example, ExxonMobil's SCANfining I and II processes have over 1 MBD of committed or installed world-wide capacity. Three critical steps are typical parts of most commercial FCC naphtha HDS processes. The first of these is a step designed to react or remove the mercaptan sulfur found in the lightest fraction of FCC naphtha (LCN, C5-75 C) without saturating the large amount of important C5/C6 olefins in this boiling range. The second critical step is a selective HDS process to maximize the desulfurization of thiophenic sulfur, while minimizing the saturation of important C7/C8 olefins in intermediate or combined intermediate/heavy cat naphtha. Selective HDS of ICN and ICN/HCN requires combination of optimized process conditions and selective catalyst (for example RT-225) technology to maximize thiophene HDS while minimizing olefin saturation. The third critical process step involves minimizing mercaptan formation from the reaction of product H₂S with feed olefins (mercaptan reversion). This talk will focus on the critical processes involved in producing gasoline, and the chemistry of all three critical process steps for removing sulfur from gasoline.

CHICAGO BULLS VS. MEMPHIS GRIZZLIES
JANUARY 13, 2007
YPAB / AICHE JOINT SOCIAL



NOMINATIONS REQUESTED FOR THE ERNEST W. THIELE AWARD

The Ernest W. Thiele award is sponsored by BP and recognizes the outstanding contributions to our profession by a Midwest region chemical engineer. This award was established by the AIChE Chicago Section and is presented annually to a Midwest region AIChE member. This internationally recognized award consists of an engraved plaque and \$1000 honorarium presented at our sectional meeting.

Nomination forms and additional information can be obtained from the Thiele Committee Chair. Completed nominations are due to the committee chair no later than **March 01, 2007**.

One of the highest honors a distinguished chemical engineer can receive is our Chicago Section Thiele award. Please consider nominating a deserving engineer for this prestigious award.

Jim Simnick
BP Amoco Complex, J-8
150 W. Warrenville Road
Naperville, IL 60566

Ph 630-420-5936
fax 630-420-4832
email: james.simnick@bp.com



UPDATE FROM THE MEMBERSHIP CHAIR

A survey for the November 2006 meeting showed that more than 50% of the attendees think they will attend next meetings, were satisfied with the dinner presentation and food and the price was reasonable. The featured speaker and topic together were the main reason that more than 50% attended the meeting and about 30% of the attendees indicated that they came for networking opportunities. Thanks to all who responded to the survey and hope to see you all in following events.

Illinois Institute of Technology (IIT) AIChE Alumni Dinner

Hosted by IIT's student chapters of Engineers Without Borders and AIChE.

Friday, March 30th

Location:

IIT's McCormick Tribune Campus Center

3201 S. State St. Chicago

Accessible by both the Green and Red Line El Trains

Parking information to be announced at a later date



Breakdown of Events:

Doors will open at 4:45 PM

5:00-5:30 PM: Haiti Project Presentation- IIT students will discuss their work to improve the economy and quality of life in Pignon, a small, rural community in Haiti

5:30-6:00 PM: Reception with a cash bar

6:00-7:00 PM: Dinner

Chicken Bartalucci

Pasta with Roasted Veggies

7:00-8:00 PM: David Baker- Vice President of External Affairs at IIT



IIT: Transforming Campus and Community

David Baker will discuss the actions taken by IIT since the middle 1990's to be a catalyst for change on Chicago's South Side. He will cover the University's new Master Plan, the new and renovated facilities on campus, the amazing changes in the neighborhoods around the campus, and the emergence of the University Technology Park AT IIT, now home to over a dozen technology companies.

Admission is \$25 per person and can be paid through AIChE's online invitation system. Anyone who wishes to attend needs to e-mail Scott Justus sjustus@iit.edu or register via the invitation system by Wednesday, March 19th.



We want you for AIChE-Chicago!

We need your help!

How many opportunities can you find to learn project management, delegation and leadership skills for free? Becoming an officer in the Chicago Section of AIChE is such an opportunity. While you're learning new skills, your local network grows. Just about all of us are either undergoing a career change, contemplating a career change, or are wondering if our career will be changed for us. Volunteering with AIChE is a way to add skills and accomplishments to your resume.

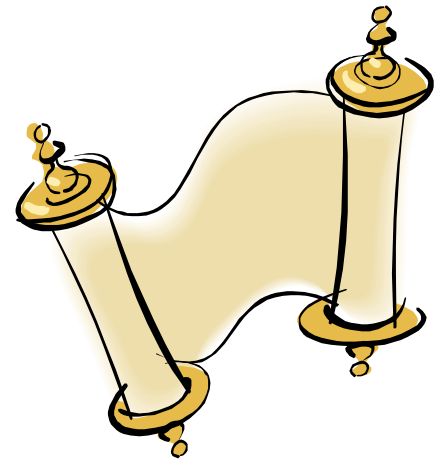
aichechicom@aiche-chicago.org

<http://www.aiche-chicago.org/volunteerrequest.htm>



SUBMITTING ARTICLES TO AICHE COLUMNS

We are now initiating a regular Newsletter and are welcoming people to e-mail any material they would like to appear on the newsletter. These can be job postings, advertisements for upcoming committee meetings, articles, general advertisements or anything else you may want to submit. To submit material e-mail your material to aichechicom@aiche-chicago.org with "newsletter article request" as a subject heading.



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