

The Packed Column

American Institute of Chemical Engineers - Upper Midwest Section

March 2007

CHAIR'S CORNER

by Kurt Waananen

Spring Meetings and an Updated Website

Please consider attending one or more of our upcoming section events:

- March 7 – Joint meeting with the University of Minnesota student section of AIChE
- March 15 – MinnTS '07 Meeting at Medtronic with talks on Nanotechnology and Batteries
- April 3 – Annual Upper Midwest Section AIChE Symposium in Hopkins with keynote talks on alternative fuels and hydrogen
- April 18 – Tour at Anchor Glass in Shakopee

Details on these meetings can be found in the newsletter and also on our updated section website, <http://www.aichelocal.org./tc>. Dongsheng Guan has

taken on the webmaster role for our local section after many years of service by Gordy Siers. On behalf of our board, I'd like to extend our thanks to Dongsheng and Gordy for their current and past contributions. If you have suggestions for the website, please drop Dongsheng a note.

Finally, if you are interested in serving as an officer in the section, please let Mark Arlinghaus know before the end of March. Open positions starting next May include Treasurer, Vice Chair, Symposium Chair, Young Professionals Advisory Board Chair and Recording Secretary.

Thanks,

Kurt Waananen

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MAKE SURE TO CHECK OUT OUR WEB SITE AT:

<http://www.aichelocal.org/tc>

AIChE Upper Midwest Annual Symposium

Final Announcement and Call for Speakers

Tuesday, April 3, 2007

Time : 8:30 AM – 4 PM

(lunch provided)

At the Hopkins Eisenhower Community Center

1001 State Highway 7

Hopkins, MN 55305

Morning Keynote Speaker:

Rolf Nordstrom Upper Midwest Hydrogen Initiative

"The Opportunity and Challenge of a Hydrogen-Electric Economy"

Lunch Keynote Speaker, Lanny D. Schmidt:

Regents Professor

Department of Chemical Engineering and Materials Science, University of
MN

"Renewable Energy for Minnesota: Does Renewable Energy Make Sense?"

For this year's AIChE symposium, the keynote talk and one break-out session will focus on "***Alternative Fuels, What about Hydrogen?***" We are inviting other potential speakers (either yourself or someone you would like to nominate) in this area as well as other topics. **We will also be offering AIChE PDH credits to any engineers who are interested in keeping up their professional development hours. Please ask at the registration table for your form.**

As in previous years, undergraduate students are encouraged to submit posters for the **student poster contest**. There are cash prizes for the top winners. This year, we would like to invite at least two students to be speakers during the morning sessions. We are also looking for **corporate sponsors** for this contest.

Please contact James Easton (phone : 952-947-4083, email : james.easton@comcast.net, jmeaston@foodsys.com) to submit speaking interest (with topic, speaker, and speaker credentials.) Be prepared to submit an abstract. You can also contact him to sponsor this event, or to sponsor the student poster contest. **Deadline for speaker interest/nominations is March 2, 2007.**

MARCH MEETING

Process Reliability Engineering: Understanding How Chemistry Challenges Availability

Hosted by: AIChE Student Chapter

When: Wednesday, March 7th, 7:30 PM

Where: Mississippi Room in Coffman Union Building at University of Minnesota

Cost: \$10/person

RSVP: matt.atkins@fhr.com

Dinner will be provided by Vescio's Italian Resturant

Ken Bloch is Flint Hills Resources' Lead Process Reliability Engineer. He is responsible for mitigating the risks for process-driven failures on refinery equipment. He has published articles about equipment failure analysis, lifecycle extension, and reliability improvement in Hydrocarbon Processing and Chemical Engineering Magazines, and is a regular speaker at the API/NPRA Operating Practices Symposium.



Coffman Directions

Coffman Memorial Union
300 Washington Ave. S.E.
Minneapolis, MN 55455-0110

From 35W

From the south: After passing I-94, watch for signs directing you to the U of M/3rd Street exit. Follow the East Bank sign. Merge onto Washington Avenue. Once you cross the Mississippi River, Coffman will be the second building on the right. Turn right onto Church Street and then right onto Delaware Street. Coffman's south entrance and drop-off locations will be on the right. Entrance into East River Road Garage is on the left.

From the north: Take the University Avenue/4th Street exit. Turn left at University Avenue and head toward the East Bank. Turn right onto Oak Street, then right onto Washington Avenue. Coffman is five blocks ahead on the left. To park or drop-off, turn left onto Church Street and right onto Delaware Street. The south entrance will be on the right.

From I-94

From the east and west: Take the Huron Boulevard exit from I-94 (north exit only). Turn left onto Washington Avenue. Coffman is approximately seven blocks ahead on the left. Turn left onto Church Street and right onto Delaware Street. Coffman's south entrance and drop-off locations will be on the right. Entrance into East River Road Garage is on the left.

5th Annual Minnesota Technical Symposium

MinnTS.org



Join us **Thursday March 15th** at Medtronic for dinner, cross-functional networking, and outstanding technical talks:

Nanotechnology

Darrel Gubrud – MN Nano Hear a broad technical overview of nanotechnology research in Minnesota academia and industry.

Frank Armatis – 3M Company Nanomaterials are already impacting the consumer in many ways. Understanding and control of material properties on the nanoscale provide new benefits in products in various market segments and these materials will continue to move into consumer markets. 3M Nanotechnology expert, Dr. Frank Armatis, will describe how nanotechnology migrates into consumer apps.

Batteries

Mark Obrovac – 3M Company Battery expert, Dr. Mark Obrovac, will present the technology and materials of Li Ion batteries. Under certain conditions, such as when a battery is overcharged, overheated, or has an internal short circuit caused by damage or manufacturing problems, the electrolyte can chemically react with materials in the battery electrodes. Hear about advances in new electrolytes and electrode materials to address the battery safety issues and the ever growing need for increased capacity will be discussed.

Tours of the Medtronic facilities will be available!

Tours will be available at specific times between 5:00 and 5:30pm only.

DATE: Thursday, March 15, 2007 **TIME:** 5:00-9pm (schedule on website)

LOCATION: Medtronic, 694 & Hwy 65 Fridley, MN **COST:** \$25

RESERVATIONS: Feb 22nd - Monday, March 12th (midnight)

reservations@MinnTS.org or to Bede Willenbring 651-236-5470

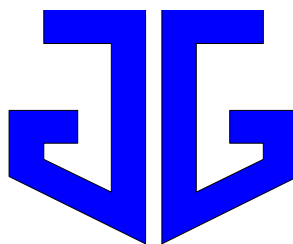
RSVP must include: name, company, email address, phone number, affiliation (ACS, AIChE, ASM, AVS, ECS, IEEE, MinnMass, MMS, MN Nano, SAS, SID, or none)

MinnTS will not share your personal information outside your affiliated organization.

RSVP today. Seating is limited.**

**RESERVATIONS NON-CANCELLABLE AFTER MARCH 12, 2007

APRIL MEETING



Anchor Glass Container Tour Shakopee, MN – Plant # 12

When: Wednesday, April 18th, 2:30 PM – Tour starts

Where: Hwy 101 & Scott Co Rd 83, Shakopee, MN 55379 (across from Valley Fair on Hwy 101)

RSVP: matt.atkins@fhr.com by Monday, April 16th.

Anchor Glass

In June 1960, ground-breaking commenced at this 33 acre site, which is located adjacent to Highway 101 and County Road 83 in Scott County, Shakopee, Minnesota. The first bottle was made at the Shakopee facility on May 22, 1961.

Anchor Glass Container has been based in Tampa, Florida since 1983. It is primarily engaged in the manufacture and sale of glass containers for the liquor, beer, juice and food industries. Currently, we are operating eight plant locations throughout the United States.

Shakopee's No. 1 tank has a melt rate of 330 tons per day, and our No. 2 furnace has a melt rate of 310 tons per day. We have three shops running off of each tank. We pack over 500 tons per day, 7 days a week, 350 days a year. Our Tank 2 has been rebuilt and enlarged with state of the art technology.

This facility shares environmental responsibility through participation in a very active and worthwhile glass container-recycling program. This program was instituted in 1970. During 1996, Anchor purchased 71,000 tons of recycled glass and paid out approximately \$2.5 million to recyclers.

SHAKOPEE GLASS CONTAINER MANUFACTURING PLAN PROFILE

In operation 43 years and is Minnesota's only remaining glass container plant.

Employs 290 Minnesotans,

Recycles 45,362 ton of container glass per year.

Join us at Dangerfield's Restaurant (in the bar) at 4:15 for networking after the tour!

1583 1st Ave E, Shakopee, MN 55379-1736 Phone: (952) 445-2245

Place an ad here and get results! Reach over 700 chemical engineers!

Nathan Johnson, doc_curtis@rocketmail.com

651-737-0144



April 22-27, 2007

Hilton Houston *(Adjacent to the George R. Brown Convention Center)*

Houston, Texas

Online Paper Submittal Process is Now Open! **The deadline is Monday, March 12th.** All authors are asked to submit an extended abstract. All timely submissions will appear on the 2007 Spring National Meeting CD-ROM proceedings. Submit Now!

Highlights of this meeting will include:

- **The 3rd Global Congress on Process Safety** featuring the 22nd CCPS International Conference, the 41st Loss Prevention Symposium, and the 9th Process Plant Safety Symposium
- **The 19th Annual Ethylene Producers Conference**
- **10th Topical Conference on Refinery Processing**
- **Outstanding Speakers** from the U.S. Department of Energy, Lyondell Chemical Company, Zeus Development Corporation, and Shaw Stone & Webster
- **More than a dozen individual topical specialty conferences**
- **Chemical Engineering Career Fair**

In addition, there will be the collocated **2007 AIChE-ACS Management Conference** taking place on the end *(April 25-27)* of the Spring Meeting.

AIChE is planning specialty programming aimed at individual constituent communities. These include a series of one-day conferences aimed at operations and maintenance personnel as well as design and consulting engineers (from the local Houston and Freeport areas.) Also included is a special track of programming aimed at younger professionals (in about the first ten years of their career) which will be designed using tutorials, panels, and roundtables. The goal is to help them to do their jobs better and be more productive employees faster.

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The Upper Midwest section of the AIChE wishes to thank Sebesta Blomberg for their support of the annual Symposium in 2006.



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