

The Packed Column

American Institute of Chemical Engineers - Upper Midwest Section

May 2004

CHAIR'S CORNER

by Jim Easton

State of the Chapter

"The problem when solved will be simple." A sign on the wall of General Motors research laboratory

Conscription is a two-year term. My time as Vice-Chair and Chair is drawing to a close. It was an excellent experience. This column is a general review of the current issues facing the Chapter.

You can observe a lot by just watching. Yogi Berra

Plant Tours

The plant tour has been the backbone of this chapter's meetings. It has become difficult to arrange a plant tour. There are concerns about safety and protection of intellectual property. We have called plants that we visited three or four years ago to arrange a second tour, but were turned down, not because it didn't work into their schedule, but because of a new policy. A Vice-President of engineering agreed in principle to have an AIChE tour. The plant manager's name was passed along to work out the details and when we contacted the plant manager three weeks later, we were told that company's lawyers nixed the idea of a plant tour. This year we have had tours of Seagate and Old Dutch Foods. For every plant tour arranged, five plants declined. Current committee members wonder how many rabbits are left to pull out of the hat.

Can we find something that will stand between a plant tour and after dinner talk? Can we have a presentation at your facility? It would not be a plant tour but rather a presentation about your process and technology. Ideas for an AIChE meeting include a Power Point presentation designed to train new hires, a presentation from last year's sales meeting or a 3-D presentation for non-technical senior executives.

I took my 9 year old son along on the Old Dutch tour. It was an excellent experience for him. He now has a different perspective on potato chips. Taking a family member along should be encouraged for an appropriate plant tour.

Never eat more than you can lift. Miss Piggy

Restaurant

AIChE chapters on the East Coast subsidize dinner meetings for local students. The subsidized rate is about what we charge everyone for dinner at the Old Spaghetti Factory. If we have a meeting with a topic that you have only a marginal interest in and dinner is only \$10.00 you may still come to the meeting. If that same dinner meeting is \$25 you may choose to stay home. The choice of restaurant will definitely have an impact on attendance.

Imagination is more important than knowledge. Albert Einstein (1879-1955)

New Board Members

I am excited about our new board members. We need new blood and new ideas. It is good to have a woman on the board again. New board members keep in mind that when planning a meeting, it is easier to find a speaker/plant tours for a meeting four months in the future than a meeting four weeks away. Near term planning is always more challenging.

Another way to help the local chapter is to be the Chair for your company. Company Chairs need to do three things, post the AIChE newsletter at work, e-mail the newsletter to other engineers at your company and mention chapter meetings at lunchtime.

What is research but a blind date with knowledge? Will Harvey

Match Maker Needed

The meeting with the American Chemical Society (ACS) was excellent. We need to plan more events with other engineering groups. AIChE members who also belong to other technical and professional organizations please e-mail the board. It would be great if you could arrange a blind date for the Chemical Engineers.

You got to be careful if you don't know where you're going, because you might not get there. Yogi Berra

Symposium

Congratulations to Nathan Busch and the Symposium team. You guys did know where to go and how to get there. It was an excellent meeting with very high standards.

MAY MEETING
“Biosecurity and the Food Distribution System”

Dr. Theodore P. Labuza

Thursday, May 20, 2004

McNamara Alumni Center, University of Minnesota
200 Oak St. SE Minneapolis, MN 55455
(Across from Williams Arena)

Dr. Theodore P. Labuza is a Morse Alumni Distinguished Teaching Professor of Food Science in the Dept. of Food Science and Nutrition at the University of Minnesota. Dr. Labuza received a B.S. (1962) and Ph.D. (1965) in Food Science at MIT. He is an author of 215 scientific refereed research articles, 16 textbooks, 70 book chapters, 7 patents and ~100 other semi-technical articles. Ted has given >500 invited technical lectures since 1971 as well as >300 general lectures on food science and technology.

Since 9-11 the food processing industry has been made aware of the potential vulnerabilities in the food distribution system. Because rapid online tests do not exist for many biologic agents, there is a high probability that raw agricultural commodities intentionally laced with bio-terror agents can reach the consumer directly with no processing or enter a processing plant undetected, be processed and shipped to retail. Little is known about the processing stability of bioterror agents. The subsequent events of an attack would be illness, hospitalization and possible death after consumption. The acknowledgement of an attack would be followed by widespread panic about the food supply plus a time period when farmers would no longer be able to ship product to processors as the government evaluates the attack and consumers eventually become more confident in the food system. Scenario development i.e. food incident profiles, suggests that a small single attack, chosen with the right distribution logistics could lead to a widespread outbreak of a bio-terror agent in a major urban area leading to nationwide panic.

In July 2002, Dr. Mike Osterholm stated at the National Environmental Health Assoc. annual conference that botulinum toxin introduced into the milk supply was one of the most likely venues for a bio-terror attack on the U.S. Minnesota is a major dairy state (\$2.7 billion, 54,000 jobs and 7,800 herds in 2001) and the Minneapolis–St. Paul area has a large population served by several dairy processors, thus allowing for an attack on a single farm to lead to a major incident. What is even more important, is that poisoning of milk is an attack against a major food for children. In May 2002, several farms in New York State tested very high for beta-lactams, far beyond the level that might occur from a cow with mastitis not being taken out of milking. Some have suggested this was a test of the system by terrorists. The use of security measures to prohibit such attacks will be reviewed with an emphasis on an early warning system as a means for early detection so as to contain any threat.

Agenda:

5:30–6:15 p.m. Reception, Ski-U-Mah Room
6:15–7:00 p.m. Dinner, Ski-U-Mah Room
7:00–8:00 p.m. Seminar by Professor Labuza, Ski-U-Mah Room

Detailed directions and parking information can be found at <http://www.alumnicenter.umn.edu/Dir&Parking.htm>. There are several parking options available very close to the Alumni Center.

The cost is \$10 per person, which includes dinner. Please pay at the event, by cash or check. RSVP by e-mailing or calling Ryan O’Connor (ryan_oconnor@cargilldow.com, ph: 952-742-0455) by Friday, May 14.

JUNE SOCIAL EVENT

Tour at Mill City Museum

Saturday, June 19, 2004

**Mill City Museum
704 South Second Street
Minneapolis, MN 55401**

Beginning in 1880 and for 50 years thereafter, Minneapolis was known as the “Flour Milling Capital of the World.” At the industry’s peak, the Washburn A Mill was the most technologically advanced and the largest in the world. At peak production, it ground enough flour to make 12 million loaves of bread in a day.

The city grew up around the mills, which received grain via rail lines stretching across the Northern Plains grain belt into the Dakotas and Canada. Trains also carried the milled flour to Duluth and to eastern U.S. destinations both for export and domestic distribution. In 1870, the city’s population was 13,000. Twenty years later it had grown to nearly 165,000.

After World War I the milling industry in Minneapolis began to decline. As the industry moved out of Minneapolis, the old mills fell into disuse. The Washburn A Mill closed in 1965. In 1991 the mill was nearly destroyed by fire.

Working through the Minneapolis Community Development Agency, the city cleaned up the rubble and fortified the charred walls of the mill in the 1990s. Shortly thereafter, the Minnesota Historical Society announced plans to develop **Mill City Museum**.



This event is for families (children, spouses, etc.)! The museum has many activities for kids of any age.

FREE ADMISSION to you and your family members if you RSVP by Tuesday, June 15. RSVP by e-mailing or calling Ryan O’Connor (ryan_oconnor@cargilldow.com, ph: 952-742-0455).

The museum opens its doors at 10 a.m. and you are free to come and go anytime as you please. They will have a list of all registered attendees. Our group will receive special museum orientation in small groups as people arrive. There is a D’Amico cafeteria on-site for lunch, but you are free to make your own lunch plans. AIChE will have a section in the cafeteria for socializing during lunchtime. The museum is open until 5 p.m. and the free admission is valid for the entire day.

Mill City Museum is located in downtown Minneapolis on the west bank of the Mississippi River, just north of the Hubert H. Humphrey Metrodome, near the corner of Portland Avenue and 2nd Street.

Look for the Gold Medal Flour sign. The museum is right next door. (See next page for directions.)

From the South: Take I-35W north to the 3rd Street/University Avenue exit #17C. Follow sign for West Bank. Turn left onto Washington Avenue. Turn right onto South 10th Avenue South. Turn left onto South Second Street. Mill City Museum is on the right.

From the North: Take I-35W south to the Washington Avenue exit #17C. Turn right onto Washington Avenue. Turn right onto 10th Avenue South. Turn left onto South Second Street. Mill City Museum is on the right.

From the North West: Take I-94 east to the 4th Street North exit #230. Follow 4th Street to 3rd Avenue South and turn left. Proceed to South Second Street, turn right. Mill City Museum is on the left.

From the West: Take I-394 east to the Washington Avenue exit #9C. Turn right on Washington to Portland Avenue. Turn left on Portland go one block to South Second Street. Turn right on South Second Street. Mill City Museum is on the left.

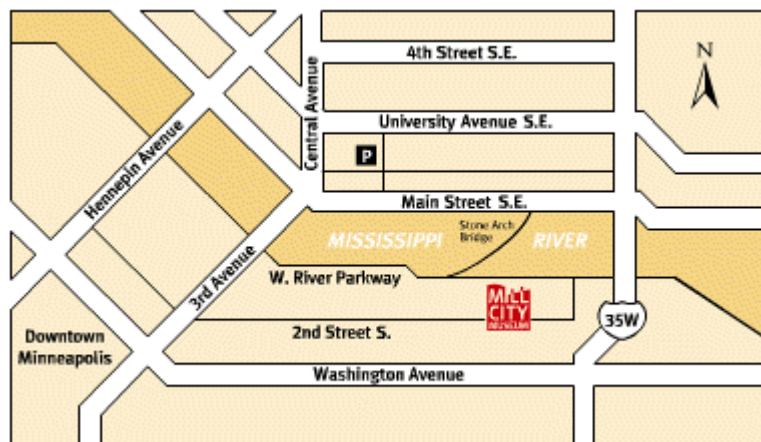
From the East: Take I-94 west to the 5th Street exit # 234B. Turn right onto 11th Avenue. Turn left on South Second Street. Mill City Museum is on the right.

Parking Information

Parking meters are available on Second Street in front of the museum, on several adjacent streets and at the west end of the Stone Arch Bridge. Meters range from \$0.50 to \$1 per hour. Meters take quarters only.

Surface lots are located on Second Street directly across the street from the Museum and east of the Guthrie construction. Daily parking ranges from \$2 to \$5.

Mill City Museum is completely handicapped accessible. Wheelchairs and strollers are available upon request.



<http://www.millcitymuseum.org>

Place an ad here and get results! Reach over 600 chemical engineers!

**Nathan Johnson, doc_curtis@rocketmail.com
651-733-8799**

CONGRATULATIONS POSTER WINNERS!

by Nathan C. Johnson

Congratulations to our 2004 Annual Symposium Poster Contest Winners! The posters and winners were as follows. Each winning group got a \$100 prize, to be distributed by the group leader.

1. Alpha Technology: A Safer Way to MMA
--Jason Barta, Kevin Podommick, Steve Larson and Garrick Shurts (from UMD)
2. Mercury Removal
--Dan De La Forest, Greg Kramer, Christopher Stone, Kris Weatherby (from UMD)
3. 6-APA
--Heidi Williams, Nicole Gangl (from North Dakota)

WELCOME NEW SECTION OFFICERS

by Nathan C. Johnson

Welcome to our newly elected officers of the Twin Cities/Upper Midwest section of AIChE! The annual election was held at the symposium. Those listed below will compose the executive committee for the following year. Thanks to all who volunteered, and who participated in our election.

Chair	Ryan O'Connor, Ph.D.
Vice Chair	Mark Arlinghaus
Symposium Chairs	Nathan A. Busch Brian E. Jensen
Recording Secretary	Kurt Waananen
Membership Secretary	Nathan C. Johnson
Treasurer	Elizabeth Gonzales
Webmaster	Gordy Siers
U of MN Liaison	Dr. Satish Kumar
Cont. Ed. and Awards	Amit Shukla
Publicity	Lily Leung
Past Chair	Jim Easton

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Symposium Chair	Nathan A. Busch	ICHG, LLC.	busch034@tc.umn.edu	952-542-3858
Recording Secretary	Brian E. Jensen		brianejensen@prodigy.net	952-926-2141
Membership Secretary	Nathan Johnson	Braun Intertec Corp.	doc_curtis@rocketmail.com	651-733-8799
Treasurer	Steven Zhang	3M	szhang2@mmm.com	651-737-6773
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Continuing Ed & Awards	Amit Shukla			
shukla12@yahoo.com	763-785-4628			
Webmaster	Gordy Siers	Hutchinson Technology Inc.	gsiers@member.aiche.org	320-587-9542
3M Chair	Steven Zhang	3M	szhang2@mmm.com	651-737-6773
U of M Chapter Liaison	Dr. Satish Kumar	University of Minnesota	kumar@cems.umn.edu	612-625-2558
General Mills Chair	Thomas Kempf	General Mills Corporation	thomas.kempf@genmills.com	763-764-2873
Seagate Chair	Murlidhar Bashyam	Seagate	Murlidhar.Bashyam@seagate.com	952-402-8108
Northern MN Chair	OPEN			
Your Company Chair	OPEN			

MAKE SURE TO CHECK OUT OUR WEB SITE AT:

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



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