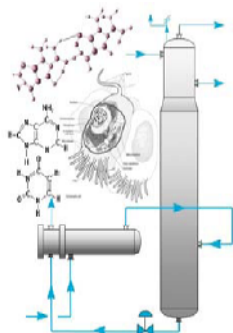


# October Newsletter

Chicago Section enewsletter

October 2008



## AIChE Chicago October 2008 Meeting Notice

### GPO Energy and CO2 Footprint Management

**By: Musharraf Ali**

**Director for Energy & CO2 footprint Program  
Abbott Laboratories**

#### Inside this issue:

Chair's Corner	2
October Speaker Bio	3
October Talk "Energy Management & CO2 footprint"	4
Announcement	5
Job Opportunity	5
September Midwest Regional Meeting @ UIC	6
UOP CEO Keynote	7
Symposium Sponsors	8
McCormack Award	9
Upcoming Events	10

**Date:** Wednesday October 15, 2008

**Location:** Greek Islands

300 East 22<sup>nd</sup> Street, Lombard, IL 60148

**Dinner:** Family Style Chicken and Lamb or Veggies

**Cost:** Members - \$30    Unemployed Members - \$15

Students - \$5    Non-Members - \$35

#### Agenda

5:30 - 6:30 pm	Social & Networking
6:30 - 7:30 pm	Dinner
7:30 - 7:45 pm	AIChE Chicago Announcements – Pat Shannon
8:00 - 9:00pm	Presentation



## Chair's Corner

With the presidential election coming up shortly, my thoughts have turned to public policy. There seems to be a new crisis daily. Maybe it's just the latest hot button, but our modern lifestyle is filled with all sorts of problems.



Happily, that's our bag, since we chemical engineers are trained, veteran problem solvers. In fact, practicing chemical engineers have a unique opportunity to help provide information and support to the general public on matters where technology impacts them. We are inherently qualified to be sources of expert opinion and analysis on manufacturing, energy and environmental issues.

We are all very busy with our work and private lives, but even a small contribution such as a letter to the editor or attendance at a discussion group or an email to your congressman can have a large influence. For example, while it's simple enough to say we need to wean ourselves from dependence on foreign oil, it's not obvious to the average citizen what that entails. Merely forsaking all imports without providing alternates would be devastating. All sorts of proposals have surfaced for the last two decades. Most people do not have the training nor access to information resources to help understand all of the technological opportunities and roadblocks involved in the solutions to this kind of difficult problem.

No one is better equipped to lead the charge than chemical engineers. We have first-hand knowledge of the problems and some of the potential solutions. We can relay this knowledge to our friends and neighbors in various social and workplace settings. We can help build a consensus for the implementation of solutions which are technically and financially sound.

I urge you to get actively involved in forums, chat rooms, interest groups, workshops and other public discussions where your special understanding of the current technology will help put our leaders on the right track to a rational path forward. Your expertise will help clarify the public debate about solutions to problems. You can make a difference.

Pat Shannon

Middough, Inc



# Speaker Biography for October Meeting

**Musharraf Ali** is the Director for Energy & CO2 footprint Program at Abbott Laboratories. Though his first name is Syed but he is known with by middle name.

Musharraf has been with Abbott over 29 years. He has held different positions in his long career with Abbott. He started at the Pakistan Plant of Abbott Labs, responsible for all Major Projects there and by the time he left to build Abbott's China Plant in 1997, Pakistan became the largest Abbott facility outside the US. Musharraf Completed a Green field site in China and then relocated to HQ in Chicago in 2000.

Since joining Abbott Laboratories Headquarters, he has been supporting Engineering, Energy and EHS Projects at different locations worldwide. In the last three years his focus has been on Energy & CO2/GHG emission Management for Global Pharmaceutical Operations. In this role, his main emphasis has been to ensure that Abbott pharmaceutical plants worldwide are in compliance with Corporate Climate Change Policy signed by CEO of the company last year.

Musharraf holds a B.S degree in Mechanical Engineering with a Masters in Mechanical Engineering from Michigan State University. His Master's thesis at MSU was on an Energy project funded by Union Carbide. That paper was published in the quarterly US Heat Transfer Journal.



# Energy Management & CO<sub>2</sub> footprint At Global Pharmaceutical Operation

Abbott Laboratories has worldwide operation and sell products in more than 130 countries. The operation is divided in to several operating divisions. In 2007, Abbott reported sales and income from ongoing operations of \$25.9 billion and \$4.4 billion respectively. Year 2007 sales from major operating segment's are:

\$14.6 billions in Pharmaceuticals, \$4.4 billions in Nutritional products, \$3.2 in Diagnostics equipment's and \$3.1 in other Medical devices.

The huge varieties of products portfolios require number of plants around the world. Abbott Laboratories has more than 50 facilities to support the sales mentioned above. Besides reporting sales numbers, Abbott reports CO<sub>2</sub> emissions/footprints numbers as well in their annual global citizenship report.

Abbott Laboratories operation is an environmentally conscious company. With increase in sales, they wanted to keep check on the emission numbers. As such, the company CEO signed an Energy policy in 2007 to keep check on their CO<sub>2</sub> emissions. Energy is directly proportional to CO<sub>2</sub> emission. An increase in operation has direct impact on Energy use and in turn increase CO<sub>2</sub> footprint. Abbott Laboratories is committed to reduce their emission by 30% to the base year of 2006 in next 5 years. This will be achieved by

Reduction of electricity use by 2.4% each year.

Reduction of fuel use by 2.4% per annum.

Large investments in renewable Energy projects.

Global Pharmaceutical Operation (GPO) of Abbott Laboratories has largest numbers of facilities worldwide. The plants with in GPO division are responsible for nearly 55% of the CO<sub>2</sub> emissions of the Corporation. This division therefore immediately went in to action and proposed emission reduction goals for all their facilities. Each Plant Manager carries a goal, depending upon the size of the operation, to reduce at least their Energy used by 6% each year normalized with their Activity.

Mr. Musharraf Ali who is responsible for Managing CO<sub>2</sub> emission and Green House Gas reduction program for Pharmaceutical Division of Abbott Laboratories will share his thoughts on how GPO is going to achieve the goal of CO<sub>2</sub> reduction to remain in compliance with Corporate Energy Policy.

## Announcement

Mike Schultz was elected AICHE Chicago Section Treasurer last spring. Sadly for us, Mike has chosen to accept a position with Battelle Memorial Institute in Malaysia, where he will help start up their alternate fuels development work in Asia for the next three years. Mike will be missed. Catherine Fieber, who has recently moved to Chicago, has agreed to serve out Mike's unexpired term. We thank Catherine for her willingness to accept this position. Please make Catherine welcome when you see her at Section events.

Catherine recently moved to the Chicago area from Massachusetts, where she worked with Intel as an engineering project manager in the qualification of a new server microprocessor. Her previous experience includes 12 years at AT&T Technologies and AT&T Bell Laboratories, where she worked in several different roles in semiconductor manufacturing and technology development. In addition, she operated an architectural tile production studio for 9 years, dealing wholesale with 30 distributors nationwide. She is a Georgia Tech graduate with bachelors and masters degrees in Chemical Engineering.

## Job Opportunity

“Chicago Chem Consultants is looking to fill the following positions. If you qualify, please contact Dr. Jeff Perl via e-mail [info@chichem.com](mailto:info@chichem.com), and submit your resume in the body of the email.

- Part-time contract associates with 10+ years of experience in chemical project engineering assignments. Work on project basis or permanent can develop.

Please see [www.chichem.com](http://www.chichem.com) for more information regarding CCC projects.



# September Midwest Regional Meeting @ UIC

The recent Chicago AIChE Symposium has now come to a successful completion. During the two days the AIChE Chicago Section played host to approximately 150 technical attendees who listened to six different topics of energy, refining, biofuels, food, pharmaceutical and Environment-Safety and Health as pertains to manufacturing.

AIChE Midwest Regional Conference UIC, Chicago



In addition and most proudly, over 354 Chicago area high school students were given a "Engineering as a career choice" by the Chicago Section.

This program featured Dr. Al Sacco, Northeastern University Professor and former NASA Space Shuttle Astronaut. The students had an AIChE Sponsor provided lunch with the technical attendees to further learn about engineering.

AIChE Midwest Regional Conference UIC, Chicago



AIChE Midwest Regional Conference UIC, Chicago



AIChE Midwest Regional Conference UIC, Chicago



AIChE Symposium UIC, Chicago



The kickoff speakers, Carlos Cabrera, UOP CEO on Monday and Jim Foster Director of Research of ADM on Tuesday both spoke about energy as a key issue. We learned about each company's competing approach to biodiesel and other areas of importance to our nation.

To view the complete photos of the symposium use the following link.

AIChE Midwest Regional Conference UIC, Chicago



<http://picasaweb.google.com/ChicagoAIChE/2008AIChEMidwestRegConf?authkey=PCsxy7o3SHU>

AIChE Symposium UIC, Chicago



AIChE Midwest Regional Conference UIC, Chicago



AIChE Midwest Regional Conference UIC, Chicago



## UOP CEO Keynotes AIChE Midwest Regional Meeting

UOP President and CEO Carlos A. Cabrera opened the AIChE 2008 Midwest Regional meeting on Sept. 22 with a keynote speech focused on current and upcoming challenges within the energy industry.

“Challenges are not new in the refining industry,” Cabrera told the audience. “In the 1960s, hydrocracking was developed to process heavier feedstocks and increase the yield of high quality fuels obtainable for a barrel of oil. The 1970s saw technology to remove lead from gasoline, and today we have increasing environmental regulations across the globe and a focus on renewable energy. But regardless of the challenge, chemical engineers have found the answers. And chemical engineers will continue to find solutions.”

Cabrera noted that the energy industry will continue to provide great opportunities for chemical engineering, identifying several areas where chemical engineers can make impacts including methane conversion, residue upgrading, coal gasification and renewable fuels.

The regional meeting was held on the campus of the University of Illinois, Chicago, and the audience consisted of chemical engineering professionals as well as students. At the conclusion of his prepared remarks, Cabrera answered several questions from the enthusiastic audience.

“I was very impressed with the audience’s reaction,” Cabrera said after his talk. “There is obviously a lot of interest in our energy future and how chemical engineers can affect it.”

Prior to Cabrera’s keynote presentation, Scott Fogler, AIChE’s incoming president, gave some remarks including a brief overview of some of the strategic priorities that AIChE will focus on over the next few years.

Cabrera will also deliver the keynote address at AIChE’s national annual meeting in Philadelphia on Nov. 18.



Shown in the photo, from left; Kristine Chin, AIChE manager, Technical Programming; Carlos A. Cabrera, UOP president and CEO; H. Scott Fogler, AIChE, president-elect, and professor of chemical engineering, University of Michigan; James Foster, research director, Archer Daniels Midland; Al Sacco, professor of chemical engineering, Northeastern University and former NASA astronaut; Jeffery Perl, president, Chicago Chem Consultants Corp

# Meeting Sponsors—We thank you.

## GOLD SPONSORS



## SILVER SPONSORS



## BRONZE SPONSORS





# McCormack Awards

**The grandfather of the Chicago Section is Harry McCormack, a founder of the section and head of the Chemical Engineering department at the Illinois Institute of Technology.**

**The McCormack Awards are given to one chemical engineering undergraduate student at Northwestern University, University of Illinois, and Illinois Institute of Technology each year based on a combination of excellence in study, research, and extra-curricular activities.**

## **Northwestern University: Elizabeth Carter**

Elizabeth Carter is the 2008 Northwestern University recipient of the Harry McCormack Award. This is in recognition of her outstanding academic achievements, her leadership of the AIChE student chapter, and her contributions to the Chemical Engineering department. In addition to her outstanding grades, Beth has led a very active and successful year for the AIChE chapter and provided valuable service to the University during her years at Northwestern.

## **University of Illinois: Joseph Gomes**

Joseph Gomes has been accepted to the Chemical Engineering graduate program at UC - Berkeley, and will start there this coming fall. His undergraduate research experience encompasses numerical programming, a prominent geothermal energy project sponsored by the Mayor's office, UIC and IIT in a "sister-cities" Chicago-Shanghi project (under the direction of Professor Murad, Head of our department). In addition, he has been involved in both experimental and theoretical aspects of catalysis research with Professors Regalbuto and Meyer, respectively. In connection with Professor Meyer's group, Joseph will be a coauthor of a forthcoming journal paper. Joseph finished a minor in mathematics with his BS in chemical engineering, and has won both the Leonard Kotin Memorial Award for Excellence in Physical Chemistry and the Olive C. and Alfred L. Koehn Scholarship. For his technical elective in Fall 2007, Joseph took Professor Wedgewood's notably demanding graduate core Transport Phenomena course (ChE 410), and received an A (outperforming most of the graduate students). His cumulative engineering GPA 3.89. We are most proud of Joseph's exceptional accomplishments, and think he is an outstanding candidate for recognition by the McCormack Award.

## **Illinois Institute of Technology: Anthony Ferrese**

The Department of Chemical and Biological Engineering at IIT proudly announces Anthony Ferrese as our selection for the Harry McCormack Outstanding Senior Award. In addition to stellar academic performance, Mr. Ferrese has demonstrated a dedication to the profession through his significant involvement in undergraduate research. At IIT he was involved in two projects. The first was on the subject of polymer membrane fabrication for fuel cell applications (with Professor Ramani) and the second was on the subject of nano-particle synthesis and characterization (with Professor Perez-Luna). In the summer of 2007, he interned at Imperial College and studied solid oxide fuel cell fabrication. His current plans are to attend graduate school at the University of California Berkeley in chemical engineering. We are confident that Mr. Ferrese will enjoy much success in his career and contribute significantly to the chemical engineering profession.



## Upcoming Meetings

<b>19-Nov</b>	<b>OSHA Compliance</b>
<b>22-Jan</b>	<b>Technology of Efficient Conversion of Biomass to Fuel (Ethanol)</b>
<b>18-Feb</b>	<b>GE Wind Turbines and Nuclear Power</b>
<b>18-Mar</b>	<b>EPA night “USEPA Industry Support Program on Combined Heat and Power”</b>
<b>15-Apr</b>	<b>Infrastructure Safety - bridges, refineries, aircraft, Jan Achenbach</b>

### **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, 2009.

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



## AICHE CHICAGO SECTION

American Institute of Chemical Engineers

Chicago Section  
13964 Doral Lane

Homer Glen, IL  
60491

We are on the web  
[www.aiche-chicago.org](http://www.aiche-chicago.org)

[aichechicom@aiche-chicago.org](mailto:aichechicom@aiche-chicago.org)

### Officers

<i>Chair</i>	<i>Patrick Shannon</i> <a href="mailto:shannoph@middough.com">shannoph@middough.com</a>
<i>Chair Elect</i>	<i>Reza Mostofi</i> <a href="mailto:Reza.Mostofi@uop.com">Reza.Mostofi@uop.com</a>
<i>V-Chair Programming</i>	<i>Steve Rosenblum</i> <a href="mailto:Steve.Rosenblum@uop.com">Steve.Rosenblum@uop.com</a>
<i>Past Chair</i>	<i>Don Chmielewski</i>
<i>Secretary</i>	<i>Steve Schade</i> <a href="mailto:sschade@ambitech.com">sschade@ambitech.com</a>
<i>Treasurer</i>	<i>Catherine Fieber</i> <a href="mailto:cfieber@comcast.net">cfieber@comcast.net</a>
<i>Newsletter Editor</i>	<i>Azita Ahmadzadeh</i> <a href="mailto:ahmaazi@iit.edu">ahmaazi@iit.edu</a>
<i>Director at Large</i>	<i>Dennis O'Brien</i> <a href="mailto:Dennis.O'Brien@jacobs.com">Dennis.O'Brien@jacobs.com</a>

# 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](mailto: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](mailto:aichechicom@aiche-chicago.org) with "newsletter article request" as a subject heading.

### AICHE Publicity Committee Fees

	Academic (non-AICHE)		Company		Recruiters	
	Per Month	Per Year	Per Month	Per Year	Per Month	Per Year
<b>Advertisements (3X3)</b>	100	450	150	675	N/A	N/A
<b>Half-Page (~7"x 4.5")</b>	280	1260	420	1890	N/A	N/A
<b>Job Posting (Size?)</b>	50	225	100	450	250	N/A
<b>Special Sizing</b>	Contact Publicity Committee					

-For the purchase of a year ad, customers have the option of changing ads/jobs month to month.

-They are not stuck with the same ad/logo for the whole year.

-Student and AIChE Member Related Postings are Free

