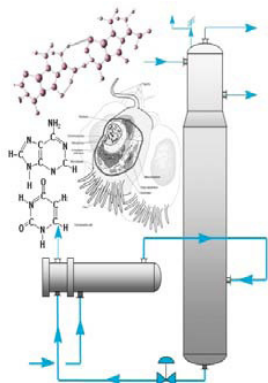


October Newsletter

Chicago Section

www.aiche-chicago.org

October 2010



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AIChE Chicago Section won the 2010 best "Outreach Program" at LDC meeting.

AIChE Chicago October 2010 Meeting Notice

**A Systems Analysis Perspective of Green Design,
Green Energy, and Sustainability**

Dr. Urmila Diwekar

"President & founder of Vishwarmitra Research Institute "

Date: **Wednesday, October 13th, 2010**

Location: **Flatlander's Restaurant & Brewery**

200 Village Green, Lincolnshire, IL 60069

Cost: **Members: \$35** **Non-Members: \$40**
Students: \$5 **Unemployed/Retired Members: \$20**

To Register CLICK the Link

<http://quest.cvent.com/d/zdqv14/4W>

Agenda

5:30 PM	BEER Tasting & Brewery Tour
5:30 PM	Registration & Social Hour
6:30 PM	Buffet Dinner
7:30 PM	Announcements & Technical Presentation

Chair's Corner

The National is coming! The National is coming!

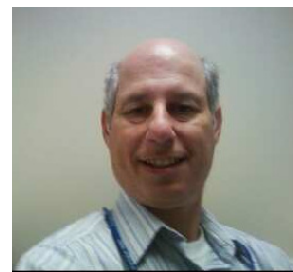
By now I'm sure most of you are aware that the Spring National Meeting of the AIChE is going to be held in Chicago in 2011. Some of you may be interested in attending but need permission from your company. The expense for this meeting will be a lot less than a normal year but there is still the issue of getting the time off. Companies are in general much more amenable to agreeing to send you to a conference when you are presenting a paper. So what's involved in presenting a paper at the National meeting?

The National Programming at AIChE is set up so that anyone that wants to make a presentation can find a suitable forum to do so at a National Meeting. Anyone can see the programming to be offered at an upcoming meeting by going to AIChE.org. A link to the upcoming meeting can usually be found in the highlight section on the middle of the page. Click on the Conferences box (gray boxes near the top of the page), and you can click on any conference AIChE is developing, and see the information you need. Use these links to see programming that you might want to attend, or sessions that you might want to present a paper at.

Programming is separated into Divisions. Each Division and Forum of AIChE has its own volunteer leadership. These leaders drive what topics will be discussed at the National Meetings. To see all the divisions, click on the gray Divisions and Forums box near the top of the AIChE.org page. At first, you will see the list of all the divisions – a nice piece of information to know when you are submitting a paper. If you click on the links here, you will see the web pages for each division. These pages usually discuss upcoming programming, and the leaders of the Division.

When you attend a meeting, or plan to submit a paper, you will find the session you want to attend by thinking about which Division might offer it

At each National Meeting, the leadership of each division will hold a programming meeting for that division. These meetings can always be found on the "Ancillary Meetings" link. These have not yet been posted for the Spring National Meeting. Sometime in October, a link will appear on the Annual Meeting page, usually in the list on the left.



So, if you are planning to submit a water management or water treatment paper, you should look at the sessions to be offered by the Environmental Division, The Sustainable Engineering Forum, Separations Division, or Transport and Energy Processes Division or the Topical on Refinery Processing- Environmental and water Solutions. See which sessions best match your paper topic, and submit an abstract.

Each session has a session chair. The session chair will contact you when it is time to submit your slides. Typically, the presentation to be made at the meeting constitutes the "paper". The presentation will be stored on a proceedings CD, which is sold to meeting attendees, and to any interested parties after the meeting. Inclusion on the CD is considered to be a "published" paper.

Here are the steps to submitting a paper on the AIChE.org website.

Of course, start by going to the website – AIChE.org

Browse to see where you should submit.....

2. Go to the Conferences button near the top of the page. Choose the meeting you want to present at from the drop down menu.
3. Click on the call for papers link
4. Click on the "Open" link next to the Spring Meeting
5. Click on View the Preliminary Program (Session Snooper)
6. Type in your topic and search for a session, or Click on the Division or Forum that might be most interested in your topic. You will also see a list of "Topicals" at the bottom of the list. Topicals are groups of sessions focused on a particular topic. Topicals are often sponsored by several Divisions at once.

7. Click on the Session you want to submit to (usually in blue)

You will see a description of the type of papers the session is looking for, the contact information for the session chair, and any abstracts that have already been submitted.

Submit the "paper" to the session you have chosen....

1. Once you know what sessions you want to submit to, go back to the Call for Papers page (CFP). Scroll down a little, and you will see that every Division, Forum and Topical is listed on the CFP page. Click on the Division, Forum or Topical you want to submit to.

You will see a window with a lot of directions open up, with a step by step process outlined for typing in the information needed about the paper. When you click on Step 1 (Select Topic), you will see the sessions offered by that division. Click on the Session you want to submit to, and follow directions. Contact the session chair to follow up, or if you have any questions.

Nearer the time of the meeting, be prepared to upload your presentation....

You will receive update emails telling you the stages of the programming:

Call for Papers Closed

Time to Upload your Presentation

Time to Register for the Meeting

Contact your session chair if you have any questions. Note that a registration fee for the meeting is required of all attendees, including presenters. You will not be allowed into the meeting unless you register for it (and pay the fee). You can choose to register for the entire meeting, or just one day.

The call for papers for the Spring National Meeting ends on **October 22. So don't delay, get your abstract in as soon as possible and represent your company at the Spring National Meeting on **March 13-17** at the Hyatt Regency, in Chicago.**

Steve Rosenblum
UOP

Featured YPAB

Jessica Swary was featured in the July 2010 issue of the '[AIChE chenected](#)'. Read more at:

<http://chenected.aiche.org/?s=jessica>

AIChE Chicago Liaisons Group

The AIChE Chicago section has devised a liaisons group to facilitate a two-way interaction between its members and industry, academia and government bodies. An active group would bring the section news to their respective work/study place and relay back their development or specific program needs to the section. An AIChE ambassador will also encourage their coworkers to attend the monthly meetings and become more involved in AIChE. This is very crucial in sustaining the section activities and ensuring the development of relevant programs and monthly meetings.

There are many opportunities that you as a local section member can be more involved in your local section programs and possibly acting as a liaison in your company is the least demanding one but the rewards are priceless. If you are interested in helping us to reach out to your work/study place, please send me and email (reza.mostofi@uop.com) and we can work together to build an even stronger local section.

Hope to hear from you soon,

Reza Mostofi

What AIChE Means to Me

Shannon E. Brown, P.E., Fellow AIChE

Many things have changed since I was deciding on a career. One thing that has not changed is the value of networking.

My father was an electrical engineer. As a young child, I toured a number of hydroelectric stations with him. In summer 1969, I participated in an NSF sponsored physics program at Cornell University. The program focused on astrophysics and quantum mechanics. They suspended curfew and cancelled early morning classes so we could watch the first moon walk projected onto a movie screen in the student union.



When I was growing up, my mother repeated told me, "There are no guarantees. Your husband may get sick or die and you have to be able to support yourself and any children you may have." I started college as a chemistry major. At freshman orientation, I saw a salary survey. In the class of 1970, chemists had an average starting salary of \$650/mo and chemical engineers had an average starting salary of \$750/mo. I decided I should find out why. I registered for courses required for both chemistry and chemical engineering. I found I liked the chemical engineering classes better than the chemistry

classes. Winter term 1972, I went to the counseling center to discuss changing majors. The only technical majors on the vocational aptitude test for women were science teacher and computer programmer; so they gave me the test for men. Physical science, electrical engineering, mechanical engineering, civil engineering and chemical engineering were all recommended majors. I talked to the advisors for the various engineering disciplines. Mechanical engineering actually sounded more interesting but the advisor said they were graduating the first woman in his four years as advisor and companies didn't want to interview her. Chemical engineering had graduated 2 to 4 women every year since the 1940's and had not had any trouble placing them. I opted for chemical engineering.

I began attending AIChE meetings in college. The Mid-Michigan Section invited Michigan State University AIChE Student Chapter members to one meeting per year. When the meeting was in Midland, they provided a bus.

I graduated in 1974 and went to work for the nuclear power division of Stone & Webster Engineering Corporation (SWEC) in Boston. The engineer who sat across the aisle informed me I was a woman trying to fit into a male engineering world, I didn't belong & I should get out. A couple months later many nuclear power projects were cancelled and I was transferred to the process division. In fall of 1974, I started grad school at night and found out when and where AIChE meetings were held. The Ichthyologists (Boston Section AIChE) welcomed new faces. Meetings covered a wide range of technical, though not necessarily chemical engineering, topics. I became a regular attendee.

In 1977, I received my M.S. ChE from Northeastern University.

SWEC licensed ethylene technology and had a pilot plant furnace at the Institute of Gas Technology in Chicago. Several times, I was sent to Chicago to observe test runs. In 1978, I moved to Chicago with Brown & Root (B&R) and started attending Chicago Section AIChE meetings.

In 1980, hotels did not have business centers. My first AIChE volunteer assignment (as part of the General Arrangements Committee) was to find a rental photocopier for the 1980 Annual Meeting at the Palmer House in Chicago. I also volunteered for the GAC in 1985, 1990, and 1996.

In the 1984, I began volunteering for Chicago Section committees – first program then newsletter, membership and student outreach. In 1986, B&R closed its Chicago area office. One of my colleagues found a job at Epstein Process Engineering. Through AIChE, I had met Dr. J. Peter Clark, at that time President of Epstein Process Engineering. I applied and Peter hired me. In 1989, former B&R colleagues recruited me for Davy-McKee. In 1989, I was asked to run for Chicago Section Secretary, and subsequently for Treasurer, Chair-Elect, Chair and Director. As Chair-Elect and Chair, I attended the Officers Conference (now called the Leadership Development Conference). In 1992, the Officers Conference included an optional two day effective presentations course before the main conference. The effective presentations course has helped me tremendously both at work and in doing outreach presentations to schools.

In the mid-1990's, I attended a few annual meetings at which I attended the Minority Affairs Committee and Professional Develop-

ment Committee meetings and was on a student conference panel about careers. I worked on the committee that proposed the Women's Initiative Committee. At the time we proposed WIC, there were only two women fellows. Women Fellows are much less rare now. I became a Fellow in September 2008.

In the mid and late 1990's, four of the companies at which I was working closed their Chicago offices. My network of former colleagues and AIChE contacts was crucial in finding jobs.

I worked on the Chicago Section symposium committee in 2006 – 2009. In 2008, the symposium became the Midwest Regional Conference. This drew me back into National AIChE involvement. In early 2009, friends convinced me to resume attending national meetings and get involved in committees. I am amazed how quickly I've gotten to know people across the country. I'm now Meeting Program Co-Chair for the 2011 Spring National Meeting (March 13 – 17, 2011 in Chicago at the Hyatt on Wacker) and secretary of the Local Sections Committee.

Volunteering with AIChE has been a lot of work but it has had many rewards. I have met many people who have become good friends.

Editorial Note

In every issue we try to bring you the story of people who have a long and productive involvement with AIChE at national and local levels. For suggestions, please contact the newsletter editor via email.

October 2010 Meeting Information

A Systems Analysis Perspective of Green Design, Green Energy, and Sustainability

This work presents a systems analysis perspective that extends the traditional plant design framework to green engineering, green energy and industrial ecology leading to sustainability. For green engineering this involves starting the design decisions as early as chemical and material selection stage on one end, and managing and planning decisions at the other end. However, uncertainties and multiple and conflicting objectives are inherent in such a design process. Green engineering principles are illustrated here using industrial case studies from chemical and pharmaceutical manufacturing, and energy sector process designs. Uncertainties increase further in industrial ecology where industrial symbiosis can be one option for sustainability. The concept of overall sustainability goes beyond industrial ecology and brings in time dependent nature of the ecosystem and multi-disciplinary decision making. Optimal control methods and financial theories can be used for time dependent decision making and forecasting. Decision making at various stages starting from green plant design, green energy, to industrial ecology, and sustainability is illustrated for the mercury cycling. Power plant sector is a major source of mercury pollution. In order to circumvent the persistent, bioaccumulative effect of mercury, one has to take decisions at various levels of the cycle starting with greener power systems, industrial symbiosis through trading, and controlling the toxic methyl mercury formation in water bodies and accumulation in aquatic biota.

Speaker's Bio

Dr. Urmila M. Diwekar is the president and founder of the Vishwamitra Research Institute, a non-profit research organization. From 2002-2004, she was a full Professor in the Departments of Bio, Chemical, and Industrial Engineering and the Institute for Environmental Science and Policy, University of Illinois at Chicago (UIC). She was the first woman full professor in the history of UIC's department of chemical engineering. From 1991-2002 she was on the faculty of the Carnegie Mellon University (CMU), with early promotions to both the Associate and Full Professor levels. In chemical engineering, she has worked extensively in the areas of simulation, design, optimization, control, stochastic modeling, and synthesis of chemical processes.

Dr. Diwekar has made major contributions to research on batch distillation including authoring the first book on batch distillation and this work is well recognized. Second edition of this book is going to be out in early part of 2011. Uncertainties are inherent in real world processes. Recognizing this fact, *Dr. Diwekar* started working in 1991 on stochastic modeling, efficient methods for uncertainty analysis, and optimization under uncertainty. These led her to productive contributions in fields as diverse as advanced power systems, sustainability, environmental management, nuclear waste disposal, molecular modeling, pollution prevention, and financial option theory. The interdisciplinary nature of the field developed into several research collaborations and in 1999 she founded the Center for Uncertain Systems:

Tools for Optimization and Uncertainty (CUSTOM) to foster interactions between various industries, national laboratories and various academic disciplines. Recently, Springer published second edition of her breadth level book on Applied Optimization that is discipline independent. Besides these two text/reference books, she has written number of book chapters and edited a book on tools and methods for pollution prevention, and conducted workshops.

Speaker's Bio

Dr. Diwekar is the author of more than 100 peer-reviewed papers, and over 275 presentations and seminars. She has chaired numerous conferences and sessions in national and international meetings. She has served as a member of the executive committee, and later as a Director of both the Computers and Systems Analysis (CAST) division and the Environmental division of the American Institute of Chemical Engineers (AIChE). She was also the programming chair for the newly formed Sustainable Engineering Forum. Besides academic research, she is the author of two commercial software packages (BdistSimOpt, Batch Process Technologies, W. Lafayette, IN, and MultiBatchDS, BPRC Inc., Allison Park, PA), has served as a consultant to more than 20 companies. During the past ten years, Dr. Diwekar has received grant support from the National Science Foundation, the Sandia National Laboratory, the National Renewable Energy Laboratory, the National Energy Technology Laboratory, the Argonne National Laboratory, the Environmental Protection Agency, the Pennsylvania Infrastructure Technology Alliance, Ford Motor Co., Mallinckrodt Chemicals, and BOC Gases.

In 2009, she was elected to fellow of American Institute of Chemical Engineers and also to fellow of American Institute of Medical and Biological Engineering. She is currently editing and contributing to a book on multidisciplinary perspectives of sustainability which will be out later part of this year as an e-book from Bentham Science Publishers.



AIChE courses in Chicago

To register click: <http://catalog.asme.org/home.cfm?Category=ED>

CH090	Industrial Fluid Mixing	Oct 11-12
CH024	Chemical and Bioengineering for Technical and Scientific Professionals	Oct 11-12
PD513	TRIZ The Theory of Inventive Problem Solving	Oct 11-13
CH501	PSM: Requirements and the Development of Management Systems	Oct 11-13
CH034	Combustible Dust Hazards: Dust Explosions	Oct 14-15
CH500	Fundamentals of Process Safety	Oct 14-15
CH004	Distillation in Practice	Oct 13-15
CH761	Producing Quality Powder Products	Oct 14-15



Keynote Speakers





High School Program and YPAB Session





and More ...



YPAB Event

Exploring a Law Degree after Undergrad

Location: Gametime Sports Bar & Grill, 6405 W. 127th St, Palos Heights, IL

Date: Thurs, Oct 28th

Time: 6:30-8:30pm

Xavier Hailey, a UIC Chemical Engineering and Depaul University Law School graduate, will share his experiences in law school including what drew him to law and what new opportunities have opened to him with the degree.

Food and drinks will be individually billed. Please RSVP to jessicaswary@msn.com by Mon, Oct 25th.

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 1, 2011.

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

Upcoming Meetings

- October 13, 2010** A Systems Analysis Perspective of Green Design, Green Energy, and Sustainability
Lincolnshire, IL
- November 9, 2010** Process Efficiency through Advanced Process Control
- November 7—12, 2010** **2010 AIChE Annual Meeting.**
Salt Lake City, Utah
- March 13-17, 2011** 2011 AIChE Spring Meeting & 7th Global Congress on Process Safety
Hyatt Regency, Chicago, IL

AIChE National's Live Webinars

[AIChE's Leadership Webinars: Chemical Engineering Essentials from Academic Authors](#)

Session One: Engineering Education in 2015 (or sooner)

Presented by Professor Richard M. Felder

Wednesday, October 13, 2010

2:00 - 3:30 p.m. ET

[Risk Management Issues Affecting ChemE Consultants](#)

Presented by Richard A. Kissel, Esq. and Daniela Fuda, Esq.

Wednesday, October 20, 2010

2:00 - 3:00 p.m. ET

[Spreadsheet Techniques and Problem Solving for Chemical Engineers](#)

Presented by Professor David E. Clough

Wednesday, October 27, 2010

2:00 - 3:00 p.m. ET

[Investing in 2011](#)

Presented by Larry N. Grogan

Wednesday, November 3, 2010

2:00 - 3:00 p.m. ET

**AIChE Members may access 6 Webinars for free
as part of their National membership.**

<http://apps.aiche.org/chemeondemand/home.aspx>

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We are on the web
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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.

aichechicago@gmail.com

http://www.aiche-chicago.org/Section_Info/Volunteer.html

Submitting Articles to AIChE Columns

We welcome email submissions for our monthly newsletter. Commercial announcements are subject to the fee schedule below. News stories, editorials, technical or career related non-commercial contributions are always welcome with no charge. We consider job postings, announcements of for-fee training courses, expositions, conferences as commercial. Categorization of announcements is at the sole discretion of the Chicago AIChE Board of Directors. Chicago AIChE may publicize activities of interest to our members by cooperating professional societies and other non-profits without charge.

Please submit your material to aichechicago@gmail.com with "newsletter article" as a subject line.

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

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

Student and AIChE Member Related Postings are Free.

