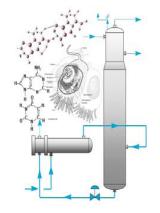
### AIChE Chicago Section

# November Newsletter

Chicago Section

www.aiche-chicago.org

November 2009



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# AIChE Chicago **November 2009 Meeting Notice**

### Where Does It All Go?

Richard Parkinson P.E., S.E.

Technical Staff Specialist Mechanical and Materials Engineering Skill Center **UOP LLC** 

Date: Tuesday, November 10, 2009

Location: Hackney's Restaurant

241 S. Milwaukee Ave.

Wheeling, IL

Cost: Unemployed Members - \$15 Members - \$25

> Non-Members - \$30 Students - \$5

#### To Register Click Below or go to www.aiche-chicago.org

https://guest.cvent.com/EVENTS/Register/IdentityConfirmation.aspx?e=dcaaf7c6-cef7-45b0-9caa-d3b37a94ed3f

#### Earn 1 PDH for the Tour & 1 PDH for the Talk

#### **Agenda**

5:30 - 6:30 pm	Indeck Tour
6:16 - 7:00 pm	Buffet
7:00 - 7:20 pm	Pre-meeting Presentation: Indeck
7:30 - 8:30 pm	Technical Presentation
8:30 - 8:50 pm	Section Business

## **Chair's Corner**

Fall in Chicago has come and almost gone. Although nothing is considered unexpected for Chicago weather, this fall was unusually rainy and I certainly hope and wish that we have a mild winter this year. The trees are getting ready for winter as fast as they can as they teach us to do the same even though we tend to avoid thinking about it.

We set due dates and work our way backwards to find our start point and define the many necessary steps that need to be taken to accomplish our goals. It have probably taken may seasons for the trees to eventually



"learn" the best time and steps to adopt to their surroundings and survive. We also learn from the past and try to predict the future and make our decision based on those. The lessons learned are captured and the new ideas are refined and added to our toolbox.

Luckily, we learn much faster than trees and can adjust more effectively, albeit the other side for us is that our environment is changing at a much higher rate also. I am sure we all can think about different matters in our personal and professional life that would be handled in a different way ten years ago. The nature likes the repetition and we like to make changes. This I believe is probably more valid for us, the engineers who love the challenges of problem solving and providing new solutions even to old problems.

I think the big challenge now is to agree on the most important issues and tackle them as many ways as we possibly can and hope that the best solution will come out. Albert Camus said; "In Fall Every Leaf turns into a Flower" and I think we are in a time that provides every idea a chance to turn into a big thing.

Reza Mostofi UOP



## **November Meeting**

### Speaker's Biography

**Rich** attended the University of Illinois in Urbana-Champaign, receiving a Bachelor and Master of Science degrees in Civil Engineering in 1970 and 1971. He began working at Universal Oil Products, now UOP, in 1972. Rich's initially assignments utilized his structural training for the detailed design of structures, piperacks, and foundations. His duties soon expanded to include pressure vessel design, particularly hydrocrackers. He was also able to nurture an existing interest in metallurgy.

During the ensuing years Rich held various positions as a Mechanical Coordinator, Project Manager, Group Assistant Manager, and Technical Staff Assistant. He also received a Master of Engineering Management degree from Northwestern University and obtained Professional Engineer (PE) and Structural Engineer (SE) registration from the State of Illinois. Rich's current responsibilities include development of project specific plot plans, evaluation of contractor proposed plot plans, and creation of Typical Equipment Layouts, which provide guidance to contractors as they develop detailed plot plans. He is remains heavily involved in a wide variety of other mechanical areas including pressure vessels, piping, refractory, structural, standards development, and metallurgy. Rich is active on several industry committees, particularly refractory, pressure vessels, welding, and materials groups in the area of low chrome and hydrogen service.

Rich and his wife live in Long Grove, a northwestern suburb of Chicago. They have two grown children, and now enjoy the life of almost empty nesters.

## **Abstract**

The presentation topic will be equipment layout in process areas, e.g., plot plans. The arrangement of equipment within a process plant is one of the most fundamental, and widereaching, decisions to



be made in the design of process plants. The arrangement must be determined early in the detailed design of the plant, and its effects are felt by nearly every aspect of the plant's design. Once the plant is on-stream, the equipment layout continues to influence operation and maintenance throughout the plant's life.

No two plants are the same, and the arrangement of equipment in seemingly identical plants may differ due to the influence of factors outside of the basic process considerations.

The arrangement of equipment within a process plant is guided by a group of basic principles and goals, beginning with safety. In this presentation the fundamental goals of and considerations for the equipment layout will be described. Many of these have evolved over the years, driven by experiences, both good and bad, within the industry. More recently some modeling tools have been developed, allowing various scenarios to be studied and risk based assessments to be made. Even with these tools, time-tested guidelines, judgment and common sense still play major roles.

### Another Successful Chicago Midwest Regional AIChE Conference!

Thanks to all who helped make the regional conference a successful event this year! Held on October 5th and 6th at UIC, the theme for this year's symposium was "Energy & Sustainability." Sessions were organized into ten key topics, which ranged from alternative fuels to solar cells to the future electrical system.

Conference organizers report over 110 paid attendees who traveled to the event from throughout the Midwest region. Highlights from the conference included a high school outreach event where over 200 high school students were hosted. The students were addressed by Dr. Al Sacco, a Northeastern University professor and former NASA astronaut, and then enjoyed lunch while conversing with industry professionals. The first day of the conference featured an AlChE Chicago













section meeting, where the Thiele Award was presented to Dr. Harold Kung, Northwestern University professor and Director for the Center for Energy Efficient Transportation. The second day included a Young Professionals Advisory Board (YPAB) mixer where a resume writing workshop and practice interview sessions were conducted.

Special thanks are extended to the AIChE student chapter at UIC, who provided critical support that allowed the conference to run smoothly. Dennis O'Brien, conference Meeting Program Chair, noted "Signage was improved [as compared to] last year and with more student volunteers, our services to attendees and speakers was better."

Thanks to all speakers, corporate sponsors, coordinators, volunteers and attendees for making this event a successful and memorable one! Keep an eye out for notices on the next regional event!

# **Job Opportunity at Abbott**



# Career Opportunities at Abbott

#### To Apply:

Visit www.abbott.com/ careers to submit your resume to the Requisition using 69031BR in the Keyword section.

Include phone numbers for contact during business and evening hours. No exploratory applications please.

Follow your aspirations to Abbott for diverse opportunities, competitive salaries, great benefits, 401(k) retirement savings plan, company paid pension plan and profit sharing; all with a company providing the growth and strength to build your future.

Abbeit welcomes and encourages diseases in our workforce. GOE 8.

We are a global, broad-based health care company devoted to discovering new medicines, new technologies and new ways to manage health. Our products span the continuum of care, from nutritional products and laboratory diagnostics through medical devices and pharmaceutical therapies. Our comprehensive line of products encircles life itself – addressing important health needs from infancy to the golden years.

#### Senior Environmental Health and Safety Specialist (69031BR)

#### Job Responsibilities:

The Senior Environmental Health and Safety Specialist's objective is to Support the Environmental, Health and Safety program for Global Pharmaceutical Research and Development Lake County Operations Process R&D and Chemical Pilot Plant organization. Focus on Process Safety program for area of responsibility, as well as utilize this expertise to assist other GPRD EHS Staff members with process safety evaluations for other business areas as needed. Assure that EHS policies and procedures needed for compliance with applicable regulations and corporate policies are developed and effectively implemented.

#### Primary Function:

This position will report to the EHS Supervisor for the Process R&D organization. Support the Environmental, Health and Safety programs for assigned business areas. Support implementation of programs that establish and maintain a culture that fosters compliance with EHS requirements. Develop and implement programs to identify and control EHS hazards within areas of responsibility. Lead efforts to ensure that strategic objectives/initiatives of Process Safety in the area of responsibility are identified and successfully executed. Establish policies and procedures to assure compliance with corporate and regulatory requirements. This position must work with business area management to assure that EHS programs are accepted by and implemented by management. Identify ways to integrate EHS into the business systems.

#### Desired Background:

Bachelor of Science Degree (Degree required in applicable fields of environmental, health and safety. Would also consider degrees in following areas: Physical or Chemical Sciences, Chemistry, Biochemistry, Environmental/Chemical Engineering)

#### Desired Skills:

BS + minimum 3 years experience MS + minimum 2 years experience PhD + minimum 2 years experience

### YPAB 2009 EVENTS

#### **NOVEMBER 2009**

#### **INNOMAG Pump Round Table**

Date: Thursday, November 19, 2009

Time: 6:00-8:00pm

Location: INNOMAG facility, 409 S. Vista, Addi-

son, IL 60101

Matt Moy from Innovative Mag-Drive (INNOMAG) will be presenting on location in Addison, IL. The discussion will include a general pump overview, with focus on the sealless, non-metallic mag-drive pump. There will be lots of hands-on opportunities including examples of a traditional centrifugal, sealless mag-drive centrifugal, and positive displacement pumps.

Please RSVP to Jessica Swary at jessicaswary@msn.com by Thursday, November 12th. Space is limited to the first 15 responses. Pizza and pop will be provided.

INNOMAG has been producing sealless, non-metallic, magnetically driven pumps since 1998 and has become recognized as innovative leader in the industry. INNOMAG strives to keep work environments safe and clean by producing a zero emissions pump. For more information, visit the website at <a href="https://www.innomag.com">www.innomag.com</a>.

#### **DECEMBER 2009**

#### **2nd Annual Holiday Wine Tasting**

Date: Sunday, December 6, 2009

Time: 2:00-5:00pm (Tentative)

Location: Vintner's Cellar Winery, Liber-

tyville, IL

Cost: \$25/person

Start the holiday season off with a festive wine tasting! Sample eight of Vintner's very own wines and have all your wine questions answered by a Vintner's sommelier. Light refreshments will be available.

Limited to first 25 responses. RSVP to jessicaswary@msn.com by Sunday, November 29th to reserve your spot, then, check back on the YPAB website for updates!

For future YPAB events, visit the website

www.aiche-chicago.org/ypab

# AIChE Chicago Student Outreach: Chemistry Day 2009

Ellen Kloppenborg, Rob Sanders, and Beth Carter (all of UOP) hosted an AIChE booth at the Chicago American Chemical Society's annual Chemistry Day. The event was at DePaul University on Saturday October 24, 2009. There were hands-on exhibits, a Boy Scout merit badge workshop, games, and presentations to let high school students have fun with chemistry. For more information about the event, visit <a href="http://membership.acs.org/C/Chicago/ChemDay/chemday09.html">http://membership.acs.org/C/Chicago/ChemDay/chemday09.html</a>.



Ellen Kloppenborg explaining the difference between chemistry and chemical engineering to a high school student.

Rob Sanders at the AIChE booth discussing chemical engineering in college.



# "Nanoscience and Technology: From Energy Applications to Advanced Medical Therapies"

## Chicago ChemPharma Evening Event

ChemPharma® Professional Association - Bringing senior level business and technical professionals from chemical, pharmaceutical, life sciences, and allied industries together to foster career and personal success through sharing information and building relationships.

We network for success!

#### Monday, 11/16/2009 - 6:00pm - 9:00 pm

Location: Pompei Restaurant

17 West 744 22nd Street

Oakbrook Terrace, IL, 630-620-0600

#### Agenda:

6:00-7:15 - Cocktails, dinner buffet, and networking

·7:15-8:15 – Dr. Tijana Rajh, Group Leader, Argonne National Laboratory,

· 8:15-9:00 - Q&A and networking

#### FEEs.

\$25 for members and \$30 for non-member guests (ON-LINE REGISTRATION THROUGH Nov. 9)

- \$30 for members and \$35 for non-member guests (ON-LINE REGISTRATION AFTER Nov. 9)
- \$40 for members and non-members (DAY OF EVENT)

There will be a cash bar. Guests are welcome.

**Speaker Biography:** *Dr. Tijana Rajh*, from the Chemistry Division of Argonne National Laboratory, is the Nanobio Interfaces Group Leader in the Center for Nanoscale Materials. Her research includes novel hybrid systems connecting semiconductors to biological systems like DNA – a technology that could lead to new gene therapy procedures and other medical applications – and technologies made possible by small semiconductor particles called quantum dots. Dr. Rajh will present an overview of why nanotechnology is important and how it is useful in various technological and medical fields. Join us to explore the broad scope and impact of nanotechnology with an expert!

# Chicago ChemPharma Evening Event

#### To Register:

Members and Non-Members with User Names

- 1. Go to www.chempharma.net
- 2. Find the event in the left column "Calendar of Events" (if event is not visible, click double arrow next to the calendar at the top, scroll down to event)
- 3. Click on the red "Register" button
- 4. This will take you to a "User Sign-Up" page
- 5. Enter your user name and password and click the "Login" button (if you hit "Register" you will be prompted to become a member)
- 6. This will take you to the Event Page
- 7. Click on the red "Register" button again
- 8. Complete information and hit register and pay for the event

#### Non-Members Needing to Establish a User Name

- 1. Go to www.chempharma.net
- 2. Find the event in the left column "Calendar of Events" (if event is not visible, click double arrow next to the calendar at the top, scroll down to event)
- 3. Click on the red "Register" button
- 4. This will take you to a "User Sign-Up" page
- 5. Look above the "login/Register" box and see "To create a new ChemPharma user account please follow this link: User Sign-up"
- 6. Click on "User Sign-up" link.
- 7. Complete information to establish user name and hit "Register" button
- 8. Return to Calendar of Events and follow steps 5-8 above

# **Upcoming Meetings and Events**

November 10, 2009 InDeck, Tour of boiler supplier/manufacturer

Wheeling, IL

November 8-13, 2009 2009 AICHE Annual Meeting

Nashville, TN

November 17, 2009 AICHE Day at the Chem Show

New York, NY

January 10, 2010 Packer Engineering

(Joint meeting with ACS)

February 9, 2010 Nanoclusters for H2 and CO2 Storage

March 10, 2010 EPA lab tour

Chicago, IL

April 14, 2010 Student Night @ UIC

May 11, 2010 Project Design for risk Management

# 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, 2010*.

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

# Need a Volunteer @ Registration Desk

If you are planning to attend next monthly meeting please consider helping us at the registration desk. For more information, please send an email to aichechicago@gmail.com

# Senior Membership Application

Application to become an AIChE senior member can be found in this issue. If you are qualified consider becoming a senior member.



AIChE American Institute of Chemical Engineers
PO Box 5169 \*Brookfield, CT 06804-5169
Tel: 203.702.7660, Fax: 203.775.5177 www.alche.org

## SENIOR MEMBER UPGRADE FORM

#### USE THIS FORM TO UPGRADE TO SENIOR MEMBERSHIP AT NO EXTRA COST

#### PLEASE MAKE SURE YOU QUALIFY:

See Membership Upgrade Requirements

► 1. YOUR PERSONAL INFORMATION	
OMr. OMrs. OMs. ODr. First Name:	M.I.: Last:
Company/University:	Job Title:
Preferred Mailing Address : ☐ Home ☐ Company	☐ University
Address Line 1:	
Address Line 2:	
City: ST/Province:	ZIP: Country:
Home Phone: ()	Business Phone: ()
Fax: ()	E-mail:
Date of Birth:/ Gender:   Male	□ Female
Your AIChE Membership #:	

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AIChE Tax Identificat	tion #: 13-162389		F. Gender. Limitale L			
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2. YOUR ACADEN	MIC DEGREES					
	degree(s) must be attached.					
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ollege/University			Master			
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☐ I. the undersia		nents I have given are true. Bylaws of AIChE. (See page		bership, I agree to al	bide by the	
			Date			
Constitution, t			Date			

#### **AICHE MEMBERSHIP REQUIREMENTS**

#### **CONSTITUTION** (a)

#### ARTICLE III — DEFINITION OF THE PROFESSION

Chemical engineering is the profession in which a knowledge of mathematics, chemistry and other natural sciences gained by study, experience and practice is applied with judgment to develop economic ways of using materials and energy for the benefit of mankind.

#### ARTICLE IV - MEMBERSHIP

Section 1. The membership of the Institute shall consist of FELLOWS, SENIOR MEMBERS, MEMBERS, and STUDENT MEMBERS. A candidate for election to any grade of membership shall be engaged in an activity and possess scientific knowledge or practical experience which qualify the candidate to cooperate with engineers in the advancement of chemical engineering knowledge and practice.

- (a) FELLOWS shall have the exclusive privileges of representing themselves as Fellows, of wearing the emblem of Fellow, and shall also have all the privileges of Senior Members.
- (b) SENIOR MEMBERS shall have the exclusive privileges of representing themselves as Senior Members, of wearing the emblem of membership, of holding office, and of voting on amendments to this Constitution, and shall also have the privileges of nominating and voting for officers and directors and the privileges that are common to all classes of membership.
- (c) MEMBERS shall have the exclusive privileges of representing themselves as Members and of wearing the emblem of membership, and shall also have the privileges of nominating and voting for officers and directors and the privileges that are common to all classes of membership. They shall also have the privileges of holding office and of voting on amendments to this Constitution after 4 years as a Member (a 4-year Member). A Member may, after regular application and election, become a Senior Member.

Section 2. All applications for membership shall be made to the Office of the Secretary in writing, signed by the applicant, in such form and in such detail as may be prescribed by the Board of Directors, and shall be referred to the Committee on Admissions.

Section 3. Election to membership shall be by vote of the Committee on Admissions. Election to Fellow shall be by vote of the Board of Directors upon nomination by five Fellows or Senior Members. Past Presidents of AIChE are exempted from the nomination requirement. All nominations and recommendations shall be held in strict confidence by the Committee and by the Board.

#### BYLAWS (b)

#### SECTION I — MEMBERSHIP REQUIREMENTS FOR MEMBERSHIP

Qualification for membership grade is determined by a combination of education and experience credits. An engineering school of recognized standing is one in which the engineering curriculum is accredited by the Accreditation Board for Engineering and Technology or is on the Admissions Committee's Approved List of Foreign Schools.

#### MEMBERSHIP GRADE REQUIREMENTS CHART

Education	Degree	Years of work experience in chemical engineering		
		Member	Senior Member	
An earned degree in	Bachelor	0	4	
chemical engineering from a school of recognized	Master	0	3	
standing	Doctoral	0	2	
An earned degree in chemical engineering from a school not of recognized	Bachelor	0	6	
standing or an eamed degree in natural science or engineering other than chemical engineering from a school of recognized standing	Master	0	5	
	Doctoral	0	4	
An earned baccalaureate degree in natural science or in engineering other than chemical engineering from a school not of recognized standing		0	6	
An earned baccalaureate degree in a field other than engineering or natural science		0	8	
No degree	1	0	10	

(a) From the AIChE Constitution as amended to January 17, 2003
(b) From the AIChE Bylaws as amended to January 17, 2003.

#### CODE OF ETHICS

Members of the American Institute of Chemical Engineers shall uphold and advance the integrity, honor and dignity of the engineering profession by: being honest and impartial and serving with fidelity their employers, their clients, and the public; striving to increase the competence and prestige of the engineering profession; and using their knowledge and skill for the enhancement of human welfare. To achieve these goals, members shall:

- Hold paramount the safety, health and welfare of the public and protect the environment in performance of their professional duties.
- Formally advise their employers or clients (and consider further disclosure, if warranted) if they perceive that a consequence of their duties will adversely affect the present or future health or safety of their colleagues or the public.
- Accept responsibility for their actions, seek and heed critical review of their work and offer objective criticism of the work of others.
- Issue statements or present information only in an objective and truthful manner
- Act in professional matters for each employer or client as faithful agents or trustees, avoiding conflicts of interest and never breaching confidentiality.

- Treat fairly and respectfully all colleagues and co-workers, recognizing their unique contributions and capabilities.
- Perform professional services only in areas of their competence.
- 8. Build their professional reputations on the merits of their services.
- Continue their professional development throughout their careers, and provide opportunities for the professional development of those under their supervision.
- 10. Never tolerate harassment.
- 11. Conduct themselves in a fair, honorable and respectful manner.

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	Steve.Rosenblum@uop.com		
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#### AICHE CHICAGO SECTION

**American Institute of Chemical Engineers** 

Chicago Section 13964 Doral Lane Homer Glen, IL 60491 aichechicago@gmail.com

We are on the web www.aiche-chicago.org

# 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	Academic (non-AICHE)		Company		Recruiters	
Fees	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.

