AIChE Chicago Section

February Newsletter

Chicago Section



February 2013



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Come out and celebrate with AIChE! As AIChE wants to be both recognized both at work and at home, the event is open to friends and family as well!

AIChE Chicago

February 2013 Meeting Notice

Annual Social Outing

Pinstripes

Date:	Sunday, Febru 2:00 pm—5:30 pm	ıary 24, 2013
Location:	Pinstripes 7 Oakbrook Ctr, Oa	kBrook, IL (630)368-1874
Cost:	Adults: \$30	Kids 12 & under: \$15
-	Click the Link: vent.com/d/1cqrny/4\	PINSPECE CERTING

FEBRUARY NEWSLETTER

Chair's Corner

Jerry Wilks, Citgo Chair Elect



The 2013 Spring Meeting and 9th Global Congress on Process Safety is still a month and a half off, but since I'm scheduled to give a presentation during that conference, I decided to say just a few words about it. Frist of all, the conference is being held in San Antonio, and San Antonio is a GREAT city for a conference. The River Walk area is stuffed with good restaurants, shops and various other forms of entertainment. San Antonio also has other tourist attractions sprinkled throughout the city. For example, the Alamo is right downtown, and there are also interesting museums like the Institute of Texan Cultures.

Just a few steps away from that museum is Hemisfair Park where you can eat a meal in the sky at the restaurant on top of the Tower of the Americas. You can get to most of the tourist sites in San Antonio by walking. Also, if you are into running, there are miles of running/ walking trails along the main river to the south of the River Walk. A conference in San Antonio is one to which you can bring your family along. They will be entertained while you are at the conference, and you can get together with them for a good dinner along the River Walk. I did this with my family during a conference last fall in San Antonio.

Another interesting aspect of this conference is that AIChE will be filming many of the presentations, and then later making them available to all of us through AIChE's ChemE on Demand website: <u>http://www.aiche.org/resources/</u> <u>chemeondemand</u>. You can watch previews of existing presentations on this site. As you know, presentations sometimes contain information that isn't included in papers such as emphasis that the presenter gives to particular parts of the process being discussed. This use of AIChE's resources to bring conference technical information to its membership is something new that other technical societies aren't yet doing, and if it is successful we will someday be able to search for technical presentations much the same way we search for papers and other technical documents today.

What is expected to evolve from this is an improved way to share technical information throughout the AIChE community. Instead of downloading a paper and then sending it around to the staff to review, we'll be able to download a presentation and show it to a group of people during a lunch and learn or a meeting. That way the issues pertaining to that technology can be more quickly discussed by the group. The step of waiting for everyone to read the paper and then getting together in a meeting to discuss it will be streamlined.

I'll see you in San Antonio at the AIChE 2013 Spring Meeting and 9th Global Congress on Process Safety - April 28 - May 2, 2013.

Richard Hoehn wins the 2012 Ernest W. Thiele Award

Congratulations to Richard (Dick) Hoehn, Senior Engineering Fellow at UOP for being awarded the 2012 Ernest W. Thiele award!

This prestigious award will be presented to Dick Hoehn at the *March 13, 2013* meeting of the Chicago AIChE section at the March meeting location at Abbott Laboratories.

Dick Hoehn is awarded the 2012 Ernest Thiele Award for his leadership and creativity in hydroprocessing technology. His contributions have resulted in improving the yields, efficiency, safety and reliability of this critical process for clean fuels. He is also presented this award for his years of mentoring and training that have resulted in better-trained design engineers and ultimately better processes for hydroprocessing.

The Ernest W. Thiele award is presented annually to a Midwest region member of AIChE who has made outstanding contributions to advance the practice of Chemical Engineering. The award is sponsored by BP, and consists of a plaque and a \$1000 honorarium.

Please join us in congratulating Dick Hoehn on his achievement.

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 <u>March 1, 2013.</u>

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

Congratulation to Jerry Wilks

Jerry Wilks has been awarded a 2012 Citgo Presidential Award! Citgo Presidential Awards recognize employee excellence and achievements in innovation, leadership, community service, teamwork, influence, and support to the CITGO business. He was recognized for analysis is did on coker furnaces to make greater throughput possible (innovation), for working on several charity events that CITGO sponsors (community service), for distributing his reports to people the other CITGO refineries and PDVSA (teamwork), and for publishing several papers (leadership). Holding offices in AIChE Chicago probably counted toward the leadership and community service part of this.



He also was recognized during the ceremony for not missing a day of work during his 7 years at CITGO. Congratulations, Jerry!

Local Section Members News

If you have any local section news that you want to share with the rest of the community, please send it to the newsletter editor.

FEBRUARY NEWSLETTER

National Engineering Week

Engineers use their imagination and analytical skills to invent, design, and build things that matter. They are team players with independent minds who turn ideas into reality. Many become licensed professional engineers (P.E.s) in order to better protect the health, safety, and welfare of the public. By dreaming up creative and practical solutions, engineers are changing the world all the time.

Engineering has been called the "invisible" or "stealth" profession.

Everything around us and that we use every day has been engineered in some way, yet we may not see the engineers behind the scenes or know much about engineering. Engineering is not part of our grade school education. Many engineers whose work affects the public become licensed.

The engineering field is as varied as engineers themselves. Engineers can design and build superstructures or delicate medical instruments.

Engineers are exploring for energy and for new worlds in space. They are designing the environmental controls for an art museum or directing global sales of today's hottest cars and computers.

Who knows where the next great challenges will be?



For more information visit www.dupageeweek.iit.edu or call (630) 682-6000

Keynote talks were delivered by three distinguished local leaders during the 5th Annual Midwest Regional Conference at IIT.



Several sponsors had table top displays which set the stage for a great casual meeting area for the attendees to catch up with old friends and make new ones at the 5th Midwest Regional Conference at IIT.



YP session rooms at the 5th MRC were packed with young professionals who wanted to learn more from their more experienced colleagues and improve their skills to get in to the job market.



At the 5th Midwest Regional Conference, the poster session was a perfect place to discuss detail technical or general subjects.



A casual dining experience at a local restaurant was all the young professionals needed to call the 5th MRC a great success.



A big thank you to all the volunteers, speakers, session chairs, organizers, sponsors, attendees, teachers, students and IIT for a great meeting.



Annual Social Outing



Where: Pinstripes 7 Oakbrook Ctr, Oak Brook (630) 368-1874 Date: Sunday, Feb 24th, 2013 Time: 2:00 pm to 5:30pm Cost: \$30 Adult \$15 Kids 12 and under

Come out and celebrate with AIChE! As AIChE wants to be both recognized both at work and at home, the event is open to friends and family as well!



Cost includes:

Assorted Pizzas and Flatbreads, Caesar Salad, Mixed Greens Salad, Pasta Salad, Sliced Seasonal Fruit. Caramelized Cheesecake & Apple Bread Pudding. Coffee, Hot / Iced Tea, and Soft Drinks included. Cash Bar Available.

We have also reserved 5 lanes for bowling! Schedule of Events:

2:00 pm Guests arrive. Meet in upstairs dining room
2:30 – 4:30 pm Food is served and replenished
3:30 – 5:30 pm Bowling



Historical Engineering Events in February

February 2, 1897 – Ice cream scoop patented by Alfred L. Cralle, the first African-American in Pittsburgh to receive a patent. His patent became the model for ice cream scoops in households soon after and the basis for many scoops today.

February 3, 1958 - Rachael Carson publishes the Silent Spring. Rachel Carson, a writer, scientist and ecologist, worked seventeen years for the US Fish and Wildlife Service, where she learned about the problems of pesticides on the environment.

February 6, 1959 - Kilby patents the integrated circuit. Jack Kilby at Texas Instruments and Robert Noyce at the small Fairchild Semiconductor start-up company were both working on the concept of an integrated circuit in 1958.

February 7, 1984 – The first untethered spacewalks were made by Space Shuttle Challenger astronauts Bruce McCandless II and Robert L. Stewart. Each used a manned maneuvering unit (MMU) in an orbit 150 nautical miles above the Earth. McCandless was the first to leave the cargo bay untethered in space

February 10, 1874 – Water-closed railway cars patented by Lewis Latimer, U.S. patent (No. 147,363). Latimer is better known for his patents for improvement in incandescent electric lamps while working for Edison.

February 11, 1939 – a "one page note" appeared in the magazine *Nature* by Lise Meitner and her nephew Otto Robert Frisch, entitled "Disintegration of Uranium by Neutrons: A New Type of Nuclear Reaction," where for the first time a theoretical explanation for the splitting of uranium atoms was published and the term "fission" was coined for that process using the analogy of cell division in biology.

February 13, 1959 – the first Barbie doll goes on sale. Barbie's inventor, Ruth Handler, was inspired by seeing that her daughter, Barbie, and her girl friends enjoyed playing with adult female dolls, but most dolls at the time were baby dolls.

February 14, 1990 - First photo of the solar system is taken and dubbed the "family portrait" of our solar system as seen from outside. Voyager 1 was launched on September 5, 1977 and it passed Saturn in November 1980.

February 14, 1946 – ENIAC, the world's first digital electronic computer, is unveiled. ENIAC – Electronic Numerical Integrator and Computer – the world's first operational, general purpose, electronic digital computer, developed at the Moore School of Electrical Engineering, University of Pennsylvania.

February 16, 2005 – the Kyoto Protocol of the United Nations Framework on Climate Change goes into effect. In 1992 the Framework Convention on Climate Change (UNFCCC) was adopted in order to meet the looming concerns of global warming.

February 17, 1998 – "Voyager 1 becomes the most distant human-made object from the Sun. Voyager 1 was launched on September 5, 1977 and it passed Saturn in November 1980.

February 17, 2009 – Television originally scheduled to go digital in the U.S. Congress mandated this as the date when all full-power TV stations would cease to broadcast analog programming.

February 18, 1901 – First vacuum cleaner patented by Hubert Cecil Booth, an English structural engineer. This design had the disadvantage that it had no way to collect the dust and never became a commercial success.

February 21, 1994 - Whirlpool begins production of refrigerators without freon. In the 1930s, refrigerators began to use freon as a refrigerant. However, the use of freon became an environmental concern once it was identified as a ozone-depleting chemical. **February 22, 1876** – Johns Hopkins opens as first research university in America .At his inauguration, Johns Hopkins first president, Daniel Coit Gilman asked: *What are we aiming at? The encouragement of research ... and the advancement of individual scholars, who by their excellence will advance the sciences they pursue, and the society where they dwell.*

February 23, 1893 – Rudolf Diesel patents the diesel engine in Germany. Rudolf Diesel's goal was to improve on the efficiency of the gaso-line-engine that used the Otto cycle. His new concept for the engine was to compress the air in the cylinder adiabatically

February 25, 1837 – Thomas Davenport patents the electric motor and electric railway. Thomas Davenport, an American blacksmith, first invented the DC electrical motor in 1834 and used it to make a small model of electrical railway in 1835.

February 27, 1932 – Chadwick publishes his discovery of the neutron. Until 1932, the atom was known to consist of a positively charged nucleus surrounded by enough negatively charged electrons to make the atom electrically neutral

February 29, 1940 – The Nobel Prize in Physics was presented to Ernest Lawrence "for the invention and development of the cyclotron and for results obtained with it, especially with regard to artificial radioactive elements".

Future City Competition

AIChE sponsored a special award for a team participating in the Chicago Future City Competition on Saturday January 26th. Future City is a competition sponsored by National Engineers Week in which middle school students compete against teams from other schools by designing a city of the future. They use SimCity software to design a computer model of their futuristic city. The students are also required to build a scale model of the city using recycled materials and write two essays reflecting their knowledge of the complex issues surrounding urban design.

The winner of the overall competition was St. Clair Junior High School. They won a trip to Washington DC to compete in the national competition during National Engineers Week in February.

Along with the overall winners, 27 special awards were presented by various engineering societies. AIChE sponsored the Energy Award which went to "the future city that best meets its energy demand from safe, environmentally responsible, reliable, and economical sources." Julie Gruhn and DeMarcus Hunter attended the event to judge the teams and select a winner for the AIChE award. The winning team was Emerald City from Thompson Junior High School. They incorporated many types of clean energy into their design, including wind, hydroelectric, solar, and wave.



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Upcoming Meetings/Live Webinars

Webinar: Leadership Is Everyone's Responsibility Wednesday, February 20, 2013, 2:00pm-3:00pm EST

AIChE Chicago Local Section Meeting "Social Outing" at Pin Stripes, Oak Brook, IL February 23rd, 2013

<u>SBE's 3rd International Conference on Accelerating Biopharmaceutical Development</u> Coronado Island, CA

February 24-27, 2013

Webinar: <u>New Materials for Membrane Separations</u> Wednesday, March 6, 2013, 2:00pm-3:00pm EST

AIChE Chicago Local Section Meeting Abbott

March 13, 2013

Webinar: From Wet Algae to Liquid Fuels

Wednesday, March 20, 2013, 2:00pm-3:00pm EDT

2013 Spring Meeting and 9th Global Congress on Process Safety

April 28 - May 2, 2013

Grand Hyatt, San Antonio, Texas

2013 Process Development Symposium

June 11-13, 2013 Oak Brook, IL

ChemE On Demand

AIChE's ChemE on Demand is a multi-media digital library containing hundreds on-demand webinars and recorded conference presentations. This convenient resource is designed to meet your needs as a chemical engineer. AIChE professional **members** are entitled to **6 FREE** 'credits', good for content in ChemE on Demand each year. **Undergraduate student members** get **free unlimited** access to ALL ChemE On Demand content.

- <u>Cheers! The Chemistry of Wine</u> with Dr. Ariel Fenster: Learn how to fully appreciate wine, the best companion of good food.
- <u>Molecular Gastronomy: The Science of Flavor</u> with Professor Peter Barham: What gives food its flavor? What makes some foods taste really good while others can be mediocre or even disgusting?
- Tapping into the Chemistry of Beer and Brewing with Dr. Charlie Bamforth: Understand the complexity of malting and brewing your favorite brew.

Job Opportunity

BSI Engineering is a full service engineering firm in search of a PROJECT ENGINEER / PROJECT MAN-AGER for our Chicago office.

BSI Engineering Background

BSI Engineering provides engineering & design services to clients in the steel, chemical, pharmaceutical and renewable fuels (Corn to Ethanol, Cellulose to Ethanol, Biodiesel) industries We have compiled an experienced staff of engineering professionals who can perform Feasibility Studies, Process & Utilities systems' evaluations, Conceptual, Preliminary & Detailed designs for project ranging from \$10K to very large projects (\$100 million total installed cost) for more than 100 different industrial clients in the U.S. and Canada.. Our corporate headquarters is in Cincinnati, Ohio with a satellite office in Chicago.

Each employee has been hired based on a demonstrated ability to provide exceptional service to our customers. Company profit sharing programs, ownership model and management systems have all been designed to support and reward employees who place our clients first; recognizing employee satisfaction will be the end result.

Project Manager/Project Engineer Job Overview:

and is accountable for overall project implementation ac- agement process (PMP certifications are a plus). tivities. The project manager is passionate, high energy, and results oriented with a creative and analytical mind and is experienced with advanced PM tools and processes, and has the ability to manage critical situations.

- Project management experience in coordination of all aspects of a project including client relations, developing project budgets and scopes of work, schedule development and leading a proiect team.
- Experience in leading and coordinating all phases of project development.
- Integrate into client environment in order to effectively lead project team while also building positive professional relationships with clients and associates.
- Define the objective, requirements, and assumptions necessary to structure a project or activity.
- Plan, schedule, and control activities to fulfill identified objectives applying technical, theoretical, and managerial skills to satisfy project requirements.
- Establish and maintain a high performing team and serve as a project advocate within the or-

ganization.

- Lead (coordinate, facilitate, and motivate) the efforts of the individual, team, client, and other resources associated with project activity. Ensure alignment on project goals and deliverables.
- Manage projects within the established scope, schedule, and budget while meeting or surpassing standards of quality.
- Lead risk management within the project team. Ensure risks have appropriate mitigation and contingency plans.
- Facilitate and lead effective meetings. Ensure appropriate agendas that enable key discussions and decisions within the team. Prepare meeting minutes and follow up on action items.

Requirements

Required Experience and Training:

- Bachelor's degree or higher in an engineering discipline (Chemical Engineering degree preferred)
- 10-15 years of industry experience

The project manager is an experienced project leader Knowledge and application of a disciplined project man-

Required Skills and Knowledge:

- Exceptional interpersonal and leadership skills.
- Technical aptitude and displayed ability to grasp a general knowledge of multiple disciplines and technologies.
- Strong competencies in planning, project management, leadership, and organization.
- Ability to produce and present clear, concise, and professionally written communications and presentations.
- Strong analytical capabilities
- Ability to lead and facilitate multiple activities and resources.
- Demonstrated work ethic, integrity, and professional conduct.

Contact Sharon Bates Human Resources Manager BSI Engineering, Inc. sbates@bsiengr.com

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AICHE CHICAGO SECTION

American Institute of Chemical Engineers

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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/

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 <u>aichechicago@gmail.com</u> 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.

