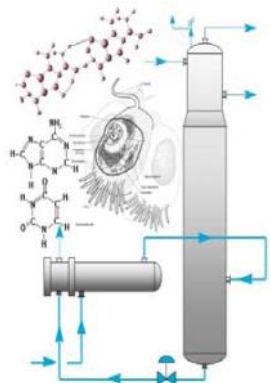


AIChE Chicago Section February Newsletter

Chicago Section

www.aiche.org/Chicago

February 2022



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AIChE February 2022 Meeting

Speaker:	Neal Cammy, Engineering Manager BLAC INC. Elmhurst, Illinois
Topic:	Benefits of High-Performance Valve Actuator Systems
Date/ Registration Deadline:	Thursday, February 17, 2022 5:30-7:00 PM
Program:	5:30 – 5:45 PM: Networking 5:45 – 6:00 PM: Announcements and Introduction 6:00 – 7:00 PM: Main Presentation
Where:	Virtual Zoom Meeting

[Click to View Event Summary and Register](#)

Cost: Free

(To donate or learn about the local section student's scholarship program, please go to [this page](#).)

Biography:

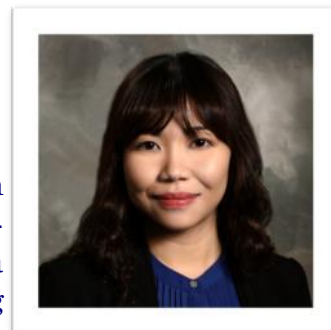


Neal joined BLAC in fall 2011 after 31 years with UOP (now Honeywell UOP) in Des Plaines, Illinois. At UOP, Neal worked mainly in Fluid Catalytic Cracking (FCC) technology on new unit startups, refinery troubleshooting, reliability, new process control and safety-instrumented system strategies, and project sales. Neal was one of the authors of the UOP FCC Electro-Hydraulic Actuator specification. Neal has co-authored several papers in the area of safety system design, holds two U.S. patents for FCC control strategy, and has presented at various conferences on FCC operations while with UOP, as well as on electro-hydraulic actuators with BLAC. Neal holds a BSChE from the Polytechnic Institute of NY (now NYU Tandon School of Engineering).

Abstract:

The vast majority of control valves in the process industries are positioned using pneumatic actuators. However, special applications that require higher performance or higher force will need other means of moving the valve, such as electro-hydraulic or electric motor driven actuators. This presentation will provide a primer on valve actuation to engineers who might not be familiar with how and/or why electro-hydraulic actuators are used in process industry applications.

Chair's Corner



February comes with the celebration of National Engineers Week on February 20-26, 2022. Founded by NSPE (National Society of Professional Engineers) in 1951, Engineers Week is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers. In this spirit, the Chicago Section has an exciting line-up of multiple events this month for you to celebrate. I am looking forward to the technical presentation in the monthly meeting on February 17 about the use of electro-hydraulic actuators in chemical process industry, which is a topic I am not very familiar with and would like to learn more about.

Our Section is also participating in the 38th Annual DuPage Area STEM Expo, taking place online February 21 - 26, 2022, hosted by Illinois Institute of Technology. The event focuses in online family fun and interactive exploration into science, technology, engineering, and math for school age children, grades K-12. The Outreach committee is partnering with Young Professionals Committee to remotely participate in the weeklong program. Please reach out to our Outreach Committee Chair, Janet (janet.werner@honeywell.com) if you would like more information or to join us.

February also marks a month until the 14th Midwest Regional Conference. You can find more details on keynote speakers, full two-day technical program, and a call for volunteers to be part of Engineer Career Day for Chicago local high school students. Besides traditional chemical engineering sessions, the program this year expands to current high-interest topics on environment and climate solutions, machine learning, and energy storage. Registration is currently open at <https://www.aiche.org/conferences/midwest-regional-conference/2022>. Please pass along the word to your colleagues to attend the conference and consider joining the Chicago Section.

Lastly, I would like to remind you that the deadline to submit application for the Chicago Section Scholarship Program is March 1st. AIChE Chicago maintains a scholarship fund for the children of AIChE Chicago members. We will be awarding one or two scholarships to students who will be entering or continuing college education and pursuing a career in chemical engineering. More information is provided in a later page of this newsletter. I recommend that everyone consider donating to this effort. Together with our outreach efforts, we are making an investment in our children to take on the future of energy and environment and to be the next generation of chemical engineers.

Ha Dinh

AIChE Chicago Section Chair

AIChE Senior Member



2022 AIChE Midwest Regional Virtual Conference

March 1 & 2, 2022

<https://www.aiche.org/conferences/midwest-regional-conference/2022>

MRC organizing committee is planning this year's conference in a variety of different areas.

Registration is now open

For submission questions please contact the Programming Chairs:
Belma Demirel (Belma.Demirel@bp.com) and Hakim Iddir (iddir@anl.gov)

For volunteer opportunities please contact the Conference Chairs:
Matthew Walters (mwalters@exponent.com) and Jessica Morris (jmorris@exponent.com)

Assistance is needed with programming, sponsorship, educational outreach, and more so please consider helping your technical community.

Keynote Speakers

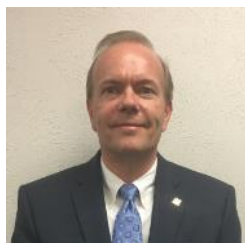


Stephen Klejst

*Executive Director of Investigations & Recommendations
U.S. Chemical Safety and Hazard Investigation Board (CSB)*

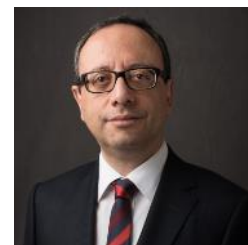


Simona Rollinson
*Chief Technology Officer
ISACA*



Henrik Rasmussen

*Vice President of Catalyst and Technology and Managing Director for the Americas
Haldor Topsoe*



Manos Mavrikakis
*Ernest Micek Distinguished Chair
University of Wisconsin-Madison*



Fouad Teymour

*S.C. Johnson Professor of Chemical Engineering and Director of the Center for Complex Systems and Dynamics
Illinois Institute of Technology*



2022 AIChE Midwest Regional Virtual Conference

High School Outreach Program

March 1, 2022



Calling All Professional Engineers!

The American Institute of Chemical Engineers (AIChE) is hosting Engineering Career Day for Chicago local high school students to explore a career in engineering. As part of the event, we have a Networking with the Professionals session where high school students have an opportunity to learn more about engineering and ask questions in a small interactive group setting. Each group of high school students will be paired with one professional engineer and one university engineering student to discuss a career in engineering. Please be prepared to share about your career path and what you love about engineering! If you are interested in participating in the Networking with the Professionals, please fill out this [form](#) to express your interest. If you have any questions, please contact us at aiche.outreach.chicago@gmail.com.

Check out <https://hopin.com/events/aiche-engineering-career-day-2022> for more information about the event!

AIChE Midwest Regional Conference

Program at a Glance

Tuesday, March 1, 2022

8:15 AM – 8:30 AM **Conference Welcome**

8:30 AM – 9:30 AM **Morning Keynote**

- Stephen Klejst, *Executive Director of Investigations & Recommendations, U.S. Chemical Safety and Hazard Investigation Board (CSB)*

9:30 AM – 9:40 AM **Break**

9:40 AM – 10:40 AM **Technical Sessions**

- *Process Safety I*
- Polymer Science

10:40 AM – 10:50 AM **Break**

10:50 AM – 11:50 AM **Technical Sessions**

- *Process Safety II*
- *Bioengineering & Nanotechnologies I*

11:50 AM – 12:45 PM **Lunch Break**

12:30 PM – 2:00 PM **Networking with High School Outreach Participants** [[optional signup](#)]

12:45 PM – 1:45 PM **Afternoon Keynote**

- Simona Rollinson, *Chief Technology Officer, ISACA*

1:45 PM – 2:00 PM **Break**

2:00 PM – 3:20 PM **Technical Sessions**

- *Environmental Compliance & Remediation I*
- *Bioengineering & Nanotechnologies II*

3:20 PM – 3:30 PM **Break**

3:30 PM – 4:50 PM **Technical Sessions**

- *Environmental Compliance & Remediation II*
- Machine Learning & Optimization

4:50 PM – 5:00 PM **Break**

5:00 PM – 6:00 PM **Poster Session**

6:00 PM – 6:30 PM **Networking Break**

6:30 PM – 8:00 PM **AIChE Chicago March Dinner Meeting**

AICHe Midwest Regional Conference

Program at a Glance

Wednesday, March 2, 2022

8:25 AM – 8:30 AM **Conference Welcome**

8:30 AM – 9:30 AM **Morning Keynote**

- Henrik Rasmussen, *Vice President of Catalyst and Technology and Managing Director for the Americas, Haldor Topsoe*

9:30 AM – 9:40 AM **Break**

9:40 AM – 11:00 AM **Technical Sessions**

- *Refining & Renewables*
- *Climate Solution: Action I*

11:00 AM – 11:10 AM **Break**

11:10 AM – 12:10 PM **Technical Sessions**

- *Catalysis & Reaction Engineering I*
- *Climate Solution: Action II*

12:10 PM – 1:00 PM **Lunch Break**

1:00 PM – 2:00 PM **Afternoon Keynote**

- Manos Mavrikakis, *Ernest Micek Distinguished Chair, University of Wisconsin-Madison*

2:00 PM – 2:10 PM **Break**

2:10 PM – 3:30 PM **Technical Sessions**

- *Catalysis & Reaction Engineering II*
- *Energy Storage I*

3:30 PM – 3:40 PM **Break**

3:40 PM – 5:00 PM **Technical Sessions**

- *Fluid Properties, Fluid Dynamics, & Transport Phenomena*
- *Energy Storage II*

5:00 PM – 6:00 PM **Happy Hour – Hosted by AIChE Chicago Young Professionals**



February is Black History Month The Library of Congress, National Archives and Records Administration, National Endowment for the Humanities, National Gallery of Art, National Park Service, Smithsonian Institution and United States Holocaust Memorial Museum join in paying tribute to the generations of African Americans who struggled with adversity to achieve full citizenship in American society.

[Read More »](#)

Charles Pierce: A Name Every Chemical Engineer Should Know

During the formative era of the profession, and years before the establishment of AIChE (1908), only a handful of universities offered a formal course of study in the new field of chemical engineering. Illinois Institute of Technology (IIT) was one of them, and in 1901 the school granted its very first chemical engineering degree to a man named Charles Warner Pierce.

Charles Pierce (1876–1947) was not only one of the first to receive a chemical engineering degree anywhere, but he was also the first African American at any institution to receive a degree in the subject.

Pierce's place in the profession's history had faded from memory for a full century until IIT's chemical engineering department began rediscovering its heritage in the early 2000s in preparation for its centennial. That's when university records revealed the name Charles Pierce as the first holder of the school's chemical engineering degree.

In 2007, IIT's Chemical and Bioengineering Department honored Pierce with its Distinguished Alumni Award, at a ceremony attended by some of Pierce's descendants.

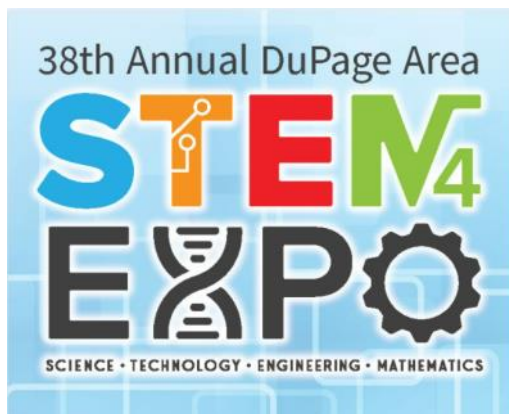
[Read Complete Article and More on AIChE ChEnected »](#)

[DuPage Area STEM Expo and National Engineers Week](#)

The DuPage Area STEM Expo, in conjunction with National Engineers Week, is a specialized event designed to promote the awareness of professional and educational opportunities provided among engineering and STEM (science, technology, engineering and math) fields.

The 38th Annual DuPage Area STEM Expo, hosted by IIT, is taking place online February 21-26. Read more about the [STEM Expo](#)

National Engineers Week is February 20-26, and the 2022 theme is Reimagining the Possible. Read more about [National Engineers Week](#)



[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 \$1,000 honorarium presented at a monthly section 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 **April 01, 2022**.

One of the highest honors a distinguished chemical engineer can receive is our AIChE Chicago Section Thiele award. Please consider nominating a deserving engineer for this prestigious award.

To nominate, please contact:

Jeffrey Zalc

bp Solutions, P&O

phone: 630.881.5478

email: jeffrey.zalc@bp.com

More information about this award and the past winners:

<https://www.aiche.org/community/sites/chicago-local-section/ernest-w-thiele-award>

<https://www.aiche.org/community/sites/local-sections/chicago/thiele-award-past-winners>

2021-2022 Meeting Schedule and Speakers

Month	Date	Speaker	Affiliation	Topic
February	Thurs 17th	Neal Cammy	BLAC INC.	Benefits of High-Performance Valve Actuator Systems
March	Tues 1st	Prof. Fouad Teymour	IIT	
April	TBD	Martin Gonzalez	bp	
May	TBD	Chris Nicholas	Lakril Technologies	

Attention Students and Parents!

If you are an undergraduate chemical engineering student or have a son or daughter that plans to study chemical engineering you may be interested in the Chicago Section's scholarship program.

Applications are due **March 1st**.

Please [click here](#) to read rules and eligibility.

For a Link to the Electronic Version of the AIChE Chicago Scholarship Application Form, Click on the Link Below:

<http://form.jotform.us/form/42814483647159>



Connect with members & participate in discussions on Engage!

Check out AIChE's member benefit, AIChE Engage. Use the robust directory search to find and connect with members. Participate in technical, career, and academic discussions about chemical engineering.

Thread Subject	Replies	Last Post
Improving Soft Skills Through Mentorship article- Aiche/CEP December 2020 CEP	0	9 hours ago by Chris
PhD Thesis		
Pressure setting for manway cover for tank emergency		by Anil Ramdeo
Digitalization in the process industry		yesterday by John Braccili Original post by Rohit Korde
Slow Progress of New-Age Tools in Chemical Eng	6	3 days ago by Jacob Albrecht Original post by Kushal Sinha



Volunteers Needed for Chicago Local Section

How many opportunities can you find to learn project management, delegation and leadership skills for free? Volunteering with the Chicago Section of AIChE is such an opportunity. While you're learning new skills, your professional 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.

Volunteers are needed to help with:

- Programming – arrange speakers for monthly meetings, and arrange catering and venues
- Logistics – arrange catering and venues
- Newsletter Editor – prepare and publish ten monthly newsletters
- Newsletter Contributions – write meeting summaries, contribute photos, and more
- Engineering Outreach – coordinate three annual K-12 outreach events with high schools and colleges
- Professional Development and Sponsorship – arrange companies to sponsor pre-meeting talks to help fund student dinners
- Awards and Scholarship Committees – Review applications for local Section award and scholarships
- Midwest Regional Conference – many opportunities including programming, logistics, website, advertising, sponsorship, high school outreach, poster session and more!
- Young Professionals – plan socials and programming for young professionals (under 35)



If you are interested in any of these positions, please contact us aichechicago@gmail.com.

Why Renew Your AIChE Membership?

Renew your membership now to keep learning and growing.

Renew Membership



Stay Connected to 40,000+ international members who take advantage of:

- Subscription to AIChE's flagship publication: CEP*
- Education—Access to e-learning courses and instructor-led training, offering Continuing Education Units and PDHs
- Access to CareerEngineer—a comprehensive job site tailored to chemical engineers
- Access to the AIChE eLibrary—a wealth of information from Knovel Life Sciences and the McGraw-Hill AccessEngineering Library collections

[View COMPLETE benefits](#)

Upcoming AIChE Conferences, Meetings and Webinars

AIChE Conferences	
Feb 9-10, 2022	2022 Ethylene Middle East Technology Conference (EMET) , Gulf Hotel and Convention Centre, Kingdom of Bahrain
Mar 1-2, 2022	14th AIChE Midwest Regional Conference
Mar 21, 2022	PD2M Singapore Conference , Singapore City, Singapore
Apr 1-3, 2022	Quantum Computing Applications in Chemical and Biochemical Engineering Workshop , Copenhagen, Denmark
Apr 10-14, 2022	2022 Spring Meeting and 18th Global Congress on Process Safety , Henry B. González Convention Center, Hyatt Riverwalk, San Antonio, TX

AIChE Volunteer and Meeting Attendee Conduct Guidelines

AIChE's volunteers are the core of the Institute and make all of its programs, conferences and educational efforts possible. These offerings provide excellent opportunities for AIChE members and meeting attendees to gain greater technical expertise, grow their networks, and enhance their careers. AIChE events provide engineers, scientists, and students a platform to present, discuss, publish and exhibit their discoveries and technical advances.

At all times, volunteers and meeting attendees should act in accordance with AIChE's Code of Ethics, upholding and advancing the integrity, honor and dignity of the chemical engineering profession. AIChE's Board of Directors has developed these guidelines to foster a positive environment of trust, respect, open communications, and ethical behavior. These guidelines apply to meetings, conferences, workshops, courses and other events organized by AIChE or any of its entities and also to volunteers who conduct other business and affairs on behalf of AIChE.

Specifically

1. Volunteers and meeting attendees should understand and support AIChE's Code of Ethics.
2. Volunteers and meeting attendees should contribute to a collegial, inclusive, positive and respectful environment for fellow volunteers and attendees, and other stakeholders,

including AIChE staff.

3. Volunteers and meeting attendees should avoid making inappropriate statements or taking inappropriate action based on race, gender, age, religion, ethnicity, nationality, sexual orientation, gender expression, gender identity, marital status, political affiliation, presence of disabilities, or educational background. We should show consistent respect for colleagues, regardless of discipline, employment status, and organizations for which they work, whether industry, academia, or government.
4. Disruptive, harassing or other inappropriate statements or behavior toward other volunteers, members, and other stakeholders, including AIChE staff, is unacceptable.
5. Volunteers and meeting attendees should obey all applicable laws and regulations of the relevant governmental authorities while volunteering or attending meetings. Volunteers and meeting attendees taking part in any AIChE event, including the ChemECar Competition™, should also comply with all applicable safety guidelines.

Violations of this conduct policy should be reported promptly to the AIChE President or Executive Director.

[**Read AIChE's Code of Ethics**](#)

AICHE CHICAGO SECTION

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

<https://www.facebook.com/AICHEChicagoSection>

<https://www.linkedin.com/groups/4538581>

<https://www.aiche.org/community/sites/local-sections/chicago>

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Officers and Contact Information

Chair	<i>Ha Dinh</i>
Chair Elect	<i>Sarika Goel</i>
Past-Chair	<i>Jeffrey Zalc</i>
Programming	<i>Belma Demirel</i> <i>David Hietala</i>
Social Media	<i>Sanaz Taghvaii</i>
Treasurer	<i>McKay Rytting</i>
Directors at Large	<i>Jarad Champion</i>
	<i>Pat Shannon</i>
	<i>Robert Tsai</i>
House Committee	<i>Lance Baird</i>
	<i>Seetha Manickam</i>
	<i>Kashif Uddin</i>
Newsletter Editors	<i>Yechan Won</i>
	<i>Robert Tsai</i>

We want you for AICHE-Chicago!

AICHE is committed to promoting a fair, just, and equitable profession and society. AICHE believes that all who wish to be a part of the chemical engineering community should have equal opportunity to pursue and achieve success. We work toward a better future for all —through our technical expertise; through how we inspire, engage, retain, and advance future talent; and through how we treat each other within and beyond the profession.

[AICHE Equity, Diversity, and Inclusion Statement | AICHE](#)

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.org/community/sites/local-sections/chicago/announcements/volunteerism>



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.

