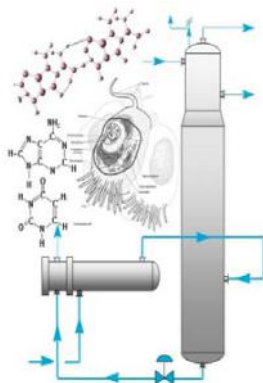


# December Newsletter



## *Inside this issue:*

|                                      |   |
|--------------------------------------|---|
| Chair's Corner                       | 2 |
| MRC 2021                             | 2 |
| Save the Date—<br>January meeting    | 3 |
| December in History                  | 3 |
| Congratulations to<br>Dennis O'Brien | 4 |
| Thiele Award Nomina-<br>tion         | 4 |
| Scholarship Infor-<br>mation         | 5 |
| AIChE Academy                        | 5 |
| Volunteers Needed                    | 6 |



*Remember! Renew your AIChE Membership  
by 12/31/2020*

Chicago Local Section dues are only \$20 and support key initiatives!

<http://www.aiche.org/community/membership/renew>

## Chair's Corner

Happy Holidays! We are in the final days of 2020, a year I am sure everyone will be happy to see in the rearview mirror. I, and the rest of the volunteers in the AIChE Chicago Section, wish you the very best for 2021. Hopefully, each of you is able to find sufficient time to disconnect from work, reenergize for the coming year, and catch up with friends and relatives (if only virtually).

I am grateful for all of the hard work performed by our section volunteers that allowed us to have interesting, well-attended, and smoothly-run virtual monthly meetings. Also, the Midwest Regional Conference committee members are investing significant time to ensure that the virtual MRC on March 17-18, 2021 is executed in a highly professional manner and with high-quality content. Make sure to save those dates!



Jeffrey M. Zalc  
AIChE Chicago Section Chair  
AIChE Senior Member



**2021 AIChE Midwest Regional  
Virtual Conference**

**March 17 & 18, 2021**

<https://www.iche.org/conferences/midwest-regional-conference/2021>

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

**[Call for abstracts is now open](#)**

For submission questions please contact the Programming Chair (Hakim Iddir) at [iddir@anl.gov](mailto:iddir@anl.gov)

For volunteer opportunities please contact the Conference Chair (Bob Tsai) at [robert.tsai@honeywell.com](mailto:robert.tsai@honeywell.com).

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

# SAVE THE DATE

## Joint ACS/AIChE - Chicago Section January 2021 Meeting

|                |                                                          |
|----------------|----------------------------------------------------------|
| <b>Speaker</b> | Rick Rateick                                             |
| <b>Topic</b>   | Interesting Topics in 19th Century Iron and Steel Making |
| <b>When</b>    | Thursday, January 14, 2021 7:00 pm -9:00 pm              |

Richard Rateick, Jr., PE, is a materials and mechanical engineering researcher with 33 years experience building and actively participating in Aerospace Industry sponsored research collaborations with leading universities and national laboratories. He holds a bachelors degree in Mechanical Engineering from Valparaiso University with a second major in Chemistry and a Master of Science in Materials Science and Engineering from The University of Notre Dame. He is a licensed Professional Engineer in the State of Indiana. He developed critical program winning materials technology for the Joint Strike Fighter STOVL thrust vectoring system and new antioxidant coating systems for carbon-carbon composites.

Collaborative research studies have focused on a multi-scale modeling and experimental approach to link material nano-structure to macroscopic performance requirements in new products. He has lectured on: building successful university-industry collaborations; Ashby methods of materials selection and design; electrochemical corrosion theory; 19th century steel making history. He holds 15 patents for aircraft fuel system and brake products and has coauthored 46 papers in peer reviewed journals. He is actively engaged personally in microbiological and histological studies.



## December In History

### Some Noticeable Events

#### December 5

1905: Chiclets gum was trademark registered.

#### December 9

1924: Wrigley's gum was trademark registered.

#### December 19

1871: Mark Twain received the first of his three patents for suspenders.

#### December 20

1946: "The Yearling," a movie based on the novel by Marjorie Kinnan Rawlings, was copyright registered.

1871: Albert Jones of New York, New York, patented corrugated paper.

### Some Notable Birthdays

#### December 12

1833: Matthias Hohner was the German manufacturer of harmonicas.

1866: Swiss chemist Alfred Werner won the Nobel Prize in 1913.

#### December 17

1778: English chemist Humphry Davy is best known for his discovery of elements such as potassium and sodium.

1908: Willard Frank Libby was the inventor of the carbon-14 atomic clock and won the Nobel Prize in 1960.

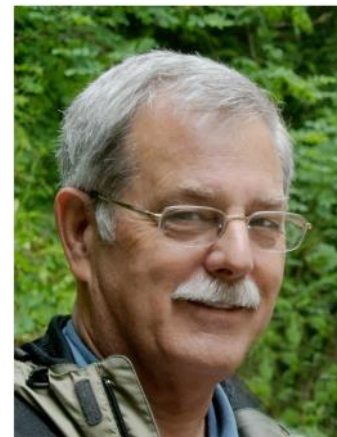
#### December 20

1805: Thomas Graham founded colloid



## Congratulations to Dennis O'Brien!

AIChE Local Sections Committee presents Shining Star Awards to recognize outstanding volunteerism at the AIChE Local Section Level. Local sections nominate their local volunteers to recognize them. Dennis O'Brien was nominated on behalf of the AIChE Chicago Section, and he was selected as one of the recipients of this award this year! Congratulations, Dennis!



Dennis is among the longest-tenured volunteers in the Chicago Local Section. His extensive service record and his dedication to mentoring make him a very well-deserved recipient of the Shining Star Award. The programming committee within the local section benefits very much from his frequent suggestions of new speakers to reach out to or opportunities for educational tours. Dennis has a genuine desire to train the next generation of engineers, and his enthusiasm for helping his colleagues and mentees cannot be understated.

For more information about the Shining Star Award, click:

<https://www.aiche.org/community/awards/shining-star-award>



chemistry.

1868: Industrialist Harvey S. Firestone founded Firestone Tires.

**December 29**

1776: Charles Macintosh patented waterproof

fabric.

1800: Charles Goodyear invented the vulcanization process for rubber.

**December 30**

1851: Asa Griggs Candler invented Coca-Cola.

## 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.

To nominate, please contact:  
 Jeffrey Zalc  
 bp Solutions, P&O  
 phone: 630.881.5478  
 email: [jeffrey.zalc@bp.com](mailto:jeffrey.zalc@bp.com)

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, 2021**.

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>

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.

# 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>



## ***You have credits, use them!***



AIChE Global professional members get six free credits each year, good for live or archived content, with permanent access to the contents selected. You'll find courses, webinars, conference presentations and more from AIChE, CCPS, SBE, IfS, and ISWS.

Check out the archived webinars and conference presentations [available at the AIChE website](#), and be sure to renew your membership!



### **Six Sigma: A Practical Overview**

eLearning (online) Course

Six Sigma is successfully practiced throughout the chemical engineering industry for improvement, organization and problem-solving. In this course,....



### **Transport of Hydrogen Fuel**

eLearning (online) Course

This 3rd video course is part of the Hydrogen Safety microlearning series aimed at providing an "awareness level" overview of hydrogen for fire, law...



### **The Link Between Process Safety and Process Intensification**

Archived Webinar

📅 Dec 11, 2019

Join this 60-minute webinar to learn about the link between process safety and process intensification.



### **Integrating Operations and Information Technology (OT/IT) ...**

Archived Webinar

📅 Jun 22, 2017

Discussing the practice of smart manufacturing and integrated operations and information technology (OT/IT) systems. Smart Manufacturing (SM) is the technology practice of applying advanced sensors,...

## ***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 local network grows.

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](mailto: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 Educations 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](#)**

### **[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.

## **2020-2021 Meeting Schedule and Speakers**

| Month           | Date                      | Speaker                             | Affiliation | Topic                                                    |
|-----------------|---------------------------|-------------------------------------|-------------|----------------------------------------------------------|
| <b>January</b>  | Thursday 14 <sup>th</sup> | Mr. Rick Rateick                    | rexp2       | Interesting Topics in 19th Century Iron and Steel Making |
| <b>February</b> | Wednesday 7 <sup>th</sup> | Assoc. Prof. Ah-Hyung (Alissa) Park | Columbia    | Energy Conversion / CO <sub>2</sub> sequestration        |
| <b>March</b>    | Week of 15 <sup>th</sup>  | Prof. Sohail Murad                  | IIT         | Process Synthesis; joint with MRC                        |
| <b>April</b>    | Tuesday 13 <sup>th</sup>  | Dr. Ted Krause                      | Argonne     | H <sub>2</sub> generation and utilization                |
| <b>May</b>      |                           |                                     | TBD         |                                                          |

### **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,

3. 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](mailto:aichechicago@gmail.com)

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

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

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

**Follow  
 AICHE  
 Chicago  
 Online**

### Officers and Contact Information

|                    |                                                                                |
|--------------------|--------------------------------------------------------------------------------|
| Chair              | Jeff Zalc                                                                      |
| Chair Elect        | Ha Dinh                                                                        |
| Chair Programming  | Christopher Nicholas                                                           |
| Secretary          | Ignasi Palou-Rivera                                                            |
| Social Media       | Sanaz Taghvaei                                                                 |
| Treasurer          | McKay Rytting                                                                  |
| Directors at Large | Robert Tsai                                                                    |
|                    | Pat Shannon                                                                    |
|                    | Olha Zvarych                                                                   |
| House Committee    | Paolo Palmas                                                                   |
|                    | Lance Baird                                                                    |
| Newsletter Editors | Reza Mostofi<br><a href="mailto:rmostmoh@gmail.com">rmostmoh@gmail.com</a>     |
|                    | Azita Ahmadzadeh<br><a href="mailto:azita.ad@gmail.com">azita.ad@gmail.com</a> |
|                    |                                                                                |

**We want you for AICHE-Chicago!**

**We need your help!**

How many opportunities can you find to learn project management, delegation and leadership skills for free? Becoming an officer in the Chicago Section of AICHE is such an opportunity. While you're learning new skills, your local network grows. Just about all of us are either undergoing a career change, contemplating a career change, or are wondering if our career will be changed for us. Volunteering with AICHE is a way to add skills and accomplishments to your resume.

[aichechicago@gmail.com](mailto: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](mailto:aichechicago@gmail.com) with "newsletter article" as a subject line.

