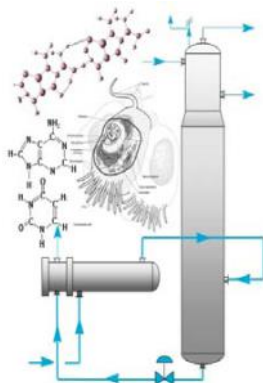


AIChE Chicago Section January Newsletter

Chicago Section

www.aiche.org/Chicago

January 2021



Inside this issue:

January meeting	1
Chair's Corner	2
MRC 2021	3
Bipin Vora	4
Future Meetings	5

Virtual Links:



Joint ACS/AIChE January 2021 Meeting

Speaker:	Richard Rateick, Jr.
Topic:	Interesting Topics in 19th Century Iron and Steel Making
Date/ Registration Deadline:	Thursday, January 14, 2021 7:00-8:30 PM
Program:	7:00 – 7:15 PM: Announcements and Introduction 7:15 – 8:15 PM: Main Presentation
Where:	Virtual Zoom Meeting (link to be provided upon registration)

[View Event Summary and Register](#)

(All registrations for the 2021 joint meeting are through the Chicago ACS website)

Cost:	Free
--------------	------

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

Speaker's Bio:



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

Chair's Corner

Happy New Year! I hope that each of you found some time to rest, connect with friends and family, and get re-energized for 2021. Quite a few of our AIChE Chicago Section members have been investing significant time and effort to ensure that the upcoming Midwest Regional Conference (March 17-18) is a success. Note that the conference will be conducted virtually this year, so hopefully more people will have the opportunity to participate. The conference website is:

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

At this point, abstract submission is open; conference registration soon will be. Make sure to let your colleagues know about the conference and to consider joining the AIChE Chicago Section if they are not already members. Regarding membership, we are also working to increase our section membership through a cost-effective, targeted advertising campaign this year.

Best wishes for 2021! I am excited by what the new year may hold and hope that we can bring even more chemical engineers together.

Jeffrey M. Zalc
AIChE Chicago Section Chair
AIChE Senior Member



[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 Christina
PhD Thesis		
Pressure setting for manway cover for tank emergency		by Christina Original post by Rohit 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

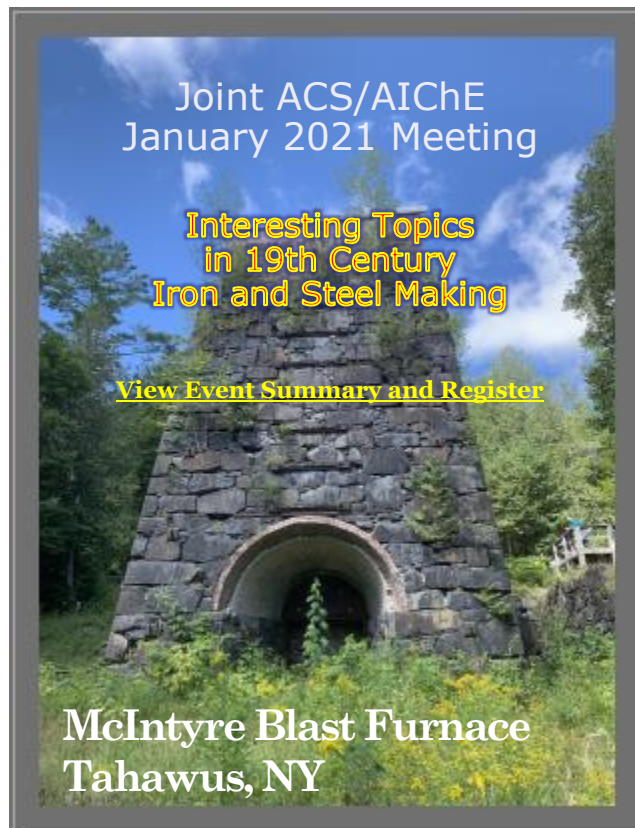



Page 1

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.

Abstract:

The 19th century was a time of great change in iron and steel making. Massive productivity improvements in iron making occurred starting early in the century with the invention of the hot air blast for the smelting of iron in the blast furnace. By mid-century, steel moved from being a luxury item, made manually and arduously in puddling furnaces, to becoming a commodity by way of invention of the Bessemer (Kelly?) converter and the Siemens-Martin or open hearth furnace. These technologies resulted in the building of great industrial empires. In this talk, I will use historical drawings and photographs to present this fascinating and sometimes sordid history along with the chemistry which added science to the art.



Curious about “Patents”, “Trademark”, “Copyrights”, “Trade Secrets”? Watch the “Patent Fundamentals for Engineers” webinar here:

<https://www.aiche.org/academy/webinars/patent-fundamentals-engineers>



2021 AICHe Midwest Regional Virtual Conference

March 17 & 18, 2021

<https://www.aiche.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

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

Congratulations to Bipin Vora!

Dual Honors for Bipin Vora

Bipin was elected as a Foreign Fellow of Indian National Academy of Engineering (INAE) and formally was inducted on December 22, 2020 in a virtual ceremony conducted from INAE Center in New Delhi.

On December 8, 2020, National Academy of Inventors (NAI) announced names of 2020 NAI fellows, and Bipin Vora is one of them. Formal induction into NAI will take place in June 2021 in Tampa, Florida at NAI national meeting.

Bipin was inducted in National Academy of Engineering (NAE) in 2018. These are three most prestigious honors in last two years for Bipin. He was awarded Engineering Distinguished Alumnus Award by University of New Mexico. Bipin Vora is member emeritus and Fellow of AIChE, member of ACS, former director of F&PD (AIChE) and retired fellow of UOP/Honeywell Co.



Learn more about these institutes here:

INAE

<https://www.inae.in/>

NAE

<https://www.nae.edu/>

NAI

<https://academyofinventors.org/>

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

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**.

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.

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>

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>



2021 Meeting Schedule and Speakers

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

Words of Wisdom

The highest result of education is tolerance. Long ago men fought and died for their faith; but it took ages to teach them the other kind of courage,—the courage to recognize the faiths of their brethren and their rights of conscience. Tolerance is the first principle of community; it is the spirit which conserves the best that all men think. No loss by flood and lightning, no destruction of cities and temples by the hostile forces of nature, has deprived man of so many noble lives and impulses as those which his intolerance has destroyed.

Helen Keller's 1903 essay, Optimism



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.

Why Renew Your AIChE Membership?

Renew Membership



Renew your membership now to keep learning and growing.

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](#)

January: from the Past

7, 1913	Patent No. 1,049,667 was granted to William Burton for the manufacture of gasoline.
17, 1882	Leroy Firman received a patent for the telephone switchboard.
20, 1857	William Kelly patented the blast furnace for manufacturing steel.
28, 1807	London's Pall Mall became the first street lit by gaslight.
28, 1873	Patent No. 135,245 was obtained by French chemist Louis Pasteur for a process of brewing beer and ale.

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>

**Follow
 AICHE
 Chicago
 Online**

Officers Information

Chair	Jeff Zalc
Chair Elect	Ha Dinh
Chair Programming	Christopher Nicholas
Secretary	Ignasi Palou-Rivera
Social Media	Sanaz Taghvae
Treasurer	McKay Rytting
Directors at Large	Robert Tsai
	Pat Shannon
	Olha Zvarych
House Committee	Paolo Palmas
	Lance Baird
Newsletter Editors	Reza Mostofi
	Azita Ahmadzadeh

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.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.

