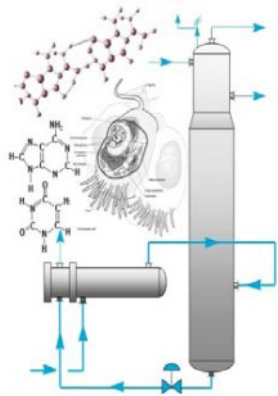


AIChE Chicago Section October 2023 Newsletter



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AIChE Chicago October Meeting *Sustainably Fueling the Future*



Gary Brierly

Business Development Manager

LanzaJet

Date: **Thursday, October 19, 2023**

Location: **Tap House Grill**

Address: **[56 W Wilson St, Palatine, IL 60067](http://www.thetaphousegrill.com/)**

<https://www.thetaphousegrill.com/>

Cost: **\$40 AIChE Global and Chicago Section Member**
\$50 Non-Member
\$15 Unemployed/Retired
\$10 Student

Registration and Information: **<https://cvent.me/KeNZrW>**

Agenda:

DATE

5:00-6:00 PM: Networking and Social hour

6:00-7:00 PM: Dinner

7:00-7:15 PM: Section Announcements

7:15-8:30 PM: Presentation and Q&A

Chair's Corner

Hello, AIChE Chicago section! By the time you're reading this, our 2 weeks of fall will likely be over and we'll be in the full swing of winter. Our fall might not last long, but I'm convinced there's no place better than Chicago from about September 21st to October 10th.

Thank you to who helped to organize a great September event to start off our programming year. Many of you made the trek to Arlington Heights and it was great to reconnect with old friends and make some new ones. It has all of us excited for the upcoming year, and we hope to see all of you at an upcoming event soon.

Our September speaker, Tom Traynor, is the Translation Leader at the Institute for Carbon Management (ICM) at UCLA. Tom's role in a nutshell is to help translate lab-scale technologies to commercialized products. He spoke about Equatic, one of the start-ups being incubated at ICM, and its novel carbon capture technology. Equatic leverages the (relatively) high concentration of carbon in the sea and the (also relatively) favorable kinetics of CO₂ absorption into water to sequester carbon in dissolved bicarbonate ions while simultaneously producing green hydrogen. Equatic's technology and Tom's talk were fascinating and generated some fun discussion around carbon capture. It was great to see everyone engaged and we will continue to work on bringing our members a diverse slate of monthly presentations in the upcoming months.

For October, we are excited to host a talk by Gary Brierley on October 19th in Palatine. Gary will be representing LanzaJet, one of a few Chicago-area companies working diligently to decarbonize air travel. In his talk, "Sustainably Fueling the Future," he'll be talking about how LanzaJet's alcohol-to-jet technology solves one of the primary constraints of the most common commercial SAF process today: feedstock availability. He'll also touch on the emission implications of different alcohol sources. Should be a fantastic talk! The meeting is open to the public, and PDH credits will be awarded for attendance of the technical presentation. Please plan to join the meeting as well as take this opportunity to invite your friends to give them exposure to our monthly meetings.



Looking further forward, planning for 2024 Midwest Regional Conference is in full swing. Please keep an eye out for the announcement and Call for Abstracts in your mailbox coming soon. The conference, hosted by the Chicago Section every year, provides a platform for our professionals to exchange technical knowledge, develop professional networks, and build the Chicago chemical engineering community. It takes a team of dedicated volunteers to organize an event of such scale, and we always welcome more help and contribution. Please reach out to this year's conference chair, Belma Demirel (belma.demirel@bp.com) if you would like to take part of the conference planning committee.

In closing, I am requesting any input, perspective, or ideas from the section that will help us meet your needs. What can the AIChE Chicago Section do for you? How can we meet your needs, help you build your career, help you find satisfaction in your professional life? Anything is welcome. Please reach out anytime to me at chair@aichechicago.org. Thank you!

McKay Rytting

AIChE Chicago Section Chair

AIChE Senior Member

October Meeting Speaker Information

Sustainably Fueling the Future

Speaker's Bio:

Gary Brierley is the Business Development Manager at LanzaJet, a leading sustainable fuels technology and production company, based in Deerfield, Illinois. Gary is Canadian by birth and holds a BSc in Chemical Engineering from the University of Toronto. He spent the first 16 years of his career working for Syncrude Canada Ltd in Northern Alberta, primarily in operations roles for hydrogen production as well as hydrotreating and mild hydrocracking of bitumen-derived streams. He emigrated to the USA in 1996 and spent the next 24 years working for UOP LLC in Des Plaines, Illinois, primarily in hydroprocessing technical sales. Gary specialized in synthetic crude production projects and shale oil upgrading projects. He was also the Global Sales Leader for UOP's hydrocracking catalyst business and led the sales effort for UOP's new slurry hydrocracking technology.



Abstract:

The aviation industry contributes roughly 2.5% of the world's global CO₂ emissions and is one of the most difficult sectors to decarbonize. The use of sustainable aviation fuel (SAF) is recognized to be the primary means by which CO₂ emissions can be reduced to meet the industry's target to become net zero by 2050. The current production of SAF is less than 0.1% of the global aviation fuel demand. In the US last year, only 16M gallons of SAF were produced, while nearly 100B gallons of jet fuel was consumed on a global basis. There are several approved production pathways for SAF, but the most common one today is HEFA technology, which uses animal fats and used cooking oil, which are limited in supply availability. LanzaJet's ethanol-to-jet technology has the ability to use the large supply of ethanol available today, while incentivizing the production of second-generation ethanol from waste streams to produce jet fuel with a low, or even negative carbon intensity. LanzaJet has set an aspirational goal of having more than one billion gallons per year of SAF production by the year 2030.

Registration: <https://cvent.me/w5mNVQ>

Special Notice on PDH Credits for Meeting Attendees:

We have switched to a fully digital process for tracking attendance and distributing PDH credits. There will be a board member with a phone or tablet at each meeting recording attendance digitally, which should streamline the process. Make sure to find them and sign in at the next meeting!



MRC-16 Spring 2024

The AIChE Midwest Regional Conference (MRC) continues into its 16th year. Organized by the [Chicago Local Section](#) and hosted at [Illinois Institute of Technology \(IIT\)](#), MRC-16 provides an opportunity for engineers and scientists in the region and beyond to learn about new technologies and refresh their knowledge, as well as network with peers. Abstracts may be submitted for the following topics:

- Advances in Refining & Biorefining Technology
- Bioengineering & Nanotechnologies
- Catalysis & Reaction Engineering
- Energy Storage
- Environmental Compliance & Remediation
- Fluid Properties, Fluid Dynamics, & Transport Phenomena
- Green Engineering & Climate Solutions
- Machine Learning & Optimization
- Polymer Science
- Process Safety & Occupational Health
- Other Emerging Topics in ChE

Submission Timelines—To be Determined

MRC is currently scheduled to be held *in-person* at Illinois Institute of Technology. Conference date and timelines will be announced soon.

AICHE MIDWEST REGIONAL CONFERENCE (MRC) VOLUNTEERS NEEDED!

AICHE CHICAGO HOSTS A MIDWEST REGIONAL CONFERENCE FEATURING TECHNICAL PRESENTATIONS FROM BOTH INDUSTRY AND ACADEMIA EACH SPRING. VOLUNTEERS ARE NEEDED TO HELP PLAN THIS EVENT. WE NEED VOLUNTEERS TO HELP WITH PROGRAMMING, WEBSITE, REGISTRATION, ADVERTISING, CATERING, HIGH SCHOOL OUTREACH AND MORE!

IF YOU ARE INTERESTED IN HELPING OUT OR LEARNING MORE

EMAIL

BELMA.DEMIREL@BP.COM

AZITA.AD@GMAIL.COM



September Meeting Photos

Remember to check out our [Facebook page](#) for more photos and news!



National Chemistry Week

October 15-21, 2023

National Chemistry Week

Topic: Medicinal Chemistry



National Chemistry Week (NCW) is a public awareness campaign that promotes the value of chemistry in everyday life. ACS members and chemistry enthusiasts celebrate NCW by coordinating events and communicating the importance of chemistry. [Read more about NCW.](#)

National Chemistry Week (#ACS_NCW) is celebrated this year during the week of October 15-21, with the theme “The Healing Power of Chemistry.” Chemistry plays a crucial role in formulating the medicines we take when we get sick, developing the vaccinations we roll our sleeves up for, and testing the blood samples that we provide at our doctors’ offices.

The theme recognizes the tremendous advances made by medical professionals and scientists with inspiration from ancient peoples’ habits, from plants and animals in the wild, and from our own bodies’ mechanisms to prevent, fight, heal, and restore us to health. Did you know, currently about 11 percent of all medicines considered “essential” by the World Health Organization (WHO) are derived from flowering plants?

Newest AIChE 35 Under 35 Recipients Announced

originally published on AIChE website (October 2023) - [link](#)

The AIChE 35 Under 35 Award honors 35 chemical engineering professionals under the age of 35 who have made great contributions to the field, as well as to AIChE. These young individuals will pave the way for future generations, serving as role models and innovators. The recipients of the awards were selected for their achievements and contributions in one of seven different categories:

- bioengineering (6 winners)
- chemicals and materials (9 winners)
- education and outreach (2 winners)
- energy and environment (6 winners)
- innovation and entrepreneurship (3 winners)
- leadership (7 winners)
- safety (2 winners)

AIChE®
35UNDER35

2023 AIChE Annual Meeting: Leading the Way to a Sustainable Future

The AIChE Annual Meeting is the premier educational forum for chemical engineers interested in innovation and professional growth. Academic and industry experts will cover a wide range of topics relevant to cutting-edge research, new technologies, and emerging growth areas in chemical engineering.

Links: [Conference Website](#) [Technical Program](#)
[Register](#) [Meeting FAQ](#)



Meet AIChE's 2023 Election Candidates

In April, AIChE's Nominating Committee announced the slate of candidates for president-elect, treasurer, and four directors for the Institute's 2023 election.

Voting by paper and electronic proxy ballot will begin on **September 11 and end on October 16**. The election results will be announced at the Annual Business Meeting.

[Link to website](#)



2023 Election Timeline

May 15 – Petition Candidate Cut-Off Date

August 21 – Election Ballot Mail Date

September 11 – Election Commences

October 16 – Election Ballot Receipt Deadline

November 6 – Election Results Announced at the AIChE Annual Meeting in Orlando, FL

2023 Meeting Schedule and Speakers

Month	Date	Speaker	Affiliation	Topic
Oct	19th	Gary Brierly	LanzaJet	Sustainably Fueling the Future

Upcoming AIChE Conferences, Meetings and Webinars

AIChE Conferences

Oct 17-18, 2023	2023 Ethylene Middle East Technology Conference (EMET) , Grand Hyatt Al Khobar, Kingdom of Saudi Arabia
Oct 17-19, 2023	6th International Conference on CRISPR Technologies , The Revere Hotel Boston Common, Boston, MA, USA
Oct 18, 2023	CCPS and DNV Present Process Safety in Africa (virtual)
Oct 19, 2023	CCPS Latin America Regional Meeting , Cartagena, Colombia
Oct 22-24, 2023	2023 AfroBiotech Conference , Hyatt Centric Midtown Atlanta, Atlanta, GA, USA
Oct 24-25, 2023	2023 Global Conference on Process Safety and Big Data , DECHEMA House, Frankfurt am Main, Germany
Oct 24-26, 2023	2023 OTC Brazil , Sulamerica Convention Center, Rio de Janeiro, Brazil
Oct 24-25, 2023	2023 Diversity and Equity Accelerator through Learning for Startups , Hyatt Centric Midtown Atlanta - Atlanta, GA, USA
Nov 5-10, 2023	2023 AIChE Annual Meeting , Hyatt Regency Orlando, Orlando, FL

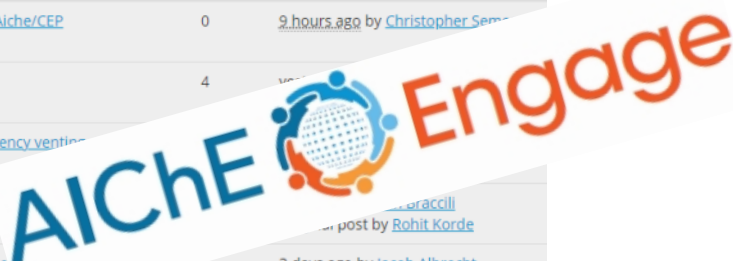
AIChE Webinars

Oct 19, 2023	PD2M Meet the Leader: Paul C. Collins
Nov 2, 2023	Innovations in Control of Work: Transforming Chemical Engineering Safety

[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 Christopher Sem
PhD Thesis	4	
Pressure setting for manway cover for tank emergency venting		
Digitalization in the process industry		Original post by Rohit Korde
Slow Progress of New-Age Tools in Chemical Engine		3 days ago by Jacob Albrecht Original post by Kushal Sinha



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 15th**.

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>



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, 2024**.

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>

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.

Young Professionals Committee (YPC) Chicago Section

AIChE's Young Professionals Committee (YPC) Chicago Section was created to start and maintain young professionals' involvement in AIChE after graduation and to ensure that students retain their membership through their transition into the work force.

We enthusiastically welcome all people with a degree in Chemical Engineering, including those currently working in industry and academia, recent graduates, and those pursuing other paths. We also welcome current students – both undergraduate and graduate – to our events.

The Chicago YPC exists as a subset of the AIChE Chicago section.

Our goal is to provide technical, career, and networking opportunities to young Chemical Engineering professional in the Chicagoland area. To accomplish this, we seek to provide a variety of technical and social activities, provide outreach and volunteering opportunities, and to create programming that will appeal to ChemE's under the age of 35.

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

Email us: yp.aichechicago@gmail.com

Connect with us: We have a facebook group under YPC Chicago!

Join our mailing list: We have google group under ypcchicago!

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 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](#)

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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Chicago
Online**

Officers and Committee Members

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Chair Elect	<i>Matt Walters</i>
Past-Chair	<i>Sarika Goel</i>
Programming	<i>Aida Amini Rankouhi</i>
	<i>Yechan Won</i>
Treasurer	<i>Adam Kanyuh</i>
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	<i>Janet Werner</i>
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Publicity Committee	<i>Sanaz Taghvaii Arabi</i>
Young Professionals Committee	<i>Ruben Barajas</i>
Newsletter Editors	<i>Rosmer Chirino</i>
	<i>Alfred Sunaryo</i>
	<i>Robert Tsai</i>
	<i>Yechan Won</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!

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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.

