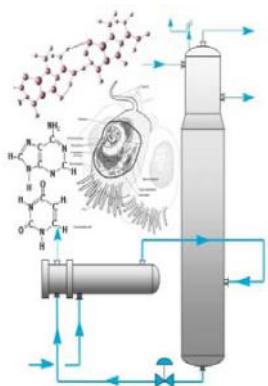


December Newsletter

Chicago Section

www.aiche.org/Chicago

December 2022



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GOODBYE 2022



2023

Remember! Renew your AIChE Membership
by 12/31/2022

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

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

SAVE THE DATE

Joint ACS/AIChE - Chicago Section January 2023 Meeting

Speaker	Professor Mercouri Kanatzidis
Topic	A new era in solar energy conversion and optoelectronics enabled by perovskites
When	Thursday, January 19, 2023

Biography:

Mercouri Kanatzidis was born in Thessaloniki, Greece in 1957. After obtaining a B. Sc from Aristotle University in Greece, he received his Ph D. in chemistry from the University of Iowa in 1984. He was a post-doctoral research associate at the University of Michigan and Northwestern University from 1985 to 1987 and is currently the Charles E. and Emma H. Morrison Professor of Chemistry at Northwestern University. Mercouri moved to Northwestern in the fall of 2006 from Michigan State University where he was a University Distinguished Professor of Chemistry since 1987.

Mercouri also holds an appointment at Argonne National Laboratory and is the editor in chief of the Journal of Solid State Chemistry.



<https://chemgroups.northwestern.edu/kanatzidis/>

<https://chemistry.northwestern.edu/about/news/2022/mercouri-kanatzidis-2022-global-energy-laureate.html>

Abstract:

Three- and Two-dimensional (3D and 2D) halide perovskites are a larger class of organic-inorganic compounds that in the last decade have emerged as outstanding semiconducting materials thanks to their superior carrier lifetime and structural diversity. These materials have demonstrated record-breaking efficiencies in solar cell performance, light-emitting devices, and radiation detection. They have defined a new and ever-growing field of optoelectronic device research which requires a systematic understanding of the effects of the spacer on the structure, properties, and device performance. This presentation will focus on the current knowledge of structure-property relationships and discuss guidelines on successfully choosing organic spacer cations and incorporating them into crystalline materials and optoelectronic devices. Useful insights are emerging on what kind of organic spacer cations can stabilize various perovskites.



MRC-15

April 11-12, 2023

The AIChE Midwest Regional Conference (MRC) continues into its 15th year. Organized by the [Chicago Local Section](#) and hosted at the [University of Illinois Chicago \(UIC\)](#), MRC-15 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 Timeline

Abstract Submission Deadline: Monday, January 9, 2023

Acceptance Status: Monday, January 30, 2023

Draft Presentation or Poster Submission: Friday, March 17, 2023

MRC is currently scheduled to be held *in-person* at UIC. Any changes to conference format will be announced as early as possible. The planning committee is continuing to monitor local, state, and federal guidance related to in-person conferences. COVID-19 safety protocols will be provided in the weeks leading up to the conference.

CALL FOR ABSTRACTS

AICHE MIDWEST REGIONAL CONFERENCE 2023

APRIL 11 -12 @ UNIVERSITY OF ILLINOIS AT CHICAGO

ABSTRACT SUBMISSION
DEADLINE: JANUARY 9, 2023



TOPICS INCLUDE:

- 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



November Meeting Photos

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



2023 Meeting Schedule and Speakers

Month	Date	Speaker	Affiliation	Topic
January	Thurs 19th	Prof. Mercouri Kanatzidis	Northwestern	A new era in solar energy conversion and optoelectronics enabled by the humble halideperovskites?

Upcoming AIChE Conferences, Meetings and Webinars

AIChE Conferences	
Dec 19, 2022	4th Engineering Sustainable Development Conference , Virtual
Dec 19, 2022	5th Water Conference , Virtual
Jan 8-11, 2023	ICBE 2023 - 12th International Conference on Biomolecular Engineering , Hyatt Centric Santa Barbara, CA
Jan 17, 2023	CCPS Pharma, Food, and Fine Chemicals Workshop - Effectively Managing Reactive Chemistry Risks—Part 2 , Virtual
Jan 24, 2023	RAPID Technology Showcase Featuring Compact Membrane Systems
Jan 25, 2023	PD2M Meet the Leader Forum: Dr. Patricia Hurter , Live Webinar
Jan 26, 2023	Liquid Hydrogen: Safety and Design Considerations , Live Webinar

December In History

Some Notable Birthdays

December 12

1833: Matthias Hohner, German manufacturer of harmonicas.

1866: Alfred Werner, Swiss chemist and winner of the Nobel Prize in 1913.

December 17

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

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

December 20

1805: Thomas Graham, founder of colloid chemistry.

1868: Harvey S. Firestone, industrialist and founder of Firestone Tires.

December 29

1776: Charles Macintosh, Scottish chemist and inventor of waterproof fabric.

1800: Charles Goodyear, inventor of the vulcanization process for rubber.

December 30

1851: Asa Griggs Candler, founder of the Coca-Cola Company.

Some Notable 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.

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, 2023**.

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>

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

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>



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.

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.

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

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<https://www.facebook.com/AIChEChicagoSection>
<https://www.linkedin.com/groups/4538581>
<https://www.aiche.org/community/sites/local-sections/chicago>

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Chair Elect	<i>McKay Rytting</i>
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	<i>Aida Amini Rankouhi</i>
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	<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.

