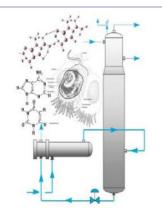
## AIChE Chicago Section

**Chicago Section** 

www.aiche.org/Chicago

January 2023



#### Inside this issue:

January Meeting Info	1
Chair's Corner	2
January Speaker Info	3
MRC 2023	4
2023 AIChE Chicago Meeting Schedule	6
Upcoming AIChE Events	6
Scholarship Information	6
January History	7
Thiele Award Nomination	7
Volunteer Opportunities	8



Joint ACS/AIChE January 2023 Meeting			
Speaker:	Professor Mercouri Kanatzidis Northwestern University Department of Chemistry		
Торіс:	A New Era in Solar Energy Conversion Enabled by Perov- skites		
Date/ Registration Deadline:	Buffet Dinner Registration Deadline: 12 PM on Friday, January 13 Lecture-only Registration Deadline: 11 AM on Wednesday, January 18		
Program:	Thursday, January 19, 20235:30 - 6:20Check-in and Social Hour6:20 - 7:15Buffet Dinner7:15 - 7:30Announcements7:30 - 8:30Technical Presentation with Q&A8:30 - 8:35Closing Remarks		
Where:	Reza's Restaurant 1557 Sherman Ave Evanston, IL 60201 (847) 999-3555 Parking is on the street or in nearby garages ( <u>LINK</u> ) Click link for map and to get directions ( <u>LINK</u> )		
Click to View Event Summary and Register			
Cost:	<ul> <li>\$40 for ACS &amp; AIChE members</li> <li>\$45 for nonmembers</li> <li>\$25 for students</li> <li>No cost for attending the lecture only, either on-site or online</li> </ul>		
(To donate or learn about the local section student's scholarship program, please go to this page.)			

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



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 postdoctoral research associate at the University of Michigan and Northwestern University from 1985 to 1987 and is currently the the Charles E. and Emma H. Morrison Professor of Chemistry at Northwestern University. Mercouri moved to Northwestern in the Page 3

## **Chair's Corner**

Happy New Year to all! I hope you and your family had a wonderful holidays and a great start of 2023. End of 2022 brought few changes for me and I want to keep you all updated on this front. At the end of December, I (along with my family) moved from Illinois to California and slowly trying to settle at the new place. Although I have moved out of Illinois, I will continue to chair the section and of course, I would not be able to do any of this without the support of our amazing AIChE Chicago section board members as well as volunteers. I am really grateful to receive enormous support from the group and with their



help and support, I will continue to chair and make sure the section activities runs smoothly.

We are starting off 2023 with the January joint meeting with the Chicago Section of American Chemical Society (ACS). Given the common interests and collaborations between chemical engineering and chemistry community, it is a great opportunity to network and learn about both fields. We are really looking forward to meeting and connecting with members of both organizations and learn about solar energy conversion at the same time.

The MRC committee has been making great progress

(<u>https://www.aiche.org/conferences/midwest-regional-conference/2023</u>). Call for abstracts is now open so please consider submitting an abstract for an oral presentation or poster and help us put the words out to your colleagues and/or potential speakers. Please reach out to Conference Chair, Dr. Jessica Morris at <u>jmorris@exponent.com</u>, if you would like to get involved in any capacity.

In addition to our technical programming, we have several volunteering opportunities coming up for our outreach programs such as MRC high school outreach program. You can reach out to <u>aichechicago@gmail.com</u> for more information or express your interest in participating. As always, I am requesting your support and ideas to help us do better and share your perspective on what you would like us to do more. Please reach out to us on <u>aichechicago@gmail.com</u> with your ideas/suggestions/comments/questions - everything is welcome. Thanks again for your continued support and I am looking forward to a wonderful 2023.

Sarika Goel AIChE Chicago Section Chair AIChE Senior Member

#### Page 1

fall of 2006 from Michigan State University where he was a University Distinguished Professor of Chemistry since 1987.

Prof. Kanatzidis holds a dual appointment as Senior Scientist at Argonne National Laboratory and is the Editor-in-Chief of the *Journal of Solid State Chemistry*. He was recently named a 2022 Global Energy Prize Laureate, which recognizes outstanding scientific research and technical developments in the field of energy that promote greater efficiency and environmental security for energy sources on Earth in the interests of all mankind. Mercouri is the laureate in the Nonconventional Energy category: for major advances made in solar energy conversion with the use of novel perovskite halides.



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

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

#### Abstract:

Two- and three-dimensional halide perovskites are a class of organic-inorganic compounds that are outstanding semiconducting materials due 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 also defined a new, expanding field of optoelectronic device research requiring systematic understanding of the effects of organic spacers on their structure, properties, and device performance. This presentation will focus on current knowledge of structure-property relationships for incorporating organic spacer cations to stabilize crystalline perovskites for use in optoelectronic devices. AICHE CHICAGO SECTION

# AICHE" MIDVEST REGIONAL CONFERENCE

## MRC-15 April 11-12, 2023

The AIChE Midwest Regional Conference (MRC) continues into its 15th year. Organized by the <u>Chicago Local Section</u> and hosted at the <u>University of Illinois Chicago (UIC)</u>, 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 (Extended): Monday, January 30th, 2023 Acceptance Status: Monday, February 6th, 2023 Draft Presentation or Poster Submission: Tuesday, April 4th, 2023

#### Submit Abstract

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.



## **AICHE MIDWEST REGIONAL CONFERENCE 2023**

#### APRIL 11 -12 @ UNIVERSITY OF ILLINOIS AT CHICAGO

**ABSTRACT SUBMISSION DEADLINE: JANUARY 30, 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** 





PAGE 6

#### 2023 Meeting Schedule and Speakers

Month	Date	Speaker	Affiliation	Торіс
January	Tuesday 19th	Prof. Mercouri Kanatzidis	Northwestern	A New Era in Solar Energy Conversion Enabled by Perov- skites
February	TBD	TBD	TBD	TBD

#### Upcoming AIChE Conferences, Meetings and Webinars

AIChE Conferences		
Jan 17, 2023	CCPS Pharma, Food, and Fine Chemicals Workshop - Effectively Manag- ing 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	, 2023 Liquid Hydrogen: Safety and Design Considerations, Live Webinar	
Jan 26, 2023	n 26, 2023 ChemE Cube 2023: Direct Air Capture Webinar, Live Webinar	
Jan 31, 2023	Roadmapping Workshop #3: Prioritizing Virtual Training Development Needs, San Jacinto College: Central Campus, Pasadena, TX	

## **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

#### CHICAGO SECTION

#### January: from the Past

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

#### 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

#### <u>NOMINATIONS REQUESTED FOR</u> <u>THE ERNEST W. THIELE AWARD</u>

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:

 $\underline{https://www.aiche.org/community/sites/chicago-local-section/ernest-w-thiele-award}$ 

 $\underline{https://www.aiche.org/community/sites/local-sections/chicago/thiele-award-past-winners}$ 

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

## 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 <u>aichechicago@gmail.com</u>.

#### Why Renew Your AIChE 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



Renew Membership

#### 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 Christian
PhD Thesis	5	Engus
Pressure setting for manway cover for tank emerging	ES	tai Ramdeo
Digtalization in the process industry		<u>yesterday</u> by <u>John Braccili</u> Original post by <u>Rohit Korde</u>
Slow Progress of New-Age Tools in Chemical En	6	<u>3 days ago</u> by <u>Jacob Albrecht</u> Original post by <u>Kushal Sinha</u>

#### 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.
- 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<sup>™</sup>, 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** 

#### CHICAGO SECTION

#### AICHE CHICAGO SECTION

AIChE Chicago Section 13964 Doral Lane Homer Glen, IL 60491 <u>aichechicago@gmail.com</u>

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



#### Officers and Contact Information

#### We want you for AIChE-Chicago!

Chair	Sarika Goel
Chair Elect	McKay Rytting
Past-Chair	Ha Dinh
Programming	Belma Demirel
	Aida Amini Rankouhi
Treasurer	Jeffrey Zalc
	Jarad Champion
Directors at Large	Janet Werner
	Robert Tsai
Logistics Committee	Lance Baird
	Kashif Uddin
Publicity Committee	Sanaz Taghvaii Arabi
Young Professionals	Ruben Barajas
Nouveletter Editors	Yechan Won
Newsletter Editors	Robert Tsai

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/localsections/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 <u>aichechicago@gmail.com</u> with "newsletter article" as a subject line.

