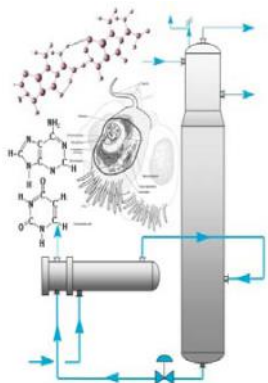


February Newsletter

Chicago Section

www.aiche.org/Chicago

February 2018



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Particle Technology Conference

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Thiele Award

AIChE Chicago February Meeting & UL LLC Tour

The Science of Flammable Refrigerants

Mark Skierkiewicz

Staff Engineer, UL LLC



Date: **Thursday, February 22, 2018**

Where: **Demetri's**

Address: **660 Lake Cook Rd., Deerfield, IL 60015**

Cost: **Local Section Members—\$40**
Non-Members—\$45
Unemployed—\$15
Students—\$10

Registration and Information: <http://www.cvent.com/d/vtqt9/4W>

Agenda

4:45-5:00: Meet at UL
5:00-6:30: Tour of UL.
5:45-6:45: Meeting registration at Restaurant
6:45-7:45: Dinner
7:45-8:00: Section Announcements
8:00-9:00: Technical presentation

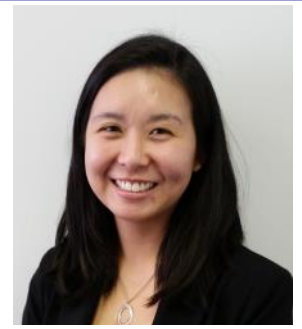


REGISTER ONLINE TILL
FEBRUARY 28TH AND SAVE!

Register Here for MRC 10: <http://www.cvent.com/d/4tq141/4W>

Chair's Corner

While on vacation in Alaska last year, I visited a bear sanctuary. As the sanctuary employee stated facts about bears, I heard an interesting snippet -- "The concrete bear pens actually used to be wastewater tanks for an abandoned paper mill." That simple fact made me look at the space in a completely different light. It also made me think about how all things can be reapplied or updated based on current needs.



Companies modernize or rebrand to stay relevant with current practices and trends. OPI is one of the most popular brand of nail polishes, but did you know that it originally started as a [dental supply company](#)? Sears is another example. It may be on the decline now, but as a company that is over 100 years old, [it went through many changes to grow and stay relevant to its customers](#).

AICHE Chicago has filled the same professional functions and missions for many years, but in the vein of modernizing, we are in the process of updating our Chapter By-laws, which have not been updated in around 20 years. The proposed by-laws update aligns with current standards for AICHE local sections and also modernizes the concepts and verbiage based on current practices, needs, and volunteer levels. Please read the newsletter to see more information about the proposed by-laws, and if you have any questions regarding them, please feel free to email us (aichechicago@gmail.com).

By updating our by-laws, we are re-applying our same mission to the modern standards and needs. In a few short years, AICHE Chicago will be approaching its 100 year anniversary, and we hope that the by-laws update will help us continue to serve our members.

Janet Werner

Chair, 2017-2018

February Meeting Information

Mark Skierkiewicz

The Science of Flammable Refrigerants

Speaker's Bio:

Mark Skierkiewicz has been employed as an engineer at UL for over 12 years. During that time Mr. Skierkiewicz was responsible for evaluating/investigating heat pump, air conditioning, ventilation and process cooling products for domestic and international markets. Mr. Skierkiewicz also has knowledge of US and International regulatory standards, approval and testing requirements. Mr. Skierkiewicz holds a bachelor's degree in Mechanical Engineering, a master's degree in Mathematics and is a licensed Professional Engineer in the State of Illinois. He is a Member of ASHRAE, participates in the multidisciplinary task group for Low Global Warming Potential (LowGWP) refrigerants and is a corresponding member of ASHRAE TC5.10.

To Register:

<http://www.cvent.com/d/vtqt9/4W>

Abstract:

The phase-out and restriction of the most common and widely used refrigerants was initiated



ed in the late 1980's and has spurred innovation, both for the alternative refrigerants that have been introduced as well as the equipment that uses them. Several refrigerants have been identified as potential replacement for refrigerants currently used in HVAC and refrigeration systems. Safety evaluation of these refrigerants requires an understanding of refrigerant flammability in representative-scale settings so that equipment can be appropriately designed and installed for safe operation.

This presentation will provide an introduction on the current status of codes and standards in the United States and Canada. Research on the use of these refrigerants has both been conducted to determine the efficiency of equipment as well as to determine hazards that could exist if the refrigerants were to be introduced into occupied spaces. The appli-

cations for Heating, Ventilation, Air Conditioning and Refrigeration (HVAC/R) equipment varies greatly depending on the global region that it is installed. Because the equipment varies, the research conducted covers a wide range as well. Testing is conducted at the small scale to determine and identify if the material is flammable and how quickly any flames will propagate. There has also been several full scale tests conducted to determine the interaction with occupied spaces during abnormal conditions. The research is being used to shape codes and standards and is being used to better design the next generation of HVAC equipment. However, as with all research there are limitations, and these past projects have identified additional questions that will need to be answered. There is ongoing and future planned research that will help answer some of these questions and ensure that the next generation of refrigerants can be implemented and used in a safe manner.

Volunteers Needed for DuPage STEM Expo

Join AIChE for a fun, free, family interactive outreach opportunity! We are looking for volunteers to help with our booth at the Annual STEM Expo (formerly E-Week Expo) on the IIT Rice campus in Wheaton, IL. Check out the flyer for the event [here](#). This event is geared towards K-12, and it's a great opportunity to educate a younger generation about chemical engineering! See event details below:

What: DuPage STEM Expo 2018

Where: IIT Rice Campus -- 201 East Loop Road, Wheaton, IL 60189

When: *Saturday, February 24th, Shift 1: 9:30 am - 12:30 pm, Shift 2: 12:30 pm - 3:30 pm*

RSVP: wernerjl@Middough.com by February 22nd (Please indicate which shift you would like to volunteer)

Cost: Free! We hope that you can join us and represent Chemical Engineering!

10th Annual Midwest Regional Conference



March 13-14, 2018

**Illinois Institute of Technology
Chicago, IL**

Midwest Regional Conference

Breakfast and
lunch included

MRC-10 (2018)

More information:

<https://www.aiche.org/chicago>

Share your passion about your job with high school students

Do you have a story to tell? Share a table with the future generations and help them understand what you do.

- *Develop your professional skills*
- *Learn about industrial sectors*
- *Network with others in the field*
- *Advance your career*

7 Keynote and Plenary Lectures

6 Career Development Sessions

18 Technical Sessions

14 Professional Development Hours

Keynote Speakers :

Jim Rekoske, Chief Technology Officer,
UOP/Honeywell

John A. Rodgers, Professor, [Northwestern University](#)

Doraiswami Ramkrishna, Distinguished
Professor, [Purdue University](#)

Plenary Speakers:

Thomas Foust, Director, National Bioenergy
Center, [NREL](#)

Kimberly Gray, Professor and Chair, Civil and
Environmental Engineering, [Northwestern University](#)

Christopher W. Jones, Professor and
Associate Vice President for Research,
[Georgia Tech](#)

Russell A. Ogle, Principal Engineer, [Exponent](#)



For more
information scan
the QR code



Online Registration Deadline February 28, 2018

Young Professionals Social

Where

10th Annual AIChE Midwest Regional Conference

The BOG (lower level of Herman Hall)

When

Evening (TBA)

Tuesday, March 13th

What

Have some fun!

- Alumni Bowling Competition
- Networking
- Refreshments



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 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](#)



DON'T MISS THE PREMIER EVENT ON RESEARCH IN PARTICLE SCIENCE + TECHNOLOGY.

EARLY REGISTRATION NOW OPEN [CLICK HERE TO REGISTER](#)

APRIL 22-26, 2018 • ORLANDO WORLD CENTER MARRIOTT • ORLANDO, FL

KEYNOTE SPEAKERS:

- Hamid Arastoopour,
Illinois Institute of Technology
- Rustom Billimoria, *ExxonMobil*
- Philip Chi Lip Kwok,
The University of Sydney
- Jeffrey Elam,
Argonne National Laboratory
- Liang-Shih Fan,
The Ohio State University
- Masayoshi Fuji,
Nagoya Institute of Technology
- Benjamin Glasser,
Rutgers University
- Stefan Heinrich,
Hamburg University of Technology
- William Heumann,
Heumann Environmental
- Christoph Mueller, *ETH Zürich*
- Wolfgang Peukert,
*Friedrich-Alexander-Universität
Erlangen-Nürnberg*
- James Ritter,
University of South Carolina
- Jennifer Sinclair Curtis, *University
of California, Davis*
- Chris Sinko,
Bristol-Myers Squibb
- Shankar Subramaniam,
Iowa State University
- Chika Takai,
Nagoya Institute of Technology

FEATURED EVENTS

WCPT8 plenaries will cover a wide range of topics, from mesoscience to nature-inspired design, contact charging, and the future needs in R&D. Learn and interact with international leaders in the field of particle science and technology.

Monday, April 23, 2018

Contact Charging in Granular Materials

Heinrich M. Jaeger, *University of Chicago*

Tuesday, April 24, 2018

Nature-Inspired Chemical Engineering – A Pathway to Innovation in Particle Technology

Marc-Olivier Coppens, *University College London*

Wednesday, April 25, 2018

Mesoscience: Opening a New Paradigm of Particle Technology

Jinghai Li, *Chinese Academy of Sciences*

Thursday, April 26, 2018

An Industrial Perspective on the Future Needs in Solids Processing Research and Education

Karl Jacob, *The Dow Chemical Company*

PLATINUM SPONSOR



GOLD SPONSORS



2018 Midwest Regional Conference Program at a Glance Tuesday, March 13th 2018

Up-to-date Information at:
<https://www.aiche.org/community/sites/local-sections/chicago/mrc10-2018>

7:30 AM - 10:30 AM	Continental Breakfast (Faculty Club)
8:45 AM – 10:00 AM	Morning Keynote (HH 002) - <i>Jim Rekoske, UOP/Honeywell</i>
10:00 AM – 10:15 AM	Networking Break
9:45 AM – 11:30 AM	Technical Sessions - <i>Process Safety I</i> (HH 002) - <i>Reaction Engineering</i> (HH 005) - <i>Panel Session: Work/Family Life Balance</i> (HH 010)
11:30 AM – 12:30 PM	Lunch with High School Outreach Participants (Ballroom and Expo Room)
12:45 PM – 1:45 PM	Afternoon Plenary Sessions - <i>Russell A. Ogle, Exponent</i> (HH 002) - <i>Christopher W. Jones, Georgia Tech.</i> (HH 005)
1:45 PM – 2:00 PM	Networking Break
2:00 PM – 3:15 PM	Technical Sessions - <i>Process Safety II</i> (HH 002) - <i>Catalysis I</i> (HH 005) - <i>Modeling of Biological Processes</i> (HH 003) - <i>YP Workshop: Entry Level ChE Experiences</i> (HH 010)
3:15 PM – 3:30 PM	Networking Break
3:30 PM – 4:45 PM	Technical Sessions - <i>Refining & Petrochemical Processing</i> (HH 002) - <i>Catalysis II</i> (HH 005) - <i>Tissue Engineering</i> (HH 003) - <i>Panel Session: Dealing with Difficult Co-Workers</i> (HH 010)
4:45 PM – 5:00 PM	Networking Break
5:00 PM – 6:30 PM	Poster Session (Gallery Lounge)

Two special sessions on “Particles Technology” and “Mixing Basics” by experts in the industry.



Congratulations to AIChE Chicago Member Bipin Vora

Bipin Vora is elected as a new member of National Academy of Engineering (NAE), Congratulations.

WASHINGTON — The National Academy of Engineering (NAE) has elected 83 new members and 16 foreign members, announced NAE President C. D. (Dan) Mote, Jr., today. This brings the total U.S. membership to 2,293 and the number of foreign members to 262. WASHINGTON — The National Academy of Engineering (NAE) has elected 83 new members and 16 foreign members, announced NAE President C. D. (Dan) Mote, Jr., today. This brings the total U.S. membership to 2,293 and the number of foreign members to 262.

Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer. Academy membership honors those who have made outstanding contributions to "engineering research, practice, or education, including, where appropriate, significant contributions to the engineering literature" and to "the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engineering education." Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer. Academy membership honors those who have made outstanding contributions to "engineering research, practice, or education, including, where appropriate, significant contributions to the engineering literature" and to "the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engineering education."

Individuals in the newly elected class will be formally inducted during a ceremony at the NAE's annual meeting in Washington, D.C., on Sept. 30, 2018. A list of the newly elected members and foreign members follows, with their primary affiliations at the time of election and a brief statement of their principal engineering accomplishments can be found here:

<https://www.nae.edu/MediaRoom/20095/177353/178117.aspx>

Vora, Bipin V., founder and principal consultant, Vora International Process Corp., Naperville, Ill. For catalytic process innovations leading to commercialized petrochemical technologies.

By-Laws Update Notification

The AIChE Chicago Section's by-laws have not been updated for more than 20 years. The board of directors has decided to update the by-laws to be in alignment with AIChE Global's current standards and current local section practices.

The Chicago Section has newly proposed by-laws based on the AIChE Global's model by-laws, revised for the Chicago Section. To review the full text of the proposed by-laws, For a summary of pertinent changes, please see below.

Any objections to proposed by-laws by members in good standing can be voiced at the next local section meeting (February).

Changes from existing by-laws

- ◆ Changes throughout the by-laws reflect the verbiage and standards in accordance of AIChE Global's current model by-laws. For additional information on difference between model by-laws and proposed by-laws, email aichechicago@gmail.com
- ◆ Jurisdiction of local section has the addition of Grundy, Kendall, and Will counties.
- ◆ Board of directors includes elected officials but not standing committees. This was done to provide more flexibility for purposes of quorum.
- ◆ Committees were consolidated, restructured, renamed, and/or reduced from 18 standing committees under 6 groups to 11 standing committees under 4 groups. This more closely reflects practices and volunteer levels of recent years.

Existing By-Laws:

- Public Outreach Group: Career Guidance Committee, Government Interaction Committee, Public Relations Committee
- Awards Group: Thiele Award Committee, Awards & Nominations Committee, Sponsorship Committee

- Program Group: House Committee, Meeting Program Committee, Symposium Committee
- Professional Development Group: Continuing Education Committee, Job Postings Committee, Professional Development Committee,
- Communications Group: Publicity Committee, Membership Committee, Constitution & By-laws Committee
- Liaisons Group: Industrial Liaisons Committee, Academic Liaisons Committee, Government Liaisons Committee

Proposed By-laws:

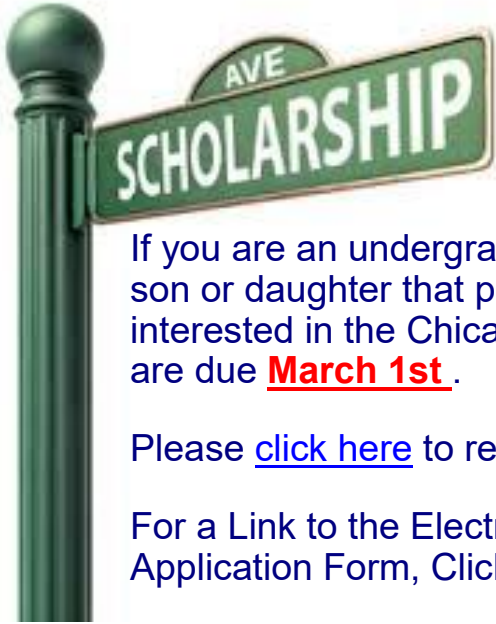
- ⇒ Programming Group: Meeting Programming Committee, Logistic Committee, Midwest Regional Conference Committee
- ⇒ Career Development Group: Engineering Outreach Committee, Young Professionals Committee, Professional Development Committee
- ⇒ Publicity Group: Newsletter Committee, Online Marketing Committee
- ⇒ Membership, Awards, and Service Group: Membership Committee, Scholarship Committee, Awards Committee
- ⇒ Verbiage related to committees being overseen by specific elected officers has been removed. This allows more flexibility in oversight of committees.

10th MIDWEST REGIONAL CONFERENCE SPONSORS

The Chicago section of the AIChE is grateful for the generous support of our conference sponsors!



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>

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 \$1000 honorarium presented at our sectional 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 1, 2018](#)

One of the highest honors a distinguished chemical engineer can receive is our Chicago Section Thiele award. Please consider nominating a deserving engineer for this prestigious award.

Jim Simnick

BP Amoco Complex, J-8

150 W. Warrenville Road, Naperville, IL 60566

Ph 630-420-5936, fax 630-420-4832

email: james.simnick@bp.com

2018 Midwest Regional Conference Program at a Glance Wednesday, March 14th 2018

Up-to-date Information at:
<https://www.aiche.org/community/sites/local-sections/chicago/mrc10-2018>

7:30 AM - 10:30 AM	Continental Breakfast (Faculty Club)
8:45 AM – 10:00 AM	Morning Keynote (HH 002) - <i>John A. Rodgers, Northwestern University</i>
10:00 AM – 10:15 AM	Networking Break
9:45 AM – 11:30 AM	Technical Sessions - <i>Process Engineering</i> (HH 002) - <i>Bio-Medical Engineering I</i> (HH 005) - <i>Bio-Interfaces</i> (HH 003) - <i>Panel Session: They Just Put Me in Charge of a Team - Now What Do I Do?</i> (HH 010)
11:30 AM – 12:30 PM	Lunch with High School Outreach Participants (Illinois A and Illinois B)
12:45 PM – 1:45 PM	Afternoon Plenary Sessions - <i>Thomas Foust, National Bioenergy Center, NREL</i> (HH 002) - <i>Kimberly Gray, Northwestern University</i> (HH 005)
1:45 PM – 2:00 PM	Networking Break
2:00 PM – 3:15 PM	Technical Sessions - <i>Electro-chemical Engineering</i> (HH 002) - <i>Bio-Medical Engineering II</i> (HH 005) - <i>Transport Phenomena I</i> (HH 003) - <i>YP Workshop: Mock Interviews</i> (HH 010)
3:15 PM – 3:30 PM	Networking Break
3:30 PM – 4:45 PM	Technical Sessions - <i>Bio-Based Products and Fuels</i> (HH 002) - <i>Bio-Medical Engineering III</i> (HH 005) - <i>Transport Phenomena II</i> (HH 003) - <i>Workshop: Job Search Essentials</i> (HH 010)
4:45 PM – 5:00 PM	Networking Break
5:00 PM – 6:00 PM	Local Section Dinner Reception (Ballroom)
6:00 PM – 7:00 PM	Local Section Dinner (Ballroom)
7:00 PM – 8:00 PM	Dinner Keynote (Ballroom) - <i>Doraiswami Ramkrishna, Purdue University</i>



Building a Global Community of ChEnections through AIChE®

Have you always thought about joining AIChE® but never got around to it?

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- The code: **COMMUNITY**
- Our **ENTITY** name along with first and last name in the field of "Who referred you to join?"

Chicago Section

Visit www.aiche.org/community/membership today and start building your **Global Community of ChEnections**.

Here's a sampling of the top benefits more than 53,000 AIChE members in 110 countries have taken advantage of:

- One-year subscription to **CEP Chemical Engineering Progress®** (in print and online). AIChE's flagship publication is included in your dues.
- Preferred rates on **AIChE conferences** — attend just one conference a year and your AIChE membership pays for itself
- Free, unlimited access to the **AIChE eLibrary**, featuring the Knovel® Life Sciences collection
- Six free annual credits to use on AIChE webinars and conference presentations from **AIChE Academy**
- Free **career resources** and **services**
- And much more...



Volunteers Needed for MRC 2018

If you have an interest in volunteering for Midwest Regional Conference activities, please contact Reza Mostofi (mostmoh@gmail.com). The MRC 2018 will be held March 13-14th, 2018 at IIT. More information is available at the conference website:



<https://www.aiche.org/community/sites/local-sections/chicago/mrc10-2018>

Volunteers Needed for Chicago Local Section

The AIChE Chicago Section needs volunteers to help with:

- **House (Logistics) Committee** - Organize restaurant and food for monthly meetings
- **Newsletter Editing** - format, edit, and draft newsletters
- **Newsletter Contributions** - write meeting summaries, contribute photos, interview members, or write newsletter pieces
- **Welcoming and Registration** – help at registration desk for monthly meetings, develop membership initiatives
- **Awards** – coordinate nominations for AIChE awards

If you have an interest in either of these positions or if you want to volunteer for any other committee, please contact email aichechicago@gmail.com .

AIChE Chicago is now on Facebook and LinkedIn!



Like us on Facebook www.facebook.com/AIChEChicagoSection



Join our group on [LinkedIn!](#)

Upcoming AIChE Conferences, Meetings and Webinars

Chicago Local Meetings

Feb 22, 2018

February Monthly Meeting, Northbrook

Mar 13-14, 2018

Midwest Regional Conference, IIT, Chicago

Apr 10, 2018

Annual Poster Session and April Monthly Meeting, UIC, Chicago

AIChE Conferences

Mar 13–14, 2018

[10th Annual Midwest Regional Conference](#), Chicago, IL

Apr 22-26, 2018

[2018 Spring Meeting and 14th Global Congress on Process Safety](#), Orlando, FL

June 5-7, 2018

Process Development Symposium, Oakbrook, IL

Officers and Contact Information

Chair	Janet Werner
Chair Elect	Mike Schultz
Chair Programming	Beth Carter
	Robert Tsai
Secretary	Nick Guzman
Treasurer	Joe Guido
Directors at Large	Adam Kanyuh
	Dennis O'Brien
	Ellen Kloppenborg
House Committee	Arwa Hasan
	Asmara Soomro
Newsletter Editors	Azita Ahmadzadeh azita.ad@gmail.com
	Janet Werner Janet.werner8@gmail.com

AICHE CHICAGO SECTION

American Institute of Chemical Engineers
Chicago Section
13964 Doral Lane
Homer Glen, IL 60491
aichechicago@gmail.com



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.

AICHE Publicity Committee Fees	Academic (non-AICHE)		Company		Recruiters	
	Per Month	Per Year	Per Month	Per Year	Per Month	Per Year
Advertisements (3X3)	100	450	150	675	N/A	N/A
Half-Page (~7"x 4.5")	280	1260	420	1890	N/A	N/A
Job Posting (Size?)	50	225	100	450	250	N/A
Special Sizing	Contact Publicity Committee aichechicago@gmail.com					

For the purchase of a year ad, customers have the option of changing ads/jobs month to month. Online payment can be done using <http://www.cvent.com/d/9cq5pw/4W>

Student and AIChE Member Related Postings are Free.

