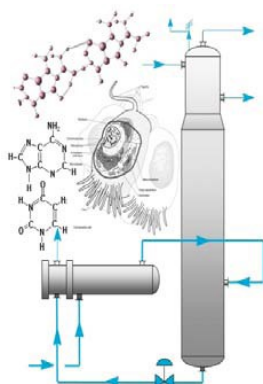


December Newsletter

Chicago Section

www.aiche.org/Chicago

December 2018



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Season's Greetings

AIChE Chicago December Social

Friday, Dec 14, 2018

7:00—9:00 PM

Lincoln Park Zoo Lights

2001 N Clark St, Chicago, Illinois 60614, USA

LINCOLN PARK ZOO (WEST GATE)

FREE OF CHARGE - INFORMAL GATHERING

Event Information

*Remember! Renew your AIChE Membership
by 12/31/2018*

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

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

Chair's Corner

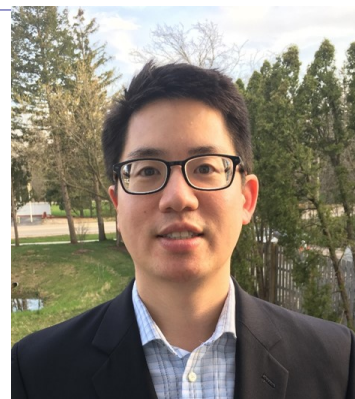
Season's Greetings!

2018 is drawing to a close, and like every year, I am stunned by how quickly time went by. I want to wish everyone a safe and happy holiday season. The days are quite cold lately, but I hope you are able to spend them in the warm company of family and friends.

The end of the year is an occasion to reflect. Most, if not all of us, have had unanticipated issues arise while working on a project that have necessitated a shift in attention. My experience here has been no different. As I think back on stepping into the role of section chair just a few months ago, I remember wanting to focus on membership and outreach. These activities of course remain extremely important to me, and I feel we have been successful thus far in terms of publicity and attendance at meetings and other events. We will continue to work hard to deliver as well as improve on these core functions.

However, I have also found myself involved in matters I did not foresee being very conscientious of. One such area has been the financial operations of the section. Per standard procedure, the leadership team reviewed the financial situation during the summer transition period and then agreed on a finalized budget around the beginning of the programming year. This aspect of our organization has been managed well – in no small part due to a history of excellent treasurers – but typical of a society of engineers, we have also been mindful of potential ways to do things better.

Plans to adjust our infrastructure in this regard have recently been set in motion, thanks largely to the commendable efforts of Jeff Zalc and Ben Ketter, and I believe we are



headed in a positive direction. I am furthermore optimistic there will be a means to ultimately pass along the benefits from these changes to our general membership in some form – perhaps opening options for our monthly meetings or creating opportunities for other programs. Returning to my earlier thoughts on the unexpected, this endeavor has now become one of our initiatives that I am most eager to see through. On that note, I am quite enthusiastic about what is in store for 2019 and hope that you are too!

Bob Tsai

*Chair, 2018-2019
AIChE Chicago*

November Meeting Summary

The Ram Restaurant & Brewery in Rosemont near the intersection of Higgins and River Road was a great location for November's meeting. Despite the light snow, it was an easy drive to the venue which had a cozy room for us and \$3 beers to help raise the cheer even further for the approximately 30 attendees. There was a good mix of recent grads, working engineers, and retirees to make for good networking opportunities all around.

Dr. Jennifer Reed, the Harvey D. Spangler Faculty Scholar and Professor in the Department of Chemical and Biological Engineering at the University of Wisconsin-Madison, was our invited speaker and discussed the interesting work from her group on Systems Approaches for Engineering Microbial Biocatalysts. She first explained how the metabolic reaction networks are identified within a bacteria. Then, Dr. Reed showed how these reaction networks can be modeled using a combination of stoichiometric and material balance constraints and rate equations. Next, she demonstrated that using optimization methods, such as linear programming, experimentally-validated models can identify reactions within the network that need to be enhanced or eliminated to increase the production of a desired chemical. Dr. Reed completed her talk with some case studies illustrating that modifying the model-identified reactions in the network by gene editing or forced mutation indeed results in the predicted improvement in the production of the target chemical. Overall, this was a great introduction to biochemical engineering for those of us who were unfamiliar with the field.

By: Lance Baird



January Meeting—Save the date !!

Save the Date!

January Meeting

January 25th

Schaumburg, IL



The January 2019 Meeting will be held at Roosevelt University in Schaumburg, IL.
More details to follow.

PROFESSOR DON CHMIELEWSKI

WINS THE 2018-2019 ERNEST W. THIELE AWARD

Congratulations to Professor Donald Chmielewski for being awarded the 2018-2019 Ernest W. Thiele award! This prestigious award will be presented to Professor Chmielewski at an upcoming meeting of the Chicago AIChE Section.

Don is awarded the 2018-2019 Ernest Thiele Award for his advances to the theory of control system design and service to our profession through mentorship, education and leadership. Don has provided leadership for many years to our Midwest Regional Conference AIChE meetings and as the faculty advisor to the IIT student chapter of AIChE.

The Ernest W. Thiele award is presented annually to a Midwest region member of AIChE who has made outstanding contributions to advance the practice of Chemical Engineering. The award is sponsored by BP and consists of a plaque and a \$1000 honorarium.

Please join us in congratulating Professor Chmielewski on his achievement at an upcoming 2019 Chicago Section AIChE meeting to be announced.

Ernest W. Thiele Award Recipients

YEAR	RECIPIENT	AFFILIATION	RECOGNITION & ACHIEVEMENT
1983	E.W. Thiele	Standard Oil (Indiana)	Catalysis, Distillation fundamental advances
1985	B.B.Broughton	UOP	Aromatics Separation Processes, adsorptive separation
1986	T.J. Hanratty	Univ. Of Illinois	Advances in Fluid Mechanics
1987	G. Thodos	Northwestern	Physical Property Advances
1988	L.O. Stine	UOP	Petroleum/Petrochemical Processes
1989	D.T. Wasan	IIT	Research and Progress on Separation Processes
1990	R.S. Mah	Northwestern	Chemical Process System Analysis
1992	J.J. Carberry	Notre Dame	Chemical Reaction Engineering research, innovation, and education
1993	R..J. Bertolacini	Amoco	Catalysis research innovations and leadership
1994	J.W. Westwater	Univ. of Illinois	Research in Heat transfer and contributions in teaching
1995	Norman Li	UOP	Pioneering research in membranes and separations
1996	Rathin Datta	Argonne	Original research in metabolic engineering and membranes
1997	Hamid Arastoopour	IIT	Academic leadership and environmental engineering
1998	Arvind Varma	Notre Dame	Fundamental advances in synthesis of materials, catalysis and reactor stability
1999	S. George Bankoff	Northwestern	Heat transfer advances in chemical and nuclear engineering
2000	Henry Linden	IGT (retired)	Leadership of the Institute Of Gas Tech.
2001	Paul Sechrist	UOP	Contributions to computational fluid Mechanics, CCR, and FCC refining processes
2002	Julio Ottino	Northwestern	Research in Chaos Theory and mixing of solids and liquids
2003	Ali Cinar	IIT	Contributions in process modeling, monitoring and control. As an educator championing computers and statistics.
2004	Ted M. Knowlton	PSRI	For his contributions to fundamental and applied research, and his leadership in the fields of fluidization and particulate solids.
2005	Dimitri Gidaspow	IIT	For his fundamental contributions to computational fluid dynamics, multi-phase flow and fluidized bed systems and as an educator.
2007	Lynn H. Rice	UOP	For his fundamental contributions to the petroleum refining isomerization process.
2008	Robert Lyczkowski	Argonne	For Innovative application of multiphase theory and computational fluid dynamics in the areas of nuclear, fossil and biochemical engineering.

YEAR	RECIPIENT	AFFILIATION	RECOGNITION & ACHIEVEMENT
2009	Harold Kung	Northwestern	For contributions to understanding catalytic phenomena, design of catalytic structures, and teaching.
2010	J. Peter Clark	Consultant	For leading the development of numerous food products and new food preparation processes, and as a mentor and teacher.
2011	Urmila Diwekar	UIC and V.R.. Institute	For leading the development of uncertainty analysis in processes.
2012	Richard Hoehn	UOP	For leadership and creativity in Hydroprocessing technology
2014	Alan Zagoria	UOP	For leadership and innovation in hydrogen utilization in refining
2015	Randy Snurr	Northwestern	For advancing nanoporous metal-organic frameworks for gas storage and absorption
2016	Satish Parulekar	IIT	For research in biotechnology, teaching and service to AIChE.
2017	Doug Nafis	Honeywell UOP	For developing new processes in refineries and petrochemical plants, and for mentoring and training future chemical engineers
2018	Donald Chmielewski	IIT	For advances to the theory of control system design and service to the profession through mentorship, education and leadership.

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, 2019

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

Congratulations to AIChE Chicago Section's New Fellow Member!



Ray Cocco has been with PSRI for 12 years where he has the role of President. PSRI is a consortium-based company with 31 member companies in Canada, France, Brazil, Finland, Germany, India, South Africa, Saudi Arabia and the United States.

Before PSRI, Ray spent 17 years with The Dow Chemical Company where he led research and development efforts in numerous particle technology platforms including the production of WoodStalk™ (a particleboard made of straw) for Dow BioProducts, the production of vinyl chloride monomer and RCI oxidation using fluidized beds, the production of hydrocarbon using circulating fluidized beds, the development of polyolefin catalyst for fluidized beds, and in the production of aluminum nitride and silicon carbide ceramic powders using moving bed reactors. In addition, Dr. Cocco was instrumental in bringing computational fluid dynamics, Six Sigma and Design for Six Sigma methodologies into Dow's research environment.

Ray is past chair of the AIChE Particle Technology Forum (Group 3), a past member of CTOC, a current board member of ASTM's D18.24 Committee on Characterization and Handling of Powders and Bulk Solids and on the advisory boards for University of Florida's Chemical Engineering Department, Auburn University's Chemical Engineering Department, and the Center for Nature Inspired Engineering at University College London. He is also the chair for the upcoming World Congress in Particle Technology VIII in Orlando, Florida.

He has 52 publications, 3 book chapters, several patents, and numerous invited presentations. He also consults for industry, national labs and universities on a regular basis.

Ray received his B.S. in Ch.E. from the University of Florida in 1982 and his Ph.D. in Ch.E. from Auburn University in 1989.

Volunteers Needed for Chicago Local Section

The AIChE Chicago Section needs volunteers to help with:

- **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

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



2019 AICHE Midwest Regional Conference Chicago, IL

March 18-19, 2019

Hosted by University of Illinois @ Chicago, UIC

Organized by Chicago Local Section of AICHE

Volunteers needed for MRC 2019

The AICHE Midwest Regional Conference 2019 organization is well underway. We are still trying to fill a couple of Committee Chairs:

Registration Committee – *registration committee is responsible for the registration both online and on-site.*

Onsite Registration – *responsible for the printing of name badges for all preregistered attendees and distribution of program books. Also, issue PDH (continuing education) certificates as well as manage associated sign-in/out sheets.*

Lodging and Travel - *Provide support for making arrangements and/or coordinating travel arrangements for out of state guest participants and visitors*

Signage – *responsible for creating, printing and displaying any signage required for the conference.*

Session chairs: *We also need your help in organizing the technical sessions. This position includes soliciting three speakers for your session that can be about a relevant subject. It is a great opportunity to know your peers in your interest area and expand your network of friends as well. We would like to have two co-chairs for each session so in case of any unforeseen circumstances, the session can still be held at the given time slot. Our estimate for the time required to perform this task is around 10-15 hours excluding the actual time at the conference. Please note that there are several sessions in parallel and we need many volunteers for this position.*

If you have an interest in any of these positions or if you want to volunteer for any other MRC committee, please contact Dennis O'Brien at dennisobr@gmail.com. The MRC 2019 will be held March 18-19th 2019 at UIC. More information is available at the conference web site:

<https://www.aiche.org/community/sites/local-sections/chicago/mrc11-2019>.

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>

Reminder—Use your credits!

AIChE Global professional members get six free credits each year, good for live or archived content, with permanent access to the content selected. If you haven't used all your credits, they will expire at the end of the year.



Check out the archived webinars and conference presentations [available at the AIChE website](#), and be sure to renew your membership to get six free credits good for next year!

Upcoming AIChE Conferences, Meetings and Webinars

Chicago Local Meetings

Dec 14, 2018	AIChE Chicago Section December Social 2018 , Chicago, IL
Jan 25, 2019	January 2019 Local Section Meeting - Joint with ACS, Schaumburg, IL

AIChE Conferences

Dec 10-12, 2018	2nd International Conference on CRISPR Technologies , San Diego, CA
Dec 10-12, 2018	3rd Symposium on Complex Biodynamics & Networks , Singapore
Dec 17-18, 2018	2018 CCR Annual Meeting , Wilmington, DE
Jan 6-9, 2019	9th ICBE - International Conference on Biomolecular Engineering , Newport Beach, CA
Jan 6-9, 2019	2019 LyondellBasell Sponsored CCPS Faculty Workshop , Houston, TX
Feb 17-20, 2019	6th International Conference on Accelerating Biopharmaceutical Development (AccBio 2019) , Carlsbad, CA
Mar 18-19, 2019	AIChE Midwest Regional Conference , Chicago, IL
Mar 31-Apr 4, 2019	2019 Spring Meeting and 15th Global Congress on Process Safety , New Orleans, LA

AIChE Webinars

Dec 12, 2018	Modeling Membrane Separation
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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](#)

[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.

Visit our website!

Be sure to check out our website to make sure you have the latest information on meetings and events! Miss a meeting? You can even find old newsletters and past events!

If you want to help us improve our website, please give us feedback, or even better, volunteer to help us with the website!

Thank you for being part of AIChE Chicago!



www.aiche.org/Chicago

[AIChE Chicago is now on Facebook and LinkedIn!](#)



Like us on Facebook www.facebook.com/AIChEChicagoSection



[Join our group on LinkedIn!](#)

Officers and Contact Information

Chair	Bob Tsai
Chair Elect Protem	Jarad Champion
Chair Programming	Ha Dinh
	Sarika Goel
Secretary	Ben Ketter
Treasurer	Jeff Zalc
Directors at Large	Adam Kanyuh
	Dennis O'Brien
	Olha Zvarych
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We are on the web
www.aiche.org/Chicago

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.

