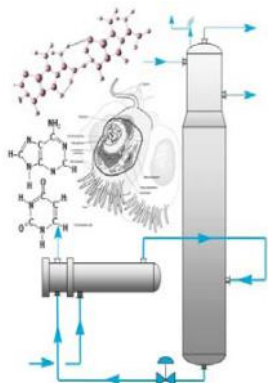


October Newsletter



Inside this issue:

| | |
|---|----|
| Chair's Corner | 2 |
| October Meeting Information | 3 |
| September Meeting Summary | 4 |
| 2016 Midwest Regional Conference, IIT | 5 |
| Volunteering Opportunity at Chemistry Day | 7 |
| September YP Social Hours | 7 |
| 2016 AIChE Board of Director Election | 8 |
| 2016 AIChE Board of Director Nomination | 8 |
| Thermal Analysis Webinar | 21 |
| Upcoming Events | 23 |

AIChE Chicago October Meeting

Introduction to Intellectual Property

Heath J. Briggs
Patent Attorney



Location: *Downtown Law Firm*

Date: *Tuesday, October 13, 2015*

Address: *77 West Wacker Drive, Suite 3100, Chicago, IL*

Cost: AIChE Global and Local Section Member: \$40
AIChE Global Member Only: \$45
Non-Member: \$50
Students: \$10
Unemployed/Retired: \$15

Register Here:

<http://www.event.com/d/grqhl/4W>

Agenda

| | |
|-------------|--|
| 5:30—6:30 | Registration and social hour with cash bar |
| 6:30 - 7:30 | Dinner |
| 7:30 - 7:45 | Announcements |
| 7:45 - 8:45 | Technical Presentation |

Chair's Corner

We kicked off our 2015-2016 year with a great monthly meeting. Our speaker Dr. Ranil Wickramasinghe gave an interesting talk on membranes and how important of role they can play in our everyday lives. We had a great turnout and I would like to thank those that attended as well as those whose supported our student dinner / scholarship fund.

When I first joined the Chicago Local section, I did so at that advice of some work colleagues. Initially, I figured it would be good forum to learn about different topics which could further enhance my technical skill set. What I did not realize was that it turned out to be a great opportunity to meet other colleagues within our profession. As I got more involved with the section, those networking opportunities turned into great friendships. In addition, my participation in the section's K – 12 programs demonstrated what an impact our Local section was having on society. Recently, one individual came up to me at a meeting and told me that it was through one of our High School Outreach programs that got him interested in Chemical Engineering. This just demonstrates the value that our section provides towards guiding our youth towards our profession.

As I mentioned last month, one of my goals is to grow our volunteer base. I realize in today's world between professional careers, family life and hobbies that it is hard to fit time in to help out, but without people volunteering their time to this organization we miss out on the ability to educate our youth on what Chemical Engineering is and to provide technical programming / networking opportunities which

allows us to become more well rounded engineers.

We are in need of individuals to help volunteer for our K – 12 programs (High School Outreach Programs, Engineer's Week, etc.). Simple things that you can do are offering to be a part of a panel discussion group or talking about your careers during the High School Outreach programs, acting as a mentor for a Senior Chemical Engineering design course or by coordinating some of these events. In our Young Professionals group, we are in need of leaders to replace those leaders who are aging out or taking on more leadership roles within the Local section or AIChE Global. For our Local section, we are in need of individuals to help out with putting together our newsletters, organizing speakers / venues for our monthly meetings, helping out at our annual Midwest Regional Conference and officers to run our section. For the past few years a lot of the same people have been filling these roles so the section needs new faces with new ideas to continue to meet the needs of our members.

Please consider volunteering your time to our Local section. If you have inquiries about volunteering opportunities please feel free to contact me or one of the other officers.

*Adam Kanyuh
AIChE Chicago Section Chair
UOP – A Honeywell Company*



October Meeting Information

Introduction to Intellectual Property

This session will provide a brief overview of the legal requirements and the benefits of patents, trade secrets, copyrights and trademarks.

Speaker's Bio

Heath J. Briggs is a chemical engineer, a registered patent attorney, and has more than 10 years of patent prosecution experience. Heath has significant patent prosecution experience in the chemical area, especially in the areas of material science (e.g., metallurgy) and organic chemistry, and Heath represents several Fortune 500 companies in this area, managing their worldwide patent portfolios. Heath also has significant experience in the software and internet fields. Heath has obtained dozens of U.S. patents for his clients, and has worked with foreign counsel in China, France, Germany, Japan, Saudi Arabia, South Korea, Russia, and the United Kingdom, among others, to obtain foreign patents for his clients.

Since 2005, Heath has served as an Adjunct Professor at the University of Colorado at Boulder, where he teaches engineering students a self-designed course on intellectual property

law. He was also selected by the American Institute of Chemical Engineers (AIChE) to provide online IP training for its chemical engineering members. Heath is involved in the community, where his passion is to educate aspiring inventors and entrepreneurs about intellectual property.



Parking Garage near the Law Firm

The Law Firm will **NOT** validate parking.

- 111 W. Wacker located directly across the street, entrance is on the Clark street side.
- 203 N. LaSalle This garage is located on Lake St between Clark St & LaSalle St. Heading eastbound on Lake St, the entrance is on the left just before Clark St. Look for a black and white "Self Park" sign above the entrance.
- 181 N. Clark The entrance to this parking garage is located on the east side of N Clark St, slightly south of the southeast corner of the W Lake St/N Clark St intersection; the garage entrance is across the street from the light blue and red columns on the east side of the 17 story steel and glass James R Thompson Center. The other entrance you may enter is 85 W. Lake St.

To Register:

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

September Meeting Summary

The first monthly meeting of the 2015-2016 AIChE Chicago year was held at Five Roses Pub in Rosemount. Speaker Dr. Ranil Wickramasinghe spoke about membrane separations. Attendees learned how membranes are used for diverse applications. Thank you to everyone who attended!

For more photos, visit our [Picasa web album](#) or go to our [Facebook Page!](#)



CALL FOR CONTRIBUTIONS



AIChE[®]
MIDWEST
REGIONAL
CONFERENCE

2016 AIChE Midwest Regional Conference
Chicago, IL – March 3-4, 2016
Hosted by Illinois Institute of Technology
Organized by Chicago Local Section of AIChE

“Call for Contributions” is now open!
Submission deadline is **October 30, 2015**

For submission details, please see www.tinyurl.com/Submit2MRC2016

Contributions encouraged in the following areas:

- Biomedical and Pharmaceutical Engineering
- Catalysis and Reaction Engineering
- Energy and Sustainability
- Environmental Engineering
- Fluid Properties, Fluid Dynamics and Transport Phenomena
- Process Engineering and Optimization
- Process Safety / Occupational Health
- Refining and Petrochemical Processing

Keynote and Plenary Speakers:

Khalil Amine

Distinguished Fellow,
Argonne National Laboratory

Jeffery Hubbell

Institute for Molecular
Engineering,
University of Chicago

Christopher Burcham

Senior Engineering Research
Advisor,
Eli Lilly and Company

Shakeel Kadri

Executive Director, AIChE
Center for Chemical Process
Safety

Linda Broadbelt

Professor and Chair,
Northwestern University

Lorenz Biegler

Professor and Chair,
Carnegie Mellon University

For additional information on keynote and plenary speakers see
<http://www.aiche.org/chicago-midwest-regional-conference>

For submission questions? Contact the Programming Chair at
chmielewski@iit.edu

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](#)

AIChE Chicago has a new look!

We are pleased to reveal our newly website for AIChE Chicago. Feel free to Take a Peek.

We hope you will visit the new website at our new address, www.aiche.org/Chicago and while you are there, let us know what you think! We know there is still work to do, and in the coming months, we hope to continue improving the site so that it best serves how we communicate with you.



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!](#)

Volunteering Opportunity on ACS's Chemistry Day

YPC will be supporting the Chicago local section of the American Chemical Society (ACS) in its annual Chemistry Day, celebrating National Chemistry Week. **DePaul University** will host this year's Chemistry Day on **October 17, 2015**, from **10 AM to 3 PM**. "Chemistry Colors our World" will be 2015 event's theme, where presentations will focus on the chemistry of food colors, fireworks, rainbows, natural dyes and pigments, and more. Chemistry Day is a free event, and open to the public.

Volunteers are needed for the AIChE Chicago

Section booth, where we will introduce children to chemistry and to our profession, chemical engineering. There will be 2 shifts for volunteers: morning (9 AM – 12 PM) and afternoon (12 PM – 3PM). If you would like to help, please contact Fernando Franco, fernandofranco@outlook.com by October 14, 2015.

For more information about the event check the following

link: [http://chicagoacs.org/content.php?page=Chicago Section Community Activities](http://chicagoacs.org/content.php?page=Chicago%20Section%20Community%20Activities)

Programming Committee
YPC AIChE-Chicago

September's YP Social Hour

Last Thursday, September 24, 2015, YPC kicked off its 2015-2016 year with a social hour at Rock Bottom restaurant, in Lombard, IL. Young Professionals had the opportunity to see each other after the summer break, to share food in an Oktoberfest environment, to enjoy traditional German music, and to discuss their short-term goals as members of the AIChE-Chicago Young Professionals group. Everyone enjoyed meeting old and new friends in a very amiable atmosphere.

All in the Young Professionals Committee look forward to having a great year of activities that will help foster stronger relationships among local chemical engineers and to strengthen the

perception of our profession by society at large.



Interested in joining our Young Professionals group? Visit our google group to request joining our mailing list!

<https://groups.google.com/forum/#!forum/ypcchicago>

2016 AIChE Board of Director Election

Dear Members,

It's election season and time for you to decide who will be on the Board for 2016! **Online voting will be open Tuesday, September 8 at <http://www.societyelection.com/SocietyElection/AIChE/index.asp>.** Paper ballots for the election of AIChE's 2016 President-Elect, Secretary, and Directors were mailed to you on Monday, August 24.

Profiles of the candidates for this year's election are available at this newsletter and at <http://www.aiche.org/about/governance/elections/2015-board-directors-election>. Here you will find the candidates' bios and platform statements that outline their view for AIChE. Additionally, we've asked the candidates to answer a few questions to get to know them better. Their responses will be posted on [ChEnected](#), one each week, starting September 8. **The deadline to receive your vote is October 12, 2015, 11:59 p.m. EDT.**

In order to be eligible to vote, you must be an active member and have paid your dues for 2015. If you choose to participate in the election online, you will need your Member ID, which will serve as your Personal Identification Number. If you have any questions regarding your member information, please contact the AIChE Member Service Center toll-free at [800.242.4363](tel:800.242.4363) (U.S.) or visit www.aiche.org/phone (outside U.S.) to obtain your country's number, or email customerservice@aiiche.org.



Slate of Candidates

For President-Elect

| | |
|----------------------------------|------------------------------------|
| T. Bond Calloway | Savannah River National Laboratory |
| Wendy Young Reed | Chemstations |

For Secretary

| | |
|----------------------------------|-----------------------------------|
| Freeman Self | Bechtel Group |
| Rosemarie Wesson | National Science Foundation (NSF) |

For Director

| | |
|--|--|
| Heriberto Cabezas | U.S. Environmental Protection Agency (EPA) |
| Gregory T. Frank | Amgen |
| Zenaida Otero Gephardt | Rowan University |
| Meagan Lewis | UOP |
| Timothy O. Odi | Chevron Phillips Chemical Co. |
| Joseph B. Powell | Shell |
| Edward M. Trujillo | University of Utah |
| Ranil Wickramasinghe | University of Arkansas |

For President-Elect

T. Bond Calloway



Bond Calloway is an Associate Laboratory Director at the Savannah River National Laboratory, where he leads a team of scientists and engineers conducting energy research. He has more than 30 years of industrial experience in research and development, design, construction, and operation of nuclear/chemical plants. Bond was elected to the AIChE Board of Directors (2011–2013). He was the co-chair of the 2009 AIChE Annual Meeting and the 2014 Natural Gas workshop. Bond currently serves on the AIChE Center for Energy Initiatives Board; the Environmental Progress & Sustainable Energy Journal Editorial Board; the Chemical Engineering Progress (CEP) Editorial Board; the Public Affairs and Information Committee; and as a director of the Nuclear Engineering

Div. and the Savannah River Local Section. He also served on AIChE's Research and New Technology Committee (2008–2013), including two years as chair; on the Chemical Engineering Technology Operating Council (2008–2012); on the Executive Board of the Program Committee (2009–2010); and on the Nuclear Engineering Div. Executive Committee (2004–present), including three years as chair. Bond received AIChE's Herb Epstein Award (2008) and Robert E. Wilson Award (2014); the U.S. Dept. of Energy Sustainability Award (2011); and an R&D 100 Award for contributions in engineering and energy research (2001). A graduate of Auburn Univ. and a Fellow of AIChE, Bond has authored 50 papers on various aspects of energy research and manufacturing.

Statement:

Positioning AIChE for Future Trends in Research, Technology, and Manufacturing: At no other time in the past 30 years have the government, academia, and industry found common purpose with the co-development of new manufacturing technologies that strengthen our country's competitive advantage. My top priorities are positioning AIChE to foster the development of new manufacturing technologies and partnerships through the following initiatives.

- Advancing manufacturing's societal and economic impacts by fostering AIChE's and the chemical industry's participation in the development and startup of national manufacturing institutes aimed at spurring growth in the chemicals industry. Two chemical manufacturing R&D institutes will be started by the U.S. government, and I will position AIChE and its membership for a leadership role to build widespread recognition of their benefits.
- Strengthening participation in AIChE by developing regional networks of local sections, industry, and academic institutions for collaboration that will enhance our members' interconnectivity and provide a platform for delivering targeted member services based upon regional needs.
- Position AIChE to become a technology leader and sounding board for industry, state, and federal government for technology issues that have a broad societal impact.

For President-Elect

Wendy Young Reed



Wendy Young Reed is Business Development Manager for Chemstations, providing process simulation software solutions through the CHEMCAD suite of products. Her previous experience includes working with technology developers and users in a broad range of industries, including chemical and pharmaceutical manufacturing, refining, and water treatment. Since earning her BS in chemical engineering from Texas A&M Univ., she has demonstrated commitment to AIChE by supporting local sections (founding the Young Professionals Group in the South Texas Section), chairing AIChE's Membership Committee, and donating annually to the Foundation. She has worked with colleagues across industry, academia, and government through her past service as chair of the Young Professionals Advisory Board (now Young Professionals Committee), on the Board of Directors (2007–2009), and currently as Director of the Chemical Engineering Technology Operating Council (CTOC). Wendy advanced AIChE's leadership in addressing global challenges as a founding co-chair of AIChE's Water Initiative (now the International Society for Water Solutions). She was the Co-MPC for the 2015 AIChE Spring Meeting.

Statement:

I believe our world is a better place because of chemical engineers. We help solve the world's grand challenges through the way we're taught to approach problems. Our systems-thinking approach to problem solving is why I believe we should be at the forefront of sustainability efforts worldwide. One essential component of any sustainable process is safety. AIChE should expand upon our leadership in process safety to share both sustainability and safety learnings in developing regions. As President, I would help promote AIChE's upcoming launch of the Credential for Sustainability Professionals as an important step toward making this a reality.

Our profession continually changes due to emerging technologies and increasing diversity of its membership. Our job descriptions, geographic locations, genders, or years of experience may differ, but AIChE can help us maintain our identity as chemical engineers by addressing our needs for professional development, networking, and maintaining technical competency throughout all phases of our careers and family lives. AIChE's Young Professionals Committee and Women's Workplace Retention and Re-entry Initiative are two examples of focused efforts in this area. As President, I would work to strengthen coordination among AIChE's entities to facilitate these types of efforts by reviewing current practices, identifying areas for improvement, and guiding establishment of new processes where needed.

I'm honored by the opportunity to work with you to impact our world and profession. Please contact me at wendy.young.reed@gmail.com or www.linkedin.com/in/wendyyoungreed/ with thoughts or questions.

For Secretary

Freeman Self



Freeman Self is a Bechtel Group Distinguished Engineer and a process engineer at Bechtel Oil, Gas & Chemicals specializing in process safety. AIChE has been his professional home for more than 30 years. Committed to local sections, he chaired AIChE Past-President Otis Shelton's Blue Ribbon Task Force on Local Sections, which won the AIChE Gary Leach Award. He has served the South Texas Section (STS) in many positions. As Chair in 1987, he led STS as it resumed its annual regional conferences and spun-off the Balcones Fault Subsection. An AIChE Fellow, Freeman has served on AIChE's Board of Directors (2011–2013); the Finance Committee; as treasurer of the Fuels and Petrochemicals Div.; and is a past chair of the Career and Education Operating Council (CEOC), which provides direction for local sections, student chapters, and career and educational programs. He supports the AIChE Academy as a webinar advisory editor. He is also an original member and past chair of Prairie View A&M Univ.'s Chemical Engineering Advisory Board. Freeman received a BChE from Georgia Tech, an MSChE from Rice Univ., and an MBA from the Univ. of Houston.

Statement:

I will continue to advocate for real value for our members. I invite all members to join me in advancing AIChE as the chemical engineer's professional home. As Secretary, I will focus on:

- growing the offerings of the AIChE Academy. Chemical engineers want access — via the web and in person — to a wide range of technical information and professional support.
- enlarging AIChE's Leadership Development Program. Leadership opportunities are a primary benefit of membership. The program provides personal growth opportunities and leadership training.
- advancing networking opportunities, including ChEnected and other social media.
- adding more regional conferences (such as the successful STS conference), virtual meetings, and local sections (international and domestic) to provide convenient forums for networking and professional development.
- increasing the number of sections developing Young Professional groups. Young professionals contribute dynamic ideas and leadership that sustain AIChE.
- supporting Industry Technology Groups to address challenges in energy, sustainability, and the environment. AIChE has the expertise to successfully advance solutions to these problems.
- strengthening career resources and tools, such as Virtual Career Fairs.
- expanding new sources of revenue, such as corporate and public partnerships, grants, and technology consulting. AIChE's new Peer Review initiative is an example of the latter.

I would appreciate your vote and support as we lead AIChE through the next decade. Please feel free to contact me at murphyself@gmail.com.

For Secretary

Rosemarie Wesson



Rose Wesson is Program Director of the Chemical and Biological Separations program at the National Science Foundation (NSF), and an adjunct chemical engineering professor at the Univ. of Maryland, College Park. Prior to joining NSF, Rose was a senior research leader in Dow Chemical Co.'s Corporate Materials Science R&D. Rose received her BS in chemical engineering from MIT, and her MS and PhD, both in chemical engineering, from the Univ. of Michigan. Rose is a registered Professional Engineer. Prior to joining Dow, she was a chemical engineering faculty member at Louisiana State Univ. Rose has been an active member of AIChE since 1988. Some of her AIChE leadership experiences include service on AIChE's Board of Directors (2012–2015) and as treasurer of the Management Div. (2007–2011). She has been the AIChE Coordinator of the Washington Internships for Students in Engineering (WISE) program since 2010, and is an AIChE Fellow.

Statement:

Over the years, the Institute has grown and changed. However, one constant remains — we must continue to amplify the interest and excitement in chemical engineering by attracting and retaining young people in the profession. If elected as AIChE Secretary, my first priority will be to continue to attract and retain students and young professionals to and in the Institute, and to work to promote interactions between students, young and mid-career professionals, and AIChE Fellows.

As an NSF Program Director in the Small Business Innovation Research program, I saw the personal and societal benefit of entrepreneurship. Young people innovate and create new ways of thinking and doing. Academicians and mid-career industrial professionals have experience and knowledge that allow continued innovation and entrepreneurship. As Secretary, I will promote and encourage entrepreneurial education throughout AIChE.

During my recent tenure on the AIChE Board of Directors, I chaired an eleven-member Task Force to examine the governance processes of the Institute. The Task Force made several recommendations for improved governance. As Secretary, I look forward to being a part of the continued improvement of the governance processes of the Institute.

Finally, during my years at The Dow Chemical Co., I recognized the importance of safety education throughout the chemicals industry. This is another area in which AIChE continues to play a significant role, impacting students working as interns, young and mid-career professionals, as well as Fellows. As Secretary, I will continue to promote increased safety education.

If you'd like to discuss any of these ideas, my email is rdwesson@aol.com. I'd appreciate your vote for AIChE Secretary. Thank you for your consideration.

For Director

Heriberto Cabezas



Herb Cabezas is the Senior Science Advisor to the Sustainable Technology Div. at the U.S. Environmental Protection Agency (EPA), where he has been the Acting Director of the Sustainable Technology Div. (2008–2010) and Chief of the Sustainable Environments Branch (2000–2008). He is also Associate Professor of Computer Science and Systems Technology at the Univ. of Pannonia, Hungary. He co-founded the Trans-Atlantic Research and Development Interchange on Sustainability (TARDIS), and was a U.S. Embassy Science Fellow in Zagreb, Croatia (2014). He earned his BS degree at New Jersey Institute of Technology, and his MS and PhD at the Univ. of Florida, all in chemical engineering. He is also a decorated U.S. Navy veteran of the Vietnam Conflict, an AIChE Fellow, and has been recognized with the EPA Science Achievement Award in Engineering (1989); NJIT's Distinguished Alumni Achievement Award (2007); AIChE's Research Excellence Award in Sustainable Engineering (2011); and the Environmental Div.'s Lawrence K. Cecil Award in Environmental Chemical Engineering (2013). He is a past chair of the Environmental Div.

Statement:

It is a high honor to be nominated for AIChE Director. Chemical engineering is possibly the most versatile profession in the world. Chemical engineers are productively employed in chemical manufacturing, biological engineering, and even banking and finance. We seem willing to attack almost any problem anywhere with the traditional, practical, and disciplined problem-solving approach of our profession. In the 21st century, this is important because we live in an increasingly complex world where challenges abound. We have 7+ billion human beings to provide for, and we have to provide while living on one planet and preserving our freedoms and free enterprise. These are tall challenges, and solutions can only come from disciplined problem-solvers like chemical engineers. Hence, my mission, and the reason I have accepted the nomination, is to serve the profession guided by these three principles:

1. AIChE must continue to be the prime professional home of chemical engineers across the globe, regardless of their particular business or place of employment.
2. AIChE must promote and maintain the core knowledge and identity that has allowed chemical engineering to become a versatile profession. Our way of thinking and outlook are important.
3. AIChE must manage the increasing professional diversity of its membership while preserving the core knowledge, identity, and cohesion of the profession. We cannot forget who we are.

Finally, I am a lifelong AIChE member. If elected, I will devote all of my efforts to the best interests of the profession guided by the aforementioned principles.

I would be happy to discuss any issues pertaining to the AIChE. Feel free to write me athcabezas@fuse.net.

For Director

Gregory T. Frank



Gregory Frank is Principal Engineer at Amgen, with responsibility for managing process engineering and technology development. Greg's industrial career includes developing and commercializing synthetic and biologic pharmaceuticals and specialty chemicals at Amgen, Promega, and Merck. His experience spans research through senior leadership as director of engineering, EH&S, and regulatory compliance. Greg is active in nonprofit organizations, including service as Board Chairman of American Tall Ship Institute, whose mission is at-risk youth intervention through science and technology education; and as Founding Chairman of Goals for Life, which provides resources to underprivileged youth in developing nations. Greg regularly publishes his work, is an AIChE Fellow, and a Link Foundation Fellowship recipient. He continues to receive Amgen corporate-level awards for technological and operational achievements. Greg received his PhD and undergraduate chemical engineering degrees from Stevens Institute of Technology, and a Masters' degree from the Univ. of Delaware.

Statement:

Our profession is uniquely positioned to take on a wide range of challenges in the areas of energy, chemicals, food, health, education, materials, and bioengineering. Our responsibility is to advance research, development, and manufacturing technologies in an ethical, sustainable, and safe manner. If elected to the Board, I will focus on the following priorities:

- Ensuring that we sustain the fundamental curriculum essential to all ChemEs, even as we meet challenges and opportunities in nontraditional areas through academic preparation and research. This objective can be advanced through partnerships such as the recent AIChE-NSF Industry-Academia Workshop.
- Promoting lifelong learning and membership value by embracing new tools and technologies to deliver advanced products and services to members where we live and work each day. These include the AIChE Academy, on-demand content, training, and other online and regional events.
- Identifying and developing effective leaders at all stages of their careers, thereby benefiting both the long-term health of AIChE and the individuals by advancing critical career skills.
- Promoting new growth and leadership opportunities for young professionals, even as we continue to build on our existing experience and strengths.

AIChE has provided me with many leadership opportunities: Spring Meeting Co-MPC; Pharmaceutical Discovery, Development, and Manufacturing Forum Chair; over 20 years of programming leadership, including developing major topical conferences; and leadership of the Food, Pharmaceutical, and Bioengineering Div. These opportunities benefited me both personally and professionally, and I'd like to continue to give back to AIChE. If elected, my commitment is to continue enhancing AIChE's value for members of our profession.

For Director

Zenaida Otero Gephardt



Zenaida Otero Gephardt, PhD, PE, is an associate professor of chemical engineering at Rowan Univ., where she has served as Director and Associate Dean of Engineering. Prior to joining Rowan, she was a research engineer at the DuPont Co. Zenaida is a Fellow of AIChE, past chair of the Societal Impact Operating Council (SIOC), and a past chair and current Board member of the Delaware Valley Section. She is immediate Past Vice President for Accreditation of the Latin American and Caribbean Consortium of Engineering Institutions. Zenaida was a recipient of the Lindback Excellence in Teaching Award and the Excellence in Student Advising Award at Rowan Univ., and has received Best Paper and Best Poster awards from the International Div. and Chemical Engineering Div. of the American Society for Engineering Education (ASEE).

She serves on the Editorial Board of *Formación Universitaria* in Chile, is a registered Professional Engineer in Delaware, and conducts workshops and consults in experimental design and data analysis for the chemical and pharmaceutical industries.

Statement:

Chemical engineers today are significant contributors to a wide range of industries, from petroleum to food and pharmaceuticals, and we navigate in a global technical and business environment. This makes us uniquely qualified to identify opportunities and shape the technology and society of the future. However, the public, including many students and guidance counselors, is generally not familiar with what engineers do or their significant contributions to society. AIChE has an opportunity to serve its members and the profession as the critical link between academia, industry, and the community to promote technical excellence, societal responsibility, diversity, and inclusion, and to communicate the value and significant contributions of chemical engineers to society. As a Board member, I will strive to:

- strengthen AIChE local sections and their connections with the Operating Councils by supporting their K–12 and AIChE student chapter outreach activities
- enhance and strengthen diversity and inclusion throughout the Institute and the profession by supporting the diversity and inclusion initiatives and the industry/Institute partnerships currently underway, as well as the development of new efforts
- strengthen and enhance globalization efforts throughout the Institute
- increase membership through outreach, especially to graduating students transitioning into the profession, and to other young professionals
- **increase the value AIChE brings to its members and the profession by supporting the AIChE Academy; Industry Technology Groups and Centers; the work and collaboration among AIChE Operating Councils; and collaborations with other professional organizations.**

For Director

Meagan Lewis



Meagan Lewis is a Product Line Manager in the Catalyst, Adsorbents, and Specialties group at UOP, a Honeywell Co. She works closely with UOP's manufacturing plants, sales team, and development groups to ensure on-time delivery and quality products for the olefins, detergents, and SPA product lines. Meagan joined UOP in 2008, and has held roles in project management and field service for the Technical Services group. Meagan received her BS in chemical engineering from the Univ. of Illinois at Urbana-Champaign, and her MBA from Loyola Univ., Chicago, where she graduated with honors.

During her professional career, Meagan has been a very active member of AIChE and has held several leadership roles on the global and local levels. Most recently, Meagan was the Meeting Program Co-Chair for AIChE's 2014 Spring Meeting in New Orleans. At that same meeting, she received AIChE's 2014 Herb Epstein Award for Technical Programming in recognition of the work she did to expand the Young Professionals Committee's technical programming and collaboration within the Institute. Other roles that Meagan held include: treasurer of the Young Professionals Committee (YPC); chair of the YPC Technical and Social Programming subcommittee; and service on the AIChE Chicago Section's YPC Membership and Programming committees. Meagan is also a member of the Fuels and Petrochemicals Div.

Statement:

The chemical engineering world is lucky to be filled with experienced and knowledgeable experts who have solved many of the world's challenges. Unfortunately, many of those expert engineers are closing in on retirement age, and it is well known that there is a bi-modal distribution of age in our profession and in AIChE membership. It is critical that we work to minimize the gap in expertise and inspire the next generation of engineering professionals. Additionally, we need to continue to capture the interests of young professional and mid-career engineers to bridge the gap of knowledge. As a director of AIChE, I plan to motivate current and potential chemical engineers by:

- building upon the AIChE brand to recruit members worldwide, particularly where local sections are not available
- identifying and aligning the Institute's objectives with the professional needs and communication styles of mid-career and young professional engineers
- promoting modern methods of knowledge transfer between less-experienced engineers and the experts in our profession
- continuing efforts to inspire K-12 students to pursue careers in engineering.

I feel extremely honored by the opportunities that I have been given through my AIChE involvement. I welcome your questions or further discussion via email at meagan.lewis@honeywell.com.

For Director

Timothy O. Odi



Tim Odi is an Engineering Fellow at Chevron Phillips Chemical Co., and a Fellow of AIChE. His work involves modeling and process engineering support of olefin and polyolefin manufacturing technologies. He originally joined Phillips Petroleum in 1997, having previously worked for Dow Chemical. He is an active member of AIChE's South Texas Section and a member of the Fuels and Petrochemicals Div. and the Computing and Systems Technology Div. He has also served AIChE as: chair of the Societal Impact Operating Council (SIOC, 2009); chair of the Minority Affairs Committee (MAC, 2013); and treasurer of MAC (2005–2006). SIOC grew into a greater asset for the Institute under his leadership, with strong outreach (K–12, Engineers without Borders) and reporting entities (Government Relations Committee, MAC, Women's Initiatives Committee) for educating the public on societal needs on behalf of AIChE. Tim received his BSChE from the Univ. of Lagos, Nigeria, and an MS and PhD in chemical engineering from Northwestern Univ. He is a

registered Professional Engineer in Louisiana.

Statement:

This is an exciting time for the chemical engineering profession. The abundance of shale gas fueling expansion of the chemical industry due to cheaper feedstock and energy, opportunities in biotechnology, nanotechnology, and renewable energy, and advances in modeling for safer design and operation of processes are all reasons for optimism. With these opportunities come challenges for AIChE to grow in membership, while meeting the diverse interests and expectations of chemical engineers engaged in all fields. If elected as director, I will focus on the following issues to further strengthen AIChE to meet these challenges:

- increasing awareness and engagement of AIChE in the oil and energy sector, renewable energy, chemicals, and biomaterials, while encouraging participation by members in all fields
- promoting member recruitment and retention, promoting seamless transition from student to professional membership, and working with the Young Professionals Committee to address the needs of young professionals
- making local sections more relevant for members, including formation and support of virtual sections, domestic and international
- fostering global outreach of AIChE through partnerships with international organizations for the benefit of members
- supporting strategies for positioning AIChE to play leading roles in the emerging fields of the profession
- supporting K–12 initiatives and scholarship programs to provide a pipeline of future chemical engineers
- supporting AIChE's diversity initiatives for full participation and career success of all members.

I welcome the opportunity to discuss with readers my ideas about growing and strengthening the Institute: odito@cpchem.com.

For Director

Joseph B. Powell



Joe Powell is an AIChE Fellow and Shell's Chief Scientist – Chemical Engineering. In 1988, he joined the Process Development Dept. at Shell Technology Center in Houston, TX, where he has led major R&D programs in new chemical processes, biofuels, and enhanced oil recovery, as well as a "Hunters" innovation group. Joe has been granted more than 55 patents (with another 60+ patents pending) and has received several awards, including AIChE's A. D. Little Award for Chemical Engineering Innovation (1998); an R&D 100 Award and American Chemical Society Team Innovation Award (2000); the Univ. of Wisconsin's College of Engineering Distinguished Achievement Award (2009); and AIChE's Process Development Div. Service Award (2012). He is co-editor and chapter author for the book *Sustainable Development in the Process Industries: Cases and Impact* (John Wiley & Sons, 2010). He serves on the National Academy Board on Chemical Sciences and Technology, and on the editorial committee of the *Annual Review of Chemical and Biological Engineering*.

Joe obtained a PhD in chemical engineering from the Univ. of Wisconsin-Madison, following a BS in chemical engineering from the Univ. of Virginia.

Statement:

I joined AIChE as an undergraduate, and the networking, sharing of best practices, and professional growth in ChE science and technology were instrumental in my eventual promotion to Chief Scientist. I have been honored to serve AIChE as a Process Development Div. program chair and co-chair (10 years+); Spring Meeting program chair and co-chair; member of the Program Committee and Chemical Engineering Technology Operating Council (CTOC); Pilot Plants area chair; and in numerous topical chair positions. As an AIChE Board member, I would strive to make AIChE the best it can be in serving global member needs for networking, continuing professional education, and growth throughout a career, and help ensure that ChE education remains grounded in the core principles of the profession as it expands into new fields such as bio and nanotechnology. AIChE should be a compelling value proposition for chemical engineers of all ages and disciplines, reflected by increasing membership and participation. As a profession, we face significant challenges in providing future energy and chemicals in a safe and sustainable manner with responsible stewardship, for a growing global stakeholder population with diverse needs. AIChE's meetings and conferences — global and local — together with an enhanced web presence and cutting-edge publications, can provide the mechanisms for chemical engineers to connect, learn, keep abreast of change, and find solutions to the most compelling problems of our time. If elected director, I would openly solicit and act upon your input for how AIChE can better serve your needs. Contact: JBPCHE@gmail.com.

For Director

Edward M. Trujillo



Ed Trujillo is an associate professor of chemical engineering at the Univ. of Utah and has served as Assistant Dean for Minority Affairs in the College of Engineering. His ChE degrees are from the Univ. of Arizona (BS), California Institute of Technology (MS), and the Univ. of Utah (PhD). His research interests include acid mine drainage, biosorption of heavy metals, and multilayered growth of mammalian cells. Prior to joining the Univ. of Utah in 1984, he was a PhD research engineer at Marathon Oil Co., where he conducted research and field studies on enhanced oil recovery techniques. He is an AIChE Fellow, was named AIChE's Outstanding Student Chapter Advisor (2008), and has served as chair of two AIChE local sections: Rocky Mountain and Great Salt Lake. He has also served AIChE as chair of the Career and Education Operating Council (CEOC), chair of the Student Chapters Committee, Founding Chair and member of the International Student Chapters Committee, and on the International Committee.

Statement:

Chemical engineering is a very broad discipline, encompassing many areas of interest. These interests affect all of society, and it is important that chemical engineers are educated in, and trained using, the latest technologies. Not only must chemical engineers be technically competent, but they also must be aware of the social implications of their profession and their obligations to the public and society. AIChE can become the avenue for this. Through its conferences, programs, and online resources, the Institute is a leading resource for chemical engineers. As companies become more international, we must recognize the challenge of working with other cultures and populations and continue to improve services to all our members, both domestically and internationally. This can only happen through a coordinated effort from the Board of Directors, the staff, and, most importantly, the many volunteers that devote their time and expertise to these goals.

As an AIChE Board member, I would expand my own efforts to:

- reach out internationally to students and professionals, enhancing AIChE as the global home of chemical engineers
- support and develop K–12 initiatives to make students aware of the great opportunities available in chemical engineering, particularly addressing women and underrepresented groups in the U.S., as well as international students
- promote AIChE's member benefits, particularly the resources available through the AIChE Academy for lifelong learning
- make AIChE ever more relevant to our professional members by listening to their needs and identifying programs that meet those needs.

I have been a member of AIChE for more than 40 years and feel that the Institute has been an important part of my professional career. It would be an honor to serve as an AIChE director.

For Director

Ranil Wickramasinghe



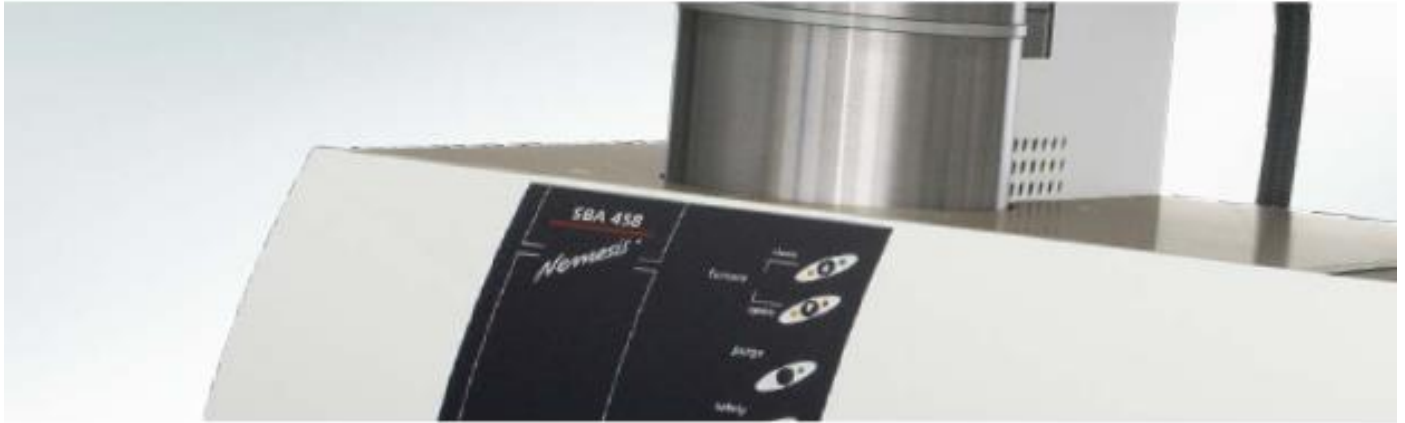
Ranil Wickramasinghe holds the Ross E. Martin Chair in Emerging Technologies at the Univ. of Arkansas. Prior to this, he was a professor at Colorado State Univ., specializing in developing membrane separation processes. He has worked in industry, with international experience in China, Germany, Japan, and Singapore. He has published more than 130 journal articles, and several book chapters and patents. His research has led to extensive collaborations with industry, academia, and government in highly multidisciplinary areas. Ranil obtained his chemical engineering degrees from the Univ. of Melbourne (BS, MS) and the Univ. of Minnesota (PhD). He is a licensed Professional Engineer and an AIChE Fellow. Ranil's major contributions to AIChE over the last 25 years include: Program Chair for the 2013 San Francisco Annual Meeting (AIChE's largest Annual Meeting); chair of the Career and Education Operating Council; programming chair for membrane separations; AIChE's representative to the P.E. Exam Committee (15 years); and vice chair of the Boston Local Section.

Statement:

As a director, my aim is to strengthen AIChE's recognition as the global representative of chemical engineers. The challenge is to make sure that AIChE represents the varied interests of chemical engineers. I will use my international background and training to ensure that AIChE provides you, our members, with real value.

- Active local sections (U.S. and overseas) are critical to growing the membership of AIChE. I will ensure that we strengthen U.S. sections and develop vibrant international sections.
- Programming at AIChE's major and co-sponsored meetings must serve the interests of our members. I will work with the Program Committee to ensure that we meet the needs of an increasingly international membership.
- Operating Councils (OCs) are the vehicle for implementation of AIChE's strategic goals. Industry Technology Groups (ITGs) ensure that we meet the needs of members working in different arenas. I will work with the OCs and ITGs to ensure that your interests are represented as we increase our global presence.
- As AIChE establishes international student chapters, it is essential that we serve the professional needs of members throughout their careers. I will work with the Young Professionals Committee, International Committee, and OCs to retain these students as professional members.
- I will work to publicize the AIChE Academy and its outstanding educational programs.

I am honored to run for AIChE director, and appreciate your support in order to establish AIChE as the global home of chemical engineers. Please contact me at ranil.wickramasinghe@uark.edu if you have suggestions or would like to discuss issues facing AIChE.

NETZSCH

Characterization of Metal, Ceramic and Thermoelectric Materials

USING THERMAL ANALYSIS & THERMOPHYSICAL
PROPERTIES MEASUREMENT TECHNIQUES

Dearborn, MI
October 19, 2015
Doubletree Hotel

Des Plaines, IL
October 20, 2015
Hilton Garden Inn O'Hare

St. Paul, MN
October 22, 2015
Embassy Suites St. Paul – Downtown



click the QR Code below to register:



Leading Thermal Analysis ■

NETZSCH NORTH AMERICA TRAINING ACADEMY

*On Tour***Content**

This technical seminar will discuss the most important methods for characterization of ceramics, metals and other high materials using thermal analysis and the measurement of thermophysical properties. These methods include DSC, TGA, STA (Simultaneous DSC/DTA-TGA), Evolved Gas Analysis, Laser Flash for Thermal Diffusivity and Thermal Conductivity, Dilatometry for Thermal Expansion and measurement of Seebeck Coefficient. These versatile techniques are excellent tools for answering critical questions in the areas of product development, quality control & assurance, failure analysis and research of new products & materials. Measurement theory, instrument design, and practical applications will be detailed. Additional focus will be on the newest Laser Flash, Dilatometers and Seebeck Coefficient instruments as well as their applications to thermoelectric materials research and their performance.

Participation fee

\$45, includes lecture materials, breakfast & lunch

Should you have any further questions, please do not hesitate to contact Peter Vichos by phone or e-mail:
Phone: 781-418-1828
peter.vichos@netsch.com

We are looking forward to meeting you!

Target group

Scientists, engineers, and laboratory personnel working in research, development, processing or quality control who wish to familiarize themselves with the latest developments in the area of thermal analysis and thermal properties measurement for advanced materials characterization.

Program

- 08:45 am Continental Breakfast
- 09:15 am Welcome and Introduction to NETZSCH
- 09:30 am Introduction of classical Thermal Analysis methods: High Temperature TGA-DSC and Simultaneous TGA-DSC
- 10:30 am Break
- 10:50 am Introduction of Evolved Gas Coupling Methods – TGA-MS, TGA-FT-IR, TGA-GC-MS)
- 11:30 am Application Examples: Thermal Analysis and Evolved Gas Analysis of Metal and Ceramics
- 12:30 Lunch
- 01:30 pm Introduction of Thermophysical Properties Measurements Techniques: Specific Heat, Thermal Expansion, Thermal Conductivity, Seebeck Coefficient
- 02:20 pm Break
- 02:40 pm Application Examples: Thermophysical Properties Measurements of Ceramic and Thermoelectric Materials
- 03:40 pm Wrap up & discussion

You can conveniently register online

www.netsch.com/NIBonTour

Upcoming AIChE Conferences, Meetings and Webinars

Chicago Section Monthly Meetings

| | |
|-------------------|---|
| October 13, 2015 | Chicago, IL |
| November 18, 2015 | Oak Brook, IL |
| March 3-4, 2016 | 8th Midwest Regional Conference, IIT, Chicago |

AIChE Conferences

| | |
|----------------------|---|
| November 3-5, 2015 | 2nd CCPS Global Summit on Process Safety , Kuala Lumpur, Malaysia |
| November 8-13, 2015 | 2015 AIChE Annual Meeting , Salt Lake City, UT |
| November 16-17, 2015 | Water Efficiency in Downstream Refinery, Petrochemical and Chemical Processing , Sugar Land, TX |
| March 3-4, 2016 | 8th Midwest Regional Conference , IIT, Chicago |

AIChE Webinars

| | |
|-------------------|---|
| October 7, 2015 | Phase Equilibria Concepts |
| October 14, 2015 | Pressure Relief System Design of Reactive Systems |
| October 21, 2015 | Fundamentals of Agglomeration |
| October 28, 2015 | How PSM Programs of the Past Should Shape a Better PSM Future |
| November 4, 2015 | Wax Deposition: Experimental Characterizations, Theoretical Modeling, and Field Practices |
| November 18, 2015 | Economics of Waste Management in the US |

Officers and Contact Information

| | |
|--------------------|--|
| Chair | Adam Kanyuh Adam.kanyuh@honeywell.com |
| Chair Elect | Tom King Thomas.king@honeywell.com |
| Chair Programming | Mike Toraason mtoraason@bakerrisk.com |
| | Jesse Calderon jcalderon@bakerrisk.com |
| Secretary | Jarad Champion Jarad.champion@gmail.com |
| Treasurer | Pat Shannon shannonph@middough.com |
| Newsletter Editors | Azita Ahmadzadeh azita_ad@gmail.com |
| | Janet Werner Janet.werner@sensient.com |

Directors at Large

| | |
|-------------------|--|
| Dan Rusinak | drus45@comcast.net |
| Steve Wozniak | Steve.wozniak@honeywell.com |
| Ellen Kloppenborg | Ellen.kloppenborg@honeywell.com |

AICHE CHICAGO SECTION

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

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.

| 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.

