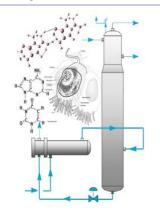
### AIChE Chicago Section

# August Newsletter

#### **Chicago Section**

#### www.aiche-chicago.org

August 2012



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#### AIChE National Election

# All ballots must be received by **Septem-ber 12**.

On **August 8**, the electronic proxy website will go live. **At that time**, you can cast your electronic proxy at <u>http://www.societyelection</u> .com/SocietyElection/AICh <u>E/index.asp</u>

# **Directors Elections**

**AIChE National Board of** 

AIChE holds an annual election for the Board of Directors.

It's that time again!

Your Vote Counts!

See Page 8 for bios of candidates.

# **Call for Papers!**

#### 2013 AIChE Midwest Regional Conference

January 31—February 1, 2013

Illinois Institute of Technology, Chicago, IL

Check the website for the most current information!

http://www.aiche.org/conferences/2013midwest.aspx

## **Chair's Corner**

Thanks all for taking the time to read this. AIChE Chicago is in an exciting time right now, and that's all thanks to the many volunteers who contribute small and large amounts of time to their already-busy schedules. In addition, you, part of the membership, have followed through with fantastic support of section activities. Those two factors have combined to allow Chicago to be one of the strongest AIChE sections in the country!



Our effort has turned towards solidifying the gains we have made over the past decade, and to ensure our future status as a great section. Over the summer the board discussed many changes that will be of great interest to membership, including a focused social media program, and outreach programs aimed at K-12 students, AIChE college sections and new graduates. Over the next few months you'll be hearing plenty about these new endeavors.

Also keep an eye on your e-mail inbox for an AIChE Chicago survey – it is your chance to shape the future activities of an organization you already support. It will be short – about ten questions – that get to the root of what you like, and about what you'd like to change.

We again have a great board this year, including filling a couple of slots that have been long vacant. But we still could use your help – most of the open positions include support functions that won't take much out of your time. If you're interested in more information please send a note to <u>secretary@aiche-chicago.org</u>.

Peter Hereña

### **AIChE National's Live Webinars in August**

# AIChE's Institute for Sustainability (IfS) Youth Council on Sustainable Science and Technology (YCOSST) Webinar: On-Site Biological Graywater Treatment

Presented by Bobbie Swinson Wednesday, August 1, 2012, 2:00 - 3:00 p.m. ET

#### **Biofuels: Metrics and Challenges**

Presented by John Carberry

Wednesday, August 22, 2012, 2:00 - 3:00 p.m. ET

All webinars meet at the date and time indicated above and last one hour. With AIChE's ChemE on Demand, AIChE members get 6 credits with their annual membership. Credits can be used to obtain individual items listed at ChemE on Demand including the above webinars and all archived content. Each time you use a credit you gain permanent access to the content you've selected. When you use all your credits you can still access content at the low member's price. Undergraduate student members get free access to archived webinars. To register visit <a href="http://apps.aiche.org/chemeondemand/home.aspx">http://apps.aiche.org/chemeondemand/home.aspx</a>.

#### SAVE THE DATE for the AIChE Chicago September Meeting

Wenesday, September 12, 2012.

Dr. Patrick Murray, Vice President of Research and Development at Nanophase Technologies Corporation

This presentation will focus broadly on the challenges associated with developing and commercializing high value nanotechnology solutions for a diverse group of industries, with selected examples from Nanophase's markets and applications serving to illustrate both the hurdles as well as the tremendous opportunities that can be created in taking a nascent science from the laboratory bench through full-scale manufacturing and finally to customers.

Location TBD. Keep an eye out for more info in the September AIChE Chicago Newsletter!

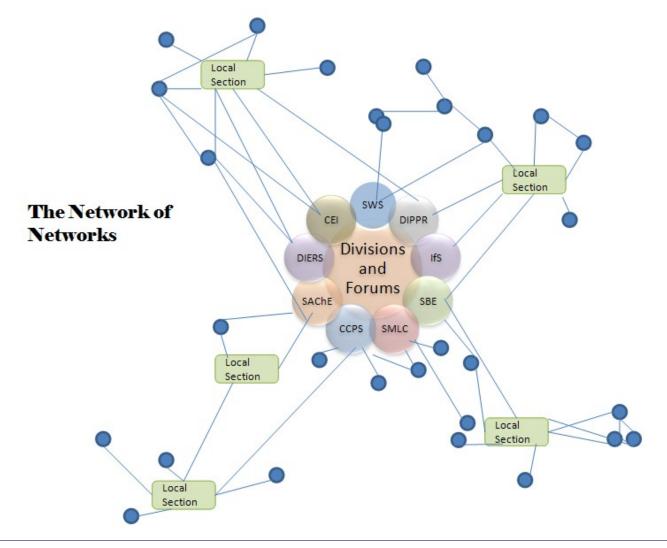
# AIChE Technical Societies and Local Sections

#### By Annette Johnston

Since it was formed, AIChE has been the professional home for chemical engineers practicing in all industries, and in all fields of research. For decades, the Divisions of the Institute have published research and best practices impacting a wide variety of technologies and businesses. The innovation and expertise showcased by AIChE is often considered to apply only to the "chemical industry". Chemical Engineers have practiced their entire career in businesses that may not be considered to be in the "chemical industry". Many specialized societies and net-



works have formed in order to provide a forum for debate and review of chemical engineering practice outside of AIChE. As the professional home for chemical engineers worldwide, AIChE is striving to become the *Network of Networks*. It is the forum for which specialized professionals can improve their practice by using innovation and expertise from chemical engineers in different practices around the world.



AIChE will become a hub in a *Network of Networks*, with global awareness of the vast breadth and depth of the expertise available within the Institute. This expertise must be seen as applicable to the most relevant technical problems of our age. The first big step towards that goal is the development of the Technical Societies. These groups will be the face of AIChE to the world. The Technical Societies can be the hub for linking programming and education activities of the forums with the vast number of specialized industrial societies, local sections, local government initiatives, and business incubators worldwide.

Many AIChE members are not aware that Technical Societies have been, and continue to be, established. Anybody interested in progress on these issues can be a member of a technical society – they do not necessarily have to be a member of AIChE. This sort of membership is different than being a member of a Division or a Forum. Divisions and Forums are groups of AIChE members working on programming and education for chemical engineers, within AIChE. Technical Societies take that programming and education, and apply as necessary for progress on their activities. The Technical Societies can be found on the main web page – aiche.org. They are right next to the Divisions and Forums tab.

Here in the Chicago Section, we have developed our own monthly programs. The Chicago Section is full of technical experts in many different practices and industries. The section has called on speakers from within the area for much of its programming. We have brought the expertise in the area to the local section membership. Consider that many local section members, and the AIChE members they know (Cont'd on next page)

Society Name	Society Goal
Water Initiative (soon to be Society for Water Solutions or SWS)	Optimize Global water use and treatment
Society for Biological Engineering (SBE)	Home for Biological Process Professionals
Institute for Sustainability (IfS)	Innovations that Minimize Environmental Impact
Smart Manufacturing Leadership Coalition (SMLC)	Operational Excellence in Manufacturing
Center for Chemical Process Safety (CCPS)	Advancing the Practice of Process Safety
Safety and Chemical Engineering Education (SAChE)	Teaching Undergraduates Process Safety Practice
Center for Energy Initiatives (CEI)	Identify and Pursue Opportunities to apply Energy Tech- nologies to Address Global Issues
Design Institute for Physical Properties (DIPPR)	Maintain Reliable Physical Properties Database for Safety and Modeling Applications
Design Institute for Energy Relief Systems (DIERS)	Emergency Relief Systems for Runaway Reactions

#### **AIChE Technical Societies**

PAGE 5

(Cont'd from previous page) in Divisions and Forums, could also bring expertise to industries, government agencies, business incubators, and research consortiums, in and near the local sections.

Chemical Engineers work on the issues and challenges facing all of these entities. AIChE can communicate that best through the Technical Societies. Each Society has a focus on topics that all professionals can relate to – water use, energy conservation, safety, sustainability, data and modeling, and education. Local Sections should draw on resources in the Societies to interact with the entities, and the members, in their area. Sharing of expertise, and showcasing of skills can be enjoyed mutually by the local sections and the entities they interact with.

Take a look at aiche.org, and investigate the technical societies that seem most interesting. Perhaps you are the resource they are looking for in their next workshop. Or, perhaps your local section should be the location for one of their next activities. Consider that interaction with a Technical Society may be a platform for the local section to make many more local connections, beyond monthly meetings.

Some of the Technical Societies have been in AIChE for years, or even decades. With the addition of the more recent ones, AIChE truly has a platform for networking outside the world of chemical engineers alone. Every chemical engineer wants their practice to work for good for themselves and their community, and the global community. Leverage your participation in the Technical Societies to make that happen!

#### IIT AIChE Student Chapter: Call for Guest Speakers

Hello AIChE Chicago Local Section members!

My name is Jaya Parulekar and I am the Outreach Coordinator for the AIChE Student Chapter of the Illinois Institute of Technology (AIChE-IIT). We are interested in having some guest speakers at our weekly meetings this upcoming fall semester to share their experiences as professional chemical engineers. We meet every Thursday from 12:40 pm to 1:50 pm in Perlstein Hall, Room 108, on IIT's Main Campus.

If you are interested, please contact me at jparulek@hawk.iit.edu or aiche@iit.edu.

Thank you very much!

Best,

Jaya Parulekar

Outreach Coordinator, AIChE-IIT

#### **Upcoming Meetings**

Joint AIChE-ACS Symposium Ensuring the Sustainability of Critical Materials and Alternatives: Addressing the Fundamental Challenges in Separation Science and Engineering Pennsylvania Convention Center Philadelphia, PA August 12, 2012

2012 Annual Safety in Ammonia Plants and Related Facilities Hyatt Regency Chicago, IL September 9-13, 2012

Chicago Section Monthly Meeting Location TBD September 12, 2012

2012 AIChE Regional Process Technology Conference South Shore HArbour Resort and Conference Center League City, TX October 4-5, 2012

2012 Annual Meeting Pittsburgh Convention Center Pittsburgh, PA October 28—November 2, 2012

#### AIChE National Election – Your Vote Does Matter!

Historically, AIChE National elections have been won by very small margins because few people vote. The National AIChE election is underway. Hard copy ballots began arriving in our mailboxes last week. On-line voting begins August 8<sup>th</sup>.

Profiles of the candidates, as they appear on the National AIChE web site, appear elsewhere in this newsletter. Read the profiles and <u>vote</u>. Your vote does matter!

All ballots must be received by **September 12** 

On **August 8**, the electronic proxy website will go live. **At that time**, you can cast your electronic proxy at <a href="http://www.societyelection.com/SocietyElection/AIChE/index.asp">http://www.societyelection.com/SocietyElection/AIChE/index.asp</a>.

#### Candidate for President-Elect

#### Otis Shelton, Praxair, Inc

Otis Shelton is Director of Praxair's Corporate Safety and Environmental Services Assessment Program for Praxair facilities worldwide. He received his BS and MS in chemical engineering from the Univ. of Houston. He joined Union Carbide (UC; Texas City, TX) and held a variety of manufacturing assignments to improve process operations, later applying business analysis and financial management skills in assignments at the company's headquarters. In 1986, he helped lead the development and implementation of an audit program that provided in-depth evaluations of UC's facilities.



In 1992, Otis joined Praxair to lead its global audit program. Otis is an AIChE Fellow, a leader in his community and in his profession. He served on the Board of Directors (2000–2002) and as Secretary (2004–2006), and helped direct the Institute during a difficult financial period. He is the outgoing chair of the Government Relations Committee, and a member of the Board of Trustees and the Minority Affairs Committee. Otis served 20 years on the National Advisory Board of the National Society of Black Engineers, and for five years on the National Research Council's Committee on Chemical Demilitarization.

**Statement:** Our profession is growing globally, and with that growth comes opportunities. The Institute, as the home for chemical engineers worldwide, is well positioned to serve as a catalyst in addressing some of the key issues facing society, including energy independence, safety, the environment, education, and water scarcity. As President, I plan to focus on programs that increase relevance and value to the Institute's members, strengthen the Institute's financial resources, and improve the productivity of our staff and volunteer network. Some of the programs I plan to focus on include:

- reinvigorating struggling local sections through the use of virtual sections and dedicated field support to address problem areasimplementing a revised business model for the Institute that leverages its core technical strengths to positively impact membership growth and financial stability
- evaluating key Institute work processes to improve relevance and responsiveness to members, globally
- supporting industry's drive to improve the competitiveness of its manufacturing operations
- leveraging the Institute's diversity to address pressing issues in the U.S. and abroad.

Please contact me at Otis Shelton at Praxair.com if you have any additional questions.

### Candidate for President-Elect

#### John C. Tao, O-Innovation Advisors LLC

John C. Tao is President of O-Innovation Advisors LLC, a consulting firm offering strategic innovation services. Before founding O-Innovation, John worked for more than three decades at Air Products and Chemicals and at Weyerhaeuser, where he was Vice President of Open Innovation. Recognized for leadership in business development, alliance management, university partnerships, and technology transfer, John has built a strong network in industry, academia, and government. A Fellow of AIChE, John is also known for his contributions to alternative fuels, having worked in synthetic



fuels, industrial gas separations, and biofuels. He was an invitee to the U.S. Dept. of Energy's (DOE) Quadrennial Technology Review for Alternate Fuels, and is a member of the Biomass R&D Technical Advisory Committee, appointed jointly by the Secretaries of DOE and the Dept. of Agriculture.

John has also contributed to the profession through service on the boards of the Industrial Research Institute and the Council for Chemical Research. He currently serves on the Advisory Committee of the National Science Foundation's Industrial Innovation and Partnerships Div. Within AIChE, John has served on the Board of Directors (2008–2010), as Vice Chair of the Lehigh Valley Local Section, as Director of the Fuels and Petrochemicals Div., on the Advisory Board of the Center for Waste Reduction Technologies (CWRT), as a member of the Legacy Society, and as session chair and presenter at meetings. John holds BS and PhD degrees in chemical engineering from Carnegie Mellon Univ., and a MS from the Univ. of Delaware. He has published and presented over 90 papers and has nine patents.

**Statement:** As our nation recovers from the deep recession, AIChE has the opportunity to strengthen its membership, take a more active role in advancing the competitiveness of our industries, and solve our energy and sustainability challenges. If elected, I will focus on government relations, international presence, industrial competitiveness, and institutional collaborations. My agenda will include:

- encouraging and promoting better collaborations between and among academia, industry, and government to advance innovation and competitiveness
- working closely with AIChE's Public Affairs and Information Committee, the American Chemical Society, and other engineering societies to provide a strong
- voice in shaping national energy and sustainability policies
- working with the International Committee to recruit members worldwide and make the Institute more global
- increasing industrial sponsorships for existing and new initiatives at AIChE

#### Candidate for Secretary

#### James C. Hill, Iowa State University

Jim Hill is University Professor and Professor of Chemical and Biological Engineering at Iowa State Univ. His chemical engineering degrees are a BS from Stanford and a PhD from the Univ. of Washington. He has experience in the petrochemical industry, government, and academe, in the U.S. and overseas. His research area is fluid mechanics; he was among the first to carry out direct numerical simulations of turbulent reacting flows.

Hill is a Fellow of AIChE and has been a member of the Institute for more than 40 years. He currently serves on the Fellows Council and last fall was co-MPC of the Annual Meeting in Minneapolis, MN. His service to the Institute is extensive and includes the Board of Directors (2001–2003) and the task force that guided AIChE through the 2003 financial crisis.



For that and other activities he received the Van Antwerpen Award for Service to Institute. Some of his activities have included: the Constitution and Bylaws Committee; chair of the Chemical Engineering Technology Operating Council (CTOC; which oversees technical activities of the Institute); Executive Board of the National Program Committee (he wrote the current operating manual); and 1992 Annual Meeting Program Chair. He received AIChE's George Lappin Service Award for his programming contributions, and also represented AIChE on the U.S. National Committee on Theoretical and Applied Mechanics.

**Statement:** I am honored to be nominated for Secretary and, if elected, will do my best to ensure that AIChE is the premier technical and professional society for chemical engineers. That is my vision for the Institute. As Secretary, I would be a member of the executive committee and so would have influence on priorities supporting this vision.

The main challenges facing AIChE are rebuilding its slowly declining membership and improving relevance. Of 200,000 U.S. chemical engineers, less than 15% are members of AIChE, an unhealthy situation often blamed on diversification of the profession across a variety of industries. Improving this is a challenge as well as an opportunity. Our membership goals are too modest — we should aim to increase our membership by 10% each year.

In addition to my vision and the membership challenges stated above, my goals for AIChE are to:

- increase its value to practicing chemical engineers
- strengthen local sections
- lead the way in emerging technologies
- expand efforts to get young members involved
- improve AIChE's financial health.

AIChE is currently conducting many initiatives along these lines, but more needs to be done. Please contact me at <u>hill@iastate.edu</u> to discuss my ideas to improve AIChE.

#### Candidate for Secretary

#### Christine B. Seymour, Pfizer Inc.

Christine Seymour is an Associate Research Fellow in Global Regulatory Chemistry and Manufacturing Controls at Pfizer Inc. She leads the regulatory strategy and implementation for a portfolio of projects across all phases of drug development and for commercial products. Previously, Chris led chemical process development research teams at Pharmacia Corp. and at G.D. Searle.

She has chemical engineering degrees from Lehigh Univ. (BS) and from the Univ. of Massachusetts at Amherst (PhD), as well as an MS in regulatory affairs from Temple Univ. Chris has enjoyed



participating in AIChE leadership for more than 15 years, including the following roles: Chair of the Executive Board of the National Program Committee (2012), Society for Biological Engineering Board of Directors (2009–2012), AIChE Board of Directors (2009–2011), Spring AIChE Meeting Programming Chair (2008), and Process Development Div. Chair (2003–2005). She is the recipient of AIChE's 2012 Epstein Award for Technical Programming and is an AIChE Fellow.

**Statement:** *I* am very honored to be nominated for Secretary. I truly value being part of AIChE; I enjoy contributing to the Institute and coordinating technical programming, and I cherish my many AIChE friendships developed over the years. If elected as AIChE Secretary, I will do my best to serve the membership. As a long-time AIChE member and volunteer, I am determined to help AIChE become a more-diverse, stronger professional society that better meets the needs of its industrial and academic members. AIChE is transforming from a society that had members in several core industries to a society that serves members in a broad spectrum of industries. I would like to help AIChE appeal to a boarder range of engineers and, in doing so, create a stronger Institute for today's engineer as well as tomorrow's engineer.

In my AIChE volunteer activities, I have strived to strengthen AIChE programming and membership in new areas — from being a part of the creation of the Process Development Div., to chairing the AIChE/ACS co-sponsored 2008 Spring Meeting, and to increasing pharmaceutical programming via the annual Quality by Design Topical Conference. I believe that AIChE needs to continue expanding in these areas as well as other important efforts such ChEnected, ChemE on Demand, eLearning, eLibrary, energy, sustainability, water, local sections, young professionals, ScaleUp (undergraduate student program), K–12 outreach, international programs, and specialty conferences.

If you'd like to contact me about these concepts, my email is <u>Christine.B.Seymour@Pfizer.com</u>. I'd appreciate your vote for AIChE Secretary. Thank you.

#### Candidate for Director

#### Timothy J. Anderson, University of Florida

Tim Anderson is a Distinguished Professor at the Univ. of Florida and Director of the statewide Florida Energy Systems Consortium. He received his education in chemical engineering from Iowa State Univ. (BS) and the Univ. of California, Berkeley (MS, PhD). Tim's career has allowed him to pursue discipline research (electronic materials processing with over 230 publications and seven patents), education research (over 25 publications), and administration (department chair, dean of research).

He is editor of the journal Chemical Engineering Education, a past consulting editor of AIChE Journal, and a Fellow of AIChE and ASEE. He has a continuous record of professional service to AIChE over the past 30



years, including serving as a founding member and chair of the Chemical Engineering Technology Operating Council, program chair for the 1995 Annual Meeting, chair of the Computational Molecular Science and Engineering Forum, chair of the Executive Board of the Program Committee, and a leader of the Materials Engineering and Sciences Div., and he helped to establish the electronic materials programming area 8e. He is currently a member of the AIChE Foundation Board of Trustees.

**Statement:** Opportunities for chemical engineers have never been greater. As evidence, the graduating class of 2012 is finding placement in an increasingly diverse range of industries — from life sciences to alternative energy to semiconductors — as well as internationally, and in strengthening the traditional chemical process industry. The workplace is also changing, including increased productivity expectations, the way we acquire, analyze and use information, and the structure of benefits offered by employers. More than ever, a strong and responsive AIChE is needed to provide leadership and balanced services to its members.

AIChE is our professional society. It is important that all chemical engineers value participation in AIChE and have pride in their profession and professional organization. If elected to the Board of Directors, I would work with the Board and other AIChE entities to:

- expand cost-effective professional development opportunities and career services to our members through better use of technology
- ensure membership relevance to the full community, including abroad, with focus on attracting students and recently graduated chemical engineers as well as those practicing in nontraditional fields
- make AIChE the premiere forum for industry-academic-government technical dialogue to promote our profession
- increase access to technical programming through partnerships, greater access to publications, and use of electronic delivery
- leverage the network and buying power of AIChE to provide members access to benefits such as job
  placement and financial resources.

Thank you for your consideration. I hope that you will allow me the opportunity to serve as a Director of AIChE during this time of considerable opportunity.

#### Candidate for Director

Raymond A. Cocco, Particulate Solid Research, Inc

Raymond A. Cocco is President and CEO of Particulate Solid Research, Inc. (PSRI), a consortium-based research and development company with 28 industrial members located throughout the world. Ray has extensive experience in collaborations with industry, national laboratories, and academia. His expertise spans the spectrum of particle technology, from designing and optimizing commercial-scale fluidized beds and circulating fluidized beds, to using experimental and simulation techniques to quantify the interparticle forces responsible for particle clustering and agglomeration. Before PSRI, Ray was a technical leader with Dow Chemical for 17 years, where he led projects and programs in reaction engineering, model-



ing, and solids processing. He has published articles on catalysis, fluidization, particle dynamics, and modeling.

He received his BS from the Univ. of Florida and his PhD from Auburn Univ., both in chemical engineering. He currently chairs AIChE's Particle Technology Forum (PTF), where he has been a leader for over 20 years. He is also a member of the ASTM Committee on Characterization and Handling of Powders and Bulk Solids, and is on the Advisory Board for the Univ. of Florida's Dept. of Chemical Engineering.

**Statement:** *I* am proud of the accomplishments within our AIChE community. Yet, we can enhance and expand what is available and what can be made available to our members and society. Together, we have much to offer in solving the world's challenges in the decades ahead. As an AIChE Board Member, I will bring my experiences in working with industry, national laboratories and academia to capitalize on increasing the interactions between diverse groups of professionals. AIChE and its members are well suited to helping shape that future through global leadership and interdisciplinary teams. As Director, I will focus on further developing and enhancing AIChE's key existing programs and promoting new programs where needed. I will work to:

- provide members with easily accessible tools for technical- and soft-skills involving technical writing, patent applications, presentation skills, time management, leadership training, and project management
- continue to improve the AIChE website, making it the first source for job hires and recruiting, mentorship, technical experts and chemical engineering news
- provide better collaboration with other technical organizations on a global level with emphasis on member-to-member interactions
- improve our involvement with public policy and public education
- provide AIChE's technical programmers with online tools for better communication, paper selection, and educational outreach

#### Candidate for Director

Thomas F. Degnan, ExxonMobil Research & Engineering Co.

Thomas F. Degnan is the Manager, Breakthrough and Leads Generation for ExxonMobil Research and Engineering Co. He received his PhD from the Univ. of Delaware and his BS from the Univ. of Notre Dame. He also holds an MBA from the Univ. of Minnesota. He has more than 34 years of industrial experience, first with 3M Co. in St. Paul, MN, and then with Mobil Technology Co., and finally ExxonMobil Research and Engineering Co.

He is the inventor or co-inventor on 100 U.S. patents and has authored or co-authored more than 30 journal articles, one book, and



one monograph. Honors include AIChE's Catalysis and Reaction Engineering Practice Award, the American Chemical Society's (ACS) Industrial Chemistry Award, and the ACS Heroes in Chemistry Award. Currently, he is chairman of the advisory committee of the Dept. of Chemical and Biomolecular Engineering at the Univ. of Delaware, and serves on advisory boards for the Univ. of Notre Dame, Stevens Institute of Technology, and Johns Hopkins Univ.

**Statement:** I believe that the future of the chemical engineering profession is dependent upon the ability of the Institute to engage and build upon the vibrant energy and enthusiasm of chemical and biomolecular engineering students and recent graduates. It is most important to expose the new engineers to the perspectives and critical thinking of experienced members if we are to most effectively address society's future needs for increased energy, food, and clean water. Toward that end, I will focus my efforts as Director toward strengthening the relationship between students and experienced practitioners by:

- increasing the level of engagement between AIChE and its 165 student chapters
- increasing the active student membership in AIChE student chapters, and developing more spirited challenges building upon the success of the Chem-E-Car Competition
- providing additional opportunities and scholarship funding for students to attend AIChE conferences and make poster and podium presentations
- enhancing e-learning opportunities by more fully exploiting AIChE's web-based education initiatives
- identifying opportunities for AIChE's educational programs (e.g., short courses) to more effectively couple with and complement industrial training and development courses
- increasing outreach activities to reach more prospective minority students and acquaint them with the importance of chemical engineering and the rewards of a career in chemical engineering.leverage the network and buying power of AIChE to provide members access to benefits such as job placement and financial resources.

I appreciate that the opportunity to serve as a Director constitutes a significant personal commitment to strengthen an already great professional society.

#### Candidate for Director

#### L.S. Fan, Ohio State University

L. S. (Liang-Shih) Fan is Distinguished University Professor and the C. John Easton Professor of Engineering in the Dept. of Chemical and Biomolecular Engineering at the Ohio State Univ. (OSU). He has been on the OSU faculty for 34 years and served as Department Chair from 1994 to 2003. A Fellow of AIChE, Fan has been very active in AIChE throughout his career, including serving as founding chair of the Particle Technology Forum and Chair of the Societal Impact Operating Council. He also served, under the former programming system, as Chair of Group 3 — Contacting and Particulates, Operations and Processes, and as Director of the Heat Transfer and Energy Conversion Div.



He is an AIChE Journal Editorial Board member and currently chairs the International Committee, which coordinates AIChE's global activities such as recruiting international student and professional members, establishing local sections, and cooperating with other societies. He was an AIChE President Blue Ribbon Committee member working on international program accreditation. L. S. is an accomplished educator and researcher. In 2008, he was named one of the "One Hundred Chemical Engineers of the Modern Era" by AIChE.

**Statement:** AIChE can lead in solving many problems facing the world today. Through the continued emphasis on our strengths — innovation, education, and diversity — we can mold a dynamic future. Engaging our members, fostering our youth, and challenging ourselves will ensure that we can sustain, connect, and expand the AIChE community. As an AIChE Director, I am committed to:

- provide members with easily accessible tools for technical- and soft-skills involving technical writing, patent applications, presentation skills, time management, leadership training, and project manainspire and engage the future leaders — from K–12 to college — by increasing science, technology, engineering, and mathematics (STEM) programs and promoting professional mentorships in our field
- encourage member outreach to underprivileged communities with teaching opportunities, sound sustainability practices, and humanitarian efforts
- improve the various AIChE products, services, and web-based technologies in order to increase interaction and to foster greater dialogue between the diverse and interdisciplinary AIChE members on critical global topics
- raise and renew the professional and research value of AIChE in industry and academia
- unite our collaborative profession by building national and international connections through international education, research, and technology development
- increase recognition of the significant achievements of our members to create greater awareness of our profession's potential
- promote reputable science and engineering in public policy.

I sincerely appreciate this opportunity to serve as Director, and pledge to serve the broad concerns of the AIChE members.

#### Candidate for Director

#### Paula T. Hammond, Massachusetts Institute of Technology

Paula T. Hammond is the David H. Koch Chair Professor of Engineering in the Chemical Engineering Department at the Massachusetts Institute of Technology and a member of MIT's Koch Institute for Integrative Cancer Research, the MIT Energy Initiative, and a founding member of the MIT Institute for Soldier Nanotechnology. She recently served as the Executive Officer (Associate Chair) of the Chemical Engineering Department (2008-2011) and is an Associate Editor for the journal ACS Nano. She earned her S.B. in Chemical Engineering from the Massachusetts Institute of Technology in 1984, her M.S. degree from Georgia Institute of Technology in 1988, and her Ph.D. in Chemical Engineering in 1993 from the Massachusetts Institute of Technology.



Paula Hammond's research program focuses on the self-assembly of polymeric nanomaterials; the core of her work is the use of electrostatics and other complementary interactions to generate functional materials with highly controlled architectures, including the development of new biomaterials and electrochemical energy devices. She was also appointed to the National Academy Board of Chemical Science and Technology (BCST) from 2006 to 2009. She was Chair of the AIChE Materials Science and Engineering Division (MESD), has been involved for several years in Polymer programming, and in the past has served as faculty advisor for the AIChE MIT student chapter. She received the William Grimes Award, the Distinguished Scientist Award from Harvard University, and is a Fellow of the American Physical Society, the Polymer Division of the American Chemical Society, and the American Institute of Biological and Medical Engineers.

**Statement:** From the AIChE vision, I would bring a particular interest in the application of chemical expertise to meet societal needs. This is true particularly at a time when new technological needs from chemical engineers abound in areas of oil and gas recovery, the challenge of clean water, the continuing need for extended energy, and the application of technology on public health, and the ability to address key diseases from cancer to infectious disease. The importance of these issues and the critical need for the advancement of our field can be conveyed by AIChE through engagement in public policy efforts to educate the public and our government and address issues of federal funding. Furthermore, AIChE can seek means of guiding activities that stimulate industrial-unversity partnerships that lead to supported research and increased translation of engineering technologies.

As an AIChE Board member, I would also focus on contributing to several other key strategic areas, including:

- The continued enhancement of the AIChE meeting in terms of intellectual content and learning opportunity for members across the broad range of disciplines represented by Chemical Engineering.
- Continued engagement and recognition of the professional needs of members from start to end of career, including job search, workshops, coursework, and training in emerging and interdisciplinary areas of the field.
- Addressing the increasingly global nature of the chemical engineering field, and means of positively
  engaging sister organizations across the world.
- Defining and articulating the core principles of chemical engineering and the means by which they connect many important and rapidly growing technological areas of application.

#### Candidate for Director

#### Annette A. Johnston, Abbott Laboratories

Annette Johnston is Senior Project Manager at Abbott Laboratories Diagnostics Div. (North Chicago, IL), where she has worked for over 20 years in development, compliance, engineering, and manufacturing roles. She was a design and research engineer at Monsanto, and gained experience in the specialty chemicals industry. She received her BS in chemical engineering from the Univ. of Illinois at Urbana-Champaign, and is working toward a Master's degree in engineering management at Northwestern Univ. In 30 years of practice, she has been active in AIChE on both the local and national levels.



She has chaired the St. Louis Section and is currently past chair of the Chicago Section, where she has produced several symposia. She has served as Program Chair for the Process Development Div., and was Program Chair for AIChE's 2010 Spring Meeting, receiving AIChE's Lappin Program Committee Service Award in 2011. She currently chairs the Research and New Technology Committee.

**Statement:** AIChE serves many important roles. It is the "practice home" for chemical engineers worldwide — providing tools for becoming a more-effective professional, as well as job search, insurance, and financial services. AIChE is also a foundation for building and maintaining the prestige of the chemical engineering profession. AIChE is, and should remain, the "network of networks" for chemical engineers, in all their varied practices. Members will remain with, and new members will join, a network that supports their practice and enhances their prestige. We can make a supportive home for chemical engineers by:

- continuing to provide insurance and financial benefits, so that chemical engineers can be secure, regardless of their employment situation
- making major AIChE conferences an increasingly better value for attendees
- listening carefully to our members, and providing the training most useful to them, online; the interaction with members should be personal, and the training should be what they need to enhance their practice
- utilizing the potential for relationship building available through our new website; not all members come to meetings, but they can feel at home with other members they interact with online

I believe we can enhance the prestige of the profession by:

- better communicating with the public on behalf of chemical engineers
- emphasizing the impact of chemical engineering practice on global issues, such as energy usage, water usage, and sustainability showcasing AIChE as a forum where the world can find experts to advise on technical

#### Candidate for Director

Michael R. Poirier, Savannah River National Laboratory

Michael R. Poirier is a Senior Fellow Engineer at Savannah River National Laboratory, where he develops new processes to treat wastes. He has been active in AIChE for many years, serving as chair of the Professional Development Committee (2002–2004); chair of the Career and Education Operating Council (2008); and as a member of the Education Services Committee, the Membership Committee, and the Webinar Advisory Committee of the Continuing Education Committee.



He worked with AIChE staff and volunteers to develop the ChemE on Demand digital library, and has organized and conducted career services workshops at Spring and Annual meetings and for local sections. Michael won AIChE's Gary Leach Recognition Award in 2004, and was elected an AIChE Fellow in 2010. He earned a BS in chemical engineering from the Univ. of Notre Dame in 1984, an MS in chemical engineering from the Univ. of Illinois in 1987, and a PhD in chemical engineering from the Univ. of Illinois in 1989.

**Statement:** As an AIChE member and volunteer, I wish to help AIChE become a stronger professional society and better serve its members. I recall talking to colleagues a few years ago who told me they were not members because they did not believe they were receiving value for their membership dues. I believe the AIChE has made improvements in the value it brings to members, and I wish to be part of the team that continues to increase value for the members.

AIChE needs to increase its membership. One area where we should focus is students. The ScaleUp program of sponsored student membership has been a success at bringing students into the AIChE. While they are student members, we need to show young engineers what the Institute has to offer, so they will want to continue their membership after graduation. In addition to students, we also need to focus on bringing young professionals into the AIChE and keeping them as members.

Local sections are an important part of the AIChE. Many members attend only local section meetings. We must ensure that AIChE meets the needs of these members. I believe that AIChE's Career Services products are of value to the members, especially those undergoing job changes and career changes. We must continue to offer these products and strive to improve them. We must also work to make these products available online, and to members who are not able to attend major AIChE meetings.

The Institute must speak for and promote the profession of chemical engineering. We need to publicize the work chemical engineers perform to make the world a better place in which to live, and ensure that the voice of chemical engineers is heard as society addresses issues such as energy, water, and the environment.

#### Candidate for Director

Subhas Sikdar, US Environmental Protection Agency

Subhas Sikdar is Associate Director for Science at EPA's National Risk Management Research Laboratory. He received his PhD in chemical engineering from the Univ. of Arizona (1975) and has worked for Occidental Petroleum, General Electric, NIST, and EPA, mostly in R&D management. During his technical career he has authored or coauthored more than 80 journal papers, edited 13 books, and has been awarded 26 U.S. patents. He is a Fellow of AIChE, the American Association for the Advancement of Science, and the Indian Institute of Chemical Engineers, and has received AIChE's Research



Excellence in Sustainability Award and the Lawrence K. Cecil Award in Environmental Chemical Engineering.

He recently served on the Board of Directors of the Green Chemistry Institute and the Council for Chemical Research. He has also served numerous chemical engineering departments as a member of external advisory boards. In AIChE, he founded and chaired the Sustainable Engineering Forum (SEF). He also served as the Chair of the Institute for Sustainability (IfS), and now chairs the Engineers Forum on Sustainability. Recently, his technical interest has been mostly focused on engineering sustainability, for which he has been a leader in EPA as well as in AIChE. Having directed 14 NATO workshops on sustainability issues in Europe for over 15 years, he has developed an international collaborative network on sustainability research. He is the founder/editor of Clean Technologies and Environmental Policy and a section editor of Current Opinions in Chemical Engineering.

**Statement:** Practicing chemical engineers in certain sectors are not AIChE members. Membership should be made attractive to them by reaching out to address their concerns. More industry participation in AIChE programs, meetings, and short courses is a critical need. AIChE is well positioned to provide leadership in technical sustainability for all engineering and science disciplines. AIChE, through the Institute for Sustainability, can be a catalyst in promoting close collaborations with academia, industry, and government. As a Director, I will enthusiastically work to:

- enhance AIChE's international profile by building upon successes already made
- make sustainability principles and practice a driving force for education and research, particularly for water and energy resources
- use my chair position in the Engineers Forum on Sustainability to foster closer cooperation among engineering societies by programming jointly
- contribute as a member to AIChE's Center for Energy Initiatives with ideas on collaboration, communication, workshops, and research on energy issues
- promote deserving members for recognition within and outside AIChE
- work to enhance AIChE influence by leveraging government, academia, and industry efforts.

## **CALL FOR TECHNICAL CONTRIBUTIONS**

2013 AIChE Midwest Regional Conference January 31—February 1, 2012 Organized by the Chicago Local Section of AIChE Hosted by the Illinois Institute of Technology, Chicago, IL

The "Call for Technical Contributions" for the <u>2013</u> <u>AIChE Midwest Regional Conference</u> is now open:

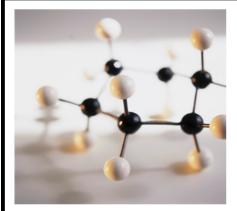
http://www.aiche.org/conferences/2013midwest/Contributions.aspx

Contributions are sought in <u>all</u> areas of chemical engineering.

Professional Development contributions are also encouraged.

Contributions may be in the form of:

- Invited Sessions
- . Contributed Presentations
- Poster Presentations



For those interested in organizing an Invited Session please see the "Intent to Submit an Invited Session" form.

For questions, please feel free to contact a member of the <u>Meeting Program Committee</u>.

(http://www.aiche.org/conferences/2013midwest/ProgramCommittee.aspx).

## **Call for Volunteers**

Volunteers are needed to help plan and support the Midwest Regional Conference.

For those interested in volunteering on the <u>General Arrangements Committee</u> (http://www.aiche.org/conferences/2013midwest/GAC.aspx), please contact the conference chair: Donald Chmielewski, <u>chmielewski@iit.edu</u>

## Young Professionals News

### **YP August Social: CSO at Ravinia**

When: Sunday, August 19, 1:00PM Where: Ravinia Park in Highland Park RSVP to: Aaron, Aaron.Matthews@Navistar.com or Janet, chujl@middough.com

Enjoy the sounds of the Chicago Symphony Orchestra at Ravinia before the summer ends with other YP's!

See <u>http://www.ravinia.org/Calendar.aspx</u> for details.

The cost is \$10/person for a lawn ticket. Please visit <u>http://</u> <u>www.ravinia.org/BuyTickets.aspx</u> for details on ticket purchase. Please purchase your tickets individually.

Food, drinks, blankets, and chairs are welcomed and encouraged!

Travel by train is encouraged. A train departing from Ogilvie Station downtown will leave at [10:35 a.m. / 12:35 p.m.] and return at [4:37 / 5:32 / 7:37 p.m.].

Hope to see you there!

### **<u>YP Spotlight—Check it out!</u>**

2011-2012 AIChE Chicago YP Chair Aaron Matthews recently coauthored an article entitled, "The Physics of Monster Trucks" in the August 2012 issue of Car And Driver Magazine. Check it out here!

<u>http://www.caranddriver.com/features/the-physics-of-monster-trucks-feature</u>

#### NOMINATIONS REQUESTED FOR THE ERNEST W. THIELE AWARD

The Ernest W. Thiele award is sponsored by BP and recognizes the outstanding contributions to our profession by a Midwest region chemical engineer. This award was established by the AIChE Chicago Section and is presented annually to a Midwest region AIChE member. This internationally recognized award consists of an engraved plaque and \$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 <u>March 1, 2013.</u>

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

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#### AICHE CHICAGO SECTION

#### American Institute of Chemical Engineers

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

We are on the web www.aiche-chicago.org

#### 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-chicago.org/Section Info/Volunteer.html

### **Submitting Articles to AIChE Columns**

We welcome email submissions for our monthly newsletter. Commercial announcements are subject to the fee schedule below. News stories, editorials, technical or career related non-commercial contributions are always welcome with no charge. We consider job postings, announcements of for-fee training courses, expositions, conferences as commercial. Categorization of announcements is at the sole discretion of the Chicago AIChE Board of Directors. Chicago AIChE may publicize activities of interest to our members by cooperating professional societies and other non-profits without charge.

Please submit your material to <u>aichechicago@gmail.com</u> with "newsletter article" as a subject line.

AICHE Publicity Committee	Academic (non-AICHE)		Company		Recruiters	
Fees	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.

Student and AICHE Member Related Postings are Free.

