



# AIChE Fellows Newsletter



## Fall 2016

### In This Issue

- From the Fellows Council  
Fellows Breakfast  
San Francisco, 11/15
- The AIChE Strategic Plan with  
Supporting Goals & Initiatives
- Constitution Revision
- Help! Ways Fellows Can  
Contribute to AIChE Activities
- Fellows Council Member  
Reports of Recent Efforts
- Fellows Council Roster  
Fellows Council Report, 7/16

### Vote! AIChE Leader Elections

- Voting for Officers & the Board  
is open online or by mail from  
September 6 to October 10.

### Come to Breakfast!

[aiche.org/fellows-news-breakfast](http://aiche.org/fellows-news-breakfast)  
San Francisco: Nov 15, 2016  
San Antonio: Mar 28, 2017

### Get Active with Students!

[aiche.org/conferences/student](http://aiche.org/conferences/student)

*Meet our future professionals  
close to home*

[aiche.org/students/chapters/find](http://aiche.org/students/chapters/find)

*Get involved with a student  
chapter near you*

### Useful Links

[aiche.org/fellows/council](http://aiche.org/fellows/council)

*FC organization and leadership*

[engage.aiche.org/fellowsdirectory](http://engage.aiche.org/fellowsdirectory)

*Where to find an AIChE Fellow*

[aiche.org/academy](http://aiche.org/academy)

*Education & training for chemical  
engineers & their companies*

[engage.aiche.org](http://engage.aiche.org)

*The mobile-friendly platform  
connecting AIChE members &  
their CHE communities*

### Contact Us

[fellowscouncil@aiche.org](mailto:fellowscouncil@aiche.org)

## From the Fellows Council

This third edition of the new communication link for the AIChE Fellows features the AIChE® Strategic Plan Roadmap, the Special Election to revise the Institute's Constitution, and a list of opportunities for Fellows to interact with students, especially at the Annual Meeting in San Francisco. Our goal is to involve more Fellows to further the mission of AIChE in the special ways of the Fellows!

Page 2 shows elements of the new AIChE Strategic Plan & its Roadmap. There will be many places for Fellows to contribute.

Page 3 describes the need for Constitutional revisions and mechanics of voting during October to December. To have a voice in this fundamental action and to meet the high requirement of members voting, everyone, especially Fellows, should participate.

Page 4 lists very specific opportunities for Fellow involvement in student activities at the Annual Meeting in San Francisco and in ongoing student programs. Great ways to give back!

Page 5 contains some reports of the Fellows Council member activities. All Fellows are encouraged to contact the FC member involved with if they would like to work with an FC member.

Page 6 gives the current FC roster and the report from the FC telecom in July, including the new FC officers and members approved by CEOC and effective January 2017. A revision to the FC Bylaws has been approved by the Council and is awaiting approval by CEOC.

Changes to the Fellows web site for enhancing communication about and among Fellows are underway; they will be in place soon.

*Don't forget to vote for AIChE Leadership by October 10!*

We look forward to greeting you at our Breakfasts, to considering your proposals for Fellows activities, and to receiving your communications about issues important to the Fellowship.

Best regards,

Jim Hill, Chair; Dave Eckhardt, Vice Chair; John O'Connell, Secretary

## Fall 2016 Fellows Breakfast Agenda

Tuesday, Nov. 15, 2016, 7:00–9:00 AM; Parc55 Hotel; Cyril Magnin I

### Agenda

- Greetings and Welcome
- Remembrance of our Deceased Colleagues
- Introduction & Presentation of New Fellow Pins & Plaques
- Reports: AIChE Leadership, FC Leadership, AIChE Foundation
- Recent Initiatives and Activities: Process Safety Education
- Conversation and Fellowship

See [www.aiche.org/fellows-news-breakfast-meeting](http://www.aiche.org/fellows-news-breakfast-meeting) for highlights

## The AIChE Strategic Plan & Implementation

At the Houston Fellows Breakfast, Executive Director June Wispelwey reviewed the current AIChE Strategic Plan and presented elements of the Roadmap for its implementation. Here are some excerpts, with more details to be published on the AIChE website.

### The Primary Goals of the Strategic Plan - *GIVES*

Goals	Initiatives
Global	Expand presence in the Middle East
	Expand presence in Asia
	Explore viability of expansion in “uncertain” regions
	Expand student program through global Chem-E-Car Competitions®
	Develop global content & delivery methods
ITGs	Consolidate small, independent societies under AIChE’s umbrella
	Consolidate external conferences as a strategy for growth
	Identify & develop new growth areas for AIChE in emerging & underserved technical domains
	Grow CCPS® by following Vision 20/20
Via IT	Implement Enterprise IT platforms that can be leveraged to meet many business needs
	Expand social media, enhancing member community
	Go mobile!
Education	Develop curriculum in gap areas for ChemE practitioners
	Enhance & leverage SACHÉ® modules for undergraduates
	Evaluate & leverage credentialing programs
	Expand professors’ knowledge of process safety fundamentals
Societal	Expand members’ knowledge of policy issues & empower them to act
	Educate policy makers & funding agency staff
	Improve the technical literacy of the public

### The Supporting Goals & Initiatives

Goals	Example Initiatives
New Business Models	Accelerate fundraising for AIChE initiatives
More Inclusive	Welcome minorities & under-represented technical domains
Operational Effectiveness	Implement staff Efficiency Team recommendations – <i>e.g.</i> , improve communications, document & automate business processes
Volunteer Leadership	Create a volunteer leadership development process for the BOD
ChemE Competitiveness	Improve skills by strengthening & implementing new ChemE Education, <i>e.g.</i> , to meet process safety challenge

The BOD and Staff will be considering specific steps for these and other initiatives during the next year. There will be many opportunities for Fellows to be involved, so stay tuned!

## AIChE Fellows Newsletter Fall 2016



### Revising the AIChE Constitution

AIChE's Constitution serves as the primary governing document for the Institute. AIChE's Board of Directors is asking members to approve changes to the Constitution. These are the first revisions since 2003. Voting is from October 12 - December 12, 2016.

The proposed changes to the Constitution will make AIChE more vibrant, flexible and better able to adapt to the changing needs and interests of its members. The ballot is reproduced below; its five categories on the ballot (see below) are noted here in parentheses.

**Implementing Best Practices:** (1) We propose specifying term limits for Directors, Secretary, Treasurer and President; (2) moving several provisions from the Constitution to the Bylaws (member description and eligibility, election and Nominating Committee processes); and removing obsolete references.

**Reflecting Current Practices:** (3) In the Constitution, we propose broadening Board creation of divisions, local sections and student chapter to encompass all entities, including industry technology groups, forums, and future groups; specifying the Past President as an Officer; and changing the process for proposing an amendment from discussion at a general meeting to presentation to the membership.

**Modernizing Governance:** (4) We propose changing the requirement for Board petition candidates from the low threshold of support from 100 members to a more representative 2 percent of the membership; and (5) conforming Constitutional provisions to requirements of the Non-Profit Revitalization Act of 2013 under New York Not-for-Profit Corporation Law; changing the requirement for future amendments to the Constitution from 75 percent approval by a minimum of 20 percent of voting members to two-thirds of votes cast.

Please join us in voting yes this fall, and reach out to your colleagues to ensure a quorum is reached to allow passage of these highly important updates.

More information and President Greg Stephanopoulos' message is at:

[www.aiche.org/amendments](http://www.aiche.org/amendments)

Specific modifications of the current document are at:

[www.aiche.org/sites/default/files/docs/pages/proposedconstitutionchanges.pdf](http://www.aiche.org/sites/default/files/docs/pages/proposedconstitutionchanges.pdf)

AIChE's Virtual Local Section (VLS) will host an online meeting devoted to the election to amend the Constitution. The meeting is scheduled for 9:00 PM EDT on Thursday, September 22 and will feature AIChE Board member and VLS Director John O'Connell leading the Constitution revisions. Participating AIChE Leadership will help field questions from members.

VLS participation information is available at [www.aiche.org/vls](http://www.aiche.org/vls).

#### **BALLOT** **PROPOSED AMENDMENTS TO AIChE'S CONSTITUTION**

**Yes**  
 **All Proposed Amendments** (AIChE's Board of Directors recommends a vote in favor of ALL proposed amendments.)

Alternatively, if you don't check yes, you may vote separately on each category of proposed amendments.

<b>Yes</b>	<b>No</b>	<b>Categories</b>
<input type="checkbox"/>	<input type="checkbox"/>	(1) Setting Term Limits and Clarifying the Role of Past President
<input type="checkbox"/>	<input type="checkbox"/>	(2) Moving Operational Provisions to the Bylaws
<input type="checkbox"/>	<input type="checkbox"/>	(3) Modernizing Practices
<input type="checkbox"/>	<input type="checkbox"/>	(4) Recognizing the Ways Technology Impacts Petition Candidacies
<input type="checkbox"/>	<input type="checkbox"/>	(5) Meeting Administrative and Legal Requirements

**Please Note:** The Board encourages you to vote as soon as possible. Amendments to the Constitution require favorable votes of 75% or more from at least 20% of the eligible voting membership.

Votes received by **December 12, 2016** will be entered in a drawing to win an iWatch!

## AIChE Fellows Newsletter Summer



# 2016

### How Fellows Can Get Involved & Make a Difference!

(\* Items to contact Sarah Ewing at [sarae@aiiche.org](mailto:sarae@aiiche.org))

1. Chem-E-Car Competition® Engineering Documentation Package Reviews for the Annual Student Conference – Student team EDPs will be assigned to reviewers after the deadline of September 19. These reviews will be done remotely/over email and take 1-2 hours each to complete\*.

2. Free food and great conversation with students. Join the Student Conference Keynote and Networking brunch from 9:00-11:00am on Saturday November 12, 2016 at the Hilton Union Square Grand Ballroom B. James (Jim) R. Fitterling, President and Chief Operating Officer of the Dow Chemical Company will be the Keynote Speaker.

3. Chem-E-Car Competition On-Site Safety Inspections at the San Francisco Annual Student Conference – Every one of the more than 30 cars in the competition must be thoroughly inspected by volunteer judges during 3:30 - 6:30pm on Saturday, November 12 at the Hilton\*. It is educational and much fun!



4. Chem-E-Car Poster Competition - Each car entry is accompanied by a poster presented by the student team. Poster Judges are needed on Sunday, November 13 from 8:30-10:30am at the Hilton\*.

5. Student Paper Competition – The winners of

6. Undergrad Student Poster Competition - The Undergrad Student Poster Competition features hundreds of students from everywhere on the globe on Monday, November 14 from 9:30 - 12:30 pm. Many judges are needed to evaluate about 10 posters and meet the student presenters. Interested professionals should fill out the form at:

<http://goo.gl/forms/jGSPkWEqh6TU2KyF2>

Competition Chair Victor Breedveld will email confirmation & instructions well before the meeting.



7. Student Chapter Advisors Meeting at 9:30 – 10:30 am on Sunday, November 13 at the Hilton will start with important business, such as ideas from the advisor brainstorming telecons (see page 5). Then the advisors will break out by region to discuss regional business; Fellows may participate in these Regional Breakout discussions to get acquainted and offer suggestions as well as at the Student Chapters Committee business meeting on Tuesday, November 15. Contact Ryan Toomey, Chair at [toomey@usf.edu](mailto:toomey@usf.edu) for details.

8. Fellows are urged to reach out to Universities close to them or those they might find interesting to work with. Student programs can always use insights and experience from interested professionals. Find out locations and contacts for student chapters at: [www.aiiche.org/community/students/chapters/find](http://www.aiiche.org/community/students/chapters/find)

9. Spring Student Regional Conferences – Fellows are

regional paper competitions present their work to determine the best of the best on Monday, November 14 from 8:30 - 11:30am. Judges are needed to hear the talks and ask questions\*.

encouraged to participate with students in regional meetings during the spring. Judges are needed for student competitions. The schedule will be posted at: [www.aiche.org/conferences/student/student-regional-conference-quick-view](http://www.aiche.org/conferences/student/student-regional-conference-quick-view)

**AIChE Fellows Newsletter Spring 2016**



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## **Fellows Council Initiatives & Activities**



## Process Safety Education Activities

This effort is being led by Fellows Council member Dan Crowl.

AICHE / CCPS held four faculty workshops at industrial facilities this summer at Dow in Freeport, TX; ADM in Decatur, IL, Cargill in Blair, NE and Chevron in Richmond, CA. A total of 97 faculty attended these workshops and gave very positive reviews, especially about companies' safety culture and its importance. The faculty all committed to adding course content in process safety to their undergraduate curricula. More workshops will be offered in summer 2017.

On Sunday, November 13 at the AIChE Annual meeting in San Francisco a 1-day workshop, entitled: "Jump Start Process Safety Engineering Education: A How-To Workshop" on process safety is being offered. Faculty attendees will learn many different ways to incorporate process safety into the undergraduate curriculum and about the resources available. Faculty can register on-line as part of the meeting registration. The cost will be \$45 and will include lunch and handout materials.

AIChE/CCPS is completing eight on-line no-cost courses on process safety for student instruction. These are interactive and high-quality, including presentation of technical content followed by an on-line test. The students will receive a certificate after successful completion of the courses. All the courses will be completed by the end of 2016 with many more to follow in future years.

Dan Crowl was the workshop staff consultant for the Dow, ADM and Cargill workshops, attending and contributing to the content.

The AIChE Fellows are strongly encouraged to contact Universities to:

1. Help identify faculty to attend the workshops.
2. Provide faculty & student safety awareness.



## Licensing & Professional Development

This effort is being led by Fellows Council member Joe Cramer.

Programming is planned for the 2016 Annual Meeting and 2017 Spring meeting in San Antonio. The PE Task Force is still finalizing some recommendations for action by CEOC and the BOD. There are plans to establish a web site for AIChE PE community issues, create more awareness of PE pathway for students with help of the Student Chapters Committee, and direct more members to information available through NCEES. Another idea is to create a video using young Ch.E. PEs providing information on why and how they pursued PE licenses.

A criterion has been added to the "Outstanding Student Chapter" awards with credit for 'making students more aware of the PE option'.

Bill Parrish, Joe Cramer, and others continue to make presentations at the Annual Student Conference on the FE/PE process.

### AIChE Foundation

This effort is being led by Fellows Council member Syamal Poddar and Foundation Development Director Stephanie Viola.



AIChE Fellows embody the countless ways chemical engineers are doing a world of good. Through the Foundation's five year, \$15 million campaign, "Doing a World of Good", they can help build an endowment to insure AIChE and the profession will achieve their aspirations, today and in the future.

From awards for initiatives in education and diversity advancement, endowment gifts reflect the extraordinary contributions of the chemical engineering community and the importance of investing in its future. See the personal ways AIChE Endowment Donors are moving the profession forward by giving back at:

[www.aiche.org/giving/impact/stories/endowment-donors-find-personal-meaning-giving](http://www.aiche.org/giving/impact/stories/endowment-donors-find-personal-meaning-giving)

Fellows are urged to lead in shaping the profession for the future. For more information, please visit:

[www.aiche.org/giving/impact/funds/endowment-gifts](http://www.aiche.org/giving/impact/funds/endowment-gifts)

## Fellows Council Initiatives & Activities (Cont.)

### Strategic Issues Programming Initiative

This effort is being led by Fellows Council members I. Grossmann, J. Hill, A. Varma, and R. Wickramasinghe.

The 2017 World Congress of Chemical Engineering (WCCE) will meet in Barcelona, Spain, on October 1-5, 2017. The Congress involves many societies, such as the European Process Intensification Congress, the European Symposium of Computer-Aided Process Engineering, the European Congress of Biotechnology, and AIChE, through the World Council for Chemical Engineering. See:

<http://www.wcce10.org/>

June Wispelwey is organizing sessions including one on process safety and an IfS ICOSSE conference. There will also be a Chem-E-Car Competition.

The FC Strategic Issues Initiative will sponsor a session on "Future Trends in Worldwide Chemical Engineering Education and Research", being organized by FC member Ignacio Grossmann along with Sebastian Engell, of the Technical University of Dortmund.

The session will have speakers from various parts of the world emphasizing changes in the educational programs and the impact that new research directions course offerings, curricula, hiring of faculty, and the growth or decline of enrollments. Of special interest will links of academia to industry in various countries.

This session has been inspired by the 2013 San Francisco panel organized by the late John Chen and Jim Hill in. It is expected that the session in Barcelona will be the basis for a similar session at the 2017 Annual Meeting in Minneapolis.

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AICHE Web Site

<http://www.aiche.org/community/fellows>

This effort is being led by Fellows Council member Dennis O'Brien.

By November, a reorganization and validation for many different browsers will be complete. Fellows Council webmasters will manage content and format. Fellows will then be asked to give feedback for updates and maintenance.

### DOE Proposal for AIChE Institute "RAPID"

Fellows Council member Maria Burka has been involved with this major initiative.

AIChE has responded to a Department of Energy (DOE) funding opportunity on Modular Chemical Process Intensification for Clean Energy Manufacturing) by creating the Rapid Advancement in Process Intensification Deployment (RAPID) Manufacturing Institute. Part of President Obama's advanced manufacturing initiative - called National Network for Manufacturing Innovation (NNMI) - the goal is to meet the manufacturing challenges of clean energy and energy efficient products and processes. The funding is for \$70 million over five years with a minimum of equal matching cost-share by the participants from industry, academia, governmental labs, and non-profit organizations.

The RAPID Institute focuses on modular chemical process intensification, a fundamental area of knowledge in chemical engineering used in manufacturing processes as a means of lowering costs, improving energy and resource efficiency, increasing overall productivity and maintaining US manufacturing jobs. An emphasis will be on capitalization investments for new construction for manufacturing and application within the U.S.

RAPID has support from 75 companies from a broad range of industries, 35 academic institutions, 7 national labs, 2 governmental labs, and 9 non-governmental organizations. Together, these partners have committed to cost-sharing of \$264 million, both in cash and in-kind support. This amount is over three times the DOE minimum requirement.

NNMIs must be operated and managed by a 501c (3) non-profit organization, such as AIChE, and must develop and provide workforce and outreach activities. AIChE would not compete with universities in the project; rather, the Institute intends to leverage its existing infrastructure and experience, thus requiring less DOE management funding and enabling more funds for research.

DOE expects to make the decision by the end of 2016. Additional information can be found at: <http://www.RAPID.org>.

## 2016-2017 Fellows Council Roster

<u>Name</u>	<u>Affiliation</u>
Maria Burka	NSF (Retired)
John Cirucci*	Spatial Analytics (Retired)
Douglas Cooper	University Of Connecticut
Joseph Cramer	BSA Consultants
Daniel Crowl*	Michigan Technical University
David Eckhardt, Vice Chair <sup>@</sup>	Irwin Engineers
Zenaida Gephardt	Rowan University
Ignacio Grossmann	Carnegie Mellon University
James Hill, Chair <sup>@</sup>	Iowa State University
Jay Lee*	KAIST
Barbara McDonald Loe, Staff	AIChE
Thomas Mensah	Georgia Aerospace Systems
Dennis O'Brien	Jacobs Consultancy
John O'Connell, Secretary	University of Virginia (Retired)
Syamal Poddar <sup>@</sup>	Poddar & Associates
David Rockstraw <sup>+</sup>	New Mexico State University
Jo Rogers <sup>+</sup>	DIPPR
Chi-Min Shu <sup>+</sup>	National Yunlin U. Science & Technology, Taiwan
Arvind Varma	Purdue University
Ranil Wickramasinghe	University of Arkansas

\*Term Ending 2016; <sup>+</sup>Newly Elected for 2017-9

<sup>@</sup>For 2017, Hill-Past Chair, Eckhardt-Chair, Poddar-Vice Chair

## Report from Fellows Council Meeting July 12, 2016 3:00 - 4:15 PM EDT

The AIChE Fellows Council oversees the organized activities of the Fellows and meets four times per year to discuss Fellow activities and policies. Two meetings are at the fall (Annual) and spring (National) AIChE meetings, and two are virtual, usually by teleconference.

At the virtual meeting in July, the main topics were:

- (1) World Congress of Chemical Engineering ([www.wcce10.com](http://www.wcce10.com)). Congress Chair F. Garcia-Ochoa joined the telecom to provide information about the Congress and welcome the FC initiative for programming to be developed by I. Grossmann & Sebastian Engell (see p. 6)
- (2) Fellows Council Bylaws approved & transmitted to CEOC for final approval & publication.
- (3) Summer Newsletter with safety education focus forwarded to all ChE Department Chairs.
- (4) Fellows web site control to FC leaders with updates followed by Fellow access (see p. 6)
- (5) FC candidates (new members & Vice Chair) sent to FC members. See above for results.
- (6) Next telecom in mid-September followed by face-to-face in SF, November 15, 1:30 PM.

*From minutes of the meeting prepared by John O'Connell, Secretary*