



# AICHE Fellows Newsletter



Spring 2016

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## Come to Breakfast!

[aiche.org/fellows-news-breakfast](http://aiche.org/fellows-news-breakfast)

Houston: Apr 12

San Francisco: Nov 15

## Get Active with Students!

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

*Meet our future professionals close to home*

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

*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*

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

*An early history of AIChE Fellows*

## Contact Us

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

## From the Fellows Council

Welcome to the new communication link for the AIChE Fellows!

Our intent is to inform you about activities of, by, and for the Fellows, and to engage you in special ways that Fellows can contribute to the Mission of AIChE®.

The Fellows Council Charter states:

The Council is the leadership group of the Fellows and is responsible for coordination of all organized activities of Fellows within the Institute. The Fellows Council reports to the Career and Education Operating Council (CEOC) of AIChE.

The main purpose of the Fellows Council is the coordination, guidance, and communication of collective activities of the Fellows, such as: website; Fellows breakfasts; organized activities related to students, young professionals, and local sections; and technical, societal, external, and other professional activities.

Any Fellow of the Institute, or group of Fellows, may make proposals and suggest issues of Fellow concern to the Council.

Views on issues of general Fellow concern may be solicited from the whole Fellowship at Fellow gatherings, as well as via surveys and direct communications.

We look forward to greeting you at our Breakfasts, to considering your proposals for Fellow actions, and to receiving your notes about Fellow issues.

## Spring 2016 Fellows Breakfast Agenda

Tuesday, April 12, 2015, 7:00 a.m. – 9:00 a.m.

Hilton Americas - Houston, Grand Ballroom J, 4th Level

### **Agenda**

- Greetings and Welcome
- Remembrance of our Departed Colleagues
- Introduction & Presentation of New Fellow Pins & Plaques
- Reports: AIChE Leadership, AIChE Foundation
- Recent Initiatives and Activities: Undergraduate Students
- Adjournment

## Message from the Fellows Council Chair

Dear AIChE Fellows:

Congratulations to the new Fellows of 2015 (listed later) and those to be recognized at the Spring 2016 AIChE meeting.

In recognition of your status in AIChE and in the profession of Chemical Engineering, we hope that you continue to serve AIChE and the profession, taking advantage of your stature, experience, and record of significant achievement.



One way to do this is to participate in some activities begun by the Fellows Council and even to suggest new activities. In the past, there has been mentoring of young professionals, promoting process safety education, being an advocate for strengthening local sections, helping student chapters (including their host ChE departments, regional meetings, and ChemE-Car<sup>®</sup> competitions), involvement in international activities, dealing with professional licensing, and programming on strategic issues at AIChE meetings.

Following a suggestion of AIChE president Greg Stephanopoulos, we are reducing the amount of leadership reporting at Fellows Breakfasts in order to give more time for fellowship, *i.e.* for you getting to know your fellow Fellows better, and for a presentation, with Fellow feedback, about a current activity of the Council.

At the Fall Meeting breakfast in Salt Lake City, AIChE past president Phil Westmoreland discussed the results of a joint NSF/AIChE workshop held last March that dealt with the issue of "academic/industry alignment." This grew out of a successful plenary session at the 2013 San Francisco AIChE meeting organized by the late John Chen and me, that was facilitated by MPC Ranil Wickramasinghe (a new fellows Council member) and AIChE staff. That session, co-sponsored by the Fellows Council and the Council for Chemical Research, dealt with the marked shift in US ChE faculty expertise towards biosciences and other "new" areas, and away from traditional process areas, that is worrisome to some leaders in the chemical industry. Fellows Council members Arvind Varma and Ignacio Grossmann served on the organizing committee of the NSF workshop. The final report is available at the link

<http://www.iche.org/conferences/nsf-workshop-chemical-engineering-academia-industry-alignment/2015>

At the Spring Meeting in Houston, Dave Eckhardt, Fellows Council Vice-Chair, will describe his activities in helping student chapters and ChE departments. His remarks appear in this newsletter.

Again, congratulations to new Fellows. I hope that everyone is having a pleasant and productive year.

Best regards,

Jim Hill, Chair  
AIChE Fellows Council

## Highlights from Recent Fellows Breakfasts

### Remembering Our Departed Colleagues

Albert Babb	Arthur Kidnay
Kenneth Beatty, Jr.	Billy Legler
Elmer Boehm	Stanley Marple, Jr.
Ted Breitmayer	Edward Roche Jr.
J. Peter Clark, III	Carl Setzer
James Gary	Harry Silla
John Herrmann	

### New Fellows: \*Received Pins and Plaques

Muthanna H. Al-Dahhan*	Tim Olsen
Michael D. Amiridis	Dickson E. Ozokwelu
Donald G. Baird*	Joseph L. Parker
Tarun K. Biswas	John Pellegrino
Lisa Brannon-Peppas	Sotiris E. Pratsinis
Chau-Chyun Chen*	Sridharan Ramaswamy
Lance Collins*	Robert Reintjes
Abhaya Datye*	David A. Rockstraw
Shrikant Dhodapkar*	Charles L. Roe
Donald L. Feke*	Alan Rossiter
Thomas J. Flynn*	Arup K. Sengupta*
Kenneth Ford	Sindee Simon
Joel R. Fried*	Andrew William Sloley
Eduardo D. Glandt	Masoud Soroush
Yun Hang Hu	Mark C. Theis
Joe Hannon*	Katsumi Tochigi*
Bamin Khomami	Jean Wilim Tom*
Sangtae Kim	Frank Van Lier
Concetta La Marca *	John W. Weidner
Paul M. Mathias*	Katherine S. Ziemer*
Trung Van Nguyen*	Stephen E. Zitney*



## Initiatives & Activities for Undergraduates

During the first part of the 21st century, AIChE's Undergraduate Student Program has become central to who we are and what we do now and in the future. Jim Hill asked that I share my perspectives on the Student Program, based on my 20+ year involvement. I will also add a little about other ways I think Fellows can contribute to the Mission of AIChE®.

In many ways AIChE is a Partner with Chemical Engineering Departments to give our graduates the following skill set:

- Knowledge of Chemical Engineering fundamentals and some their applications
- A Sense of Responsibility
- Effective Communication
- Experience in Teamwork
- Readiness to enter a Safety Culture in which Risk Management and Safety are responsibilities shared by all stakeholders

(Department Chairs and faculty do not always accept us as Partners or share expectations.)

I. As the highest grade members of the Institute, that is, the Fellows, student programs need your help on four important tasks:

- Support Department Chairs and faculty.
- Take time to thank the Department Chair for his/her efforts and support.
- If asked, be on Industrial Advisory Boards.
- Offer to mentor Teams in Senior Design Course, integrative, and applied courses.
- Offer to lecture in fields of expertise (Ethics, Risk Management, Engineering Documentation, Project Management, etc.).
- Attend events on Campus.

II. How many of us have done one or more of the above? How many of us have done all?

III. Support Student Annual and Regional Meetings

- Judges are always needed for Chem-E Car® Paper & Poster Contests. (Chem-E Car EDP review is done virtually, no need to be in attendance.)
- Speakers and attendees are always needed for workshops.
- Regional Meetings are normally underfunded, so resources are needed.

- Hosts of Regional Meetings always benefit from a mentor (better yet if the mentor has institutional memory).
- Speakers are needed for all levels of student events (including as substitutes).
- Support for Student Chapter Advisors is needed and welcome.

How many of us have done one or more of the above? How many of us have done all?

IV. Support Student Chapters

- Interactions with Off Campus professionals are always welcome, especially on topics not indigenous to Campus.
- Leadership mentoring is always welcome.
- Field trips are frequently welcome.
- Funding is frequently short (even if it is only Pizza for 50 people).

How many of us have done one or more of the above? How many of us have done all?

V. Support AIChE Foundation (Annual, Legacy)

- Resources vital to who we are, what we do
- Allows Institute to grow be more effective, and be sustainable
- Can be tailored to one's preferred initiative

The goal of the Fellows Council is to facilitate Fellow engagement in these and other activities that we are best equipped to provide from our experience and insights. Any member of Fellows Council can help you find contacts to support any of the activities that I mentioned.

To be invited to Breakfast this morning, our nominators had to convince the Admissions Committee and BOD that we had made significant contributions to, and achieved much in, Chemical Engineering practice. Thus, the BOD has recognized all of us as Leaders of our Profession! Some accept Fellow credentials as a "Capstone Award" and place it on the mantel piece next to the gold watch and pension receipts.

Instead, I accepted my becoming a Fellow as a "Vote of Confidence" and encouragement to continue to make Chemical Engineering a better profession for all of us and the world.

I urge all of you to join me.

D.R. Eckhardt, PE Vice Chair, Fellows Council

## Fellows Council Initiatives & Activities

### Strategic Issues Programming Initiative

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

The joint NSF/AIChE workshop on academic/industrial alignment was briefly described above. It resulted mainly from the efforts of Grossmann and Varma.

Following this, a special plenary panel session at the 2015 Annual Meeting in Salt Lake City was organized and led by Jim Hill and AIChE Fellow Jennifer Curtis (of UC Davis). It was created by co-MPC's Milind Deo and JoAnn Lighty, who with AIChE meetings director Kristine Chin, recruited the panelists. The topic was graduate student education. Part of the motivation was the disturbing result from the 2014 AIChE initial employment survey showing that 40% of new ChE PhD's were unemployed.

The panelists were Phil Westmoreland of NC State, Pramod Khargonekar of NSF, Joseph Helble of Dartmouth, and Gayle Gibson of DuPont. It turns out that the 40% figure was either incorrect or that conditions had changed in a year, since the 2015 survey and an informal survey by Hill indicated much lower unemployment. In fact, there was some indication that research programs dealing with innovation had created jobs. A detailed summary of that session has not yet been written up. There is information and interviews with the panelists at

<http://www.aiche.org/conferences/aiche-annual-meeting/2015/events/graduate-student-education-panel>

### Process Safety Education Activities

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

The AICHE Gala in December was focused on process safety education, raising over \$600k.

In 2015 over 20,000 SACHE completion certificates were awarded.

Shakeel Kadri, Director of CCPS, has plans for 2016 undergraduate process safety education:

1. Five integrated eLearning SACHE modules
2. Develop three more new SACHE modules.

### Process Safety Education Activities (Cont.)

3. Develop five translations of SACHE Modules
4. Conduct four faculty process safety workshops
5. Conduct three Process Safety Boot Camps.

The SACHE Committee has also developed three student levels for the modules. Detailed outlines and learning objectives have been prepared.

Three faculty workshops on process safety are currently being developed: Chevron, Richmond CA: August 22-24; ADM, Decatur, IL: July 26-28; Cargill, Blair, NE: TBA in early August.

The AIChE Fellows Council can:

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

### Licensing & Professional Development

This effort is being led by Fellows Council member Joe Cramer

Programming of specific interest to licensed PEs continues at major meetings through Area 5a (under Management Division) of the AIChE Program Committee. Integral to professional licensing, ethics is an area receiving particular attention. Also, presentations are being made at the annual and regional student conferences under the auspices of the Licensing and Professional Development Committee (LPDC) which reports to CEOC.

AIChE also continues to be represented in the "Licensing that Works" consortium of professional societies and committees and councils within the National Council of Examiners of Engineering and Surveying.

Investigation is now underway to establish a professional home or forum within AIChE for licensed PE members to better serve licensed Ch.E. PEs and motivate licensed PEs to join AIChE.

Challenges include the very low (~7%) number of AIChE members licensed, probably less than in the general Ch.E. population, and the dispersion of AIChE PEs over many entities.

## Fellows Council Roster

<u>Name</u>	<u>Affiliation</u>
Maria Burka	NSF (Retired)
John Cirucci	Spatial Analytics
Douglas Cooper	University Of Connecticut
Joseph Cramer	BSA Consultants
Daniel Crowl	Michigan Technical University
David Eckhardt, Vice Chair	Irwin Engineers
Zenaida Gephardt	Rowan University
Ignacio Grossmann	Carnegie Mellon University
James Hill, Chair	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	Poddar & Associates
Arvind Varma	Purdue University
Ranil Wickramasinghe	University of Arkansas

## Report from Fellows Council Teleconference, February 19, 2016 3:00 - 4:00 PM EST

The AIChE Fellows Council is charged with overseeing the organized activities of the Fellows and meets four times per year to discuss activities and policies related to the Fellows. Two of the meetings are in-person at the fall (Annual) and spring (National) AIChE meetings, and two are virtual meetings, usually by teleconference.

At the teleconference held on February 19, 2016 the main topics were:

- (1) accepting new members of the Council (Gephardt, Mensah, and Wickramasinghe), new vice chair (Eckhardt), and secretary (O'Connell),
- (2) planning a revision to the Council bylaws,
- (3) making arrangements for better communication with the Fellows (this newsletter for example), and
- (4) reminding us to propose a set of metrics for evaluation of Council effectiveness.

Under item (2), we have begun to implement a new succession plan by increasing the number of officers from two to four with. The current officers are vice chair Dave Eckhardt, chair Jim Hill, and past chair and secretary John O'Connell. A new vice chair will be appointed in 2016.

*From minutes of the teleconference prepared by John O'Connell*