



## From the Fellows Council Chair

Congratulations to the new Fellows who joined the Fellowship and received their credentials at the 2017 Spring Meeting (see page 3 below).

Thank you to my over 40 fellow Fellows who got up a half hour early in San Antonio to share fellowship at the Fellows Breakfast in San Antonio. We feel that this schedule change was an unqualified success that will be reprised in Minneapolis. Join us at 6:30 AM, Tuesday, October 31!

An important event of the AIChE Spring Meeting was the formal launch of the US DOE sponsored RAPID Institute. We were fortunate to have RAPID's CEO, Karen Fletcher, tell us about the significance of this initiative for AIChE and DOE. More about the Institute's status, and how Fellows can become engaged, are given on page 5 below.

In early June, Douglass Kalika (U Kentucky) and his fellow Southeast Region Chemical Engineering Department Chairs/Heads will again convene for their annual gathering. This long-running Department Chairs meeting provides opportunities for conversation and sharing of common interests and ideas for these academic leaders in their challenging, but rewarding, positions. With FC encouragement, and based on the SE region model, David Rockstraw (NMSU) is currently developing a similar meeting for Department Chairs/Heads in the US Southwest and Rocky Mountain regions during late Spring 2018. There has been a quite positive response from David's peers to the idea and he is currently canvassing them for program ideas. The FC is working on additional regional Department Chairs/Heads meetings for 2019, with the ultimate goal of all university Department Chairs having a chance to participate in such group meetings.

We remind all Fellows of their responsibility to consider their colleagues and friends for possible nomination to the grade of Fellow. Both Joe Cramer and Jo Rogers of the FC are available to facilitate the process and answer any questions that you might have. Nomination packets are at <http://www.aiche.org/community/sites/fellows/fellow-nominations>.

We hope to see many of you at our Breakfast during the 2017 AIChE Annual Meeting in Minneapolis.

Dave Eckhardt, Chair  
AIChE Fellows Council



## Highlights from Spring 2017 Fellows Breakfast I.

### Remembering Our Departed Colleagues

Douglas W. Anderson      Marvin M Johnson  
Stuart W. Churchill      Robert H. Marshall  
E. Raymond Goodell Jr.

### New Fellows: \*Received Pin & Plaque

William J. Celenza\*      Ahmed S. Khogeer\*  
Yu-Wen Chen      John G. Pendergast\*  
Thomas F. Degnan, Jr.      Reid Peterson  
Dale Lee Embry      Efstratios Pistikopoulos\*  
Warren Matthew Ewert      Shripad T. Revankar  
Priscilla Hill      Gregory C. Rutledge  
Arnis Judzis\*      Nickolaos V. Sahinidis  
Richard W. Sarnie\*



**Photos: Margot Hartford**

## Highlights from Spring 2017 Fellows Breakfast II.

### Growing AIChE

Through Efficient *Innovation* with  
Members for the Future of Society  
*June Wispelwey, Executive Director*



#### 2016 Accomplishments

- Won \$70M DOE award for RAPID Manufacturing Institute on Modular Chemical Process Intensification
- Modernized the AIChE Constitution
- Renegotiated Wiley contract and launched new *Biomedical Engineering and Translational Medicine* Journal
- Expanded our Doing a World of Good Campaign, especially for undergraduate process safety learning
- Launched the Certified Process Safety Professional™ credential
- Launched Engage and Volunteer Central
- Relunched the Council for Chemical Research under AIChE

#### 2017 Plans

- Launch the RAPID Manufacturing Institute
- Continue to advance the undergraduate process safety learning initiative, and further our Doing a World of Good campaign
- Evaluate opportunities for credentialing chemical engineering professionals
- Develop a plan to increase membership
- Evaluate new opportunities, including new journals, conferences and a trade show



LEARN • CONNECT • LEAD



### Sustaining A Transformational Year Into A Decade of Growth

*Bond Calloway, 2017 President*



#### How do We Turn this Into a Decade of Growth

- Focused Government Engagement with Active Industry & University Support
- Key Message - Basic Science & Engineering
- Lastly, Develop a Plan(s) for Changing Administrations

LEARN • CONNECT • LEAD

Photos: Margot Hartford

## AIChE's Rapid Advancement in Process Intensification Deployment (RAPID) Manufacturing Institute Begins Work

On March 24, the DOE formally approved the launch of the RAPID Manufacturing institute to drive technology development and deployment in modular chemical process intensification (MCPI). Since that time, the Institute has been moving forward under CEO Karen Fletcher to establish a portfolio of technology development programs.



The first step to form the portfolio is the development of an MCPI roadmap defining key technology opportunities that exist in the six technology focus areas of RAPID. The focus areas & leaders are:

- Chemical and Commodity Processing: T.F. Edgar, U. Texas; R. Krishnamoorti, U. Houston
- Intensified Process Fundamentals: D.G. Vlachos, U. Delaware; J.A. Ritter, U. South Carolina
- Modeling and Simulation: D. Sholl, Ga. Tech; S. Pistikopoulos, Texas A&M U.
- Module Manufacturing: B.K. Paul, Oregon State U.; W. TeGrotenhuis, Pacific Northwest National Lab
- Natural Gas Upgrading: M. Matuszewski, U. Pittsburgh; L. Thompson, U. Michigan
- Renewable Bioproducts: R. Brown, Iowa State U.; S. Ramaswamy, U. Minnesota

Details are at [www.aidhe.org/rapid/rapid-focus-areas](http://www.aidhe.org/rapid/rapid-focus-areas).

Each focus area has assembled a team of industry, academic, and government participants. Altogether, the teams have over 100 individuals representing over 25 large and small companies, more than 20 universities, and 10 federal agencies and national labs. AIChE is providing facilitation support to lead each focus area team through a process to identify well defined gaps in technology, education, supply chain, or deployment, and to quantify benefits associated with gap closure. All six teams will be at a 2-day workshop hosted by Fluor Fluor in Sugarland TX in mid-July to merge Focus Area efforts into a roadmap to guide the RAPID Institute. Completion of the technology roadmap will be followed by a call for proposals for evaluation and selective funding starting at the end of 2017.

Fellows are encouraged to advocate for their company (or home institution) to join RAPID, if the value proposition makes sense. They can also get personally involved on behalf of their company, or recommend a colleague, to participate in the roadmapping, depending on their area of interest or their expertise.

Information on RAPID's technology focus areas, updates on Institute activity, information on the recently opened call for pre-proposals, and contacts can be found on the RAPID website: [www.aidhe.org/rapid](http://www.aidhe.org/rapid).



Karen Fletcher, RAPID CEO, interviewing Mark Johnson, Director of the Advanced Manufacturing Office, U.S. DOE

## AIChE Foundation “Doing a World of Good”



In San Antonio, the AIChE Foundation celebrated the hundreds of AIChE Fellows who have come together in support of the Doing a World of Good Campaign. Since the campaign launched in the fall of 2014, AIChE Fellows have given more than \$902,000 in support of the Institute’s most valuable and innovative initiatives, and have helped grow the AIChE Endowment to \$1.76MM. Thanks to their deep commitment to the Institute, the AIChE Fellows are leaving a footprint and a lasting legacy on the chemical engineering profession.

Stephanie Viola, AIChE Director of Development, sat down in San Antonio with Syamal Poddar, Vice Chair of the Fellows Council, Foundation Trustee, and recipient of the AIChE 2016 Philanthropist of the Year Award, to hear his insights and reflections on what the Doing a World of Good campaign means to him personally, to the AIChE Fellows community, and to the world at large.



[Watch the interview here!](#)



### SAVE THE DATE! Wednesday, December 6, 2017

The 2017 AIChE Annual Gala will recognize companies and their leaders for their work towards inspiring the next generation. Funds raised will support the expansion of the Institute’s programs to engage with and improve pre-college STEM education, as well as to diversify, strengthen, and retain undergraduate engineering students.

**HONORING:** Bhavesh V. (Bob) Patel, CEO & Chairman, Management Board, LyondellBasell  
**SPECIAL FEATURE:** The “Doing a World of Good” Medal, for positive societal achievements of engineers, will be presented to James (Jim) R. Fitterling, President and COO, Dow Chemical Company

For more information, visit [www.aiche.org/gala](http://www.aiche.org/gala).

### Other Ways Fellows Can Give Back

Fellows are urged to contribute their time and expertise to some of the many activities and needs of AIChE members, students, and entities. While there was previously a special web portal for Fellows volunteering, there is now a more complete site to be matched to appropriate individual opportunities. Volunteer Central is where you can now submit your interests and availability, and be connected to those who can take best advantage of your interests and give a satisfying experience.

(<http://www.aiche.org/community/sites/fellows/fellows-volunteer-service>).

## Fellows Web Site

We encourage you to browse to [aiche.org/community/sites/fellows](http://aiche.org/community/sites/fellows) to keep abreast of FC activities and information. The web site has many sections that can be edited by the website managers, Dennis O'Brien and John O'Connell, as pictured on the lower left of the home page. Suggestions for improved navigation, corrections, and enhancements are welcome!

## 2017-2018 Fellows Council Roster

| <u>Name</u>                 | <u>Affiliation</u>                              |
|-----------------------------|---|
| Maria Burka                 | U.S. National Science Foundation (Retired)      |
| Douglas Cooper              | University of Connecticut                       |
| Joseph Cramer               | BSA Consultants                                 |
| David Eckhardt, Chair       | Irwin Engineers                                 |
| Zenaida Gephardt            | Rowan University                                |
| Ignacio Grossmann           | Carnegie Mellon University                      |
| James Hill, Past Chair      | Iowa State University                           |
| 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, Vice Chair   | Poddar & Associates                             |
| David Rockstraw             | New Mexico State University                     |
| Jo Rogers                   | DIPPR   |
| Chi-Min Shu                 | National Yunlin U. Science & Technology, Taiwan |
| Ranil Wickramasinghe        | University of Arkansas                          |

## There Are Many Long-Time Fellows!

At the Spring Fellows Breakfast, Dave Eckhardt asked everyone to stand up. He then requested that all those who were new Fellows to sit down (See page 3 above.). He then asked those within their first 5 years to sit. Proceeding similarly through 10, 15, 20, and 25 years as Fellows, there remained standing only two of the 57 attendees. The longest in attendance was Emmett Miller of California, who has been a Fellow for 35 years.

AIChE records show that there are 29 who have been Fellows for 40 years or more. The longest is Johnny McKetta at 46. Further, there are 144 who were admitted between 30 and 39 years ago. All these individuals must be at least 75 years old, given the previous minimum requirement of 25 years in the profession. Congratulations to them all!

We are privileged to have, and proud to know, all Fellows for their achievements and stature, especially those who have been leaders of our Community for so long.

## Fellows Council Activities

The AIChE Fellows Council oversees the organized activities of the Fellows and meets at least four times per year to discuss Fellow activities and policies. Two meetings are face-to-face at the fall (Annual) and spring (National) AIChE meetings, and two or more are virtual, usually by teleconference. See the Bylaws at: <https://www.aiche.org/sites/default/files/community/349761/aiche-community-site-files/416921/fellowscouncilbylaws.pdf>. Each FC member leads an activity on behalf of the Fellows. Please contact them directly about specific details.

### Tenth World Congress of Chemical Engineering (WCCE10) October 2017

FC members Arvind Varma, Maria Burka, and Ignacio Grossmann have organized these sessions at WCCE10 in Barcelona, October 1-5 2017:

**Session 1:** Trends and Challenges in Chemical Engineering Education. Examining the evolution of chemical engineering education, and recent and future trends in curricula, enrollment and outcomes. Experts from seven countries will make brief presentations and followed by a panel discussion.

**Session 2:** Trends and Challenges in Chemical Engineering Research. Motivated by the grand challenges being faced of human health, energy, climate change, and food supply. Experts from four countries will make brief presentations followed by a panel discussion involving the audience.

### Fellows Support of AIChE Outreach

FC member Zenaida Gephardt is organizing a jointly sponsored session at the 2017 Annual Meeting on "Broadening Participation in Chemical Engineering: Outreach Efforts that Work". The Fellows, the Education Division, SIOC, and hopefully, MAC and WIC, will sponsor a panel presenting interactive activities in their programs. The goal is for all attendees to leave the session with concrete ideas to use in outreach efforts and in everyday classrooms to promote diversity.

### Professional Registration and the FE and PE Examinations

FC member Joe Cramer, along with Fellow Bill Parrish, have organized several sessions at the 2017 AIChE Meetings on the paths and content toward professional registration, as related to chemical engineering. These include having the President of NCEES speak, a series on professional ethics organized by Fellow Deb Grubbe, the FE exam as a curricular assessment tool, and sessions at the Annual Student Conference on the value and process for professional licensing.

### Nomination and Selection of International Members for Fellow

FC member Jo Rogers, a long-time member of the AIChE Admissions Committee, along with FC member Joe Cramer and Fellow Benny Freeman, is leading an effort to identify barriers to nominating for Fellow those engaged in the profession from outside North America. The FC is working closely with the Admissions Committee to encourage the nomination of suitable candidates and to follow these nominations through the AIChE review procedure. We want to ensure that the process does not inhibit the selection of those qualified and interested in becoming an AIChE Fellow. If you know of any potential nominees for Fellow residing outside of North America please contact these FC members directly.



## Summary of Fellows Council Telecom January 24, 2017 12:30 - 1:30 PM EST

- FC Meeting plans for 2017 – Four to five meetings total
- Fellows Web Site – Update and expand
- Initiatives
  - Smart Manufacturing and RAPID – Status and How Fellows might participate
  - Strategic Programming Initiatives - World Congress Barcelona 2017
  - Support Graduate Education
  - Support ChE Department Chairs – FC interactions at regional meetings
  - Support Undergraduate Education
  - Support Undergraduate Safety Education
- Fellow Nominations and Admissions – Barriers to selecting international Fellows
- Professional Registration – Build member and student awareness and engagement
- Foundation – Fellow contributions to “Doing a World of Good”
- Quality at AIChE Meetings – Support EBPC and other entities to improve sessions
- Membership of Fellows Council – New FC members beginning 2018
- Next meeting face-to-face in San Antonio, March 28, 2017

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

## Summary of Fellows Council Meeting in San Antonio March 28, 2017 1:30 - 3:15 PM CDT

- Fellows and RAPID (See page 5 above)
- Recommendations to Admissions Committee for facilitating nominations involving internationals, service to other professional societies, length of AIChE membership.
- Fellows Web Site updates. (See page 7 above)
- Diversity & societal initiatives from MAC (Fellow mentoring & scholarship application reviewing) & SIOC
- Stagnated membership of AIChE: similar to other societies, AIChE staff studying
- Partnering with PAIC
- Telecoms in June & September followed by face-to-face in Minneapolis, October 24

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