

# AIChE Fellows

AICHE The Global Home of Chemical Engineers

# Newsletter

### Winter 2019

#### In This Issue

- From the Fellows Council
- Fellows Breakfast: New Orleans, 4/2/19
- From the Fellows Council Chair
- Pittsburgh Fellows Breakfast Highlights
- Fellows Council Activities: Focus on Education
- AIChE Foundation News: Focus on Women
- Fellows Council Roster & Meeting Report

### Come to Breakfast!

aiche.org/community/fellows/events New Orleans: April 2, 2019 Orlando: October 29, 2019

#### Get Active with Students!

<u>aiche.org/conferences/student</u> <u>Meet our future professionals at Regional</u> <u>Conferences close to your home this Spring</u> <u>aiche.org/students/chapters/find</u> <u>Get involved with a student chapter at a</u> <u>university near you</u>

#### **Useful Links for Fellows**

aiche.org/fellows/leadership

FC organization and leadership engage.aiche.org/fellowsdirectory Where to find an AIChE Fellow (Requires login)

#### aiche.org/academy

Education & training for chemical engineers & their companies

#### engage.aiche.org

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

#### aiche.org/VLS

The global "local section" for members unable to interact live with other ChEs

#### aiche.org/paic

AIChE's Committee on Public Affairs & Information

#### **Contact Us**

fellowscouncil@aiche.org

# **From the Fellows Council**

This edition of the Fellows Newsletter begins our third year of communicating information and features relevant to the AIChE Fellows. Our goal is to involve more of you in furthering the mission of AIChE in the special ways of the Fellows!

<u>Page 2</u> has the <u>message from the 2019 Fellows Council Chair</u>, Jo Rogers.

<u>Pages 3 & 4</u> have <u>2018 Annual Meeting Fellows Breakfast</u> <u>highlights</u> with summaries from AIChE leaders including <u>photos</u>.

<u>Page 5</u> describes current efforts of the Fellows Council to <u>support</u> <u>university Department Chairs</u> and ABET.

<u>*Page* 6</u> has news of the <u>AIChE Foundation</u> with its focuses on women, diversity, and the Doing a World of Good campaign.

<u>Page 7</u> presents DIPPR<sup>®</sup> and ways to volunteer in AIChE.

<u>*Page* 8</u> gives the <u>FC roster for 2019</u> and a <u>summary of the FC</u> <u>meeting</u> in November 2018. Several new FC members and visitors were welcomed.

Changes to the Fellows web site have appeared; browse to aiche.org/community/fellows. Please send your suggestions for site improvements and enhancements to fellowscouncil@aiche.org!

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, Jo Rogers, Chair; Syamal Poddar, Past Chair; Dave Eckhardt, Vice Chair; John O'Connell, Secretary

### **Spring 2019 Fellows Breakfast**

Tuesday, Apr. 2, 2018, 6:30–9:00 AM; Hilton New Orleans Riverside: Room TBA

#### Agenda

- 6:30 Coffee & Fellowship
- 7:20 Greetings and Welcome
- 7:25 Remembrance of our Departed Colleagues
- 7:30 Introduction & Presentation of New Fellow Pins & Plaques
- 7:45 Reports: AIChE Leadership, FC Leadership, AIChE Foundation
- 8:10 Interactive Discussion and Feedback
- See <u>www.aiche.org/community/fellows/events</u> for details.

# AIChE Fellows Newsletter Winter 2019

# **From the Fellows Council Chair**

We hope this newsletter, the first of three for 2019, finds you looking forward to a healthy and personally satisfying New Year, with a desire to continue being active with the AIChE community. The Fellows Council stands ready to help you identify possible <u>volunteer opportunities</u> that would benefit from your life-long and enthusiastic engagement in our profession.

We congratulate the 42 new Fellows elected during the past year in recognition of their significant professional achievements and service to the profession.

As AIChE continues efforts to reach out to chemical engineers world-wide, we hope

that you will identify individuals from North America and beyond that could meet our *Fellow requirements*, so that they may be nominated and elected.

Over the past year, the <u>Fellows Council</u> under Chair Syamal Poddar, has worked to improve the value of the Fellows Breakfast (held on the Tuesday mornings of the Spring and Annual Meetings). The Fellows Breakfast allows time for fellowship among new and current Fellows, and features brief presentations by AIChE leadership on new Institute initiatives and strategic directions. New Fellows are now being contacted directly to congratulate them on their election and to encourage them to join us at the Breakfast to personally receive their Fellow plaque and pin from the AIChE President and Executive Director.

The <u>Fellows pages of the AIChE website</u> have recently been modified to better inform Fellows about our activities, provide more links to Institute entities and news, and indicate the many ways for Fellows to become more involved in our profession. Suggestions for continued improvement of the site are always welcome (contact <u>fellowscouncil@aiche.org</u>). The site also has the <u>criteria for election to Fellow</u> and the required <u>documentation</u> for nomination of those who could be qualified.

We look forward to meeting current and newly elected Fellows at the Fellows Breakfast on April 2 during the 2019 AIChE Spring Meeting and 15<sup>th</sup> Global Congress on Process Safety in New Orleans.

### 2019 Fellows Council Officers:

Chair: Jo Rogers; Vice Chair: Dave Eckhardt; Past Chair: Syamal Poddar; Secretary: John O'Connell

### **About the Fellows Council**

The Fellows Council was constituted in January 2011. The By-laws were revised and approved in August 2016. The leadership cycle covers three years. During a one-year term, the Chair of the Council moderates Fellow gatherings, usually breakfasts, at the AIChE Spring and Annual meetings, and coordinates the Council's activities to advance the mission of AIChE. The Council Vice Chair assists the Chair in arranging meetings and records during a one-year term and becomes the next Chair. The Past Chair serves for one year to provide officer continuity and leads in nominating new Council members. The Secretary serves for three years and provides reports of the meetings of the Fellows Council, edits the Newsletter, and oversees communications to the Council members. The Council meetings and virtually in between.

Any Fellow of the Institute, or group of Fellows, may make proposals and suggest issues of Fellow concern to the Council. These shall be submitted in writing/e-mail to any Council member, and if appropriate, such items will be included in the agenda of the next quarterly Council meeting.



AIChE

# AIChE Fellows Newsletter Winter 2019

AICHE

### Highlights from Fall 2018 Fellows Breakfast I.

Robert E Maples Peter J Reilly

Paul R Roberts

Robert D Stief

Luh C Tao

Remembering Our Departed Colleagues

James M Braus P L Thibault Brian Ralph A Buonopane Charles A Clerecuzio William W Ellis Alfred J Engel Harold W Flood Richard G Griskey Joseph F Gross William R Gustafson Duane F Hogsett William H Manogue

New Fellows: \*Received Pins & Plaques

Robert W. Andrew, Jr. Frances H. Arnold Madan M. Bhasin Richard D. Braatz\* Linda J. Broadbelt\* Marco J. Castaldi John Champion Linda Cheng\* Panagiotis Christofides\* Raymond A. Cocco\* Joanne Beattie Compton Harold T. Connor, Jr. Rajesh N. Dave Clive Davies\* Hasan Dindi Thomas F. Fuller\* Alice P. Gast

Gayle J. Gibson\* Roger G. Harris Clifford L. Henderson Michael A. Henson Scott M. Husson\* Kathleen A. Kas Mayuresh Kothare\* Cliff Kowall\* Jefferson Lievense\* William P. Linak\* Shijie Liu\* Helen H. Lou\* Mary K. Lynch\* Alon McCormick\* Amar Mohanty Robert Y. Ofoli Edgar A. O'Rear III\*

Jacques L Zakin D. Lionel O'Young Jimmy Don Orr Ahmet Palazoglu **Dimitrios Papavassiliou** Katherine E. Pearson S. Joe Qin\* Suzette M. Schultz\* Kathleen Shell J. Ilja Siepmann Mark A. Stadtherr Mary Ellen Ternes James R. Thompson Levi T. Thompson\* Huanting Wang W. Vincent Wilding\* Gregory Yeo\* Timothy Zygula Photos: Margot Hartford



















# AIChE Fellows Newsletter Winter 2019 AIChE

# Highlights from Fall 2018 Fellows Breakfast II.

### Christine Seymour, 2018 AIChE President AIChE Strategic Plan - 2018 and Beyond

- AIChE Vision: The global ChE leader, the lifetime center for ChEs, a catalyst for applying ChE Expertise to societal needs
- Process: Gather stakeholder facts, perform SWOT analysis, develop strategy via plan, feedback, roadmap
- Priorities: Enable member success, strengthen communities, enhance lifelong learning, expand diversity & inclusiveness, address societal issues, use transformational technologies to innovate & deliver products & services





### June Wispelway, AIChE Executive Director Growing AIChE through Efficient Innovation with Members for the Future of Society

- <u>Revenue</u>: ~ 300 % increase;
- <u>RAPID, ITGs, Meetings,</u> Education: all with \$MM more
- <u>New membership programs</u> for new grads, YPs, 2 divisions
- Progress on 2018 Goals: Strategic plan, operating profit, new journal, Foundation, expanding conferences



• <u>2019 Goals</u>: Strategic Plan implementation, operating profit, membership growth, RAPID milestones, manufacturing initiatives, diversity/inclusion programs in "*Doing a World of Good*", conference/publication/education content expansion

### Kim Ogden, 2019 AIChE President President's Task Force on Membership Models

- Membership of current & recent Officers, BoD members, Reps from CCPS, SBE, Student Chapters Committee
- Now active; to report to BoD in New Orleans
- Asking key questions: How to adapt to a generation of not joining organizations? Optional models? Ala carte or "one price, full access"? Elements of risk?
- Deliverables: Evaluations of other society models, potentials for AIChE, NewBiz analysis, recommend decision & implementation plan if model changed from present.

An album of photos by Margot Hartford of events at the Pittsburgh Annual Meeting Fellows Breakfast can be accessed at: <u>https://www.flickr.com/photos/chenected/albums/72157700353587012</u>

# AIChE Fellows Newsletter Winter 2019 AIChE Fellows Council Activities Focus on Education



**Regional meetings for university ChE Department Chairs**: These are continuing to be supported by the Fellows Council. The goal is to create and support recurring gatherings for Chairs to discuss their collective needs and interests with their peers. In all cases, the regional department chairs set the Agenda, choose dates and locations. AIChE and the Fellows Council support these efforts.

The Southeast Region (covering the Southeast Student Region with

several states added), has held a successful, well-attended Department Chairs/Heads Meeting for over 50 years. The 2019 event, organized by J. Weidner (weidner@engr.sc.edu) and will be held <u>June 2-4, 2019</u> at Amelia Island, FL. The agenda will be posted on the Fellows Website, when available. Due to the popularity of this event, Weidner indicates only limited space is available space for Chairs from outside the Southeast.

The <u>Southwest</u> Region (the Southwest Central, Mountain and Pacific Student Regions) will meet for the second time during June 12-14 in Phoenix, AZ. C. Torres (cit@asu.edu) is the contact. The agenda will be posted on the Fellows Website, when available. The goal is to have 25+ Chairs in attendance; space is available for additional participants.

The first meeting of an expanded Northeast Region (NE US and Eastern Canada, including NE and Mid Atlantic Student Regions) is being organized for June 2020. Planning is being done by J. Klier (U. Mass, Amherst), E. Maginn (Notre Dame), J. Plawsky (RPI), A. Robinson (CMU), V. Young (Ohio U.), and Fellows Council Vice Chair D. Eckhardt. Details will be posted on the Fellows website when available.

Updates for all meetings will be found at the Fellows website (www.aiche.org/fellows/events).

**Department Chairs Forum**: FC Vice Chair, D. Eckhardt, made a presentation to the annual Chairs forum in Pittsburgh to:

- Express Fellows appreciation and support for their efforts in guiding education for the future of our profession
- Encourage them to engage with Fellows in their areas
- Inform them of Fellows activities and communications
- Describe AIChE educational resources, especially for safety education
- Nominate qualified faculty and corporate associates for selection as Fellows

A presentation was also made by Teresa Fryberger of the National Academies about a new study on the future of Chemical Engineering. Fellows can make comments & sign up for the mailing list at <u>https://nas.edu/chemengineering</u>.

### Accreditation Board for Engineering & Technology (ABET)

ABET (<u>www.abet.org</u>) is a nonprofit, non-governmental organization for <u>accrediting college and</u> <u>university degree programs</u> in applied/natural science, computing, engineering, and engineering technology. AIChE works with ABET to accredit Chemical Engineering programs.



ABET currently has a draft proposal for <u>new chemical engineering program criteria</u>. Comments are currently being accepted. (<u>www.abet.org/accreditation/accreditation-criteria/accreditation-changes</u>/). Final revisions are expected in November 2019 and, if approved, will apply beginning in 2020-2021.

ABET has a continuing <u>need for Chemical Engineering Program Evaluators</u>, particularly those with industrial experience. AIChE Fellows typically make excellent Program Evaluators

New Program Evaluators are expected to have significant experience in Chemical Engineering, complete ABET training, and make at least a five-year commitment. Information can be found at <u>www.abet.org/program-evaluators/become-a-program-evaluator</u>. Fellow Randy Lewis chairs the AIChE Education & Accreditation Committee; more information from <u>randy.lewis@byu.edu</u>.

# **AIChE Foundation News**

### **Focus on Women in Chemical Engineering**





**Rising Stars Shine at Workshop to Empower Women** in Engineering: The inaugural "Rising Stars" workshop was held at Pfizer's headquarters on December 11th. Over 50 women explored communication, self-advocacy, and bias in the workplace. Read more *here* and see *photos*.

Celebrating Women in Chemical Engineering: On October 30 in Pittsburgh, AIChE's Women's Initiatives Committee (WIC) commemorated its 20th anniversary with a day-long special symposium featuring invited talks by 20 prominent women in chemical engineering from diverse backgrounds and affiliations. Read more *here*.

Christine Seymour - Investing in the Future: AIChE Past President and Fellow, Christine Seymour, has made a tremendous personal commitment to the future of the profession by gifting one year of AIChE Young Professional membership for all Lehigh University BS Chemical Engineering graduates in the class of 2019. Learn more <u>here</u>.

### **Focus on Diversity and Inclusiveness**

Henry T. Brown Scholarship Endowment: It is with great sadness we report the passing of Melinda C. Brown, Henry T. Brown's wife and partner of sixty years. They have been pioneering advocates and mentors to underrepresented communities in AIChE for nearly five decades. In memory of Melinda's supporting role to Henry's work for minority engineers at AIChE, the Endowment for the Minority Affairs Committee (MAC) Scholarship Program has been renamed "The Henry T. Brown and Melinda C. Brown Endowment for the Education of Under-Represented Minority Chemical Engineers." So far, MAC scholarships have been presented to more than 450 high school and college students. The goal of Brown Endowment is \$300k of which \$186k has been raised. To donate, click here.

**Respectful and Inclusive Cultures:** At the 2018 Annual Meeting, the AIChE Foundation, partnering with Chevron, co-hosted a session on "Conscious Inclusion, Building Respectful and Inclusive Cultures". Read more here.

AIChE LGBTQ+ & Allies Initiatives – Annual Meeting Highlights: An Inclusion in Engineering workshop

and panel was moderated by retired Director of Engineering at DuPont and Fellow Gayle Gibson. Perspectives and experiences were given by Jim Fitterling, CEO, Dow Chemical Company, and COO, DowDuPont Materials Science Division; Deborah Grubbe, Owner and President of Operations and Safety Solutions, and Eric Reiner, Lecturer at the Haas Business School, U. Calif. (Berkeley). Read more here. Over 100 students attended the inaugural AIChE LGBTQ+ Ice Cream Social.



### **Focus on AIChE Fellows Generosity**

Giving to the AIChE Foundation's Doing a World of Good campaign: The Doing a World of Good campaign has raised \$11MM, with AIChE Fellows contributing \$1.2 MM. AIChE has supported 174 grants to under-represented students, 60 grants to impactful projects, educated 389 faculty members on process safety, and helped 416 universities implement the Undergraduate Process Safety Learning Initiative.

AIChE<sup>®</sup> DOING A WORLD

OF GOOD

## AIChE Design Institute for Physical Property Research (DIPPR<sup>®</sup>)

DIPPR<sup>®</sup> (<u>www.aiche.org/dippr</u>) has been active longer than any other sponsored research group of AIChE, celebrating its 40<sup>th</sup> anniversary last November. It is now recognized as the world's premier pre-competitive cooperative to measure and tabulate thermophysical properties and related Environmental Health & Safety data for successful process design. Fellow Jo Rogers is Operations Manager of DIPPR.

DIPPR's Gold Standard Methodology ensures that new data are critically evaluated before acceptance, with values accompanied by estimates of their underlying uncertainties. AIChE provides the umbrella for DIPPR's research activities and has dissemination, publication, and sales rights to the results of such work. All 49 DIPPR member companies participate in the *801 Project*: Evaluated Process Design Data (<u>https://www.aiche.org/dippr/projects/801</u>) for accurate, and complete thermodynamic & physical property process engineering data. The costs of projects are covered by DIPPR dues and income from licensing.

Benefits include:

Exclusive use of new DIPPR data for at least five years until they are made available through licensing. A voice in the annual selection of new compounds to be added to the DIPPR database. Leveraging of scarce resources through collaboration with industry peers.

Benchmarked practices and networking with industry experts dealing with relevant data needs.

Major past projects of DIPPR are listed below. Their research results have been included in Project 801.

- 805 Project: Experimental Data on Mixtures (<u>www.aiche.org/dippr/projects/805</u>) to obtain phase equilibrium and other data on binary and multicomponent mixtures of industrial chemicals augmenting group structure predictive techniques. More than 315 systems have been measured.
- 851 Project: Critical Properties of Pure Compounds (<u>www.aiche.org/dippr/projects/851</u>) to experimentally measure, especially with new, rapid techniques to avoid the effects of degradation and gravity. Values of  $T_c$  for 183 chemicals, along with many  $P_c$  and  $V_c$  data have been measured.
- *ESP Project*: Environmental and Safety Properties (*www.aiche.org/dippr/projects/ESP*) to compile and evaluate data and estimates. This unique project fills ESP knowledge gaps of U.S. industry.

# **AIChE Fellows Website and Volunteering**

We encourage you to browse to <u>aiche.org/fellows</u> to keep abreast of Fellows activities and information. Links exist to the Fellows Directory (accessible only with AIChE login), Fellow nomination criteria and resources, AIChE volunteer opportunities, events (often with photos), newsletters, and archived announcements.

The website has many sections that can be edited by the website managers, Jo Rogers and John O'Connell. Your <u>suggestions for improved navigation</u>, corrections, and enhancements are welcome! Contact (*fellowscouncil@aiche.org*).

Fellows are urged to contribute their time and expertise to some of the many activities and needs of AIChE members, students, and entities. <u>Volunteer Central</u> matches individuals with opportunities; <u>submit your</u> <u>interests and availability to</u> (<u>www.aiche.org/fellows/fellows-volunteer-service</u>)</u>. Contributing your time to AIChE activities connects you to our profession in ways that take best advantage of your interests and talents, as well as should give you greatly satisfying experiences.

# AIChE Fellows Newsletter Winter 2019 AIChE

### 2019 Fellows Council Roster

Name Gilda Barabino David Eckhardt, Vice Chair Zenaida Gephardt Ignacio Grossmann Ahmed Khogeer Monica Mellinger, Staff John O'Connell, Secretary Robert Ofoli Syamal Poddar, Past Chair Anne Robinson David Rockstraw Jo Rogers, Chair Chi-Min Shu Cheryl Teich <u>Affiliation</u> City University of New York Irwin Engineers (Retired) Rowan University Carnegie-Mellon University Saudi Aramco AIChE University of Virginia (Retired) Michigan State University Poddar & Associates Carnegie-Mellon University New Mexico State University DIPPR National Yunlin U. Science & Technology, Taiwan Dow

### Summary of Fellows Council Meeting in Pittsburgh October 30, 2018

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.

<u>At the Pittsburgh meeting</u> after the Fellows Breakfast on October 30, 2018, most of the 2018 and 2019 members attended and were joined by several guest Fellows providing stimulating discussions.

The main topics were:

- (1) Feedback of Breakfast; Positives, possible improvements, suggestions
- (2) PAIC task force to review content of policy statements; revisions to policies (See *aiche.org/paic*)
- (3) Strategic Initiatives and Programming: Fellows cosponsored two Annual Meeting sessions
- (4) Educational support for ChE University Departments: FC representation at Department Chairs session. Continuing and new regional Department Chairs meetings well-regarded (See page 5.)
- (5) SIOC: Fellows cosponsored one Student Conference session. Engineers without Borders support is changing. FC to do more on international activities, diversity, MAC Scholarships, mentoring.
- (6) Minority Affairs Committee (MAC): strategic planning to move beyond meetings to build community, establish business plan as contributions decline, connect to AIChE Strategic Plan.
- (7) Foundation: Financials doing well, but Doing a World of Good goal not yet met, seeking more employer matching contributions
- (8) Admissions: 10 years as member can cause problems especially for internationals. AIChE Bylaws may need revising. Committee doing test cases to facilitate Fellow nominations and selection. FC should submit more nominations.
- (9) Website/Newsletter: Site updating in process. Newsletter informative & enjoyable. Items welcome!
- (10) New Fellow pins: Four designs proposed by AIChE Marketing. Choice needed in early 2019; to be made at next meeting.
- (11) Next telecom in January followed by face-to-face in New Orleans, April 2, 2019.

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