



AICHE Elects New Fellows

Last fall, AIChE's Board of Directors conferred the title of Fellow on 20 AIChE members who have made significant contributions to the profession. Several of these new Fellows received recognition at the November Annual Meeting in Salt Lake City, UT, while others will be honored at the March 2011 Spring Meeting in Chicago, IL.

Fellow candidates are nominated by their AIChE peers, and must have significant chemical engineering practice (generally 25 years) and been a member of AIChE for at least 10 years, with at least three years as a Senior member. More information about AIChE Fellows is available at www.aiche.org/About/OurMembers/fellow.aspx.

Here are some of the recently elected Fellows. More will be introduced in future issues of *CEP*.



John F. Cirucci is a Senior Engineering Associate at Air Products and Chemicals, where he has held positions in process design and development for diverse areas of technology. He earned his chemical engineering BS and MS from Penn State

Univ. and Lehigh Univ., respectively. He is the current chair of AIChE's Societal Impact Operating Council, chairs the Global Outreach Committee, and is a leader of the Lehigh Valley Section. He is a founder of the Lehigh Valley Professionals Chapter of Engineers Without Borders-USA, leading its collaboration with AIChE.



Andre R. Da Costa is a Chemical Engineering Manager at Corning, Inc., with 24 years of diversified industrial chemical engineering experience across four continents. He earned an MSc from Mendeleev Univ. (Russia) and a chemical engineering PhD from the Univ. of New South Wales (Australia). He is co-inventor on 14 patents and co-author of 30 papers and presentations. Since coming to the U.S. in 1999, Da Costa has served AIChE in more than 20 local and national leadership roles. He is chair of the Executive Board of the National Program Committee and was elected Institute treasurer in 2010.



R. Bruce Eldridge earned his PhD in chemical engineering at the Univ. of Texas at Austin, where he is currently a Distinguished Senior Lecturer and head of the Process Science and Technology Center in the Dept. of Chemical Engineering, and oversees a research program whose principal investigators employ more than 40 graduate students. Eldridge's courses cover chemical engineering fundamentals, fluid flow, process design, and heat and mass transfer. His

teaching approach emphasizes chemical engineering principles while promoting an understanding of concepts that are fundamental to engineering practice.



Bill B. Elmore earned his chemical engineering PhD at the Univ. of Arkansas. He began his academic career at Louisiana Tech Univ., serving as chemical engineering program chair and as an academic director of multiple engineering and science departments. In 2005, Elmore moved to Mississippi State Univ.'s Dave C. Swalm School of Chemical Engineering as the Hunter Henry Endowed Chair. He currently serves as interim director for the Swalm School, and is involved in AIChE student activities and programs.



Timothy C. Frank is Associate Director of R&D at Dow Chemical in Midland, MI, where he is a leader of separation and purification technologies within Dow's Engineering Sciences Laboratory. He is a leader of AIChE's Mid-Michigan Section and is involved in AIChE programming in the area of extraction. He is editor and co-author of the chapter on liquid-liquid extraction in *Perry's Chemical Engineers' Handbook*. He earned his chemical engineering BS and PhD at Montana State Univ. and the Univ. of Colorado, respectively.



Alan L. Graham earned his PhD in chemical engineering at the Univ. of Wisconsin, and has worked extensively in two-phase and multiphase transport, applying this knowledge in industry, government laboratories and universities. Graham has been a professor and chair of the Chemical Engineering Dept. at Texas Tech Univ., a Distinguished National Laboratory Professor at the Univ. of

New Mexico, and an adjunct professor at the Univ. of California, Santa Barbara. He founded the Institute for Multiscale Materials Studies, a joint initiative between Los Alamos National Laboratory and the Univ. of California, Santa Barbara.



Lori McDowell is a business development manager at Praxair, where her responsibilities include industrial gas applications for combustion processes, alternative fuels, and air quality. She earned chemical engineering BS and

PhD degrees from the Univ. of Pennsylvania and the Univ. of Delaware, respectively, and an MS in environmental engineering from Caltech. She has held leadership roles in AIChE's Fuels and Petrochemicals Div., and has served on the Chemical Technology Operating Council, the National Program Committee, and others. She is also a leader of the Women's Energy Network of Houston.



Meyya Meyyappan is Chief Scientist for Exploration Technology at NASA Ames Research Center in Moffett Field, CA, previously serving as Director of the Center for Nanotechnology. His research interests include nanomaterials and application development for chemical sensors and biosensors, electronics, and optoelectronics. He has co-authored more than 200 journal articles and presented more than 200 invited lectures and courses on nanotechnology topics around the world. He has received numerous international honors for his contributions to nanotechnology and education.



Todd M. Przybycien earned BS degrees in chemical engineering and chemistry from Washington Univ. and an MS and PhD in chemical engineering at Caltech. He worked at Monsanto Agricultural Co. prior to starting his academic career at Rensselaer Polytechnic Institute. Arriving at Carnegie Mellon Univ. in 1996, he served as the founding head of the Dept. of Biomedical Engineering from 2002 to 2008, and now holds joint appointments in biomedical and chemical engineering. He serves on the Managing Board of AIChE's Society for Biological Engineers and is on the editorial board of *Separation Science and Technology*.

AIChE Members Elected Fellows of AAAS

The American Association for the Advancement of Science (AAAS; www.aaas.org) recently elected 503 of its members as Fellows of AAAS. This latest class of AAAS Fellows includes several members of AIChE.

AAAS Fellows are recognized by their peers for meritorious efforts to advance science or its applications. These individuals will be formally honored for their contributions to science and technology on Feb. 19, at the Fellows Forum during the AAAS Annual Meeting in Washington, DC.

The following AIChE members were elected AAAS Fellows in Dec. 2010:

- Nicholas L. Abbott, Univ. of Wisconsin-Madison
- Gilda A. Barabino, Georgia Institute of Technology
- Rena Bizios, Univ. of Texas at San Antonio
- Joan F. Brennecke, Univ. of Notre Dame
- Michael W. Deem, Rice Univ.
- Francis J. Doyle, III, Univ. of California, Santa Barbara
- Kelvin H. Lee, Delaware Biotechnology Institute
- Edward J. Maginn, Univ. of Notre Dame
- Rajakkannu Mutharasan, Drexel Univ.
- Arvind Varma, Purdue Univ.
- Richard C. Willson, Univ. of Houston

AAAS is an international nonprofit organization dedicated to advancing science around the world. Among its publications is the journal *Science*. The complete roster of new AAAS Fellows can be found on the AAAS website.

WESTERN MICHIGAN CHE STUDENTS RECEIVE ENERGY MANAGEMENT SCHOLARSHIPS

Five AIChE student members at Western Michigan Univ. (WMU) have been awarded scholarships by Armstrong International, a Three Rivers, Michigan-based manufacturer of products and systems for lowering energy consumption and reducing environmental emissions.

The 2010 scholarship recipients — Kristen Bellmer, Casey Kick, Thomas Merckley, Caleb Pease, and Katie Risnes — are studying under the energy management option of WMU's chemical engineering program, which provides opportunities for students who plan careers in the energy industry to gain hands-on experience working with industry professionals.

The Armstrong Energy Management scholarships are awarded annually to WMU chemical engineering students who meet academic and other criteria.



▲ From left to right: Casey Kick, Kristen Bellmer, Thomas Merckley, Caleb Pease, Tom Henry (Armstrong's director of global sales), and Katie Risnes.

In Memoriam: Bernard S. "Bernie" Lee, AIChE Fellow

Bernard Shing-Shu "Bernie" Lee, former president of the Institute of Gas Technology (Chicago, IL), died on Nov. 7, 2010, in Sun Lakes, AZ. He was 75.

Born in Nanking, China, in 1934, Lee moved to the U.S. in 1949. He attended the Univ. of Virginia before transferring to Polytechnic Institute of Brooklyn (now Polytechnic Institute of New York Univ.). There he earned his chemical engineering BS (1956) and doctorate (1960), and conducted his thesis research, on the kinetics of particle growth in a fluidized calciner, at Argonne National Laboratory.

After beginning his career at Arthur D. Little, in Cambridge, MA, Lee, in 1965, joined the Institute of Gas Technology (IGT) — a not-for-

profit research and education organization that develops technologies for fossil fuel conversion and natural gas utilization. He began as a supervisor in gasification research, and was responsible for the HYGAS process for converting coal to synthetic natural gas. As synthetic-fuel programs expanded in the 1970s, he devoted his time to the scale up of HYGAS and other conversion processes, becoming an authority in the gasification field. In 1978, Lee became President of IGT, a position he held until his retirement in 1999.

Lee also served as a director of several organizations, including Peerless Manufacturing Co., National Fuel Gas Co., and NUI Corp., and on the advisory board of the Center for Applied Energy Research. He was also



an advisor to Petronas in Malaysia, and Shanghai Gas Design Institute in China.

A Fellow of AIChE, Lee served on the Government Relations Committee's Task Force on massive electricity storage (MES) and wrote several articles on the topic for *CEP*, among various activities.

He is survived by his wife, Pauline, a sister, three daughters, and nine grandchildren.

BELFORT RECEIVES BIOCHEMICAL ENGINEERING AWARD

Georges Belfort, the Russell Sage Professor of Chemical and Biological Engineering at Rensselaer Polytechnic Institute, Troy, NY, has been named recipient of the 2011 Alan S. Michaels Award in the Recovery of Biological Products by the American Chemical Society's (ACS) Biotechnology Div. The award recognizes outstanding contributions to the advancement of science and technology for the recovery of biological products, and is being presented to Belfort for his fundamental and applied research on separations processes in biochemical engineering. He will be honored in March at the ACS annual conference in Anaheim, CA.

Belfort has made seminal contributions in liquid-phase pressure-driven membrane-based processes, bioseparations engineering, interfacial science, and affinity separations.

He is the editor of three books, and has published more than 185 peer-reviewed papers and 22 book chapters.

He serves on the editorial board of several international journals and is the international editor of the *Journal of Chemical Engineering of Japan*. He also lectures widely in both academic and industrial settings and is an active consultant in the U.S., Europe, and Japan.



Belfort is a member of the National Academy of Engineering and a member of the Managing Board of AIChE's Society for Biological Engineering. In 2008, AIChE named Belfort one of the "100 Chemical Engineers of the Modern Era." He is a recipient of AIChE's Clarence Gerhold Award in Separation Science and Technology, and is co-founder and former president of the North American Membrane Society.

Belfort received his BS in chemical engineering from the Univ. of Cape Town, and earned his MS and PhD from the Univ. of California, Irvine.

INSTITUTE AND BOARD AWARD NOMINATIONS DUE FEB. 15

Nominations are being accepted for AIChE's 2011 Institute and Board of Directors' Awards. These honors, to be presented at the October 2011 AIChE Annual Meeting in Minneapolis, MN, recognize significant achievement in the chemical engineering profession, and include a series of recently inaugurated awards that celebrate outstanding contributions in industrial practice. Information on each award and the nomination process can be found at www.aiche.org/About/Awards/InstituteandBoard.aspx.

Nomination forms, supporting letters, and supplemental materials should be saved as electronic documents (PDF format is preferred) and submitted to AIChE on a single CD. The postmark deadline for Institute and Board award nominations is Feb. 15, 2011. Questions about the nomination process may be addressed to awards@aiiche.org.

In Memoriam: Raymond T. Schneider

Raymond T. Schneider, an AIChE Fellow, died on Dec. 28, 2010, in Vero Beach, FL. He was 81.

Born in Cincinnati, OH, Schneider earned a degree in chemical engineering from the Univ. of Cincinnati, and worked briefly for the U.S. Atomic Energy Commission before serving in the U.S. Army during the Korean War.

After the war, Schneider worked for more than 40 years as a process and project engineer in the design and construction of chemical plants for phosphate and nitrogen manufacturing, beverage and fuel alcohol production, fluegas desulfurization, mineral processing, and uranium processing. He became a well-known technical expert in his fields, and holds three patents related to those industries.

Schneider was active in AIChE for decades, including the Central Florida Local Section, where he had served as section chair.

An avid photographer, Schneider received awards for his photographs of birds of Florida.

He is survived by his wife of 52 years, Mary Jo, five children, and numerous grandchildren.

In Memoriam

Frank E. Biasca, 90, Los Gatos, CA

John W. Buckman, 73, Charlotte, NC

William G. Cunningham, 82, Chesterfield, MO

Suren V. Desai, 67, Libertyville, IL

James E. Dodgen, 89, Colorado Springs, CO

Thomas L. Gage, 67, Billings, MT

Lionel Kantrowitz, 77, Paramus, NJ

Hisashi O. Kono, 79, Morgantown, WV

Wolfgang B. Pietsch, 72, Naples, FL

Joseph J. Rakos, 77, Edison, NJ

George H. Weekley, 88, Little Rock, AR

AIChE® Calendar Conferences



For information and registration details, visit www.aiche.org/conferences or call Customer Service at 1-800-242-4363 or 1-203-702-7660 (outside the U.S.)

FEBRUARY
7-9, 2011

OTC's First Arctic Technology Conference
George R. Brown Convention Center • Houston, TX

MARCH
13-17, 2011

**2011 AIChE Spring Meeting and
7th Global Congress on Process Safety**
Hyatt Regency Chicago • Chicago, IL

MARCH
16-18, 2011

Sustainable Packaging Symposium 2011
Hyatt Regency Chicago • Chicago, IL

MAY
2-5, 2011

Offshore Technology Conference (OTC) 2011
Reliant Park • Houston, TX

JUNE
5-8, 2011

**AIChE-DECHEMA Global Conference on
Sustainability in the Process Industries (ESPI)**
Hong Kong Univ. of Science and Technology •
Hong Kong, SAR, China

SEPTEMBER
11-15, 2011

**56th Annual Safety in Ammonia Plants and
Related Facilities Symposium**
Sheraton Montreal Hotel • Montreal, QC

OCTOBER
16-21, 2011

2011 AIChE Annual Meeting
Minneapolis Convention Center • Minneapolis, MN



Scheduled Webinars

Register and view live and archived webinars at <http://www.aiche.org/webinars/>

FEBRUARY 9, 2011
2:00-3:00 PM ET

**Making Your Work Easier and Your Results
Data-Driven with Statistics**
Presented by Janet Hammill

FEBRUARY 16, 2011
2:00-3:00 PM ET

**AIChE's Leadership Webinars: Chemical
Engineering Essentials from Academic Authors
— Session Four: Fluid Mechanics for Chemical
Engineers — Old and New**
Presented by Dr. James O. Wilkes

FEBRUARY 23, 2011
2:00-3:00 PM ET

**Controlling Electrostatic Hazards Associated
with Liquid and Powder Processing**
Presented by Dr. Vahid Ebadat

MARCH 2, 2011
2:00-3:00 PM ET

**Applying Lean Principles to Manufacturing and
Design in Process Industries**
Presented by Adnan Siddiqui

MARCH 9, 2011
2:00-3:00 PM ET

**AIChE's Leadership Webinars: Chemical
Engineering Essentials from Academic Authors —
Session Five: A Structure of Isothermal Chemical
Engineering Reactor (CRE) Design**
Presented by Dr. H. Scott Fogler