



Meet Some of AIChE's New Fellows

Each year, AIChE's Board of Directors confers the title of Fellow on AIChE members who have made significant contributions to the profession. Several of these new Fellows received recognition at the October Annual Meeting in Minneapolis, MN, while others will be honored at the April 2012 Spring Meeting and Global Congress on Process Safety in Houston, TX.

Here are some of the recently elected Fellows. More information about AIChE Fellows is available at www.aiche.org/About/OurMembers/fellow.aspx.



Tapas Kumar Das, P.E., is a visiting professor at Saint Martin's Univ. (Lacey, WA), where he teaches civil and mechanical engineering. He earned his PhD in chemical engineering at the Univ. of Bradford (England), and performed postdoctoral research at London's Imperial College and at Princeton Univ. He has worked for universities, industrial companies, government agencies, and consulting firms with a focus on chemical and environmental engineering, and sustainability. He is a leader of AIChE's Environmental Div. and Sustainable Engineering Forum, and has chaired many AIChE conference sessions. He is a past chair of the Puget Sound Section, and a registered P.E. in the state of Washington.



Brian C. Gahan, P.E., is founder and president of Laser Rock Technologies, LLC (Cary, IL), an energy consulting firm. His experience includes more than 25 years in the petroleum industry, working in energy, financial, academic, and R&D organizations. He is a past chair of AIChE's Chicago Section, and the Pittsburgh Section of the Society of Petroleum Engineers, for which he served as a Distinguished Lecturer. He is a U.S. Air Force officer serving in the Illinois Air National Guard as Chief Bioenvironmental Engineer for the 126th Air Refueling Wing. He is a registered P.E. in Illinois and Ohio.



Frederick G. Heineken is a retired program director at the National Science Foundation, where he served for 24 years, most recently in the biotechnology and biochemical engineering directorate. After earning a chemical engineering PhD from the Univ. of Minnesota, he worked on enzyme product development at Monsanto before joining the Univ. of Colorado, where he performed research on respiration physiology. He later spent nine years at COBE Laboratories, where he worked on hemodialysis research and product development, before

joining the NSF. He served as a director of AIChE's Food, Pharmaceutical and Bioengineering Div., and received the Division's Award.



M. Douglas LeVan is the J. Lawrence Wilson Professor of Engineering at Vanderbilt Univ., where he is a past chair of the chemical engineering department. Prior to joining Vanderbilt in 1997, he served for 19 years on the chemical engineering faculty at the Univ. of Virginia. His research interests include novel adsorbent materials, adsorption equilibrium and thermodynamics, intraparticle mass-transfer rates in nanoporous adsorbents, dispersion, and applications of fixed-bed adsorption and membrane processes. He is co-editor of the Adsorption and Ion Exchange chapter of *Perry's Chemical Engineers' Handbook*, and is active in AIChE conference programming.



Anthony McHugh is the Ruth H. and Sam Madrid Professor and Chair of the Dept. of Chemical Engineering at Lehigh Univ. He first joined the faculty at Lehigh in 1972 after completing his PhD at the Univ. of Delaware. From 1979 to 2002, he was a member of the chemical engineering faculty at the Univ. of Illinois at Urbana-Champaign. His research expertise in polymer engineering includes process modeling, rheology, membrane formation, and controlled-release drug delivery. He has published some 200 technical articles and delivered more than 250 seminars at conferences worldwide.



Manfred Morari is head of the Dept. of Information Technology and Electrical Engineering at the Swiss Federal Institute of Technology (ETH) Zurich, where he performs research on hybrid systems and the control of biomedical systems. He led ETH's Automatic Control Laboratory from 1994 to 2008, and prior to that was a professor of chemical engineering at California

Institute of Technology. His honors include election to the U.S. National Academy of Engineering, and AIChE's Colburn and Professional Progress awards. He has held appointments with Exxon and ICI Ltd., and serves on the technical advisory boards of several corporations.



William Roy Penney is a professor of chemical engineering at the Univ. of Arkansas, Fayetteville. His prior engineering experience includes work for McDonnell Aircraft, Monsanto, A. E. Staley, and Henkel. His research and consulting interests are in fluid mixing, heat transfer, process design and scaleup, plant startups, flow distribution in reactors and other process equipment, and intellectual-property litigation. Since 1989, he has served on AIChE's Student Design Competition subcommittee, chairing the project for several years and co-authoring and grading many contest problems. He recently received AIChE's North American Mixing Forum Award for Mixing Research and Practice.



Joseph B. Powell is Chief Scientist at Shell's Westhollow Technology Center (Houston, TX), where he leads R&D programs including innovation and scaleup of new commercial technologies for the production of bisphenol-A and 1,3-propanediol. In addition to his process R&D role in Shell's future energy and chemicals programs, he identifies new technologies. He holds more than 45 U.S. patents, and is co-editor of the book *Sustainable Development in the Process Industries: Cases and Impact*. He earned his chemical engineering PhD at the Univ. of Wisconsin, and is a leader of AIChE's Process Development Div.



Thomas J. Wallen, P.E., is an attorney specializing in intellectual property. He earned his MS in chemical engineering at the Univ. of Virginia and his JD from the Appalachian School of Law. He founded Rappahannock Engineering, Inc., where he developed proton-conductive membrane materials for hydrogen fuel cells, and processes for membrane production. He also worked at the U.S. Patent and Trademark Office, where he examined biotechnology, electrical, chemical, and mechanical applications. He is a P.E. in Virginia and a member of the American Bar Association, and is past chair of AIChE's Tidewater and National Capital sections.

SIOC ORGANIZES K-12 OUTREACH COALITION

With National Engineers' Week just around the corner (Feb. 19–25; www.eweek.org), AIChE is encouraging its members to join forces with their colleagues to inspire future generations of chemical engineers through a new K–12 outreach coalition.

AIChE and its Societal Impact Operating Council (SIOC) is assembling a community of members who are interested in using educational outreach as a way to spread the message about the positive impacts that chemical engineers have on society, and about the significant career opportunities that exist in the profession.

In 2011, the SIOC launched an effort to coordinate the numerous educational outreach activities conducted by individual members, local sections, and student chapters. According to Frank Petrocelli, chair of the SIOC's K–12 Outreach Committee, the first step in this process was to establish a coalition consisting of K-12 outreach advocates representing the key constituencies within AIChE.

"The initial work of this K-12 coalition was focused on identifying already established outreach efforts," says Petrocelli. Surveys sent to AIChE members and to leaders of local sections and student chapters indicated that approximately 25–30% of the chapters and sections are active in K–12 outreach. "These programs run the gamut from in-class demonstrations and experiments, to science fair judging, to career-oriented presentations, to scholarships," reports Petrocelli.

The coalition was then tasked with building a broader virtual community of AIChE members who would like to become involved in K-12 outreach. In recent months, the coalition has focused on highlighting successful outreach efforts in an attempt to encourage more members to get involved. These efforts have included calls to action and best practices posted on ChEnected, AIChE's community blog (<http://chenected.aiche.org/?s=SIOC>), and an SIOC-led K–12 outreach workshop held at the Oct. 2011 AIChE Student Conference in Minneapolis, MN.

Looking ahead, the coalition is working to add a formal high-school outreach program to each AIChE Spring and Annual meeting, in collaboration with members in each host city, says Petrocelli.

Chemical engineers who would like to join these activities or share stories about their own K-12 outreach experiences are invited to contact the SIOC K-12 Outreach coalition at K12Outreach@aiche.org.

The Societal Impact Operating Council is one of three bodies that manage AIChE's activities. SIOC is responsible for AIChE's interactions in the public realm, including global outreach, minority affairs, womens' initiatives, and others.

Institute and Board Award Nominations Due; Some Deadlines Extended

Nominations are due for AIChE's 2012 Institute and Board of Directors' Awards, to be presented at the October 2012 AIChE Annual Meeting in Pittsburgh, PA. These honors include recently inaugurated awards that recognize contributions in industrial practice. Deadlines for several of these industry honors have been extended for 2012 only.

The nomination deadlines for 2012 are as follows:

- Most Institute and Board of Directors' Awards **Due: Feb. 15, 2012**
- Engineering & Construction Award; Industrial R & D Award; Process Operations Award **Due: Apr. 15, 2012**
- Industrial Progress Award (New in 2012) **Due: May 1, 2012**

Information on each award, along with nomination forms and submission instructions, can be found at www.aiche.org/InstituteandBoardAwards. Questions about the nomination process may be addressed to awards@aiiche.org.

In Memoriam

- John F. Bender, 59, Chatham, VA
- Donald C. Buck, 58, Bremerton, WA
- John P. Herring, 91, Newark, DE
- George Kalfas, 47, Wilmington, DE
- Thomas F. Langer, 85, Cape Coral, FL
- Warren L. Larsen, 91, Waynesboro, NJ
- William F. Michels, 53, Aurora, IL
- George T. Miller, 90, Asheville, NC
- Robert L. Moison, 82, Burnsville, MN
- Walter C. Moore, 100, York, PA
- Gerald V. Nelson, 72, Nederland, TX
- Frank S. Riordan, 93, Cincinnati, OH
- Michael C. Schultz, 89, Broomfield, CO
- Edmund W. White, 91, Silver Spring, MD
- Hugh D. Williams, 73, Williamsburg, VA

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, 2012

Carbon Management Technology Conference
Caribe Royal Hotel and Convention Center • Orlando, FL

APRIL
1–5, 2012

2012 AIChE Spring Meeting & 8th Global Congress on Process Safety
Hilton Americas-Houston and George R. Brown Convention Center • Houston, TX

APRIL
3–4, 2012

Institute for Sustainability's Sustainable Packaging Symposium 2012: Advancing Sustainable Supply Chains with Optimized Packaging
Hilton Americas-Houston • Houston, TX

APRIL 29 – MAY 2, 2012

Society for Biological Engineering's 3rd International Conference on Stem Cell Engineering
Sheraton Seattle • Seattle, WA

APRIL 30 – MAY 3, 2012

2012 Offshore Technology Conference
Reliant Center • Houston, TX

Webinars



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

FEB. 8, 2012
2:00–3:00 PM ET

Outcomes of the EPA/NSP/AIChE Center for Sustainable Technology Practices Sustainable Supply Chain Design Scientific Workshop
Presented by Professor Ignacio E. Grossmann

FEB. 15, 2012
2:00–3:00 PM ET

Two-Phase Gas/Liquid Pipe Flow and Relief Sizing
Presented by Professor Ron Darby

FEB. 21, 2012
11:00 AM–12:00 PM ET

Maintenance and Reliability for Chemical Engineers, Part 4: Building the Business Case
Presented by David A. Rosenthal, P.E.

FEB. 29, 2012
2:00–3:00 PM ET

Explosion Protection with In-line-Flame Arresters
Presented by Dr. Michael Davies

MAR. 7, 2012
2:00–3:00 PM ET

Carbon Nanomaterials for Energy-Related Applications
Presented by Dr. Yury Gogotsi

MAR. 14, 2012
2:00–3:00 PM ET

Pressure Relief Valve Sizing Equations' Basis
Presented by Aubry Shackelford