

2009 Board of Directors' and Institute Awards

On Sunday evening, Nov. 8, at the AIChE Annual Meeting in Nashville, TN, the Institute will recognize some of chemical engineering's foremost figures, with the presentation of the 2009 Institute and Board of Directors' Awards. The awards will be given at the annual Honors Ceremony, which is open to all meeting attendees.

AIChE members in all area of practice and academics are encouraged to nominate qualified candidates for future awards. The Awards Committee is especially interested in receiving more nominations from, and on behalf of, members engaged in the industrial practice of chemical engineering. Visit the AIChE website for more information about the Institute and Board awards: www.aiche.org/Awards/. The deadline for 2010 nominations is Feb. 15, 2010.



Founders Award for Outstanding Contributions to the Field of Chemical Engineering

Henry Z. Kister
Fluor Corp.



Lawrence B. Evans Award in Chemical Engineering Practice

(Sponsored by CACHE Corp.)
Dr. Jeffrey J. Siirola
Eastman Chemical Co.



William H. Walker Award for Excellence in Contributions to Chemical Engineering Literature

(Sponsored by John Wiley and Sons)
Dr. James A. Dumesic
Univ. of Wisconsin-Madison



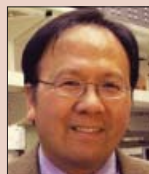
Allan P. Colburn Award for Excellence in Publications by a Young Member of the Institute

(Sponsored by DuPont)
Dr. Yi Tang
Univ. of California, Los Angeles



Alpha Chi Sigma Award for Chemical Engineering Research

(Sponsored by the Alpha Chi Sigma Educational Foundation)
Dr. James C. Liao
Univ. of California, Los Angeles



Institute Award for Excellence in Industrial Gases Technology

(Sponsored by Praxair)
Dr. Jerry Y. S. Lin
Arizona State Univ.



Sustainable Energy Award



F. J. and Dorothy Van Antwerpen Award for Service to the Institute

(Sponsored by The Dow Chemical Co.)
Dr. Andre R. Da Costa
Chevron



Professional Progress Award for Outstanding Progress in Chemical Engineering

(Sponsored by Air Products and Chemicals)
Dr. Kristi S. Anseth
Univ. of Colorado



R. H. Wilhelm Award in Chemical Reaction Engineering

(Sponsored by Exxon-Mobil)
Dr. Raymond J. Gorte
Univ. of Pennsylvania



Award for Service to Society

(Sponsored by Fluor Corp.)
Dr. Isaac C. Sanchez
Univ. of Texas at Austin

Warren K. Lewis Award for Chemical Engineering Education *(Sponsored by Exxon-Mobil)*



Dr. Lorenz T. Biegler



Dr. Ignacio E. Grossmann



Dr. Arthur W. Westerberg

Carnegie Mellon Univ.

AICHE Awards for Industrial Contributions to Debut in 2010

AICHE's Board of Directors and the national Awards Committee have inaugurated several new awards honoring significant contributions by chemical engineers working in industry. Along with the Lawrence B. Evans Award in Chemical Engineering Practice — renamed in 2009 for the recent AIChE president and founder of Aspen Technology — the new honors constitute an expanded system of recognition for chemical engineering contributions in the industrial community.

Most of the new awards will be presented for the first time in the fall of 2010. One of the new honors — the Sustainable Energy Award — will have its debut presentation at the November 2009 Annual Meeting in Nashville, TN. The recipient organization for that prize — Genencor — will receive the award at the Institute's Honors Ceremony, to be held Nov. 8.

The Sustainable Energy Award recognizes individuals in industry, teams from industry, or entire companies that have made substantial contributions toward the development, generation and use of energy through the application of chemical engineering.

The Industrial Research and Development Award is given to individuals or teams working in the industries served by chemical engineers, whose work has resulted in the successful commercial development of new chemicals or chemistry-based products and/or new processes for making useful products.

The Engineering and Construction Award will be presented to individuals or teams for achievement in the design and/or construction of process plants or process plant revamps. The achievements may be the result of excellence in process engineering, project engineering, project management, equipment design, engineering and/or construction scheduling and construction management.

The Process Operations Award pays tribute to individuals or teams working in plant operations, process control and/or supply chain management that have significantly improved the safety, reliability or economics of process operations.

The Industry Leadership Award recognizes individuals or teams working in the industries served by chemical engineers, for leadership and accomplishments in activities including management; sales and marketing; public, community, and industrial relations; commercial and business development; training; or public service. The recognition may be made for a singular contribution or a series of contributions.

The Corporate Innovation Award recognizes corporations (or a corporate division or group) employing a substantial number of chemical engineers for innovation that has resulted in the successful commercial development of new products and/or new processes for making useful products. Introduced in 2008, the

first two winners of this award have been 3M and DuPont.

The Lawrence B. Evans Award in Chemical Engineering Practice recognizes an individual for substantial lifetime achievement in one or more aspects of industrial chemical engineering practice, including management, leadership, research, publications, technology development, patents, engineering and construction, process operations and supply-chain management, sales and marketing, design, business development, and entrepreneurship. Non-winning nominations for the Practice award could, with the agreement of the nominator, be redirected and considered for other awards.

Eligible nominees for the majority of these awards should be from industry or from a government laboratory or another nonacademic entity.

Nominations for 2010 Institute Awards must be postmarked by Feb. 15, 2010. Details are available at www.aiche.org/About/Awards/InstituteandBoard.aspx.

ANOTHER WINNER: CHEM-E-CAR AT THE WORLD CONGRESS

An international version of AIChE's student Chem-E-Car Competition took place at the August 2009 World Congress of Chemical Engineering in Montreal, Quebec. (See the related story on p.46.) There, AIChE teams won the top four slots. The winners from the Univ. of Puerto Rico (right) scored a perfect run — stopping their vehicle precisely on the target mark. Other AIChE teams at the World Congress were Cornell Univ., Cooper Union, Louisiana State Univ., Technical Institute of Monterrey, Mexico, and Univ. of British Columbia. Additional teams came from Canada and Malaysia. Puerto Rico, Cooper Union and Cornell are all past winners of AIChE's National Competition.

Now in its tenth year, the Chem-E-Car Competition involves student chapters in a design and safety program, and is held in connection with AIChE regional and national student conferences



(Photos by Ronald Willey)

World Congress Explores Challenges and Chemical Engineering's Role

The international chemical engineering community gathered in Montreal, Quebec, Canada, August 23–27, for the Eighth World Congress of Chemical Engineering (www.wcce8.org). This year's Congress — built around the theme “Challenges for a Changing World” — was organized by the Canadian Society of Chemical Engineers (CSCHE) and hosted by École Polytechnique and McGill Univ.

AICHE was one of several co-sponsor organizations that helped to program the 400 industrial and technical sessions, which covered virtually all the classical areas of chemical engineering — including mixing, separations, reaction engineering, catalysis, materials, process development, and safety — as well as emerging areas such as nanotechnology, biotechnology, and computational fluid dynamics. Thirteen plenary sessions explored the Congress' theme, with special emphasis on energy and chemical engineering education.

Current AIChE president H. Scott Fogler presented a plenary lecture entitled “Chemical Engineering Perspectives for the Next Decade,” and president-elect Henry T. Kohlbrand delivered a session keynote address, “Elements of Sustainability — An Industrial Perspective.”

AICHE participants also contributed to other conference segments, notably the North American Sustainability Panel, arranged with assistance from AIChE's Institute for Sustainability (IfS), as well as several process safety programs.

Among its key contributions, AIChE along with the CSCHE were joint organizers for the 2nd AIChE-CSCHE LNG (liquefied natural gas) Topical Conference. Subtitled, “Answering Safe-Siting Questions,” the three-day LNG Conference set out to explore the issues related to public safety around LNG storage and



▲ LNG Conference organizers and speakers included (left to right) Peter Lederman, Lederman Consulting USA; Cdr. Patrick Clark, U.S. Coast Guard; Jerry Havens, Univ. of Arkansas; Peter O'Rourke, National Association of State Fire Marshals; Norm Trusler, British Columbia, Canada; Ted Lemoff, National Fire Protection Association; Chris Zerby, Federal Energy Regulatory Commission; Joseph Cramer, AIChE Programming Director. (Photo by Ronald Willey)

gasification facilities, with emphasis on the siting of import terminals. The identification of potential hazards, their consequences, and tactics for their mitigation has considerable implications for regulatory agencies, prospective terminal developers, and the gas industry in general, as well as for the public.

A balanced risk/benefit procedure for siting LNG facilities may also be applicable to other types of energy facilities proposed to address the current worldwide energy crisis. Indeed, energy was a recurring topic among the World Congress plenary speakers, and a subject of broad interest to the Congress's 2,500 attendees.

Fogler was one of many speakers who noted the challenges related to the growing need for energy, reminding attendees that two billion people on the planet currently have no access to electricity. The consensus suggested that the rapid evolution of developing countries out of “energy poverty” will drive a three-fold increase in worldwide energy usage by mid-century, and while energy transformation away from reliance on fossil fuels is necessary, this alone will not be sufficient to fully address the crisis. The long-term attractiveness of direct solar energy

conversion was noted by several speakers. The need for innovation in approaching long-term solutions for global energy needs, as well as problems related to the availability of clean water and improved health in developing regions, was a common theme throughout the presentations.

Other plenary speakers at the Congress explored the advances in bioengineering and nanotechnology, and their enormous potential for improved drug delivery, the targeting of disease centers, and the combating of serious health problems like cancer.

The Congress made it evident that chemical engineers have demonstrated an ability to be innovative, and a confidence that the profession and its educators will continue to evolve to face the challenges ahead ran through the event. Indeed, any solutions to the world's modern challenges must include significant doses of chemistry, physics and biology — problems perfectly suited for chemical engineers.

The PowerPoint slides for many Congress presentations will be posted on the CSCHE website (www.cheminst.ca). The next World Congress will be hosted by the Korean Society of Chemical Engineers in Seoul in August 2013.

WISE Chemical Engineering Interns Go to Washington

This summer, three chemical engineering students honed their skills and broadened their perspectives when AIChE selected them as 2009 WISE (Washington Internships for Science and Engineering) Interns.

Rated one of the top internship programs in the country by *The Princeton Review*, the WISE program selects engineering students entering their final year of undergraduate studies to conduct research on a public policy issue for ten weeks during the summer in Washington, DC. They have the opportunity to learn about the interactions between the engineering community and the government in matters of public policy, and to see how engineers can contribute to public policy decisions in complex technological matters.

As part of the program, the students prepare papers on public policy topics. Jennifer Christensen, WISE Intern from Texas A&M Univ., focused on “Biofuels Policy and Regulatory Issues: Applying Green House Gas Emissions — Life-cycle Analysis.” Sarah Widder, WISE Intern from the Univ. of Washington, wrote about “Policy Options for Nuclear Waste Management: A Sustainable Solution for Expanded Nuclear Energy.” Steven Timothy, WISE Intern from Cornell Univ., reported on “Solar Electricity: Residential Photovoltaic Implementation via National Feed-in Tariff.”

AIChE Members Bruce Cranford, Joseph Cannon and David Richman served as AIChE mentors. Because AIChE does not maintain a Washington, DC, office, the American Chemical Society agreed to provide office space and facilities for AIChE’s three interns.

For information on the WISE program and application deadlines, visit www.aiche.org/Students/Awards/.



▲ Pictured (left to right) are AIChE Director Maria Burka, who leads the Washington Internships in Science and Engineering (WISE) program effort for AIChE’s Government Relations Committee; Jennifer Christensen, Texas A&M Univ.; Sarah Widder, Univ. of Washington; Steven Timothy, Cornell Univ.; and Bruce Cranford, one of AIChE’s WISE mentors.

“Birth of an Industry” Commemorated as Drake Oil Well is Named a Historic Landmark



▲ Replica of the pump house and derrick at the Drake Well Museum in Titusville, PA.

August 27, 2009 marked the 150th anniversary of the day Edwin L. Drake — dispatched to Titusville, PA, by his employer, the Seneca Rock Oil Co., in a quest for medicinal “rock oil” — struck liquid

gold with the drilling of the first commercially successful oil well. That world-altering event was celebrated this summer with a “Drake Day Extravaganza” — held at the Drake Well Museum Complex (www.drakewell.org) in Titusville — where the site was formally designated a historic landmark by the American Chemical Society (ACS).

AIChE past president Dale Keairns, as well as leaders of AIChE’s Pittsburgh Local Section, collaborated with ACS on the Drake Day festivities — which drew 2,100 visitors for a weekend of tours, demonstrations and entertainment. Keairns presented a talk on the future of energy in the U.S.

In the 1850s, Samuel Kier, a Pittsburgh businessman, established a market for petroleum as a tonic, and built a one-barrel distillation unit for refining crude oil at the Pennsylvania site. Seneca Oil, based in New Haven, CT, sent Drake to the site to figure out how to extract oil from the earth through a well, rather than skimming it from creeks and lakes. The success of Drake’s well created an economic boom, and the use of oil as a lubricant and for fuels soon outstripped medicinal uses. The rest is history.



▲ Drake Day participants included (left to right) Judah Ginsburg (ACS); Dale Keairns (AIChE Past President); Barbara Zolli (Drake Oil Well Museum); Tom Lane (ACS President); Mordecai Treblow (ACS); and Paul Brezovec (Chair of AIChE’s Pittsburgh Local Section).

Lowell Fellingner, Past AIChE Director

Lowell Lee Fellingner of St. Louis, MO, died on July 24, 2009, at age 93. An active member and Fellow of AIChE, Fellingner served as a national AIChE Director from 1977–1979.

Fellingner was born in Norris City, IL, and received his BS in chemical engineering from the Univ. of Illinois in 1937. In 1941, he earned a PhD in chemical engineering from MIT, where he is still known for his thesis on the adsorption of ammonia. He worked at Monsanto for 39 years, retiring in 1981.

Throughout his retirement, Fellingner remained active in AIChE, and enjoyed many avocations — including cycling, hiking, mountain climbing, Toastmasters and handball. A lifelong clarinetist, he played in the Univ. of Illinois marching band, the St. Louis VFW band, a group at Monsanto, and other pickup bands. In recent years, he was a contributor to the AIChE Foundation and the Institute's 21st Century Campaign.

He is survived by his wife Erika, two children, two grandchildren, and two great-grandchildren. Memorial contributions may be made to Emmaus Homes (a charity for disabled adults), 2200 Randolph St., St. Charles, MO 63301, or to Christ Church UCC, 7126 Bruno Ave., Maplewood, MO 63143.

OBITUARIES

Frank S. Chalmers, 81, Washington, DC

Wing-Cheng R. Chan, 73, Cheshire, CT

Gordon Goff, 87, Lafayette, LA*

Joseph Gontcharuk, 86, Aurora, OH

Joseph D. Helwig, 83, Media, PA

Gale L. Hubred, 70, La Habra, CA

Alex James, 85, Greenville, SC

Harvie H. Lewis, 65, Mechanicsville, VA

Richard L. Marcell, 77, Bergenfield, NJ

Thomas G. McWilliams, 75, Elkton, MD

Cliff F. Poor, 75, Las Vegas, NV

John E. Rogerson, 89, Maineville, OH

George S. Roy, 56, Brook Park, OH

Julius Rubin, 90, Franklin Square, NY

Edwin Shuttleworth, 89, Lake Bluff, IL

Allan Smith, Chatham, MA

Carl H. Vogel, 88, Bedminster, NJ

R. N. Watkins, 76, Oxford, MS

Eugene P. Whitlow, 94, Saint Joseph, MI

Stanley Wojton, 61, Lyndhurst, OH

* AIChE Fellow

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.)

OCTOBER
5–6, 2009

AIChE Midwest Regional Conference
Univ. of Illinois at Chicago • Chicago, IL

NOVEMBER
8–13, 2009

2009 AIChE Annual Meeting
Gaylord Opryland Hotel • Nashville, TN

NOVEMBER
17, 2009

AIChE Day at the Chem Show
Javits Convention Center • New York, NY

MARCH
21–25, 2010

2010 AIChE Spring National Meeting
Grand Hyatt San Antonio • San Antonio, TX

MAY
2–5, 2010

SBE's 2nd International Conference on Stem Cell Engineering
Boston, MA



Scheduled Webinars

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

OCTOBER 7, 2009
2:00–3:00 PM ET

Effective Communication-Driven Leadership Skills in a Dynamic Global Market
Presented by Dr. Syamal Poddar

OCTOBER 14, 2009
2:00–3:00 PM ET

A 'Virtuous' Approach to Ethics in Engineering
Presented by Dr. Edmund G. Seebauer

OCTOBER 21, 2009
2:00–3:00 PM ET

The Project Success Method: Project Success Through Practical Hands-on Tools, Applications and Methodology
Presented by Clinton M. Padgett

OCTOBER 28, 2009
2:00–3:00 PM ET

TRIZ: Patterns of Invention and Resolving Engineering Contradictions
Presented by Jack Hipple

NOVEMBER 4, 2009
2:00–3:00 PM EST

Microreactors
Presented by Dr. Klavs Jensen

NOVEMBER 6, 2009
2:00–3:00 PM EST

Biomass Energy Systems for Steam, Power and Fuel Production
Presented by Thomas F. McGowan

NOVEMBER 17, 2009
2:00–3:00 PM EST

Expiration Day: Planning for the 2010 Estate Law Changes (Free for AIChE Members)
Presented by Larry N. Grogan

NOVEMBER 19, 2009
2:00–3:00 PM EST

An Introduction to Methods of Process Safety Hazard Assessment
Presented by Dr. Raymond A. Freeman
(Free for AIChE Members)