

Leadership Development Conference Will Bring Motivation and Management Skills to AIChE Volunteers

AIChE relies on well-informed and motivated member volunteers to lead the Institute's many activity groups — local sections, committees, technical divisions and forums — and to represent the Institute to members on the grass-roots level. One opportunity to gain the knowledge and management skills needed to serve in those roles will present itself at AIChE's 2009 Leadership Development Conference (LDC; www.aiche.org/LDC/), to be held June 12–14, 2009, at the Augusta Marriott Hotel, Augusta, GA.

AIChE members-at-large are invited to take part in the conference — whether they have ambitions to become an AIChE leader or not.

Hosted and programmed this year by AIChE's Central Savannah River (CSR) Local Section, the annual Leadership Development Conference was established in the 1980s to equip volunteer leaders with the knowledge, relationships, and inspiration that they would need to effectively represent the Institute to members in their geographic location or segment of the industry. At the conference, these representatives share best practices, get to know AIChE's Board of Directors, and establish stronger ties to the national organization.

Over time, the LDC has evolved into more than just an orientation for AIChE officers. It has become an opportunity for members to acquire and hone communication skills, management techniques, and other career-building skills.

These opportunities make the LDC a popular attraction for volunteer leaders and other active members, bolstered by strong contributions from the host local sections — which lend their own character to each event. Over its history, the conference has been held in every region of the U.S. —



from Florida to Washington state, from Arizona to Wisconsin, from Tulsa, OK, to St. Louis, MO, to Buffalo, NY.

CSR Local Section Chair Dan Lambert attributes his experience at past LDCs with making his section — and the Section's leadership — stronger and better-coordinated.

"Our last three section chairs have all attended an LDC, and we feel that it made a big impact on our leadership," says Lambert. "We volunteered to host the conference to share our enthusiasm and to help other section leaders. We also wanted to show smaller sections that you don't need to live in a major population center like Boston or Chicago (hosts of past LDCs) to have a healthy AIChE local section." The CSR Section has about 150 AIChE members in the Augusta, GA — Aiken, SC area.

Lambert, who also chairs AIChE's Nuclear Engineering Div., says that the skills training and connections with AIChE's national leadership developed at the LDC are a great help in preparing AIChE committee, division and forum officers for their roles.

"I'd also like to see local sections, forums, divisions and committees use the LDC as a way to prepare younger AIChE members for leadership," urges Lambert. "As such, we are encouraging student leaders and young professionals to attend."

Leaders of AIChE's national Young Professionals Advisory Board and young members from the South Texas Local Section will be on hand to discuss the needs of younger AIChE members, and how AIChE local sections and groups can attract young members to become more active.

Past CSR Local Section chairs Chip Lasher and John Steimke, co-chairs of the 2009 LDC, have assembled a program that provides AIChE leaders with the training needed to orient their activity groups, but they are also striving to include general sessions that promote leadership and career skills that will be transferable to life on the job. Tentatively scheduled workshop topics include:

- Creative problem-solving
- Mentoring: Building Tomorrow's Leaders
- Communication: Leading with Questions
- Motivating Volunteers

Program details and registration information for the 2009 Leadership Development Conference are available at www.aiche.org/ldc/. General questions about the program may be addressed to Chip Lasher (Lawrence.lasher@srs.gov) or John Steimke (john.steimke@srnl.doe.gov).

First International Conference on Sustainability Science and Engineering

Cincinnati, OH
August 9–12, 2009
<http://www.aiche.org/ICOSSEAug09>

To submit an abstract, go to:
<http://aiche.confex.com/aiche/icosse09/cfp.cgi>

Deadline: March 15, 2009.

Biotech Pioneer Gaden Honored for Bringing Medicine to the Masses

Elmer L. Gaden, Jr., of Charlottesville, VA, a retired Univ. of Virginia chemical engineering professor and an AIChE Fellow, has won the National Academy of Engineering's (NAE) 2009 Fritz J. and Dolores H. Russ Prize. Often considered the "father of biochemical engineering," Gaden is being recognized for pioneering research that enabled the large-scale manufacture of antibiotics.

The Russ Prize — sponsored by Ohio Univ. with an endowment from the Russes — was established in 1999, and is awarded biennially to a researcher whose achievements are of critical importance in advancing science and engineering, ultimately improving the human condition. The prize honors recipients with a \$500,000 cash award and a gold medallion. Gaden will receive the prize at a gala dinner on Feb. 17, 2009, in Washington, DC.

Gaden's research began 60 years ago while he was a doctoral student at Columbia Univ. After World War II, antibiotics — particularly penicillin, which had been successfully used to treat battlefield injuries — were increasingly in demand. Drug companies were looking for methods of quickly growing large quantities of the mold-derived drug. Chemical engineers began experimenting with a mechanical process of microbial fermentation, used primarily to produce yeast for food.

Gaden, instead, decided to focus on accelerating the yeast's growth. He introduced oxygen to the yeast through mass transfer, providing more fermentation energy. This

enabled the yeast to grow and multiply faster, thereby providing the method of large-scale antibiotics manufacturing.

Gaden's accomplishment launched the field of biochemical engineering — making a global impact on medical practices through the availability of penicillin and other antibiotics. His methods remain commonplace today and are still applied to produce numerous drugs, including insulin and interferon. Today the antibiotics market is estimated at more than \$25 billion worldwide.

A native of Brooklyn, NY, and a World War II Navy veteran, Gaden worked briefly at Pfizer before devoting his career to teaching and collaborating in academia. He taught at Columbia Univ. for 26 years, and then moved on to teaching and administrative appointments at the Univ. of Vermont. In 1979, he joined the Univ. of Virginia, where he remained until his retirement in 1994.

During his career, Gaden also established *Biotechnology and Bioengineering*, the first international research journal of its kind, and served as its editor for 25 years.

Gaden is exploring ways to donate part of the Russ Prize money to improving engineering education.

Further information about the Russ Prize is available on the NAE Web site: www.nae.edu/awards.



In Memorium: Robert V. Edwards

Robert V. Edwards, professor of engineering, former associate dean and chair of the chemical engineering department at Case Western Reserve Univ., died in Chesterland, OH, on Dec. 8, 2008, of pancreatic cancer. He was 67.

Born in Baltimore, MD, Edwards was one of the first African American students to attend Baltimore Polytechnic Institute High School. He then attended Johns Hopkins Univ., where he earned a BS in mathematics and subsequently a PhD in chemical engineering in 1968. During this period, he was active in the civil rights movement and participated in some of the first sit-ins.

Edwards joined Case Institute of Technology (now Case Western Reserve)

in 1968, where he remained a faculty member until his death. The Board of Trustees of Case Western Reserve Univ. recently awarded him emeritus status to recognize his many years of exemplary service to the university. On Nov. 10, 2008, the Robert V. Edwards Student Reading Room was dedicated in his honor.

In the 1970s, Edwards made seminal contributions to the then-novel concept of using Doppler-shifted laser light for measuring velocities of fluids and other moving objects. Now a mature technology, laser Doppler anemometry is widely used for many purposes, including detection of wind shear near airports and monitoring the flow of air near wind turbines.

A Fellow of AIChE, Edwards published

widely in the scientific literature, advised many undergraduate and graduate students, and lectured on his research throughout the world. He was appointed a Visiting Scientist at the Danish Atomic Energy Commission in Risoe, Denmark, and at the NASA Glenn Research Center in Cleveland, OH.

In addition to his professional activities, Edwards enjoyed ham radios, sailing on Lake Erie, and playing the recorder in a local musical group.

He is survived by his wife, Anne Lindsay, two sons, five step-children and 13 grandchildren.



Upcoming AIChE/ASME Continuing Education Courses

Feb. 9–11, Pan American Life Conference Center, New Orleans, LA

- Industrial Fluid Mixing
- Essentials of Chemical Engineering for Non-Engineers

Mar. 2–6, Omni Houston Hotel Westside, Houston, TX

- Spreadsheet Power
- Excel Programming/Spreadsheet Combo
- Fuel Blending Technology and Management
- HAZOP Studies and Other PHA Techniques for Process Safety and Risk Management
- Emergency Relief Systems (ERS) Design Using DIERS Technology
- Excel Programming With VBA
- Flow of Solids in Bins, Hoppers, Chutes and Feeders
- Improving Powder Properties by Granulation, Compacting and Sintering
- Heat Exchanger Design and Operation
- Advanced Concepts for Process Hazard Analysis
- Pneumatic Conveying of Bulk Solids
- Process Safety Combo

Mar. 16–20, Harrah's Las Vegas, NV

- Six Sigma for Chemical Engineers



David Clough (left) and Miles Julian celebrate the 100th presentation of "Spreadsheet Power," Nov. 17–18, 2009, in San Diego, CA.

- Integrated Process Synthesis: CO₂ Emission Reductions
- PSM: Requirements and the Development of Management Systems
- Micro Process Technology: Tools, Methods and Applications
- Fundamentals of Process Safety
- Multi-Disciplinary Process Development: From Lab to Plant

Attendees will receive continuing education units. Discount rates and scholarships are available to those eligible. For more information, see the course catalog at <http://catalog.asme.org/>, or contact ASME Information Central at 1-800-843-2763; infocentral@asme.org.

Long Run for Short Course

On Nov. 17–18, 2009, chemical engineers David Clough and Miles Julian (shown in the photo at left) delivered the 100th presentation of their AIChE/ASME short course, "Spreadsheet Power for Chemical Engineering Calculations," in a session held at the Town and Country Hotel in San Diego, CA. Now in its twenty-first year, the course is believed to be the most durable in the history of AIChE continuing education.

First offered in 1989 under the title "Use of Spreadsheets in Chemical Engineering Calculations," the two-day course has been attended by more than 1,350 students. Clough, a professor at Univ. of Colorado, and Julian, who is retired after a 40-yr career at DuPont, recently concluded the 101st offering of "Spreadsheet Power" at Chevron Phillips Chemical Co. in Baytown, TX. The next presentation is scheduled for Mar. 2–3, 2009, in Houston, TX.

See the box at left for information about upcoming courses.

AIChE Conference Calendar

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.)

AIChE/SPE 4th Joint Workshop: Practical Strategies for Managing CO₂ Emissions — Where are We Going?

February 22–24, 2009 • Fairmont Sonoma Mission Inn • Sonoma, CA

SBE's 2nd International Conference on Accelerating Biopharmaceutical Development

March 9–12, 2009 • Marriott Coronado • Coronado Island, CA

2009 Spring National Meeting

April 26–30, 2009 • Tampa Convention Center • Tampa, FL

2009 Offshore Technology Conference

May 4–7, 2009 • Reliant Park • Houston, TX

2009 Leadership Development Conference

June 12–14, 2009 • Marriott Augusta Hotel • Augusta, GA

2009 Ammonia Conference

September 13–19, 2009 • Hyatt Regency Calgary • Calgary, AB, Canada

2009 Annual Meeting

November 8–13, 2009 • Gaylord Opryland Hotel • Nashville, TN

OBITUARIES

George E. Branigan, 77, Little Rock, AR

Lile F. Davis, 80, Plano, TX

James A. Drobile, 81, Gladwyne, PA

W. L. Holmes, 83, Sugar Land, TX

Erik Krabbe, 96, Port Jefferson, NY

Russell D. Rischard, 48, Tyler, TX

George C. Szego, 89, Dover, DE*

Jerry Taborek, 86, Sedona, AZ

Hendrick C. Van Ness, 84, Troy, NY*

Kris Venkat, 61, North Brunswick, NJ

Arthur P. Weber, 88, Rockville Center, NY

*Fellow