



Candidates Announced for 2010 AIChE Election Petition Candidates Due May 3

AIChE's Nominating Committee has announced the slate of candidates for the officer and director positions for 2011. In the coming months, *CEP* will publish profiles of all the candidates that describe each person's qualifications and platforms. Profiles of president-elect and treasurer candidates will appear in the June issue, and candidates for director will be published in July.

The president-elect will be elected to a three-year term, serving one year each as president-elect, president, and past-president. The treasurer and directors are elected for three-year terms. Voting by paper and electronic proxy ballot will begin August 9 and end September 7. To keep up to date on this year's election, visit: www.aiche.org/election.

For President Elect

Ignacio Grossmann, *Carnegie Mellon Univ.*
Thomas R. Hanley, *Auburn Univ.*

For Treasurer

Andre R. Da Costa, *Chevron*
Liese Dallbauman, *PepsiCo*

For Director (four to be elected)

Timothy J. Anderson, *Univ. of Florida, Gainesville*
T. Bond Calloway, Jr., *Savannah River National Laboratory*
Emmanuel A. Dada, *FMC Corp.*
Karl V. Jacob, *The Dow Chemical Co.*
JoAnn Slama Lighty, *Univ. of Utah*
Jeffery P. Perl, *Chicago Chem Consultants Corp.*
Freeman E. Self, *Bechtel*
Katherine S. Ziemer, *Northeastern Univ.*

Are You Interested in Running?

Members interested in running for the AIChE Board election or nominating another member can sign up as a petition candidate.

Any Fellow, senior member, or 4-year member of the Institute who would like to run for president-elect, treasurer, or director can file as a petition candidate with the Office of the Secretary by May 3, 2010. Nominees for president-elect must have previously served as an AIChE officer or director.

Petition candidates must submit the support, in writing, of 100 or more Fellows, senior members, or members. This can be done by signing a petition or by e-mail. For more information on filing as a petition candidate, please contact election@aiche.org.

AIChE Board of Directors Election Guidelines

In order to keep campaigning on a high professional level and to maintain fairness to all candidates, the Institute will rely on the integrity of the candidates. The following are the election guidelines:

(1) Campaigns shall be reasonable in manner, inexpensive, personally oriented and financed by the candidates themselves (that is, not financed by any organization, company, university, or local section of AIChE).

(2) Campaign advertising will be limited to the candidate's personal statement presenting his/her qualifications and views as published in *CEP*, the standard campaign ad in *CEP*, and prescribed content on the AIChE web page. The web page or ad can provide an e-mail address of the candidate for more details on his/her positions, in order to foster a dialog between the candidate and the voting membership.

(3) Campaign committees of friends of the candidates may be formed, but all mailing costs are to be borne by individuals. E-mail contacts are permitted, but no address lists are to be provided by AIChE staff, local sections, or divisions.

(4) No local section, division, or committee shall be allowed to send out any candidate's campaign material in their official mailing, nor should they support or oppose any candidates.

(5) Electioneering at AIChE meetings shall be prohibited. This includes distribution and posting of campaign materials.

(6) Sitting Board members should not endorse candidates running for election.

The Board recognizes that it is not practical to develop a complete set of electioneering rules to police each candidate's professional vitality and integrity. The Board is convinced, however, that it can depend on the membership to enforce these regulations by voting only for candidates who observe them.

AIChE 2010 Election Timeline

May 3, 2010: Petition Candidate Cut-Off Date

August 9, 2010: Election Ballot Mail Date

September 7, 2010: Election Ballot Receipt Deadline

September 13, 2010: Tellers Committee Meeting

November 8, 2010: Election Results Announced at AIChE Annual Business Meeting in Salt Lake City, UT

AIChE to Co-sponsor Sustainable Design Expo

AIChE will help to promote sustainable engineering — and provide a showcase for companies to display their leadership in sustainability and environmental protection — when it co-sponsors the U.S. Environmental-Protection Agency's (EPA) 2010 National Sustainable Design Exposition, to be held Apr. 24–25, on the National Mall in Washington, DC.

Coinciding with Earth Day, the annual Sustainable Design Expo was created to encourage new generations of scientists, engineers, and technology workers in their efforts to advance the principles of sustainability through technology. It brings together engineers, students, government representatives, and industry innovators to raise awareness of the principles of sustainable development and collaborate on sustainability initiatives.

The Expo also gives young scientists and engineers an opportunity to start down career paths that will allow them to do valuable work through sustainable engineering.

The centerpiece of the Expo is the EPA's People, Prosperity and the Planet (P3) Awards. P3 is a student design competition for sustainability, in which interdisciplinary teams of undergraduates demonstrate projects that apply innovative technology to address global environmental challenges. Chemical engineering students play key roles in many of the projects, in categories such as pollution prevention, sustainable development, alternative energy, water, agriculture, and materials.

In the P3 competition's initial phase, qualifying teams receive start-up grants from EPA and use the money to research and develop their sustainable design projects during the academic year. In the spring, the projects are presented and judged at



the Sustainability Expo. The teams with the best designs are awarded up to \$75,000 to continue their work, implement their designs in the field, and bring them to the marketplace.

Here are a few of the projects vying for honors at this year's Expo.

Students at Cornell Univ. are designing a dose controller that will adjust chemical flowrates in response to changes in water treatment plant flowrates. The controller would eliminate the need for plant operators to adjust the chemical feed systems when the plant flowrate changes, simplifying plant operation and reducing opportunities for error. The design is being tested at the Agua-Clara municipal drinking-water treatment plants in Honduras, which were designed by Cornell students and operate without electricity.

At the Univ. of Minnesota, Minneapolis, students are working on reducing the amount of fungicides used during potato production. They are using DNA sequencing to identify plant genes involved in resistance to the late blight pathogen, which causes multibillion-dollar crop losses annually and requires the use of millions of tons of fungicides for control. The students seek to understand disease response pathways in the potato foliage and tuber, integrating their data into large-scale deployment efforts for RB, a gene that confers foliar late blight resistance to potatoes.

Virginia Tech students are developing a combined riparian zone with a stream-denitrifying biofilm to reduce nitrates in aquatic ecosystems. The integration of a microbiological filter into the riparian zone of a water body will help keep ecosystems clean and healthy. The team is designing a sustainable biofilm that can be incorporated into a section of a stream to biologically remove nitrates from the water — taking a holistic approach that incorporates a biotechnological solution into a natural setting.

Learn more about the Sustainable Design Expo at www.aiche.org/EPAp3.

EXHIBIT AT THE SUSTAINABLE DESIGN EXPO APRIL 24–25

As co-sponsor of the Sustainable Design Expo, AIChE's Institute for Sustainability (IfS) is recruiting companies — from multinationals to garage-based start-ups — to exhibit at the Expo.

Exhibitors will gain exposure to legislators, business leaders, engineers and students working in sustainable science and engineering, and benefit from a public platform that will raise their companies' profiles as sustainability leaders. The exhibits will be arranged to encourage collaboration and discussion among the assembled stakeholders — helping to advance economic growth and reduce environmental impact through innovative engineering design, while educating the public about various approaches to sustainability.

Exhibit booth reservations are being accepted until March 31. Details about exhibitor packages and benefits are available from Jonathan Monk; e-mail: jonam@aiche.org.

James Knudsen, AIChE Past President, Dies at 89

James George Knudsen, professor emeritus of chemical engineering at Oregon State Univ. and a past president of AIChE, died on Jan. 25, 2010, in Corvallis, OR. He was 89.

Knudsen served as Institute President in 1980, one of many leadership roles he held during his career-long involvement in AIChE. Among his many contributions, he was a founding officer of the Heat Transfer and Energy Conversion Div. (now Transport and Energy Processes Div.) in 1956.

Knudsen was born Mar. 27, 1920, in Youngstown, Alberta, Canada. He received bachelor's and master's degrees in chemical engineering from the Univ. of Alberta and a doctorate from the Univ. of Michigan. He joined the faculty at Oregon State in 1951, where he served the College of Engineering as assistant dean for 11 years and as associate dean for 10 years, until his retirement in 1985.

Knudsen was a scholar in the area of heat transfer. He was co-author with Donald L. Katz of the classic textbook, "Fluid Dynamics and Heat Transfer," published in 1958, and he edited a chapter of "Perry's Chemical Engineers' Handbook."

He was a founder and long-time consultant for Heat Transfer Research Inc. (HTRI). He also served on the American Board of Engineering Technology and as president of the Oregon State Board of Engineering Examiners.

Colleague and AIChE Fellow

Tommy Ambrose says that Knudsen's upbringing on a wheat and dairy farm during the Depression taught him about hard work, the importance of careful planning, and the necessity of working with people as well as the natural elements.



Ambrose points out that his friend's low-key but direct manner was appreciated and respected by students, colleagues and clients. "He was particularly skillful at working with diverse groups of people and building teams charged with achieving specific objectives," he says. He also notes that Knudsen found an ideal outlet for these skills through his tireless work within the Institute, and that "AIChE was his passion."

A Fellow of AIChE, Knudsen was honored by the Institute in 1977 with its Founders Award for Contributions to the Field of Chemical Engineering, and in 1982 with the Donald Q. Kern Award for Heat Transfer.

He was preceded in death by his wife of 62 years, Joyce Renville Knudsen, and a daughter, Kathryn. Survivors include a daughter (Shelley) and two grandchildren.

AIChE Members Elected to the National Academy of Engineering

Election to the National Academy of Engineering (NAE) is among the highest professional distinctions accorded an engineer. This year, the NAE has elected 68 new members and nine foreign associates, including the following AIChE members:

Ishan A. Aksay, professor of chemical engineering, Princeton Univ. — for advances in ceramic processing methods, biologically inspired materials processing, and field-induced layering of colloidal crystals.

Montgomery M. Alger, chief technology officer, Air Products and Chemicals Inc. — for the innovative fusion of business and process engineering models to advance engineering applications and analysis.

Robert E. Cohen, St. Laurent Professor of Chemical Engineering, Massachusetts Institute of Technology — for research on polymer morphology and surfaces, commercial products and processes, successful entrepreneurship, and novel educational programs.

L. K. Doraiswamy, Anson Marston Distinguished Professor Emeritus, chemical and biological engineering, Iowa State Univ. — for outstanding leadership in the development of the Indian chemical industry and contributions to organic synthesis engineering, heterogeneous reactions and reactors.

Richard C. Flagan, Irma and Ross McCollum-William H. Corcoran Professor of Chemical Engineering, and professor of environmental science and engineering, California Institute of Technology — for leadership in invention, measurement, production, and technology of aerosols.

Jeffrey Alan Hubbell, director, Institute for Biomedical Engineer-

ing, and professor of materials science, Laboratory for Regenerative Medicine and Pharmacobiology, École Polytechnique Fédérale de Lausanne, Switzerland — for contributions to the science, engineering, and technology of bioactive materials for the benefit of patients.

Eric W. Kaler, provost and senior vice president for academic affairs, Stony Brook Univ. — for elucidation of structure-function relationships in surfactant systems that has led to novel formulations of complex, self-assembled media.

Jay D. Keasling, Hubbard Howe Jr. Distinguished Professor of Biochemical Engineering, Univ. of California, Berkeley, and chief executive officer and vice president of fuels synthesis, Joint BioEnergy Institute — for developing synthetic biology tools to engineer the antimalarial drug artemisinin.

Thomas F. Kuech, Milton J. and A. Maude Shoemaker Professor, chemical and biological engineering, Univ. of Wisconsin — for contributions to chemical vapor deposition of compound semiconductors.

Sang Yup Lee, dean, College of Life Science and Bioengineering and Distinguished Professor, chemical and biomolecular engineering, KAIST, Daejeon, Republic of South Korea — for leadership in bacterial biotechnology and metabolic engineering, including development of fermentation processes for biodegradable polymers and organic acids.

David J. Mooney, dean for chemical/biological sciences and engineering, and Robert P. Pinkas Family Professor of Bioengineering, Harvard Univ. — for contributions to the fields of tissue engineering and regeneration.

In Memorium: Richard Bennett

Richard Paul Chishold "Dick" Bennett died on Dec. 27, 2009, in Frankfort, IL, after a battle with multiple myeloma. He was 83.

During the last days of World War II, Bennett served as a staff sergeant in the mechanized cavalry of George Patton's Third Army and received the Bronze Star for heroic action. After the war, he studied chemical engineering at the Univ. of Illinois, where he earned his BS.

Bennett went on to work for Swenson Process Equipment, Inc., and its successors in Harvey, IL, for more than 40 years, where he became company president. He gained renown as an expert on crystallization and evaporator technology, and held numerous patents on behalf of the company. He wrote the chapter on liquid-solid operation and equipment for "Perry's Chemical Engineers' Handbook," and authored a chapter on evaporators for Dorf's "The Engineering Handbook."

An AIChE member and licensed Professional Engineer, Bennett was sought after for his expertise, including his work on the team that developed the process to extract potash from the Dead Sea in the late 1960s. He traveled around the world advising companies on chemical processes, continuing work as a consultant into his eighties.

Bennett was devoted to his family, and enjoyed traveling. He was also a ham-radio enthusiast, spending many weekends attending "hamfests" in the Midwest. A source of pride was the 15-ft mobile radio antenna that he built in his backyard, and family members indulged Bennett in his quest to develop "the perfect transitor."

Bennett is survived by his wife of 56 years, Doris (nee Kirkpatrick) Bennett, two children, a brother, a niece and a nephew, and two grandchildren.



OBITUARIES

Richard L. Anderson, 61, Bartlesville, OK
 Alan E. Luehrmann, 76, Silver Spring, MD
 Leonard M. Zuckerman, 86, Great Neck, NY
 Ralph Kafesjian, 75, Irvine, CA
 William H. Husband, 86, Coldstream, BC
 Dexter M. Russell, 71, Huntersville, NC
 Bronislaw B. Smura, 79, Marcellus, NY
 Roland D. Glenn, 97, Arlington, 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.)

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 Hyatt Harborside • Boston, MA
JUNE 4–6, 2010	AIChE Leadership Development Conference Hosted by the East Tennessee Local Section, Kingsport, TN
JUNE 27–30, 2010	AIChE Process Development Symposium: Energy Challenges for Process Development The Lodge of Four Seasons • Lake Ozark, MO
AUGUST 1–4, 2010	5th International Conference on Bioengineering and Nanotechnology Biopolis, Singapore
SEPTEMBER 12–16, 2010	55th Annual Safety in Ammonia Plants and Related Facilities Symposium Hyatt Regency • San Francisco, CA



Scheduled Webinars

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

MARCH 10, 2010 2:00–3:00 PM ET	Burgeoning Prospects for Waste-to-Energy in the United States Presented by Ted Michaels; moderated by Dr. Marco J. Castaldi
MARCH 17, 2010 2:00–3:00 PM ET	Long-Term Care Planning in a Recessionary Environment <i>(Free for AIChE Members)</i> Presented by Graham M. Fuller
APRIL 7, 2010 2:00–3:00 PM ET	Flame Flashbacks: Causes and Prevention Presented by Dan Banks
APRIL 14, 2010 2:00–3:00 PM ET	Visions of the Future for Chemical Engineers Presented by Henry T. Kohlbrand
APRIL 21, 2010 2:00–3:00 PM ET	Gasification: Opportunities and Challenges Presented by Dr. Shuncheng Ji
APRIL 23, 2010 2:00–3:00 PM ET	Systems Metabolic Engineering Presented by Dr. Sang Yup Lee <i>(Free for SBE Members)</i>
APRIL 28, 2010 2:00–3:00 PM ET	Right from the Start: Mistakes to Avoid While Planning Capital Projects Presented by Adnan Siddiqui