

## Four Decades+ of Safety First!

48th Ammonia Safety Conference, Orlando, September 15-18

As key ingredients in the manufacture of fertilizer, ammonia and its related chemicals, such as urea, nitric acid, ammonium nitrate, and methanol, are critical elements in helping to feed a hungry world. So, designing and operating safe processes and facilities to produce these chemicals is a truly global concern.

For more than four decades—easily making it the Institute's longest-running topical conference—the Annual Safety in Ammonia Plants and Related Facilities Symposium has provided a forum where engineers from around the world can share information on safety-related incidents, innovative safety and testing tools, new process technology developments, and other related health and environmental issues in the manufacture, transportation, and storage of ammonia and related chemicals. This year's conference, the 48th edition, will be held from September 15-18, 2003, at the Caribe Royale Resort in Orlando, Florida.

The conference opens on Monday, September 15, with a Keynote Address by

David W. Swindle, Jr., P.E., vice president, business acquisition and national security programs, for Kellogg Brown & Root Services, Inc. (KBR) Government Services, Inc., on "Critical Infrastructure Protection Strategy in Homeland Security: Chemical Plant Focus." Among his responsibilities, Swindle directs several key homeland security programs performed for senior leadership of the U.S. Departments of Defense, Energy, and Homeland Security, including activities related to the disarmament and reconstruction of Iraq.

The heart of the program will be the presentation of more than 25 high-quality research papers, addressing such topics as "Consideration of Fatigue Life for the Design of Vessels in Molecular Sieve Service," "Lifecycle Management System for Urea Plant," "Occupational Ammonia Injuries and Sodium Thiosulfate Treatment Review," "Tripod-beta: A Tool to Discover and Eliminate the Causes Why People Make Mistakes," "Fertilizer Plant Security," and "Water and Your Shift Reactor: Hero or Villain?" These formal presentations



are complemented by "Roundtables," brief, unrecorded presentations by experts, followed by a moderated panel discussion and audience question-and-answer session. Topics for these sessions include "Operating Experience and Mechanical Integrity Programs for C-1/2Mo and C-1/2Mo-Mn Materials in those Services with the Potential for Producing High-Temperature Hydrogen Attack," and "Field Repair Methods and Procedures with Special Attention to Hydrogen Saturated Parts, Dissimilar Welds and Heat Treatment."

For more information on the Ammonia Conference, or to register, go to <http://www.aiche.org/conferences/ammonia>.

### Stephanopoulos Named 55th Institute Lecturer

George Stephanopoulos, Arthur D. Little Professor of Chemical Engineering at the Massachusetts Institute of Technology, has been named AIChE's 2003 Institute Lecturer. His talk, "Invention and Innovation in a Product-Centered Chemical Industry: General Trends and a Case Study," will be delivered at the Annual Meeting in San Francisco this November.

Stephanopoulos, who is codirector of MIT's Laboratory for Bioinformatics and Metabolic Engineering, and was chief technology officer of Mitsubishi Chemical Corporation from July 2000-2002, will address how invention and innovation has changed, and the implications for academic and industrial research and development (R&D). The lecture will also touch on integrating R&D with marketing and business strategy, and managing and leveraging knowledge assets.

Prior to joining MIT in 1984, Stephanopoulos taught at the University of Minnesota and the National Technical University of Athens. He continues to serve



Mitsubishi as managing director and a member of the Board.

His research work has covered product design and process development, operations analysis-diagno-

sis-planning and process control, and, currently, bioinformatics and multi-scale modeling of materials and processes. He has authored, coauthored, and/or edited 10 books and monographs, and more than 190 journal articles.

A member of the National Academy of Engineering, Stephanopoulos was previously honored with AIChE's Allan P. Colburn, Computing in Chemical Engineering, and Best Paper awards, and he has received ASEE's Curtis W. McGraw Research Award, and the Dreyfus Teacher-Scholar Award. In 2002, he received an Honorary Doctorate from McMaster University.

For the full abstract of the lecture, see <http://www.aiche.org/programming/>.

### New Look for '04 Ballot

The paper ballot pack being mailed out on the 29th of this month is changed from past years. The second envelope for ballot return has been eliminated, and only one return envelope is provided. But, don't worry. The same rigorous standards guarding privacy still apply.

Following its successful use in the Constitutional amendment balloting, AIChE members will be able to utilize an electronic proxy for the Board election. A proxy is a limited "power of attorney," affirmatively given to another person or persons to act in his or her stead. Details on how to submit an electronic proxy will be provided with your paper ballot, and an e-mail announcing its availability will be sent to members with valid e-mail addresses. Again, the same standards guarding privacy in the paper balloting process will be applied to the electronic proxy.

If you have questions regarding the balloting process, e-mail Fiona Brennan, Assistant Secretary, at [fiob@aiiche.org](mailto:fiob@aiiche.org).

**AICHE FINANCIAL STATEMENTS, YEAR ENDED DECEMBER 31, 2002**

This is a condensed version of the 2002 financial statements of the American Institute of Chemical Engineers. The financial statements and the full audited report can be viewed by clicking on <http://www.aiche.org/about/pdf/2002finrpt.pdf>

**Statement of Activities****Revenue:**

Dues and other membership revenue .....	\$4,533,669
Publications sales, subscriptions, and royalties .....	3,361,878
Industry Technology Alliances .....	2,709,361
Meetings and technical programming .....	3,411,459
Education services .....	2,556,132
Financial services .....	481,386
AIChE Foundation contributions .....	208,065
Other revenue .....	494,880
Total investment return, net of expenses .....	(785,530)
<b>Total revenue and support .....</b>	<b>\$16,971,300</b>

**Expenses****Program Related:**

Membership .....	\$2,954,913
Publications .....	4,031,863
Industry Technology Alliances .....	3,040,668
Meetings and technical programming .....	3,259,496
Education services .....	2,874,095
Financial services .....	268,280
AIChE Foundation programs .....	259,445
Other program support .....	1,556,826
<b>Total program related .....</b>	<b>\$18,245,586</b>

**Support Services:**

General and administration .....	\$4,624,451
Fundraising .....	319,704
<b>Total support services .....</b>	<b>\$4,944,155</b>

**Total expenses .....** **\$23,189,741**

Additional pension liability .....	\$1,123,682
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(Decrease) increase in net assets .....(7,342,123)

Net assets at beginning of year .....	\$9,046,727
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<b>Net assets at end of year .....</b>	<b>\$1,704,604</b>
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**Balance Sheet****Assets:**

Cash & cash equivalents .....	\$486,351
Investments .....	8,926,868
Accounts receivable, less allowance for doubtful accounts of \$96,000 and \$267,000 in 2002 & 2001, respectively .....	1,493,898
Prepaid expenses and other assets .....	376,708
Contributions receivable .....	630,696
Fixed assets, net of accumulated depreciation .....	2,118,300

**Total assets.....** **\$14,032,821****Liabilities & Net Assets****Liabilities:**

Accounts payable and accrued expenses .....	\$2,770,603
Accrued database project costs .....	200,067
Deferred revenue – dues, subscriptions and other .....	5,362,951
Accrued employee vacation and other benefits .....	463,364
Accrued pension and other post-retirement benefit costs .....	3,531,232

**Total liabilities.....** **\$12,328,217****Net Assets:**

Unrestricted .....	\$(45,860)
Temporarily restricted .....	1,251,289
Permanently restricted .....	499,175

**Total net assets .....** **\$1,704,604****Total liabilities and net assets .....** **\$14,032,821**

**For the year ended December 31, 2002, AIChE incurred a deficit of \$7.342M, an increase of \$1.703M from 2001. As of December 31, 2002, AIChE's net assets were \$1.705M.**

The 2002 result of AIChE activities was significantly impacted by the weak economy, membership attrition, and higher promotion costs. The combined result of Membership activities, Publication sales, Industry Technology Alliances, Educational Services and Foundation activities was a surplus of \$360K. This sum was \$2.500M lower than in 2001. Offsetting this was the impact from the discontinuing Venture Projects, which saved \$1.635M. Additionally, lower dividends from the investment portfolio, costs associated with restructuring, and increased fringe benefit costs comprise the principal components of the variance between 2002 and 2001.

## 2004 Election: Campaign Ads — President-Elect

## DENNIS C. HENDERSHOT

AIChE's challenge is to maintain and enhance its value to a diverse community of chemical engineers, serving its traditional constituency, while providing a forum for collaboration across all technologies in which chemical engineers are making essential contributions.

**My Goals for AIChE**

Ensure long term financial sustainability and independence

Cost-effectively enhance traditional and growth technical activities by:

- working with technical societies throughout the world
- using electronic collaboration tools to make AIChE technical information available to all members
- outsourcing and joint ventures for support activities

**Professional Activities**

- Senior Technical Fellow, Process Safety, Rohm and Haas Company
- AIChE Board of Directors
- CCPS Managing Board and several subcommittees
- Chemical Engineering Technology Operating Council
- Chair, Safety and Health Division
- Chair, Safety and Chemical Engineering Education (SACHE) Committee
- Merit Award, 2000, Mary Kay O'Connor Process Safety Center

## JEFFREY J. SIROLA

Chemical Engineering is an increasingly versatile profession and this diversity is both a tremendous opportunity and an exciting challenge for AIChE. My goal is for AIChE to be recognized for excellence, effectiveness, value, and responsiveness to the professional needs of all chemical engineers.

**Goals for AIChE**

- Make AIChE membership attractive and indispensable
- Emphasize professionalism, excellence, cost-effectiveness, and fiscal responsibility
- Increase satisfaction with technical programming, publications, and services, especially in emerging areas

**Professional Background**

- Technology Fellow, Eastman Chemical Company
- Industrial Trustee, CACHE
- Engineering Accreditation Commission, ABET
- Chemical Sciences Roundtable
- AIChE Fellow
- National Academy of Engineering

**AIChE Service**

- Board of Directors
- Chemical Engineering Technology Operating Council
- Publications Committee Chair, Education and Accreditation Committee Vice Chair
- National Program, Continuing Education, Research and New Technology, and Awards committees
- Chemical Engineering Program Evaluator
- Director, Chair, and Programming Coordinator, CAST Division
- Director, East Tennessee Local Section

## 2004 Election: Campaign Ads—Secretary

## BOB GOODMARK

**Goals**

- Assure the long term financial viability of AIChE
- Support continuation of services our Members consider essential
- Encourage diversification of AIChE into leading edge specialties
- Work with Local Sections to develop future leaders

**AIChE Service**

- Career and Education Operating Council (CEOC) – Local Sections Committee – Liaison
- AIChE Board of Directors – National Program Committee Liaison
- Fuels & Petrochemicals Division – Treasurer
- South Texas Section – Chair Elect/Chair/Past Chair/Treasurer/Director
- Spring National Meetings – General Arrangements Committee – Chair/Finance Chair/Publicity Chair

**Professional Background**

- Shell Oil Company – Retired – Assignments in:
  - Refining      Marketing
  - Planning      Economics
  - Purchasing      Pipeline Operations
- Bachelors in ChE – Univ. of Florida
- Masters in IE-Mgt. Option – Univ. of Houston
- ChE Dept. Advisory Board – Univ. of Florida

## OTIS SHELTON

During the past decade, technology has changed significantly in chemical engineering. These changes, along with global economic weakness, have affected our membership and our financial vitality.



As we move forward, we must identify the core values of the profession/Institute. These should include creative problem-solving using chemical engineering principles in heat transfer, fluid mechanics, reaction kinetics, engineering design, operations management, and distillation. By focusing our resources and efforts on our core values, we ensure success by focusing on our strengths. This is the same model that many companies have used to regain profitability.

It is very important that we leverage the newly created Industrial Advisory Board to identify opportunities, globally, for advancing the chemical engineering profession.

Future success will require bold leadership, hard work, and greater participation by our membership.

**Vote for Otis Shelton for AIChE Secretary for bold leadership at this critical time.**

## 2004 Election: Campaign Ads — Director

## MARIA K. BURKA



## Issues for AIChE

- Financial viability — modest restructured independent organization or merger with another professional organization
- Decline in AIChE membership
- Changing career paths of chemical engineers — needs of those working outside the CPI
- Emerging role of biochemical engineering
- Potential contribution to homeland security — national visibility

## AIChE Service

- CRE Division — Chair, Vice Chair, Director, Programming Chair, Newsletter Editor. Presently Past Chair
- CAST Division — Secretary/Treasurer and Director
- National Capital Section — Chair, Vice Chair, Professional Development. Presently Director
- Genders and Women's Initiatives committees
- Meeting Program Vice Chair, San Francisco, 11/03
- Fellow

## Professional Experience

- Program Director — Process and Reaction Engineering, and Chemical and Biochemical Engineering Programs at the National Science Foundation
- Senior Scientist — Environmental Protection Agency
- Faculty member — Department of Chemical Engineering, University of Maryland
- Process Design Engineer — Scientific Design Company, NY, NY

## L. ANTONIO ESTÉVEZ



## Antonio's Key Points

I will focus on listening to what our fellow members say and bringing their voices to the leadership, on recruiting and retention, on providing an inclusive environment to our diverse community, and on excelling and leading on the international front.

## Service and Participation within AIChE

- Almost 20 years of service
- Societal Impact Operating Council (SIOC)
- Minority Affairs Committee (MAC)
- AIChE's Puerto Rico Local Section, founding member
- Participated in Annual/Spring Meetings, Officers/Leadership Conferences, Interamerican/World Congresses

## Professional Highlights

- Almost 17 years of faculty service at the University of Puerto Rico, Mayagüez Campus (UPRM)
- Associate Dean of Academic Affairs/Director of Graduate Studies at UPRM (2001-2003)
- President (1996-1998) and currently Secretary General (2002-2004) of the Interamerican Confederation of Chemical Engineering
- Past Member of the Advisory Board on Minorities in Graduate Education of the Council of Graduate Schools (2002-2003)

## CHRISTINE S. GRANT



What does it mean to be a ChE in the 21st century? To take advantage of several exciting new ChE areas (e.g., nanotechnology, bio-systems) Grant is committed to:

- Increasing membership through innovative technical partnerships
- Facilitating educational initiatives in emerging ChE areas
- Recruiting ChE professionals in interdisciplinary areas
- Pursuing unique technical initiatives to grow the Institute
- Securing the financial future of the Institute

## AIChE Service/Recognition

- Chemical Engineering Technology Operating Council
- Chair, Minority Affairs Committee (MAC)
- Environmental Division Area Coordinator
- MAC Distinguished Service Award
- Member, Women's Initiatives Committee
- Environmental Division and Interfacial Phenomena Programming Area: Session Chair

## Professional Highlights

- Associate Professor of ChE, North Carolina State University
- GA Tech Outstanding Young Alumni Council
- Sigma Iota Rho - International Honor Society
- YWCA Academy of Women in Science and Technology

## DALE L. KEAIRNS



What vision will we adopt as we restructure AIChE?

Who will determine the future of our Institute?

We are not electing Directors for "business as usual" —

There are difficult choices to be made and we need a Board that:

- Listens to you as members
- Obtains information to make informed decisions
- Has the skills to determine a new path forward

Dale L. Keairns  
For Director

Over 30 years of AIChE service with a breadth of experience

## Professional experience

- Technical and financial responsibility for research and development
- Business planning
- Management of a commercial business
- Consulting to support the work of others

AIChE Fellow with degrees in chemical engineering from Oklahoma State University (B.S.) and Carnegie Mellon University (Ph.D.)



## 2004 Election: Campaign Ads — Director

## GEORGE LIEBERMANN

AIChE is currently facing a major challenge. The financial health of our Institute, with its implications to every aspect of AIChE's service to the chemical engineering profession, requires proactive turnaround management.

**Priorities**

- Focus on the resolution of the current financial difficulties
- Reshaping the Institute to make it more effective and efficient
- Engagement of major corporations and universities in shaping the "new" AIChE
- Reinforce activities related to emerging technologies and industrial members
- Focus on students/recent graduates in order to strengthen the future base of the Institute

**AIChE Service**

- 1st Vice Chair of the Executive Board of the National Program Committee (2003)
- Founding Chair of the Process Development Group (1997-1999)
- Chair of the Pilot Plant Programming Area (1994-1996)

**Professional Highlights**

- Senior Engineering Fellow, Xerox Research Centre of Canada (2001-)
- Manager of Process Engineering Area, Xerox Research Centre of Canada (1986-1999)
- Xerox President Award (1997)
- 12 patents applied in commercial products

## KIMBERLY L. OGDEN

What does it mean to be a member of the American Institute of Chemical Engineers today? We all must ask ourselves this question. We are facing challenging times that will require more volunteer involvement, so it is paramount that we work together to achieve our goals. My current and past involvement with the Student Chapters Committee and the Career and Education Operating Council, as well as the Food, Pharmaceutical and Bioengineering Division, have made me realize that the following areas are important to our growth:



- Transitioning more student members to "life-long" members;
- Combining volunteer resources of the Local Sections and National to work more effectively together;
- Working with industry to encourage membership; and
- Keeping up with our changing technological world by providing "value-added" for all chemical engineers working in diverse fields.

**Together, we will secure the future of AIChE.**

## GARY K. PATTERSON

**AIChE Needs:**

- Stronger Local Sections
- More company support of section membership
- Re-emphasis on core values and activities
- A balanced budget

**Members Need:**

- Vigorous and helpful Local Section programs
- Balanced meeting program and publication content
- Meetings at convenient and economical locations

**AIChE and Members Must:**

- Connect more graduating students with Local Sections

**Previous AIChE Service**

- 15 meeting sessions chaired, over 50 papers given
- Chair and/or Vice Chair of four national committees
- Member of 21st Century Campaign Steering Committee
- Fellow of AIChE since 1994
- Active section member since 1961

**Other Professional Service**

- ABET Engineering Accreditation Commissioner
- Director for two non-profit corporations

**Professional Experience**

- Procter and Gamble, Columbia Southern Chemical Company, Esso Research Laboratories
- University of Missouri-Rolla (1966-84, 1990-2001 Assoc. Dean, 2001-now Emeritus), University of Arizona (1984-90 Department Chair)



## NICHOLAS TRIANTAFILLOU

AIChE needs to strengthen its effort to become more relevant to chemical engineers employed in industries outside the traditional petrochemical arena. However, before taking action, AIChE has to clearly articulate how it can benefit engineers working in diverse industries as well as their employers, while continuing to build on the core areas that help define the essence of the chemical engineering profession.



Triantafillou's background will allow him to contribute to AIChE by bringing forward a new perspective that will help AIChE to reach a broader population of engineers.

**Professional Highlights**

- Process Development Engineer, ARCO Chemical
- Lyondell in a broad range of M&A activities
- Led finance activities for multiple start-up businesses, Intel's new business incubator group
- Joined finance group supporting Intel's communication group
- BS from the University of Illinois (U-C), PhD in chemical engineering from the University of Delaware
- Wharton Management Program

## Q&A from [changes@aiche.org](mailto:changes@aiche.org)

*This is the third in a series of regular updates from AIChE's Board of Directors regarding its next steps in the life of the Institute.*

Thousands of AIChE members have asked questions and made suggestions via the Institute's [changes@aiche.org](mailto:changes@aiche.org) e-mail address. Here are some of the most commonly asked questions and the Institute's responses.

### How did AIChE get in this situation?

A number of factors have led to AIChE's current financial situation. Substantial investments have been made over the past several years to develop new products and AIChE has not yet recouped its investment in some of these ventures. Unexpected stock market losses in investments have had a big impact on overall AIChE finances. Decreases in corporate support have also impacted AIChE.

### Back in April, Dianne Dorland mentioned "insolvency" as a possibility by the end of the year. Is it?

Not anymore. AIChE's Board has embarked on a plan of focusing on essential AIChE services and products, while significantly reducing costs. These efforts will stabilize AIChE's financial situation and allow the Institute to move forward.

### What has the Board considered?

The Board of Directors considered a variety of options. Of those, two emerged as offering the greatest promise for AIChE's future: 1) reducing costs by focusing on essential services and products; and 2) entering into a strategic alliance with another professional or technical society. The first is being implemented now, and the second is still a consideration.

### Why don't you move out of New York City?

Although this idea has merit, it's not as easy as packing up and moving to Houston. AIChE has 10 years remaining on our office lease. We are working now to sublet our space, which will be a tremendous help. At the same time, we're still exploring the possibility of free or very low cost space in other cities.

### What about my AIChE insurance? Is it safe?

Yes. Absolutely safe. We recognize how daunting it can be to find the right insurance coverage. For this reason, every possible consideration will be given to AIChE's insurance offerings as we move toward the future. It is our goal to provide you with the best possible insurance coverage.

### Why don't you cut staff?

Part of the Board's cost-savings effort involves further staff reductions of about 50%. This is in addition to the 30% reductions over the past couple of years. These staff cuts will result in greater volunteer opportunities.

### Why don't you get money from big corporations?

We are. AIChE is fortunate to have solid relationships with some of the world's most important companies. Our Industrial Advisory Board, for example, is comprised of the principal technology executives at some of these companies. We are seeking their guidance and their financial support.

### So, does AIChE have a future?

Absolutely. There will be some changes over the next several months, but AIChE is being positioned to even better serve the needs of chemical engineers. We've got our work cut out for us, but AIChE will continue to be the premier professional society for all chemical engineers. Your input, support, and commitment are essential to the future growth of AIChE.

As AIChE focuses on those areas our members feel to be essential, we're still very interested in hearing from you. Please address specific ideas or questions to: [changes@aiche.org](mailto:changes@aiche.org). For more information, visit <http://www.aiche.org/changes>.