

### Raphael Katzen, Ethanol Pioneer, Dies at 93

**R**aphael “Ray” Katzen, a pioneering chemical engineer who devoted his career to producing ethanol from a variety of feedstocks, died July 12, 2009, in Bonita Springs, FL, at age 93. The founder of Raphael Katzen Associates International, Inc. (now Katzen International, Inc.), his career in chemical engineering spanned more than 70 years.

Katzen was born in Baltimore, MD, and raised in New York City, where he earned bachelor’s and master’s degrees and a doctorate — all in chemical engineering — from the Polytechnic Institute of Brooklyn (now Polytechnic Institute of New York Univ.).

While working at a defense plant during World War II, Katzen saw the potential for cellulosic ethanol technologies. In 1955, he founded Raphael Katzen Associates International, which through the years helped build and design some 140 major ethanol plants in 34 countries, for industries including agriculture, chemical, biochemical, petrochemical, cryogenic, pulp and sugar. In the 1970s, when the U.S. Dept. of Energy (DOE) was interested in developing a U.S. fuel ethanol industry based on corn, the DOE turned to Katzen and his company.

In 1997, Katzen and his wife Selma sold their interest in his company, and he started a consulting company in Bonita Springs, FL, where he continued to do consulting work, primarily in the ethanol industry. Until recently, he was active on the advisory board of the annual Chemical Process Industries Exposition (Chem Show).

Katzen was a Fellow of AIChE, and in recent years remained active as a trustee in the AIChE Foundation, and as a member of the AIChE Legacy Society. In 1986, he was honored by AIChE with the Award in Chemical Engineering Practice (now the Lawrence B. Evans Award in Chemical Engineering Practice), and in 2001 received the Institute’s Founders Award for Outstanding Contributions to the Field of Chemical Engineering.

He was elected to the National Academy of Engineering for his achievements as a chemical engineer and bioengineer. In 2008, he was the first recipient of DOE’s Raphael Katzen Award, in recognition of his distinguished contributions to the deployment and commercialization of fuels and chemicals production from renewable feedstocks.

Katzen is survived by his wife of 71 years, Selma S. (nee Siegel) Katzen, a daughter, three grandchildren, and seven great-grandchildren.

Katzen’s family has established a memorial fund through AIChE, to benefit chemical engineering students who are pursuing careers in biological engineering. Contributions may be made to the American Institute of Chemical Engineers (AIChE) Raphael Katzen Memorial Fund, 3 Park Avenue, 19th Floor, New York, NY 10016-5991.



### AIChE Student Members Recognized by Tau Beta Pi

**T**he Fellowship Board of Tau Beta Pi, the national engineering honor society, has selected 30 engineering students for graduate fellowships in 2009–2010. One of the top honorees is an AIChE student member.

Benjamin J. Freedman, a chemical engineering student at the Univ. of Maine, is the recipient of a Tau Beta Pi Fellowship, which is awarded for high scholarship, campus leadership and service, and the promise of future contributions to the engineering profession.

Freedman is a graduate of the Univ. of Maine’s Honors College, with a dual degree in biological and chemical engineering. He is pursuing a doctorate in bioprocess engineering at Virginia Tech, and plans to focus on research and development in renewable fuels.

Tau Beta Pi Fellows may do their graduate work at the institution of their choice. Seventeen of this year’s winners will receive cash stipends of \$10,000 for their advanced study. Since the program was inaugurated in 1929, 1,358 fellowships have been granted.

Tau Beta Pi has also selected 234 Tau Beta Pi Scholars for undergraduate study in 2009–2010, including 27 AIChE student members: Evan M. Cherry; Robert B. Christian; Brittany N. Collins; Brandon J. DeKosky; Nicholas D. Deveau; P. Douglas Godfrin; Gittel T. Gold; Bryan R. Goldsmith; Renee S. Hale; Kyle K. Hicks; Miles H. Honkawa; Robert J. Ingram; Andrea L. Jones; Jeong Kim; Jonathan P. Lo; Danica L. Nguyen; Adam P. Pacsi; James E. Redden; Robert N. Seidel; Nathanael A. Stocke; Katerina R. Voigt; Evan J. Waddell; Kathryn A. Whitaker; Stephen R. Wilson; Jenna N. Yaney; Ashley L. Young; and Trevor R. Zuroff.

Each will receive a cash award of \$2,000 for his or her senior year of engineering study.

Founded at Lehigh Univ. in 1885, Tau Beta Pi is the world’s largest engineering society, with collegiate chapters at 234 engineering schools across North America. It has initiated more than 506,000 members in its 124-year history. For more information, about Tau Beta Pi, visit [www.tbp.org](http://www.tbp.org).

## Laurencin to Receive Presidential Mentoring Award



Cato T. Laurencin, vice president for health affairs at the Univ. of Connecticut Health Center and dean of the UConn School of Medicine, has been chosen to receive a prestigious Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. Laurencin is one of 22

science, math, and engineering mentors who will receive their awards from President Barack Obama at a White House ceremony this fall.

Given annually to individuals and organizations, the Presidential Mentoring Awards recognize the crucial role that mentoring plays in the academic and personal development of students studying science or engineering and who belong to minority groups that are underrepresented in those fields. In announcing the recipients, President Obama said, "There is no higher calling than furthering the educational advancement of our nation's young people and encouraging and inspiring our next generation of leaders." Obama continued, "These awards represent a heartfelt salute of appreciation to a remarkable group of individuals who have devoted their lives and careers to helping others and in doing so have helped us all."

Laurencin has achieved national and international prominence as an orthopaedic surgeon and chemical engineer. He

joined the Univ. of Connecticut Health Center from the Univ. of Virginia, where he was chair of the Dept. of Orthopaedic Surgery, as well as the Orthopaedic Surgeon-in-Chief at the Univ. of Virginia Health System. He was designated as a University Professor at the Univ. of Virginia, where he held professorships in biomedical engineering and chemical engineering.

A Fellow of the American Surgical Association and the American Academy of Orthopaedic Surgeons, Laurencin was also named one of the 100 engineers of the modern era by the AIChE. Most recently, he received the Galletti Award from the American Institute for Medical and Biological Engineering, which cited his important research in tissue engineering.

Laurencin earned his undergraduate degree in chemical engineering from Princeton Univ. and his medical degree from Harvard Medical School. During medical school, he also earned a PhD in biochemical engineering from the Massachusetts Institute of Technology.

Candidates for the Presidential Mentoring Award are nominated by colleagues, administrators, and students from their home institutions. The mentoring can involve students at any grade level from elementary through graduate school. In addition to being honored at the White House, recipients receive awards of \$10,000 to advance their mentoring efforts.

## DiBiasio Elected Fellow of American Society for Engineering Education

David DiBiasio, head of the chemical engineering department at Worcester Polytechnic Institute (WPI), has been elected a Fellow of the American Society for Engineering Education (ASEE).

ASEE bestows the honor of Fellow upon members who have made extraordinary contributions to engineering and engineering technology education, and to ASEE. The honor is given to no more than one-tenth of one percent of ASEE members each year.

DiBiasio was recognized for leadership in curriculum development (including the development of a project-oriented spiral curriculum in chemical engineering), assessment of innovative teaching strategies (including the impact of global experience on student attitudes), and service to the chemical

engineering profession. He was elected at ASEE's June 2009 Annual Meeting.

DiBiasio joined the WPI faculty in 1980, after earning BS, MS, and PhD degrees in chemical engineering from Purdue Univ. He has been head of the chemical engineering department since 2006. His research focuses on education, including engineering education, international education, teaching and learning, and assessment.

At WPI, DiBiasio has served as director of the Washington, DC, global project center, and as assessment coordinator for WPI's Interdisciplinary and Global Studies Division.

DiBiasio has also served as chair of ASEE's Chemical Engineering Div., as an evaluator for the Accreditation Board for Engineering Technology (ABET), and on AIChE's Education and Accredi-

tation Committee.

Founded in 1893, ASEE is a nonprofit organization that promotes excellence in education, research, public service, and practice; fosters the technological education of society; and provides services to its more than 12,000 members, including department heads, teachers, students, and government and industry representatives from all engineering disciplines. To learn more about ASEE and its newly-elected Fellows, visit [www.asee.org](http://www.asee.org).

DiBiasio's commentary article "Education Reform: Just Do It" was published in the February 2009 issue of *CEP*, p. 4.



## Toy F. Reid, AIChE Fellow and PET Pioneer

**T**oy F. Reid of Kingsport, TN, died on July 26, 2009, after a battle with multisystem atrophy (MSA). He was 84.

A native of Rock Hill, SC, Reid earned a BS in chemistry from the Univ. of South Carolina, and a BS and MS in chemical engineering from the Univ. of Illinois and Georgia Institute of Technology, respectively. He served as a meteorologist in the U.S. Army Air Force during World War II.

Reid began a 40-year career at Tennessee Eastman in 1948, retiring in 1989 as an executive vice president of Eastman Kodak Co. and general manager of Eastman's chemicals division. A highlight of his career was the pioneering of polyethylene terephthalate (PET) for beverage and food containers; he led the development and application of matrix organizational approaches to accelerate commercialization of the PET packaging process. He was also instrumental in Eastman's becoming the first U.S. manufacturer to commercialize a modern generation of industrial chemicals using coal as a feedstock.

A Fellow of AIChE, Reid served on numerous philanthropic boards of directors, as chairman of the American Industrial Health Council, and as director of the Chemical Manufacturers Association (which is now the American Chemistry Council). He was awarded an honorary doctorate by Emory and Henry College in 1983.

Memorial contributions may be made to First Broad Street United Methodist Church Building Fund, P.O. Box 1346, Kingsport, TN, 37662.

## OBITUARIES

Ralph L. Baker, 80, Dallas, TX

Harvey J. Hauer, 87, Wilmington, DE

Ernest F. Johnson\*, 90, Freeport, ME

Raphael Katzen\*, 93, Bonita Springs, FL

Toy F. Reid\*, 84, Kingsport, TN

Norris L. Sample, 83, Kirkwood, MO

Krystle M. Spinner, 24, Totowa, NJ

Gerald A. Wilcox, 73, Baton Rouge, LA

\* AIChE Fellow

# AIChE® Calendar

## Conferences



For information and registration details, visit [www.aiche.org/conferences](http://www.aiche.org/conferences) or call Customer Service at 1-800-242-4363 or 1-203-702-7660 (outside the U.S.)

**SEPTEMBER**  
13–19, 2009

**54th Safety in Ammonia Plants and Related Facilities Symposium**  
Hyatt Regency Calgary • Calgary, AB, Canada

**OCTOBER**  
1–2, 2009

**2009 AIChE Regional Process Technology Conference**  
Moody Gardens Hotel • Galveston, TX

**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

**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/>

**SEPTEMBER 9, 2009**  
2:00–3:00 PM ET

**Chemical Product Design**  
Presented by Dr. Warren Seider and Dr. Soemantri Widagdo

**SEPTEMBER 16, 2009**  
2:00–3:00 PM ET

**Fundamentals of Fire and Fire Control** *(Free for AIChE Members)*  
Presented by Dr. J. Reed Welker

**SEPTEMBER 23, 2009**  
2:00–3:00 PM ET

**K–12 Outreach: Unique Contributions Through AIChE and How YOU Can Get Involved!** *(Free for AIChE Members)*  
Presented by Dr. Katherine S. Ziemer

**SEPTEMBER 30, 2009**  
2:00–3:00 PM ET

**Model Predictive Control: An Overview and Selected Applications**  
Presented by Dr. B. Wayne Bequette

**OCTOBER 7, 2009**  
2:00–3:00 PM ET

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

**OCTOBER 14, 2009**  
2:00–3:00 PM ET

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