# Institute News



## 2013 Board of Directors' and Institute Awards To be Presented at the San Francisco Annual Meeting's Honors Ceremony

Some of chemical engineering's most accomplished people will be recognized with the presentation of the 2013 Institute and Board of Directors' Awards. The awards will be given at the annual Honors Ceremony, on Sunday, Nov. 3, at the AIChE Annual Meeting in San Francisco, CA.

AIChE members in all areas 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/community/awards. The deadline for 2014 nominations is Feb. 15, 2014.



#### Founders Award for Outstanding Contributions to the Field of Chemical Engineering

Ronald W. Rousseau, Georgia Institute of Technology "For promoting the discipline of chemical

engineering through contributions encompassing education, research, scholarship, and leadership that have expanded the definition and application of our field."



F. J. and Dorothy Van Antwerpen Award for Service to the Institute Sponsor: The Dow Chemical Co.

Neil Yeoman, Koch-Glitsch (retired) "For a lifetime of service to the chemical engineering community and the chemical engineering profession."



### William H. Walker Award for Contributions to **Chemical Engineering Literature** Sponsor: John Wiley and Sons

Harvey W. Blanch, Univ. of California, Berkeley "For broad-ranging scientific, engineering and educational contributions in biochemical engineering, including transport and kinetics in bioreactors, microbial and mammalian cell growth processes, bioseparations, and biothermodynamics."



Professional Progress Award for Outstanding Progress in Chemical Engineering Sponsor: Air Products

Kelvin H. Lee, Univ. of Delaware "For the development of pioneering proteomics theory and technologies, and their application to systems biotechnology in cell-culture engineering and human-health diagnostics."



#### **Industrial Progress Award**

Srinivas Tummala, Bristol-Myers Squibb Co. "For contributions to Quality by Design process development of small-molecule active pharmaceutical compounds in the areas of reaction science and model-based design space development."



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

Sponsor: E. I. du Pont de Nemours and Co.

Jeetain Mittal, Lehigh Univ. "For pioneering the development of accurate physics-based protein models and for elucidation of biomolecular folding and assembly behavior in a crowded cell-like environment and near bio-nano interfaces.'



Warren K. Lewis Award for Chemical **Engineering Education** Sponsor: ExxonMobil Research and Engineering

Arvind Varma, Purdue Univ. "For profound contributions to chemical engineering education through authorship and editorship of books, outstanding administrative leadership, creative research with students, teaching, and inspiration of students."



#### **Industrial Research and Development Award**

Steven Raymond Lustig, E. I. du Pont de Nemours and Co. "For outstanding contributions in the application

of chemical engineering in industrial materials engineering research and development."

Article continues on next page



# **Institute News**

## 2013 Institute Award Recipients (continued)



Alpha Chi Sigma Award for Chemical Engineering Research Sponsor: Alpha Chi Sigma Educational Foundation

Michael Tsapatsis, Univ. of Minnesota "For breakthrough contributions in the design, synthesis and applications of molecular sieve membranes, adsorbents, and hierachical catalysts."



## R. H. Wilhelm Award in Chemical Reaction Engineering

Sponsor: ExxonMobil Research and Engineering

Liang-Shih Fan, The Ohio State Univ. "For sustained and lasting contributions to multiphase reaction engineering and for pioneering work on groundbreaking clean-energy technologies."



Lawrence B. Evans Award for Chemical Engineering Practice Sponsor: CACHE Corp.

Jan J. Lerou, Jan Lerou Consulting, LLC "For his innovations in chemical engineering practice with outstanding contributions to novel reactor types, and his tireless advocacy of new techniques in industrial catalysis and reaction engineering R&D."



Institute Award for Excellence in Industrial Gases Technology Sponsor: Praxair, Inc.

**Donald R. Paul,** Univ. of Texas at Austin "For contributions to the scientific foundation of gas permeation in glassy polymers and the development of polymeric membranes for gas separations."

## UOP's Gautam is Selected to Receive the Inaugural AIChE Government and Industry Leaders (AGILE) Award

This fall, AIChE's Board of Directors will inaugurate a new honor that celebrates the contributions of innovative executives from government and industry, when it presents the first AIChE Government and Industry Leaders (AGILE) Award at the 2013 AIChE Annual Meeting in San Francisco, CA.

The inaugural AGILE Award will be presented to Rajeev Gautam, President and Chief Executive Officer of UOP, a Honeywell Company. At the AGILE Award ceremony and lecture — scheduled for Wednesday, Nov. 6, at 6:00 pm — Gautam will be honored for his creative leadership and service to the field of chemical engineering and for his company's contributions to society at large. In his AGILE Award lecture, entitled "Strategic Imperatives for the Hydrocarbon Industries," Gautam will reflect on UOP's recent history of innovation in petroleum refining, gas processing, petrochemicals, and renewable energy, and discuss the challenges and opportunities available to researchers, technology developers, and other chemical engineers in the hydrocarbon industries.

During his 30-year career at UOP, Gautam has championed innovative solutions for industry needs, and has been responsible for the development and commercialization of a broad range of catalytic and separations technologies for the refining, petrochemical, and gas processing industries. Prior to becoming president and CEO of UOP, Gautam held other key positions in the company, spanning research and development, engineering, and marketing — including Vice President and Chief Technology Officer; director of the Process Technology and Equipment business; Technology Director for Platforming and



Isomerization Technologies; Product Line Manager for the Aromatic Derivatives business; Senior Manager of Adsorption Technology; and Manager of Molecular Sieve Process Technology.

Gautam earned a bachelor's degree (Indian Institute of Technology), master's degree (Drexel Univ.), and PhD (Univ. of Pennsylvania), all in chemical engineering. He also holds an MBA from the Univ. of Chicago.

Future AGILE Award presentations will become regular highlights of AIChE's Spring Meetings. The Spring 2014 AGILE Award honoree and lecturer will be announced in an upcoming issue of *CEP*.



## **Anseth will Present Bailey Award Lecture at** San Francisco Annual Meeting

risti Anseth, the Howard Hughes Medical Institute Investigator and Distinguished Professor of Chemical and Biological Engineering at the Univ. of Colorado at Boulder, has been selected to receive the Society for Biological Engineering's (SBE) James E. Bailey Award. Anseth will be recognized for her contributions to the development of novel biomaterials for regenerative medicine, advances in tissue engineering, and leadership in applying chemical engineering principles to biomedicine. The award will be presented at the 2013 AIChE Annual Meeting in San Francisco, CA, where Anseth will present the Bailey Award Lecture on Tuesday, Nov. 5, at 6:00 pm.

In her lecture, "Engineering Cell Niches in a Couple of Clicks," Anseth will discuss photochemical click reaction mechanisms and her recent efforts to advance hydrogel chemistries for 3D cell culture.

Anseth's research interests lie at the interface between biology and engineering, where she designs new biomaterials for applications in drug delivery and regenerative medicine. She was the first engineer to be named a Howard Hughes Medical Institute Investigator, and she received the National Science Foundation's Alan T. Waterman Award.

Anseth is a member of the National Academy of Engineering, the Institute of Medicine, and the National Academy of Sciences. She is also a Fellow of the American Association for the Advancement of Science, the



American Institute for Medical and Biological Engineering, and the Materials Research Society. She serves on the editorial boards or as associate editor of Biomacromolecules; Journal of Biomedical Materials Research -Part A; Acta Biomaterialia; Progress in Materials Science; and Biotechnology and Bioengineering.

Endowed by Cytos Biotechnology, the Bailey Award is presented for outstanding contributions to the field of biological engineering, and is presented in memory of biotechnology pioneer Jay Bailey. More information about the award is available at www.aiche.org/SBE/ community/awards.

## **Riki Kobayashi, AIChE Fellow**

iki Kobayashi, the Louis Calder Professor Emeritus in Chemical Engineering at Rice Univ. (Houston, TX), died on July 19, 2013, at age 89.



After serving in the U.S. Army and earning a PhD in chemical engineering at the Univ. of Michigan, Kobayashi joined the Rice faculty in 1951. He co-authored the

evergreen reference book, Handbook of Natural Gas Engineering in 1949, and was a prolific researcher in thermodynamics, transport properties, and differential kinetics.

Kobayashi was a Fellow of AIChE and a member of the National Academy of Engineering, among many affiliations and honors. He received the Gas Processors Association's first Donald Katz Award (1985), and Rice Univ. established a chemical engineering fellowship in his honor.

He loved teaching and research, and enjoyed playing basketball and volleyball with his students. Called "Dr. Kobayashi" by his undergraduates, he was "Riki" to his graduate students, except for those from Japan to whom he was "sensei" (teacher). He is survived by his wife, Lee, two sons, two stepdaughters, and their families.

## In Memoriam

Ralph G. Atkinson, 96, Naples, FL George L. Barnes, 98, Wilmington, DE George M. Brown, 93, Evanston, IL Charles P. Buckley, 65, Cohasset, MA William H. Cummins, 74, Nederland, TX Robert S. Dicks, 95, Chapel Hill, NC Oscar W. Haas, 58, Metuchen, NJ Murray Hanig, 91, San Diego, CA Kenneth Lambert, 41, Billerica, MA Stanley H. Langer, 86, Madison, WI Sydney Miner, 90, Minneapolis, MN Scott J. Russell. 82. Palm Harbor. FL Edward F. Thode, 91, Las Cruces, NM