



**19th annual**

# Hugh M. Hulburt Memorial Lecture in Chemical and Biological Engineering

Presented by

**Lawrence B. Evans**

Founder, Aspen Technology Inc.

Thursday, May 11, 2006

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## **McCormick**

Robert R. McCormick School of  
Engineering and Applied Science  
Northwestern University

**Department of Chemical and  
Biological Engineering**

Northwestern University  
Robert R. McCormick School of  
Engineering and Applied Science  
Department of Chemical and  
Biological Engineering

cordially invites you to the

**19th annual**

# Hugh M. Hulburt Memorial Lecture

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Biological Engineering

Presented by

**Lawrence B. Evans**

Founder, Aspen Technology Inc.

**Energy Challenges of the 21st Century:**

**The Role of Chemical Engineers**

**Thursday, May 11, 2006**

**Refreshments 8:45 a.m.**

**Lecture 9 a.m.**

*Technological Institute, L361*

*2145 Sheridan Road*

*Evanston, Illinois*

**Lunch 1 p.m.**

*James L. Allen Center, Atrium*

*2169 Campus Drive*

*Evanston, Illinois*

**[www.chem-biol-eng.northwestern.edu](http://www.chem-biol-eng.northwestern.edu)**

## Energy Challenges of the 21st Century: The Role of Chemical Engineers

Chemical engineers were the leaders in building an energy industry based on oil in the 20th century. Now in this century the world is facing new challenges as the supply of petroleum begins to decline. While traditional sources of energy will continue to be important, it is obvious that innovative developments are required to bring supply and demand into balance in an environmentally responsible way. This talk will review the various scenarios for meeting world energy needs and address the question of whether chemical engineers will continue to be the leaders in the future as they have in the past.

*Lawrence B. Evans founded Aspen Technology in 1981 and served as chairman and chief executive officer until 2002. Under his leadership the*



*company grew from a start-up to become the leading provider of software and solutions to the process-manufacturing industries. Evans was professor of chemical engineering at the Massachusetts Institute of Technology from 1962 to 1990, where he was*

*well known for his work in computer-aided process design and process control. He is president-elect of the American Institute of Chemical Engineers (AIChE) in 2006 and will be president in 2007.*

*Evans has received numerous awards, including the Computing in Chemical Engineering Award of the Computing and Systems Technology Division of AIChE in 1982. In 1997 he was named Entrepreneur of the Year for high technology in the New England region in a competition sponsored by Ernst & Young. Fortune magazine named him one of seven U.S. "Heroes of Manufacturing" in 1999, when he also received the University of Michigan College of Engineering's Alumni Society Merit Award from the Department of Chemical Engineering.*

*In 2001 Evans was elected to the National Academy of Engineering. Chemical Engineering magazine chose him for the 2002 Award for*

*Personal Achievement in Chemical Engineering.* In 2003 he was elected to the University of Oklahoma College of Engineering Distinguished Graduates Society. Evans holds a bachelor's degree from the University of Oklahoma. He earned a master's degree and a doctorate in chemical engineering at the University of Michigan.

### **Hugh M. Hulburt**

A talented administrator and teacher, Professor Hugh M. Hulburt dedicated his professional career to the practice of chemistry and



promoting the chemical engineering profession. After receiving his PhD in 1942 he worked in various industry positions, becoming director of research and development at the Chemical Construction Corporation and later director of chemical engineering and

director of physical research at American Cyanamid Company.

In 1964 Hulburt joined Northwestern and served as chairman of the chemical engineering department from 1965 to 1971, associate dean of the Graduate School from 1975 to 1980, and associate dean of the Technological Institute from 1980 to 1983. He chaired the committee to establish the Department of Biochemistry and Molecular Biology and fostered much closer ties between industry and the university and between science and engineering.

Hulburt was editor of *Industrial and Engineering Chemistry, Process Design, and Development* from its inception in 1962 until 1986. Under his editorship the journal became a highly respected publication in chemical engineering and industrial chemistry. He also served on the editorial board of the *Journal of Physical and Chemical Reference Data* and on the National Science Foundation's advisory panel for engineering, chemistry, and energetics. He was a fellow of the AIChE and was its Institute Lecturer in 1962.

The Hugh M. Hulburt Memorial Lecture was established to bring leaders in chemical engineering research and management to Northwestern to lecture and interact with students and faculty members and to foster closer collaboration between industry and academia in the education of future chemical engineers.

## Hugh M. Hulburt Memorial Lecturers

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|---|---|
| <b>1988</b> Vern W. Weekman<br>Mobil Corporation          | <b>1997</b> Thomas M. Sutliff<br>Baxter Healthcare<br>International           |
| <b>1989</b> Edward A. Mason<br>Amoco Corporation          | <b>1998</b> Stanley A. Gembicki<br>UOP  |
| <b>1990</b> Warren R. Haug<br>Procter & Gamble<br>Company | <b>1999</b> William W. Graessley<br>Princeton University                      |
| <b>1991</b> Harold J. Corbett<br>Monsanto Company         | <b>2000</b> Stephen W. Drew<br>Merck & Company Inc.                           |
| <b>1992</b> James E. Patton<br>Eastman Kodak<br>Company   | <b>2001</b> Patrick R. Gruber<br>Cargill Dow LLC                              |
| <b>1993</b> L. Lewis Hegedus<br>W. R. Grace &<br>Company  | <b>2002</b> Sang-Tae Kim<br>Lilly Research<br>Laboratories                    |
| <b>1994</b> Norman N. Li<br>AlliedSignal Inc.             | <b>2003</b> Richard M. Gross<br>Dow Chemical                                  |
| <b>1995</b> Kathleen C. Taylor<br>General Motors          | <b>2004</b> Patricia T. Sparrell<br>ExxonMobil<br>Biomedical<br>Sciences Inc. |
| <b>1996</b> William J. White<br>Bell & Howell             | <b>2005</b> Keith Grime<br>Procter & Gamble<br>Company                        |



NORTHWESTERN  
UNIVERSITY

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