

## 2009 SCHOOL OF CHEMICAL ENGINEERING



## OUTSTANDING CHEMICAL ENGINEER AWARDS

AWARDS BANQUET | October 22, 2009

# OUTSTANDING CHEMICAL ENGINEER AWARDS

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The School of Chemical Engineering has a tradition of recognizing alumni who have achieved distinction as leaders in their careers and who have shaped the chemical engineering profession. Over the years, only 121 of the school's 9,000 alumni have been accorded this prestigious award. Today, the School of Chemical Engineering faculty honor Henry Sampson and Mary Ellen Weber as the recipients of the 2009 Outstanding Chemical Engineer Award.

## WELCOME

**Heather York**, senior, School of Chemical Engineering

**Julie Kadrmas**, president, Chemical Engineering Graduate Student Organization

**Arvind Varma**, head, School of Chemical Engineering

## DINNER

## INTRODUCTIONS

**Elias Franses**, professor, School of Chemical Engineering

## PRESENTATION OF AWARDS

**Henry Sampson**, 2009 Outstanding Chemical Engineer

**Mary Ellen Weber**, 2009 Outstanding Chemical Engineer

## CLOSING REMARKS

**Arvind Varma**, head, School of Chemical Engineering



## Mary Ellen Weber, BSChE '84



Mary Ellen Weber is currently vice president for government affairs and policy at the University of Texas Southwestern Medical Center in Dallas, Texas. Focusing on analytical approaches to legislative issues and strategic communications, she is responsible for annual appropriations of more than \$175 million. Weber received her bachelor's degree in chemical engineering at Purdue University in 1984, a master's degree in business administration from Southern Methodist University in 2002, and a PhD in physical chemistry from the University of California, Berkeley in 1988. Her doctoral work explored the physics of gas-phase chemical reactions involving silicon. She has been awarded one patent and published several papers in scientific journals.

Weber was selected by NASA in the 14th group of astronauts in 1992, and subsequently flew on STS-70 (Discovery, 1995) and STS-101 (Atlantis, 2000) and logged more than 450 hours in space. She is among the youngest astronauts to fly in space. At NASA, Weber held assignments in technology commercialization, a legislative affairs liaison, and chairman of the procurement board for the biotechnology program contractor. She also served on a team that revamped the \$2 billion plan for Space Station research facilities and worked with other space agencies to develop the training protocols and facilities for space station experiments. She is a recipient of the NASA Exceptional Service Medal.

During the AIChE Centennial Meeting held in Philadelphia in November 2008, Dr. Weber was honored as one of nine in the category "Chemical Engineers in Space." Weber serves on the boards of the Museum of Natural History, The Science Place, and the Dallas Committee on Foreign Relations. In addition, she serves on a NASA advisory committee that counsels the space program on future technologies.

Weber served as a Purdue University Old Master in 1998. While a Purdue student, she was a Dean's Engineering Scholar, a member of Phi Mu social sorority, and a Grand Prix participant. Weber is a skydiver with more than 4,000 dives and has earned 12 silver and bronze medals at the U.S. National Skydiving Championships and a world record for the largest freefall formation with 300 skydivers. She is an instrument-rated pilot with more than 800 hours flying time, including 600 in jets. She also is a golfer and scuba diver. She is married to Jerome L. Elkind, a medicinal chemist.

## Henry Sampson, BSChE '56



Henry Sampson was raised in Jackson, Mississippi, where his parents instilled in him the love of learning. He attended Morehouse College in Atlanta, Georgia, before transferring to Purdue University. While a Purdue student, he was a member of Omega Psi Phi fraternity. Sampson earned his bachelor's degree in chemical engineering from Purdue in 1956. He worked as a research chemical engineer at the U.S. Naval Weapons Center in China Lake, California, in the area of high energy solid propellants and case bonding materials for solid rocket motors. He earned his master's degree and PhD at the University of Illinois at Urbana-Champaign, in 1965 and 1967, respectively.

Sampson then moved to the Aerospace Corporation in El Segundo, California, where he served as the director of mission development and operations of the space test program. He led senior engineering staff in the planning, acquisition, development, launching, and space operation of several satellites. He was one of the earliest engineers to examine how to power satellites. Sampson has written a number of papers on rocket propulsion, direct conversion of nuclear energy to electricity, and computer simulation of electrical systems. He pioneered a study of internal ballistics of solid rocket motors using high-speed photography. He has written several technical papers and has been granted patents. In 1971, he coined the gamma-electric cell that made it possible to send and receive audio signals via radio waves without wires.

During the AIChE Centennial Meeting held in Philadelphia in November 2008, Dr. Sampson was honored among the "Twenty Chemical Engineers in Other Pursuits." Sampson is the recipient of a variety of awards including the Atomic Energy Commission Award (1964-1967), Black Image Award from Aerospace Corporation (1982), Blacks in Engineering, Applied Science and Education Award and Los Angeles Council of Black Professional Engineers (1983), and was named a fellow in the U.S. Navy (1962-1964).

In addition to his work in engineering fields, Sampson is a writer, film historian, and documentary film producer who focuses on the African American presence in the film and entertainment industries. He has written five books about the portrayal of African Americans in movies, cartoons, and on radio. Sampson is married to Laura Howzell Young-Sampson, a professor at California State University-San Bernardino. Together, they are working on a biography of Sampson's mother.

## OUTSTANDING CHEMICAL ENGINEER AWARD RECIPIENTS

<b>Albert Bernard</b> 1988	<b>Donald Brophy</b> 1993	<b>A. W. Lutz</b> 1993	<b>James Schorr</b> 1993	<b>Philip Krug</b> 1994	<b>Guy Camarata</b> 1998	<b>Michael Graff</b> 2002	<b>James Rust</b> 2006
<b>Robert Bringer</b> 1989	<b>Bernard Butcher</b> 1993	<b>John Lux</b> 1993	<b>Yen-Ping Shih</b> 1993	<b>John Lillich</b> 1994	<b>Charles Kline</b> 1998	<b>Donald Lamberson</b> 2002	<b>James Stake</b> 2006
<b>Robert Henson</b> 1989	<b>John Ciborski</b> 1993	<b>Tom Maliszewski</b> 1993	<b>John Siegesmund</b> 1993	<b>Joe Stewart</b> 1994	<b>Todd Gehr</b> 1999	<b>Michael Ott</b> 2002	<b>Pierre Latour</b> 2007
<b>William Schmitt</b> 1989	<b>Alexander Clarke</b> 1993	<b>J. Timothy McGinley</b> 1993	<b>Edward Steinhoff</b> 1993	<b>William Young</b> 1994	<b>Stanley Gembicki</b> 1999	<b>Nicholas Peppas</b> 2002	<b>Duncan Mellichamp</b> 2007
<b>William Madar</b> 1990	<b>Robert Covalt</b> 1993	<b>Roger Moser</b> 1993	<b>Miller Swaney</b> 1993	<b>R. William Eykamp</b> 1995	<b>Richard Grabham</b> 1999	<b>Ellen Tobias</b> 2002	<b>Antonios Mikos</b> 2008
<b>Robert Postlethwait</b> 1990	<b>Robert Forney</b> 1993	<b>Gordon Mounts</b> 1993	<b>Joseph Temple Jr.</b> 1993	<b>Che-I Kao</b> 1995	<b>Emily Liggett</b> 1999	<b>Paul Dickensheets</b> 2003	<b>Gary Poehlein</b> 2008
<b>Norman Pruitt</b> 1990	<b>Robert Gadomski</b> 1993	<b>Randall Murill Jr.</b> 1993	<b>Francis Theis</b> 1993	<b>Craig McLaughlin</b> 1995	<b>David Pershing</b> 1999	<b>Ben Lipps Jr.</b> 2003	<b>Roberta Gleiter</b> 2008
<b>Donald Hannemann</b> 1991	<b>Bruce Gonser</b> 1993	<b>Paul Oreffice</b> 1993	<b>Vern Weekman</b> 1993	<b>William Smith</b> 1995	<b>Robert Davis</b> 2000	<b>Tom Maliszewski</b> 2003	<b>Henry Sampson</b> 2009
<b>Linda Huff</b> 1991	<b>Frederick Haas</b> 1993	<b>Donald Orr</b> 1993	<b>Maynard Wheeler</b> 1993	<b>Robert Buckman</b> 1996	<b>Abbie Griffin</b> 2000	<b>Joseph S. Alford, Jr.</b> 2004	<b>Mary Ellen Weber</b> 2009
<b>Rohit Khanna</b> 1991	<b>William Harris Jr.</b> 1993	<b>Michael Ramage</b> 1993	<b>Robert Wheeler</b> 1993	<b>Ching-Tien Liou</b> 1996	<b>Robert Hannemann</b> 2000	<b>Susan Hardman</b> 2004	
<b>Alan Fox</b> 1992	<b>James Henderson</b> 1993	<b>Henry J. Ramey Jr.</b> 1993	<b>Robert Winslow</b> 1993	<b>David Rea</b> 1996	<b>Robert McNeeley</b> 2000	<b>Rick Roberts</b> 2004	
<b>Robert LaFortune</b> 1992	<b>John Hesselberth</b> 1993	<b>Robert Reid</b> 1993	<b>William Wislinski</b> 1993	<b>Thomas Storer</b> 1996	<b>Max Downham</b> 2001	<b>Lloyd Robeson</b> 2004	
<b>S. George Bankoff</b> 1993	<b>Thomas Hodgson</b> 1993	<b>Harold Ritchey</b> 1993	<b>Jamie Wisniak</b> 1993	<b>S. Margaret Willoughby</b> 1996	<b>Donald Dunner</b> 2001	<b>Charles Davidson</b> 2005	
<b>William Bares</b> 1993	<b>John Horner</b> 1993	<b>John Roorda</b> 1993	<b>Deborah Grubbe</b> 1994	<b>Frank Becker</b> 1997	<b>Jeffrey Hemmer</b> 2001	<b>Robert Weist</b> 2005	
<b>Andrew Barnes</b> 1993	<b>Harold Hunsicker</b> 1993	<b>Samuel Salem</b> 1993	<b>Richard Hazleton</b> 1994	<b>Andrew Crowe</b> 1997	<b>Jay Ihlenfeld</b> 2001	<b>Arindam Bose</b> 2005	
<b>Robert Becherer</b> 1993	<b>Roberto Lee</b> 1993	<b>Dave Schornstein</b> 1993	<b>Lowell Koppel</b> 1994	<b>Eleftherios Papoutsakis</b> 1997	<b>Brian Stutts</b> 2001	<b>Michael Ladisch</b> 2006	



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