Biography of Ralph Coats Roe

Ralph Coats Roe had a life-long interest in the design and construction of modern electric generating facilities throughout the world. He demonstrated a talent for the analysis and imaginative solutions to various phases of this work, whether dealing with plants that were driven by water, nuclear energy, coal, oil or gas. He was probably best known for his developmental work on modern, efficient and reliable steam power plants.

At 42, during the depression of 1932, he was co-founder of the Burns and Roe Partnership. In 1935, he bought out his partner and incorporated to form Burns and Roe, Inc. He was Chairman, President and CEO until 1963 when his son, Kenneth Andrew Roe, became President. Ralph Coats Roe remained Chairman and CEO until his death in 1971 at the age of 81.

Ralph Coats Roe was born in Marcellus, New York in 1890 and began to support and educate himself at the age of fourteen. Although he was the only family member for generations before and since without a college education, he was keenly aware of the formal education he missed and often commented on the value of education and the importance of those individuals who are gifted in inspiring and guiding future engineering professionals.

He was strong, ethical, quiet, perceptive, fair and kind. He had a great deal of common sense, and a keen sense of humor that illuminated his conversation on the most unexpected occasions. His intellectual curiosity was fueled by an interest in mathematics and science.

Previous Roe Award Recipients

1975 B.T. Chao 1976 John R. Dixon 1977 Stothe P. Kezios 1978 Ephraim M. Sparrow 1979 Robert H. Page 1980 W.F. Stoecker 1981 J.W. Swedlow 1982 Frank P. Incropera 1983 L.S. "Skip" Fletcher 1984 I. Glassman 1985 G. N. Sandor 1986 Werner Soedel 1987 John R. Howell 1988 W.J. Minkowycz 1989 William Z. Black 1990 A.L. Addv 1991 C.R. Mischke 1992 Philip S. Schmidt

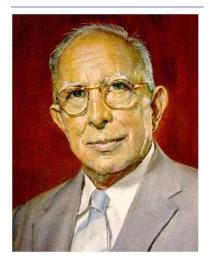
1994 John H. Lienhard 1995 Jack P. Holman 1997 C.D. "Dan" Mote. Jr. 1998 Christian Przirembel 1999 K.L. "Larry" DeVries 2000 Adrian Bejan 2001 Michael J. Moran 2002 Christina H. Amon 2003 Richard O. Buckius 2004 William J. Wepfer 2005 Gary Kinzel 2006 Dan Turner 2007 William N. Sharpe, Jr. 2008 Latif M. Jiji 2009 Stephen R. Turns 2010 Richard H. Crawford 2011 Dennis Assanis 2012 Sheri Sheppard

1993 Lawrence A. Kennedy



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Mechanical Engineering Division

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Ralph Coats Roe

2012 Ralph Coats Roe Award Recipient

Dr. Sheri Sheppard
Stanford University



About the Award

The Ralph Coats Roe Award recognizes a mechanical engineering educator who is an outstanding teacher and who has made a notable contribution to the profession. The professional contribution may be in any appropriate category, including:

- Excellence in classroom and laboratory teaching; writing an outstanding paper or textbook; developing a significant technique or method of analysis, procedure or synthesis; inspiring learning to take place through contact with students;
- Involving students and colleagues with innovate aspects of design through problems that are relevant to real life situations;
- Conceiving of an idea of great importance to the advancement of the engineering profession or engineering education;
- Teaching, directing and conducting significant research or administrative activities;
- Creating an important invention;
- Providing distinguished service and leadership to the college, the community, the nation and mankind.

Details regarding eligibility and the nomination process can be found at the ASEE web site:

http://www.asee.org/



ASEE Mechanical Engineering Division

2012 Ralph Coats Roe Award



Professor Sheri Sheppard

Professor, Mechanical Engineering
Stanford University

Sheri Sheppard Sheri D. Sheppard, Ph.D., P.E., is professor of Mechanical Engineering at Stanford University. Besides teaching both undergraduate and graduate design and education related classes at Stanford University, she conducts research on engineering education and work-practices, and applied finite element analysis. From 1999-2008 she served as a Senior Scholar at the Carnegie Foundation for the Advancement of Teaching, leading the Foundation's engineering study (as reported in Educating Engineers: Designing for the Future of the Field). In addition, in 2003 Dr. Sheppard was named co-principal investigator on a National Science Foundation (NSF) grant to form the

Center for the Advancement of Engineering Education (CAEE), along with faculty at the University of Washington, Colorado School of Mines, and Howard University. More recently (2011) she was named as co-PI of a national NSF innovation center (Epicenter), and leads an NSF program at Stanford on summer research experiences for high school teachers. Her industry experiences includes engineering positions at Detroit's "Big Three:" Ford Motor Company, General Motors Corporation, and Chrysler Corporation. Her undergraduate work was at the Univ. of Wisconsin (a badger forever), and her PhD at the Univ. of Michigan (Go Blue!). At Stanford she has served a chair of the faculty senate, is currently the Associate Vice Provost for Graduate Education and is faculty adviser to a group call MEwomen+.