

**Richard O. Buckius**  
**Assistant Director**  
**Directorate for Engineering**  
**National Science Foundation**

**Professor**  
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**University of Illinois at Urbana-Champaign**

Dr. Buckius serves as the assistant director for the National Science Foundation's Directorate for Engineering (ENG), a position he has held since September 2006. Previously he served as acting assistant director for ENG (2005 to 2006), director for ENG's Division of Chemical and Transport Systems (2004 to 2005) and program director of the Thermal Systems and Engineering Program (1987 to 1988).

Dr. Buckius is also a professor of mechanical engineering at the University of Illinois at Urbana-Champaign, a position he has held since 1984. He joined the university in 1975, and since served as associate head (1985 to 1987) and then head (1998 to 2004) of the Department of Mechanical and Industrial Engineering, as well as associate vice chancellor for research (1988 to 1991).

His research focuses on thermal sciences, much of which is fundamental in nature but has vital implications. This research covers radiative heat transfer, including scattering media and scattering from rough interfaces, combustion and convective transport. It includes analyses, experiments, numerical methods and applications. In 2006, Dr. Buckius received the Potter Gold Medal from the American Society of Mechanical Engineers (ASME) in recognition of his contributions to education in thermodynamics, and of his outstanding scholarly work in heat transfer and energy and combustion systems. Recently, he received the 2007 ASME Richards Memorial Award for outstanding contributions to research and teaching in the thermal sciences.

Dr. Buckius has also been widely recognized as an educator, receiving three awards from the American Society for Engineering Education (ASEE): the Dow Outstanding Young Faculty Award (1978), the Western Electric Fund Award (1981) and the Ralph Coats Roe Award (2003), which recognizes a mechanical engineering educator who is not only an outstanding teacher, but has also made significant professional contributions in their field. He also received numerous teaching awards from the University of Illinois-Urbana Champaign, including the Stanley H. Pierce Faculty Award from the College of Engineering (1979) for promoting empathy between students and faculty; the Campus Award for Excellence in Undergraduate Teaching (1980)—now called the Luckman award—and six Alumni Teaching awards, the most recent from the Department of Mechanical and Industrial Engineering in 2000.

Along with authoring or co-authoring more than 100 publications, books and invited talks and articles, Dr. Buckius co-authored the textbook *Fundamentals of Engineering Thermodynamics* (Mc-Graw-Hill), which was published in English, Spanish and internationally (1987); an expanded second edition followed in 1992. He is a member of the editorial boards of the journals *Nanoscale and Microscale Thermophysical Engineering*, *Heat Transfer Research*, and *Heat Transfer-Japanese Research*.

Dr. Buckius is a fellow of ASME, served as ASME vice president of Basic Engineering (2004 to 2005), and was the ASME Technical Group Leader from 2005 through 2007. He is associate fellow of the American Institute of Aeronautics and Astronautics; and a member of ASEE, the Combustion Institute and Pi Tau Sigma, the International Mechanical Engineering Honor Society.

Buckius received his bachelor's and master's degrees and his Ph.D. in mechanical engineering at the University of California, Berkeley, in 1972, 1973 and 1975, respectively.