

9'TH LEADERS IN ENGINEERING SEMINAR

THE PETROLEUM INSTITUTE, ABU DHABI

Prof. Nariman Farvardin
Professor and Dean
James Clark School of Engineering
U. of Maryland, College park, MD



12 December 2006, 12:00 - 1:00 PM
Main Lecture Hall (room 100), Zarkuh Building
The Petroleum Institute

Pathways in Engineering Education, Research, and Entrepreneurship

This talk will focus on the connection between engineering and the society, recent developments that necessitate a change in engineering education and the role of engineering research and entrepreneurship in economic development. We will review some of the most profound engineering developments of the 20th century and examine their impact on our lives though economic, societal and political changes. We will then have a discussion on a few major engineering research projects that are currently being pursued and are likely to have at least an equally profound impact on the way future generations live. We will discuss challenges and opportunities associated with these trends and conclude with a discussion of the role of engineering education and the need for a new breed of engineers to address society's most pressing problems.

Nariman Farvardin became dean of the A. James Clark School of Engineering in August 2000. He is also a professor of electrical and computer engineering and former chair of the university's Department of Electrical and Computer Engineering. As dean, Dr. Farvardin has promoted the development of several innovative programs including two successful undergraduate programs, Inventis and Keystone, as well as new initiatives in undergraduate research and technology entrepreneurship; reorganized infrastructure to improve service and productivity; and developed a strong public awareness drive to communicate the school's strengths and accomplishments to its many constituencies, resulting in increased partnerships with industry and strong philanthropic support. These efforts have resulted in enhancing the quality of education, research and outreach programs offered by the Clark School and improved the school's national standing.

During his tenure, external research expenditures have increased from \$70 million to over \$110 million per year. Philanthropic support has increased significantly and the school of engineering has recently received two landmark gifts: a \$31 million gift to establish a department of bioengineering and a \$30 million to establish a scholarship endowment. In the same period, the School has constructed a state-of-the-art engineering building; has built strong programs in nanotechnology placing the University of Maryland among the strongest in the nation in nanotechnology education and research; has established a major new initiative in energy research and has launched, with the School of Public Policy, an innovative Master of Engineering and Public Policy program to produce engineers skilled in policy issues. He has been cited by the Honorable Aristides Melissaratos, Secretary of Business and Economic Development for the state of Maryland, as the "best engineering dean in the country."

A Fellow of the Institute of Electrical and Electronics Engineers (IEEE), Dr. Farvardin is a widely respected researcher in communications and information theory. Among his honors, he has been awarded the National Science Foundation Presidential Young Investigator Award; the George Corcoran Award for Outstanding Contributions to Electrical Engineering Education; and the Invention of the Year Award (Information Sciences), from the University of Maryland. In January 2003, he was selected by *The Washington Post* as one of the "Five to Watch in 2003."

Dr. Farvardin was the co-founder and chairman of the board of Zagros Networks, a venture-funded fabless semiconductor company in Rockville, MD, developing technologies focusing on quality of service provisioning in packet switched networks. He is currently a member of the board of directors and board of advisors of several private corporations and venture capital firms. He is also a member of several technical/advisory boards of educational and non-profit organizations.

For additional information on this seminar you may contact the CAO Office (x5-713)