

## Engineers can solve the 'grand challenges,' lecturer tells Alfred University students

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Engineers - particularly those who can "move seamlessly between disciplines, be team players, and understand how to lead - will be those who help to solve the "Grand Challenges" facing the world today, Dr. Linda E. Jones told students today as she delivered the annual John F. McMahon Memorial Lecture at Alfred University. Jones is the director and chair of the Picker Engineering Program and the Rosemary Bradford Hewlett '40 Professor of Engineering at Smith College, the nation's largest women's college and the only one to offer an engineering degree. A materials scientist, Jones was a member of the faculty of what is now the Kazuo Inamori School of Engineering at Alfred University from 1991 to 2005, receiving multiple Excellence in Teaching Awards, including the State University of New York Chancellor's Award for Excellence in Teaching, during her tenure at Alfred University. "You attend a remarkable school," Jones told an estimated 300 graduate and undergraduate engineering students who gathered in Holmes Auditorium for her lecture. "Take advantage of the complexity you find here at Alfred University," she said, encouraging them to explore how engineering "dovetails with the liberal arts and sciences, with the humanities, with art." "In order to solve the "grand challenges" - 14 areas identified by an international group convened earlier this year by the National Academy of Engineering - engineers need to "think constructively, act reflectively and make informed choices," said Jones. The solution to each of the "grand challenges" (<http://www.engineeringcha...>), Jones said, lies "at the interface between recognizing human need and connecting need to resources, solutions and appropriate technology." Jones pointed to what is becoming a critical shortage of engineers in the United States. While the demand for engineers, as well as scientists and technicians, remains high, fewer and fewer students in the United States are choosing those career paths. The shortage bodes well for students and engineers who are currently in practice and who may be looking for jobs in the future, but it is not good for the U.S. economy as companies look offshore to get the skills they need. Each year, the Kazuo Inamori School of Engineering invites a distinguished ceramic scientist or engineer to deliver the lecture and receive the award, created in memory of McMahon, who was dean of New York State College of Ceramics at Alfred University and affiliated with the University for 68 years as a student, researcher, professor, division head, dean, curator and dean emeritus. McMahon, who delivered the first lecture in the series in 1980, focused national and international attention on Alfred's programs in ceramic engineering, ceramic science, and glass science engineering. The Kazuo Inamori School of Engineering now offers majors in biomedical materials engineering science, ceramic engineering, glass science engineering, and materials science, all of which are affiliated with the state-supported College of Ceramics at Alfred University, as well as electrical and mechanical engineering. For more: <http://engineering.alfred...>