

Remarks by John Orr

Remarks by John Orr, Provost and Senior Vice President

At the Installation of Jeanine Plummer as the first Alena and David M. Schwaber Professor of Environmental Engineering

Monday, April 27, 2009

I am delighted today to participate in the installation of Dr. Jeanine Plummer as the first Alena and David M. Schwaber Professor of Environmental Engineering. Professor Plummer has contributed brilliantly to her field and to the WPI community, and she richly deserves this honor. Professor Plummer received a bachelor of science in civil and environmental engineering from Cornell University. With fellowships from the National Science Foundation and the U.S. Environmental Protection Agency, she earned a master of science in environmental engineering and a PhD in civil and environmental engineering at the University of Massachusetts, Amherst. Her thesis and dissertation work focused on removing algae and the parasite *Cryptosporidium* from drinking water.

As a graduate student, she took first place in the Association of Environmental Engineering Professors' Montgomery Watson Master's Thesis Award competition and received the United Technologies Outstanding Graduate Woman in Engineering Award.

WPI was fortunate to welcome Dr. Plummer to our faculty ranks in 1999, and she has made an indelible mark on the university in her nearly 10 years here. A respected and sought-after scholar and teacher by undergraduate and graduate students alike, Professor Plummer earned the Board of Trustees' award for Outstanding Academic Advising in 2005 and for Outstanding Teaching in 2006. In November 2008 she was named Professor of the Year for Massachusetts by the Council for the Advancement and Support of Education and the Carnegie Foundation for the Advancement of Teaching.

In 2007 Professor Plummer became director of WPI's new undergraduate program in environmental engineering, an interdisciplinary major that draws on the expertise of faculty members in chemical engineering, civil and environmental engineering, and mechanical engineering. Knowing that environmental engineers face challenges that span multiple disciplines, Professor Plummer directs a program that seeks to provide students with a broad background that integrates knowledge from the sciences, mathematics, engineering, and the humanities and social sciences.

In her research, Professor Plummer explores factors that affect the quality of drinking water and technologies that can be used to detect and treat contaminants. One area of her work concerns

waterborne pathogens, and she has developed statistical tools that can be used to help identify the probable sources of bacteria in a watershed when there are multiple possible sources. Other work focuses on distinguishing between human and non-human sources of bacterial contamination, studying how viral pathogens fare in waterways and in water treatment plants to better understand the risks they pose to people, and exploring innovative techniques for deactivating microbes in drinking waters, including the use of high-frequency sound waves, solar radiation, and organic acids. Professor Plummer has investigated ways to reduce the formation of harmful byproducts associated with disinfection, and at the applicability of alternative treatment techniques to disinfect water in developing countries. Her research has been supported by the National Science Foundation and the U.S. Department of Agriculture, and has resulted in awards at conferences of the American Water Works Association.

In her research and teaching, Professor Plummer exemplifies the WPI ideal of using engineering and science to solve complex problems and create positive change in the world. It gives me great pleasure to assist in the installation of Jeanine Plummer, an outstanding member of our faculty and our community, as the Alena and David M. Schwaber Professor of Environmental Engineering.

Here is the text of the citation that accompanies this honor:

Jeanine D. Plummer

WPI proudly recognizes your outstanding contributions to teaching and scholarship, honors your exemplary service to your department, and acknowledges the distinction you have brought to the university by appointing you to the Alena and David M. Schwaber Professorship in Environmental Engineering. Established in 2008 through the generosity of David M. Schwaber, Class of 1965 and his wife, Alena, this professorship symbolizes and celebrates the special bond between WPI and the distinguished friends who support the university's highest hopes and deepest ambitions.

We would also like to recognize and thank the Schwaber family for their endowment of this professorship. Here is the text of a citation honoring their gift:

Alena and David M. Schwaber '65, True Friends of WPI

With deep gratitude, Worcester Polytechnic Institute recognizes your extraordinary generosity and the splendid support of excellence in teaching, research, and scholarship at WPI reflected in your establishment of the Alena and David M. Schwaber Professorship in Environmental Engineering. Established in 2008, this professorship symbolizes and celebrates the special bond between WPI and the distinguished friends who support the university's highest hopes and deepest ambitions.

Thank you all for joining us this afternoon. Beyond celebrating Professor Plummer's accomplishments, as important as that is, I hope that this ceremony has given you the opportunity to reflect a little on WPI as an institution. Our mission stretches back almost 150 years and our effectiveness going forward is very much a function of long-term decisions and actions—in particular of the careers of the faculty who define WPI as an academic institution. As faculty and staff return to the important tasks of bringing this academic year to conclusion, let's also reflect on our collective enterprise that define this university. It is people—faculty, students, and staff—who design, implement, and benefit from, the programs, and who make WPI what it is. By honoring our top contributors like Professor Plummer we define the aspirations for us all, and our collective aspirations as a university.