

Alternative Energy

**Betty L. Gordon Alternative Energy
Research Endowment and
Endowed Distinguished Professorship**

In July 2008, Mrs. Betty L. Gordon committed a \$1 million gift to create the Betty L. Gordon Alternative Energy Research Endowment and the Betty L. Gordon Endowed Distinguished Professorship in the Fenn College of Engineering at Cleveland State University. The Endowments will support and advance research by CSU faculty and students in the fields of alternative energy, green technology and sustainability.

Dr. Majid Rashidi has been named the Betty L. Gordon Distinguished Professor for his work in the wind energy field. The Gordon Endowments will help advance Dr. Rashidi's research and design of wind turbines.

Mrs. Gordon's late husband, Gerald Gordon, was a two-time CSU alumnus, eight-year member of the University's board of trustees and former owner and president of the Sun Newspapers. Past gifts from the Gordons have included the establishment of an endowed scholarship in the Maxine Goodman Levin College of Urban Affairs and support for the Viking basketball program.



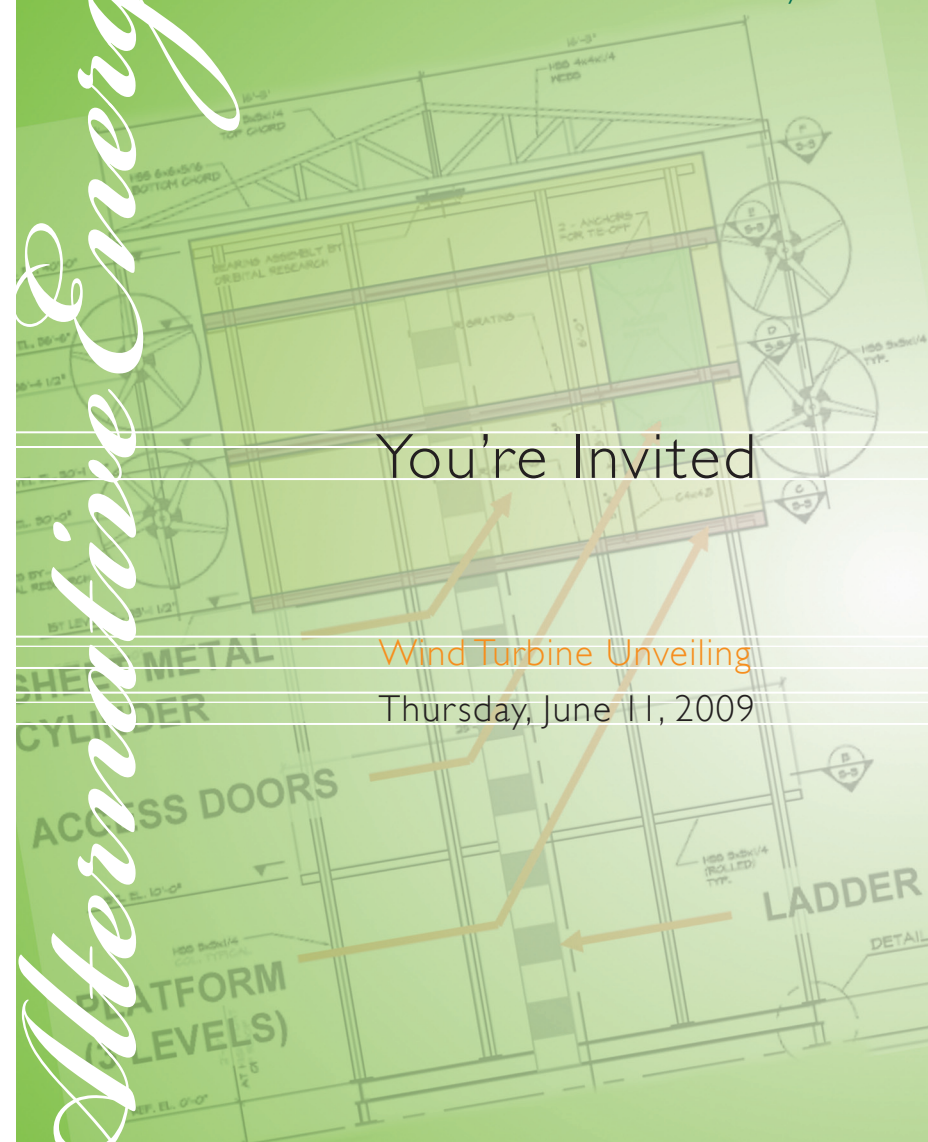
Division of University Advancement

Fenn College of Engineering
Cleveland State University

Alternative Energy

You're Invited

Wind Turbine Unveiling
Thursday, June 11, 2009



You're Invited

You are cordially invited to attend a reception at Cleveland State University, celebrating the creation and designation of the Betty L. Gordon Distinguished Professorship and the unveiling of Dr. Majid Rashidi's wind amplification turbine system.

Thursday, June 11, 2009

2:00 pm – 4:00 pm

Recreation Center, Second Floor
2420 Chester Avenue
Cleveland, Ohio 44115

Refreshments will be provided.

Please RSVP by June 4. To RSVP:
Call 216.687.5205 / email rsvp.events@csuohio.edu.

Complimentary parking will be available at the East Garage (EG) located on Chester Avenue next to the Recreation Center.

A Novel Design for Harnessing Wind Energy

Fenn College of Engineering Cleveland State University

Majid Rashidi, Ph.D., P.E., Interim Chair of the Engineering Technology Department and Professor, Mechanical Engineering Department, believes there is a better way to harness the power of the wind, especially in geographic areas with lower wind speeds. Dr. Rashidi's wind power research has focused on the potential of wind amplification structures that are capable of increasing the velocity of wind speeds.

Through a grant from the U.S. Department of Energy, Dr. Rashidi has developed a patented **wind amplification turbine system**, with two additional patents pending, that is cost effective and com-

mercially viable. The system is a cylindrical wind-deflecting structure with plurality of small-scale turbines on rotating arms that can generate power at much lower wind speeds than standard wind turbines of the same size. A stand-alone turbine will be erected and used as a control to measure the difference in power capacity of the traditional turbine versus Dr. Rashidi's system.

Wind amplification structures increase wind speeds, resulting in higher power output and reducing the minimum wind speed required to begin spinning a turbine. Dr. Rashidi's system can be scaled up in a vertical direction, while

keeping the footprint size and the size of its individual turbines the same. The system is flexible by design so it can be retrofitted on existing structures such as farm silos or water towers, making it possible for commercial use in rural and urban areas.

In June 2009, Cleveland State University will unveil Dr. Rashidi's first wind tower system on the rooftop of its Plant Services Building located near the intersection of Chester Avenue and East 24th Street.

This initial system will sit on a 30-foot-tall base with a cylinder 25 feet in diameter. Four turbines, six feet in diameter, will be anchored to two arms that can rotate as the wind direction changes. Plans are underway for additional systems in downtown Cleveland and rural areas of Northeast Ohio.

Dr. Majid Rashidi's wind amplification turbine system being installed at Cleveland State University

