Faculty Spotlight: Regents’ Professor Ajeet Rohatgi

Ajeet Rohatgi’s office contains a mélange of interesting paraphernalia—a miniature windmill, a “UFO,” a music box, a replica of an oil drilling system, a toy helicopter, a map of the world from a space perspective, and a solar panel. All of these items have a common thread that reflects Dr. Rohatgi’s lifelong passion—photovoltaics. The artifacts are all solar-powered, the world map is from a perspective that one could imagine emanating from the sun, and the solar panel represents the technology that ties it all together.

Dr. Rohatgi initially became engaged in photovoltaics at the Westinghouse Research and Development Center, where he worked in the design, development, and fabrication of high efficiency solar cells. His work earned him the distinction of Westinghouse Fellow, and he received the Westinghouse Engineering Achievement Award in 1984.

When Dr. Rohatgi came to Georgia Tech in 1985, he continued to make his mark on the field. “When I arrived (at Tech), there was nothing being done in photovoltaics. I began with a completely blank slate,” said Dr. Rohatgi. He has since filled that slate with a research presence that is now internationally recognized for its seminal contributions to the advanced theory and application of photovoltaics. Under his leadership, the University Center of Excellence for Photovoltaics Research and Education (UCEP) was established (see lead article), and ever since, photovoltaic technology developed at Georgia Tech has advanced to a level that makes large-scale application a viable possibility in the near future.

Dr. Rohatgi’s success does not rest only on the programs and facilities that he has developed, but on the connections he makes with the students who he mentors and with the larger community. His students describe him as a “tireless worker,” “unfailingly optimistic,” and “a man who truly enjoys the science (of photovoltaics).” He enjoys exploring ideas with his students and is dedicated to developing a new generation of engineers who will continue and add to his work.

Dr. Rohatgi often visits high schools to plant early seeds of interest in solar energy research. He brings some of his solar powered “toys” to illustrate the power of photovoltaics to his young audiences. Recently, Dr. Rohatgi worked with his fellow Georgia Tech professors in organizing the Blue Skies international conference, which brought together representatives from such divergent disciplines as architecture, public policy, and management, as well as engineering, to discuss the future of energy.

Dr. Rohatgi’s dedication springs from a personal sense of mission that he has carried throughout his career and a conviction that his work will have a positive societal impact. “When I entered the field of photovoltaics, I saw this as a way to help humanity,” he said. “There is no downside to photovoltaics. You just can’t have a better, cleaner way of producing electricity. It’s good for people and good for the environment. This makes me feel that my work has a noble purpose.”