

**MEMORIAL RESOLUTION OF THE FACULTY
OF THE UNIVERSITY OF WISCONSIN-MADISON**

ON THE DEATH OF PROFESSOR EMERITUS MOHAMED M. EL-WAKIL

Mohamed El-Wakil, age 91 and a resident of Madison for nearly 60 years, died June 10, 2012, in Walnut Creek, California, to where he had moved in 2005. He was born in Alexandria, Egypt in 1921. Mohamed El-Wakil was, arguably, one of most influential authors of textbooks in power engineering and nuclear reactor engineering in the world, and his efforts have left an unparalleled legacy of educational excellence and scholarship.

He graduated from the University of Cairo in 1943 and was awarded a scholarship in mechanical engineering to study in the U.S. but was not allowed to travel until after World War II. Egypt sent him to the University of Wisconsin-Madison where he earned a PhD in 1949. In 1952, he joined the faculty of UW-Madison. He assisted in the development of the top-ranked nuclear engineering program at UW-Madison. He continued to teach in the departments of mechanical and nuclear engineering until he was 80 with the exception of five years in the 1980s when he began and served as chairman of engineering and computer science at American University in Cairo.

Professor El-Wakil was internationally known for his four textbooks in power plant technology, nuclear power engineering, nuclear energy conversion and nuclear heat transport. His books can be found in almost every university library worldwide and have been the foundation of education for the majority of mechanical engineers and nuclear engineers in the power industry. Many of his graduate students are faculty members at prestigious institutions in the U.S. (e.g., Georgia Tech) and internationally (National Tshing-Hua University and University of Alexandria). He gave invited presentations in numerous countries, and he taught workshops in India, Libya, Kuwait, Lebanon, the Philippines, Indonesia, Tunisia, and the United Arab Emirates, as well as Egypt. He loved teaching and received several awards for outstanding teaching.

His research contributions covered a broad range of areas important to both mechanical and nuclear engineering. He pioneered the use of Mach-Zehnder interferometry to study the fundamentals of heat and mass transfer in energy systems. Other areas of research included spray dynamics, diffusion flames, mixed convection, and vapor explosions.

In 1974, he founded the Association of Egyptian-American Scholars to encourage Egyptians working in all academic fields in the U.S. to share expertise with colleagues in Egypt. He was a member of Rotary West in Madison.

He is survived by his wife of 32 years, Betty; two children, Dr. Fred Wakil of Los Angeles, and Dr. Leila El-Wakil of Piedmont, Calif.; and two granddaughters, Sonja (Steven Magnuson) and Sophia.

MEMORIAL COMMITTEE

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