

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

ON THE DEATH OF PROFESSOR EMERITUS MURRAY ALEXANDER THOMPSON

Murray Thompson, an emeritus professor in the physics department, died at age 75 at his home in New Zealand on April 10, 2010. Murray, who was born and educated in New Zealand, joined the UW physics department as a research associate in high energy physics in 1962. A member of the Bill Walker-Albert Erwin group, he was involved in a number of bubble chamber experiments and put together a team to build an automatic system to recognize and measure particle tracks in bubble chamber films. His was an imaginative and innovative solution to a difficult technical problem. He retired from the department in early 2000.

In 1976, Murray became director of the Physical Sciences Laboratory (PSL), a position he held until 1989. Murray was an energetic leader and promoter of PSL, as well as a mentor to the staff. He encouraged the adoption of the metric system to enhance the ability of PSL to contribute to international projects. Throughout his career, he was personally involved in technical solutions to challenging research problems in many fields. Among them was the construction of a small version of the VAX computer called the PSL1, which was funded by the Digital Equipment Corporation. Another project was the design and fabrication of an x-ray microbeam machine for speech studies, which used a narrow beam of x-rays to identify and track gold pellets on a subject's tongue as the subject spoke different phrases. Yet another project, for the Fermi National Laboratory, involved the design and fabrication of a number of time-to-digital converters with one-nanosecond resolution.

Murray delighted in assisting others to use physics in their research. One of the early assignments given him was to redesign and refurbish the Advanced Laboratory for Physics Majors, bringing it to a state-of-the-art sophistication. After the demise of Professor Edward Miller, Murray saw through the final assembly and publication of Professor Miller's book on optics.

Murray worked with medical physicists on a tomography system that gives precise, therapeutic x-ray doses to patients with tumors. The system was designed by Professor Rock Mackie in the medical physics department, and the mechanical components of the prototype were built at PSL. Murray also worked with computer scientists to explore the performance of high-bandwidth networks to determine the limitations to the transmission of scientific data that might be caused by finite transmission times.

Murray was an enthusiastic and intellectually curious person. Besides his passion for scientific knowledge, Murray loved the outdoors: tramping around the hills of Wisconsin, canoeing in Canada and, in later years, hiking in his beloved New Zealand. He is survived by Megan, his wife of 49 years, and their sons Bruce and David.

MEMORIAL COMMITTEE
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Don Reeder, chair