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

ON THE DEATH OF PROFESSOR EMERITUS OWEN R. FENNEMA

Professor Emeritus Owen Fennema, age 83, of Middleton, passed away on Wednesday, August 1, 2012, due to complications from bladder cancer, surrounded by family at Agrace HospiceCare. Owen was born on January 23, 1929, in Hinsdale, Illinois, the son of Nicolas (a dairy plant owner) and Fern (First) Fennema. He moved to Winfield, Kansas graduating from high school in 1946. He met his beloved wife, Elizabeth (nee Hammer) in high school, and they were married on August 22, 1948.

Owen attended Kansas State University, obtained a BS degree in dairy industry in 1950, and promptly completed an MS degree in dairy industry at UW-Madison in 1951. Owen served from 1951 to 1953 as second lieutenant ordnance in the U.S. Army, stationed in Fort Hood, Texas. He and Elizabeth moved to Minneapolis, Minnesota in 1953 where Owen worked for the Pillsbury Company in the research department. In 1957, they moved to Madison where Owen went to graduate school and received his PhD in dairy and food industries (minor in biochemistry) in 1960.

Owen was hired as an assistant professor in food chemistry in 1960, was promoted to associate professor (1964) and full professor (1969), served as department chair from 1977 to 1981, and remained a professor of food science at UW-Madison until his retirement in 1996. During that time, he excelled in every facet of his service to the food science department, CALS, the UW-Madison campus, the food science profession, and the international community.

In research, Professor Fennema positioned his group at the leading edge in several areas, the most noteworthy and formative being low temperature biology of foods and model food systems, and edible films. Holistic approaches were taken to define and understand the physical, chemical and biological behaviors of food systems that affect characteristics related to food quality. His fundamental discoveries of the complexities of interactions between phase behavior, (bio)chemical reactivity and solute transport in food systems evolved scientific paradigms in these areas, many of which still guide professionals today. Revealing the nature, influence and control of water and ice in foods was a mainstay of Professor Fennema's research career as reflected by the content of his several hundred scholarly publications and book chapters, along with ~60 theses/dissertations completed by the graduate students he mentored. Among the many honors and awards Owen received for his research activities, the most prestigious were fellow and Advancement of Application of Agricultural and Food Chemistry Award, the highest honor from the Agricultural and Food Chemistry Division of American Chemical Society (ACS); fellow from the Institute of Food Technologists (IFT) and the Nicholas Appert Award (IFT's highest honor); and the honorary doctoral degree in agriculture and environmental science from Wageningen Agricultural University, The Netherlands.

In the classroom, Professor Fennema was a gifted communicator and facilitator of student learning. He was legendary in his meticulous organization of course content, and his lectures were crystal clear, like the "water and ice" he frequently studied in research. His focus on explaining principles, coupled with illustrated examples (updated regularly) provided students with a "real world" feel. Owen's classroom presence and enthusiasm in the delivery of the material "[brought] the subject matter to life." Owen had a genuine interest in student learning, would encourage questions, and then take time inside and out of class to help students put it all together. Students came to know Owen as their respectful advocate, and they found inspiration from his total commitment to their education. In a lifetime of stellar achievements, Owen was recognized world-wide for the publication of a seminal book for food science students and scholars, now titled *Fennema's Food Chemistry*, published in four editions and multiple languages, and widely used

today throughout the world. He considered this one of his greatest achievements as an instructor. He has received many accolades from colleagues and students, including "phenomenal teacher," a "titan in his field" and a "father of food science," and he mentored individuals who later became some of the most prestigious leaders in the food science world. To nobody's surprise, Professor Fennema was awarded the William V. Cruess Award for Excellence in Teaching from IFT, a UW-Madison distinguished teaching award and a Fulbright distinguished lecturer award, Madrid, Spain.

Owen served on numerous professional boards and committees, including the American Chemical Society, the Council for Agriculture Science and Technology, and the Institute of Food Technologists (IFT), for which he served in multiple capacities, including treasurer from 1994 to 1999 and president from 1982 to 1983. Owen was editor-in-chief of IFT's peer-reviewed journals from 1999 to 2003 when he facilitated a complete reversal of their decline in quality and relevance, ascending the *Journal of Food Science* to its present stature as an impactful and respected journal among food science scholars. He served on several national advisory councils and was recognized by a U.S. FDA director's special citation award (2000).

Owen was a citizen of the world, as evidenced by his many contributions to international food science, not the least of which was his service to the International Union of Food Science and Technology (IUFoST). He served in various capacities in IUFoST, gave lectures around the world, and served as major professor to numerous international students. From 1999 to 2001, Owen served as the first president of the International Academy of Food Science and Technology. Owen truly had a global influence, impacting both lives and educational programs of numerous institutions. He was a man without prejudice as illustrated by being one of the first American food scientists to be invited to South Africa, and upon acceptance, insisted that he speak at black institutions in South Africa.

Despite the awards and accolades, Owen remained a humble and caring individual. To his mentors, he was always available, had unlimited patience and became a friend for life. Because of the demands on Owen's time, his students and colleagues would often try to converse with him at every opportunity, sometimes during his frequent walks about campus. Owen's legendary gait made it difficult for others to keep pace with him, risking the inability to engage in intelligent discourse with him while also gasping for air. Professionally, Owen was often so far out ahead of the rest of us, that we too wondered how we could keep pace.

Owen was also an accomplished poet, woodworker, carpenter and artisan of leaded glass. He was a truly gifted artist, and many of his works are hanging in UW-Madison buildings, IFT headquarters in Chicago, and in private homes of friends and acquaintances. One beautiful piece greets visitors arriving through the main entrance to our beloved Babcock Hall.

Owen touched the lives of many people, including students, colleagues, friends and family. In the last weeks of his life, many people wrote comments and letters to him about what a great teacher and mentor he was and the enormous impact he made on their lives. "As a distinguished scholar, world renowned professor and kind and caring friend, he was an inspiration to us all."

We are caressed by water as we enter this world, water sustains us as the essence of life, and an overflow of tears accompanies our leaving loved ones behind. Owen studied water his entire professional life. It is easy to picture him now, "playing" with water, looking at us with his habitual wry grin, knowing something we don't, but eager to share it – ever the teacher. Although we mourn his passing, we will cherish the gift he has left us, the indelible impression of the value of dedication, selflessness, humanity and example.

MEMORIAL COMMITTEE Srinivasan Damodaran Daryl B. Lund Kirk L. Parkin, chair