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

## ON THE DEATH OF PROFESSOR EMERITUS RICHARD F. FENSKE

Richard F. (Dick) Fenske, Professor Emeritus of Chemistry, died at the age of 82 on December 14, 2011 in Las Vegas, Nevada. Dick was born May 23, 1929, in Milwaukee, as one of 10 children to Bernard and Mary Fenske. After receiving his B.S. degree from Marquette University in 1952, he worked for several years at the Oak Ridge Atomic Energy Facility and the Army Chemical Center. He returned to graduate school in 1957 and received his Ph.D. from Iowa State University in 1961. Immediately upon completing his Ph.D. degree, Dick started his independent academic career at the University of Wisconsin-Madison in 1961.

Dick was an internationally-renowned pioneer in the application of molecular orbital theory and quantum mechanical methods to the study of inorganic and organometallic species. Transition metal containing compounds pose substantial challenges to computational quantum chemistry because of both the number of atoms and the number of electrons. Dick's insight into the solution of complex integrals, as well as chemically justifiable approximations in the quantum mechanical treatment of electronic structure, led Dick and his students to develop a powerful treatment of molecular orbital theory that became known as the 'Fenske-Hall' method. For a period of 40 years, Fenske-Hall and Extended Hückel theories served as the dominant means of analyzing and interpreting electronic structure in the field of inorganic chemistry. Dick's Ph.D. students from Wisconsin pursued their own distinguished careers in academia and industry.

Dick served as Chair of the Chemistry Department (1972-1977) and Associate Dean in the College of Letters and Science (1978-1982). He was known as a creative and enthusiastic teacher and earned many awards for his teaching style, including the Steiger Teaching Award – a University-wide award – in 1967. Dick retired from the faculty in 1989 and moved to Las Vegas, where the reliably sunny weather conditions benefitted his family. In the early years of his retirement, Dick returned to Madison during the summer to continue his masterful teaching of introductory chemistry courses. Although his first loves were his family and teaching, Dick also enjoyed travel, piloting, poker, and golf. In addition, he was a deeply spiritual man who was involved in his church and appreciated music, photography and art.

He is survived by his loving wife of 60 years, Francesca Mary (Fran) Fenske; children, Marybeth (Peter) Geissler of De Pere, Rick (Vickie) Fenske of Neenah, and John Fenske of Las Vegas; grandchildren, Richard, Rebecka and Jacob Fenske, Sarah, Rachel, Jonathan, and David Geissler and Alexia Shurmur; siblings, Mary Bechmann and Robert Fenske; and numerous nieces and nephews. He was predeceased by his son, Joseph Fenske.

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