

Obituary

W.E. Wentworth (1930–2004)



Wayne E. (Sonny) Wentworth died at the age of 73 in Houston, Texas on 10 March 2004. He was born in Rochester, Minnesota on 29 May 1930. He was married to the former Elise Hughes of Georgia. They had four children, Kathy, Randy, Gregg and Rick (deceased). They have three grandchildren, Susan, Travis, and Dan.

From 1948–1950, he attended Rochester Junior College, where he was elected to Phi Theta Kappa Honorary Scholastic Society. He completed a bachelor of arts degree in chemistry at St. Olaf College in Northfield, Minnesota in 1952. He received an Ethyl research scholarship. In June 1957, he received the doctor of philosophy degree with a major in analytical–physical chemistry working under R.J. Keirs and M. Kasha at Florida State University.

From September 1956 to September 1959, he was employed with the RCA Service Company at Patrick Air Force Base, Florida as a mathematical analyst. From September 1959 to 2000, he has been at the University of Houston, assistant professor 1959–1963, associate professor 1963–1969, and professor, 1969–2000. He retired after four decades of teaching and research leading to about 40 graduate degrees, half of which have been doctorates. The Robert A. Welch Foundation supported him continuously.

He has been a member of the American Chemical Society, the American Solar Energy Society, and Alpha Chi Sigma. He has published over 125 papers, written three text books, and received numerous patents. In 1960, his hypothesis that the response of the electron-capture detector is related to the equilibrium constant and hence to the electron affinity of the molecule led to the first determination of these quantities. Subsequent research on the temperature dependence of the electron-capture detector has led to the determinations of the electron affinities of many aromatic hydrocarbons and other organic molecules. A monograph on this work will be published in May 2004. One of the publications from his doctoral dissertation, was selected as a pioneer paper in analytical chemistry. His papers on the chemical applications of non-linear least squares were Citation Index Classics. His patent for pulse discharge ionization detectors was selected as one of the 100 most significant inventions of 1997.

He continued to do research and present short courses on this detector in conjunction with Valco Instruments, Houston, Texas. Even in his last days, his mind was active and he contributed to the statement of the Feynman/Lesk/Herschbach/Wentworth (FLHW) hypotheses, in press with the *Journal of Physical Chemistry A*.

Wayne E. Wentworth now belongs to the ages. Without him most of his co-workers and students would not be scientists but above all, would not be the persons that they are today.

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