

## DOCUMENTS OF THE GENERAL FACULTY

**REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR  
DANIEL M. ZIEGLER**

The special committee of the General Faculty to prepare a memorial resolution for Daniel M. Ziegler, professor emeritus, chemistry and biochemistry, has filed with the secretary of the General Faculty the following report.

Sue Alexander Greninger, Secretary  
The General Faculty

**IN MEMORIAM  
DANIEL M. ZIEGLER**

Our longtime colleague and friend Daniel M. Ziegler died in Austin, Texas, of heart failure on November 9, 2005, at the age of 78. He is survived by his wife of 53 years, Mary Alice, and four children: Danny, Paul, Mary Claire, and Jimmy, and eight grandchildren.

Dan was born on July 6, 1927, on a farm in Quinter, Kansas, to Anton and Clara Ziegler. Dan was the tenth of thirteen children, and attended elementary, middle, and high school in Quinter. In 1945, Dan enrolled in St. Benedict's College in Atchison, Kansas, earning a B.S. degree in chemistry in 1949. Dan met Mary Alice Weir during his senior year at St. Benedict's, and they were married in 1952. Dan and Mary Alice moved to Chicago where Dan entered graduate school at Loyola University. Under the guidance of J. B. Melchior, Dan earned a Ph.D. in biochemistry in 1955. Dan then joined the laboratory of David Green at the Institute for Enzyme Research at the University of Wisconsin at Madison as a postdoctoral fellow. Green's was one of the premier enzyme chemistry laboratories in the world, and it started Dan on a distinguished career as one of the top enzymologists of the 20<sup>th</sup> century. Dan joined the faculty at The University of Texas at Austin in September 1961 as an assistant professor in the Department of Chemistry and as a research scientist in the Biochemical Institute. He moved quickly up the ranks, being promoted to full professor in 1969, and in 1990 was named the Roger J. Williams Centennial Professor of Biochemistry. Dan also remained active with the Biochemical Institute, serving as associate director from 1986-1996. Dan retired in 1997.

Dan led a distinguished career in the Department of Chemistry and Biochemistry from 1961 to his retirement in 1997, both in teaching and research. For many years Dan was one of our major links with the College of Pharmacy, teaching courses which elucidated the complex biochemical pathways by which both nutrients and non-nutrients, such as drugs, are metabolized. His cogent, well-organized lectures were greatly appreciated by budding biochemists and pharmacologists alike. Dan's teaching interests reflected his research interests. He is best known for his discovery of the first FMO (flavin-containing monooxygenase) – commonly called the "Ziegler Enzyme." These enzymes are used by the body for detoxification by catalyzing the conversion of nutritionally-useless compounds to polar metabolites for excretion in bile or urine. Dan's pioneering studies on this enzyme had a major impact on the field of drug metabolism. Dan's group was the first to purify a member of this class of enzymes, and subsequent studies in his laboratory demonstrated the importance of this enzyme in the metabolism of a large number of medicinal amines and sulfur-containing drugs. Through elegant experimental design, and careful chemical analysis, Dan's research group was eventually able to elucidate the mechanism of action of FMO. Dan's impact extended beyond his work with FMO, as he provided fresh insights in enzymology, intermediary metabolism, and organic reaction mechanisms.

During his career Dan won numerous awards, including a USPHS Career Development Award from 1965-1975, the Bernard B. Brodie Award in Drug Metabolism from the American Society for Pharmacology and Experimental Therapeutics in 1990, and a Humboldt Research Award in 1991, and again in 1995. In the fall of 1990, the Fifth International Symposium on the N-Oxidation of Drugs in Munich, Germany, was dedicated to Dan for his contributions to the field. In 1996, the International Society for the Study of Xenobiotics at San Diego held an entire symposium to honor his career and presented him with their highest honor, an Honorary Life Membership. His was only the fifth such award in the history of the society.

Dan was not only an internationally-respected scientist and teacher, but a true gentleman. He was generous with his advice and suggestions for his colleagues. He was patient with his students. Dan was a devoted husband, father, and grandfather. He was an active member of St. Louis Catholic Church. He organized a choir there in 1986 and served the community as a member of the St. Vincent de Paul Society for many years.

After publishing over one hundred research articles and serving on many national and international committees, Dan retired in 1997 with the intent of doing more research, writing, traveling and devoting more time to his family. He took grandfathering very seriously. Until the time of his death, Dan would frequently come to campus to visit with colleagues in the Experimental Science Building and Welch Hall. Dan Ziegler will be remembered as a successful, hard-working scientist, and a humble teacher, colleague, and friend.

This memorial resolution was prepared by a special committee consisting of Professors Dean R. Appling (chair), Marvin L. Hackert, and G. Barrie Kitto.

Distributed to the dean of the College of Natural Sciences, the executive vice president and provost, and the president on May 1, 2006. Copies are available on request from the Office of the General Faculty, WMB 2.102, F9500. This resolution is posted under "Memorials" at: <http://www.utexas.edu/faculty/council/>.