

# MEMORIAL RESOLUTION

## HARRY S. MOSHER

(1915-2001)

Harry Stone Mosher, Professor Emeritus of Chemistry, died at his Stanford home on March 2, 2001 after a lengthy illness; he was 85. Harry Mosher joined the Stanford Chemistry Department in 1947, and retired in 1981, becoming an emeritus professor. Mosher's retirement was mandatory because he fell short by one day of the present law that makes retirement voluntary. Mosher often stated that he wished he could have continued as a regular faculty member because of his love of teaching and research.

Mosher was born in 1915 in Salem, Oregon, where he attended public schools and later Willamette University. He received his bachelor's degree in chemistry in 1937 from that institution. After obtaining a master's degree from Oregon State University in 1938, he returned to Willamette to teach for one year. Mosher then continued his graduate work at Pennsylvania State University in 1939, where his mentor was Frank C. Whitmore, a renowned organic chemist. Harry was granted the Ph.D. in organic chemistry in 1942. He remained at Pennsylvania State University during World War II as an assistant professor supervising research on synthetic anti-malarial drugs for the National Research Council and the production of DDT with the War Production Board.

In 1944, he married fellow Penn State chemistry graduate student Carol Walker. They moved to California three years later after Harry accepted an appointment as an assistant professor in Stanford's Department of Chemistry. Carol joined the staff of Stanford Research Institute that year, later becoming senior organic chemist.

During his career at Stanford, Mosher taught both undergraduate and graduate courses in organic chemistry and conducted research in a wide range of areas, including natural products chemistry and stereochemistry. Along with his graduate students, postdoctoral fellows, and visiting scholars, Mosher co-authored more than 140 research papers and a reference book titled *Asymmetric Organic Reactions*, published in 1971. Mosher was a world-renowned scientist. He determined the structure of tetrodotoxin - an extremely toxic neurotoxin found in wild newts inhabiting Stanford's Lake Lagunita. He later showed that this same toxic compound is found in puffer fish, a Japanese delicacy when properly cleaned. When not, traces of toxin resulted in the deaths of many Japanese gourmets. Tetrodotoxin has an unusually complex structure, which Mosher was the first to elucidate. Mosher worked on many other natural products including both plant pigments and toxic substances. Mosher made equally important contributions to the area of stereochemistry, the determination of molecular shapes. He invented the "Mosher Reagent", which is still widely used by organic chemists to measure the degree of left- or right-handedness in organic molecules. Mosher was a modest scientist, one who never heralded his own research. He did not regard scientific research as a race, as did some of his competitors who rushed their results to print in the popular press. Harry Mosher, in contrast, refused to release his studies until his work had appeared in refereed scientific journals. Mosher was a beloved teacher, both by undergraduate and graduate students. He gave his students' education his highest priority. It is fitting that one of Mosher's earliest

Ph.D. students, Dr. Charles P. Haber, Ph.D. '50 and Mrs. Candace Haber have endowed the Harry S. Mosher Professorship in the Department of Chemistry.

Mosher received an honorary doctoral degree from Willamette University. In 1980, the Santa Clara Valley section of the American Chemical Society established the Harry and Carol Mosher Award to advance the field of chemistry. The Moshers were the first recipients of the award, given "in recognition of the inspiration of their example." Harry Mosher served as chair of the California section of the American Chemical Society in 1955 and on the ACS National Council, both elected positions.

Mosher was an all-around athlete, having played varsity basketball at Willamette. He was an avid fan of both the Men's and Women's Stanford basketball teams. He loved to play tennis, backpack and ski. He participated in these activities well into his 80's. Until the last two months of his life, Mosher lunched regularly with his friends at the Rathskeller in the Stanford Faculty Club.

Mosher is survived by his wife; their three children, Stephen Mosher of Clovis, California, Janet Lee Oliver of Rancho Santa Margarita, and Leslie Jean Robbins of San Jose; and five grandchildren. A memorial service for Harry Mosher was held March 17, 2001 at the First United Methodist Church in Palo Alto.

Committee:  
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