

## **IN MEMORIAM**

### **WILLIAM D. McCORMICK**

William Devlin (Bill) McCormick was born in Tacoma, Washington, on May 9, 1931, to William Laird McCormick (1876-1953) and Jessie May Jones McCormick. On July 11, 1970, Bill married Esther (now Flora) Laverne Wargo in Travis County, Texas. Bill, who died November 7, 2019, from complications of cancer, is survived by Flora; their son and daughter-in-law, Brian and Rosa McCormick; and two grandchildren, Nevita and Devlin of Austin. He is also survived by a large extended family, including his sister Delinda.

Bill, who spent his childhood in Tacoma, attended high school in Victoria, British Columbia. He entered Caltech in 1949 where he became very interested in physics. However, he toyed with changing his major to chemistry when he took an exciting course taught by Linus Pauling, who was awarded the Nobel Prize in Chemistry in 1954. After graduating from Caltech with a Bachelor of Science in Physics in 1953, Bill entered Duke University's Ph.D. program in physics. His advisor was William M. Fairbank, and his thesis title was "Nuclear Magnetic Resonance in Solid Hydrogen at High Pressures;" he was awarded a Ph.D. in 1959. Some Duke faculty knew of Bill as the graduate student who understood the research projects of Professor Fairbank's other graduate students better than those students did.

While a student at Duke, Bill took a course on Einstein's theory of relativity from Professor Bryce DeWitt at the nearby University of North Carolina. Bill often raised questions in class, and after the course was completed, Professor DeWitt invited Bill to join him and his wife Cécile DeWitt-Morette for a symphony concert. Bill subsequently attended many concerts with Bryce

and Cécile, and a lifelong friendship developed. A decade later, by happenstance, Bill, Bryce, and Cécile all joined the faculty of The University of Texas.

After graduating from Duke, Bill went on a Fulbright Fellowship to Italy to conduct research with Professor Giorgio Careri, first at the University of Padua and in the following year at the University of Rome and the Frascati National Laboratory. During his two years in Italy, Bill became fluent in Italian and developed a lifelong appreciation for Italian cuisine and culture.

Bill became a Research Assistant Professor in 1961 and an Assistant Professor in 1962 at the University of Washington. He studied the properties of liquid helium, and in 1964-67, he was awarded an Alfred P. Sloan Foundation Fellowship. In 1967-68, he went on leave as a Visiting Scientist at Battelle Northwest Laboratory, a national laboratory established in 1965. In 1968, Bill was appointed Associate Professor at The University of Texas at Austin, where he established a laboratory research program on liquid helium and the temperature and magnetic field dependence of the properties of solid materials. He was promoted to Professor in 1988.

In the late 1970s, Bill began research on reactions in stirred liquid mixtures of chemicals. Collaborating with students and colleagues, he discovered that some chemically-reacting systems behave chaotically. This research led to additional faculty hiring in the area of experimental pattern-forming systems, an area in which The University of Texas at Austin eventually became famous around the world. In 1984, Bill and his faculty colleague Harry Swinney attended a conference in Bordeaux where they met Professor Zoltan Noszticzius, a chemist from Budapest. The three began to collaborate closely, and Noszticzius subsequently made multiple visits to Texas for stays ranging from months to years. The collaboration initially focused on the characterization of chaotic behavior in stirred chemical reactions, where the chemical concentrations were uniform throughout the reactor. Then, they began to design reactors in which reactions occurred in a gel

and there was no flow, only the reaction and diffusion of the chemicals. They discovered and characterized a variety of chemical spatial patterns in experiments that continued for two decades.

In 1985, Bill became a founding member of the Center for Nonlinear Dynamics where he contributed his broad knowledge and insights to many diverse research projects. After he became Professor Emeritus in 1996, he continued collaborating with colleagues and students in research on patterns in sand, fracture of solids, and fluid convection.


Bill had a long-time interest in the University of Puget Sound in his home town, Tacoma. He was the third-generation family member to serve as a trustee. During his service as a trustee, 1978-2011, he was the only scientist on the board, and he played a major role in guiding the development of strong science programs. In addition, Bill and Flora were benefactors of the University of Puget Sound, and in 2013 they established the William D. and Flora McCormick Endowed Chair in Biophysics.

Bill was an exceptional mentor to students, and several students who learned of his passing sent touching testimonials to his mentorship. All celebrated Bill's generosity with his time and his expertise in the design of research projects. For example, Diane Jacobs, a 1984 graduate who is now a professor at Eastern Michigan University, wrote:

I had to leave Austin before I could finish writing my Ph.D. thesis, so my husband could start his postdoctoral position. We had a newborn daughter, and I had a research position at the University of Michigan, but we had no money. This all made it impossible for me to return to Austin to go over important points of my thesis with Bill. Bill flew to Michigan and spent several days working with me in our living room. We had no furniture except a beanbag chair for Bill to sit in. I will never forget his kind gesture, as I would have struggled to finish my thesis otherwise.

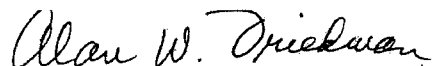
Bill was an avid, life-long learner who possessed insatiable curiosity that never dimmed. He could converse knowledgeably on a broad range of topics ranging from science and technology to

classical music, jazz, politics, and automobiles. Bill was a particularly kind man whose generous nature, innate courtesy, and keen sense of humor earned him many friends. He is greatly missed by all who knew him.



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Gregory L. Fenves, President  
The University of Texas at Austin



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Alan W. Friedman, Secretary  
The General Faculty

This memorial resolution was prepared by a special committee consisting of Professor Emeritus Harry L. Swinney (Chair), Professor Michael P. Marder, and Professor Emeritus Melvin E. Oakes.