

## Orville L. Chapman

June 26, 1932 - January 22, 2004

Orville L. Chapman was born on June 26, 1932, in New London, Connecticut. The son of a Naval officer, he grew up in several cities in the United States and Central America. He attended high school in San Diego and received his undergraduate degree at Virginia Polytechnic Institute in Blacksburg, Virginia with a double major in Chemistry and English. Orville received his Ph.D. with Jerrold Meinwald at Cornell University in 1957. He became an Instructor at Iowa State in 1957 and moved up the ranks to Professor in 1964. Orville was an early pioneer in the emerging field of organic photochemistry.

Chapman moved from Iowa State to UCLA in 1974, on the heels of his exciting successes in applying matrix isolation spectroscopy to the characterization of cyclobutadiene and benzyne. The years 1975-85 were an extremely productive period for the investigation of a wide variety of organic reactive intermediates: carbenes, nitrenes, propadienones, silenes, carbonyl oxides, strained alkynes, etc. At UCLA, Orville's ideas concerning the novel molecule,  $C_{60}$ , germinated in ca. 1979/80. In 1981, Orville initiated efforts directed at the chemical synthesis of  $C_{60}$ . This work was but one part of a new effort in the synthesis and characterization of various types of strained, non-planar aromatic compounds. In retrospect, these efforts are now recognized as pioneering contributions to materials chemistry.

In 1984, Orville and his colleague, Arlene Russell, formed a company that offered inhouse short courses in technical writing. Arlene and Orville also collaborated in the production of a laser videodisc for teaching NMR spectroscopy to undergraduates (ca. 1986-88). This was perhaps the first effort in Orville's emerging interest in revamping the undergraduate curriculum. It led to the idea of using <sup>13</sup>C NMR spectroscopy as a method for introducing the topic of organic chemistry. In 1989, he became Associate Dean for Educational Innovation at UCLA, a position that he held until his death. Orville spearheaded the UCLA proposal for curriculum reform in chemistry that was funded by the NSF.

Orville joined the Board of Editors of Organic Syntheses in 1975. He actively encouraged and solicited procedures illustrating the synthetic applications of photochemistry. He edited Volume 60 (1981) in this series, which was in large part devoted to photochemical processes.

Chapman received many national and international awards, including the Pure Chemistry Award and the Arthur C. Cope Medal from the American Chemical Society, the Havinga Medal from the Stichtung Havinga, Leiden, the Netherlands, and the Texas Instruments Foundation Founders' Prize. He was elected to the National Academy of Sciences in 1974. Professor Chapman received the ComputerWorld Smithsonian Institute Award for the best use of computers in education and academia in 1995. He was a long-term consultant for Mobil chemical, and was involved in the invention and development of a significant number of their processes.

Professor Chapman was internationally recognized as a brilliant, creative scholar and an intellectual leader in various fields of endeavor. He was a trailblazer and innovator in photochemistry, matrix isolation spectroscopy, reaction intermediates, chemical communication, the mechanism of olfactory perception, polymers, and materials design. He also achieved a worldwide reputation for bringing the best of information technology to higher education.

Orville is survived by his mother, his wife Susan, his two sons, Kevin and Kenneth, and three grandsons. A fellowship in his name will be established at UCLA.

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