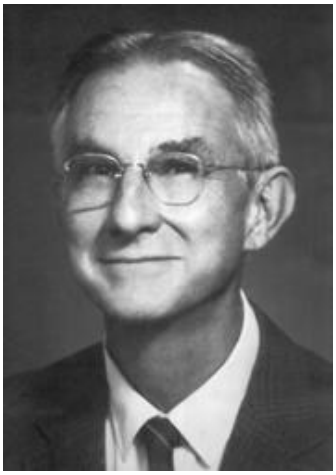

IN MEMORIAM

James Cason
Professor of Chemistry, Emeritus
Berkeley
1912 – 2003

James Cason was born August 30, 1912, in Murfreesboro, Tennessee. He grew up in Murfreesboro where he attended Miss Eliza Ransom's School through the sixth grade. He credited Miss Ransom's with instilling academic discipline by requiring him to memorize large amounts of poetry. After graduation from Miss Ransom's School, Cason attended the public Crichlow Grammar School, followed by Central High School, and finally, McCallie School, a college preparatory school in Murfreesboro.

Cason attended Vanderbilt University, where he obtained an A.B. degree in 1934 and was awarded the Founders Medal for Scholarship, being only the fourth student in the history of the college to graduate with grades of A in every course he took. After graduation from Vanderbilt he moved west and earned an M.S. degree from the University of California, Berkeley (1935). In his autobiography, Cason writes that during his studies at Vanderbilt, he had become deeply interested in organic chemistry and that he decided to undertake graduate work at Berkeley because he wanted to learn how to apply thermodynamics to organic chemistry. However, he did not find a faculty sponsor who was interested in this combination of physical and organic chemistry. Furthermore, during his year at Berkeley, he developed an interest in biochemistry and there was then no one at Berkeley with an interest in that subject. Consequently, he completed his M.S. work at Berkeley and applied for admission to the doctoral program at Yale University, which he entered in the fall of 1935, shortly after marrying Rebecca Marsden.

At Yale, Cason did doctoral work with R. J. Anderson and received his Ph.D. in 1938. He was awarded a postdoctoral fellowship to Harvard University where he did research with Louis Fieser on total synthesis of potentially carcinogenic polycyclic aromatic hydrocarbons. He taught at DePauw University in Greencastle, Indiana for the 1940-41 academic year and at Vanderbilt University from 1941 until 1945.

James and Rebecca Cason had two sons. Roger Cason was born in 1938 while Cason was a postdoctoral associate at Harvard and Marsden ("Mardy") Cason was born in 1942 while Cason was on "war leave" from his Vanderbilt position working at the Explosives Research Laboratory in Bruceton, Pennsylvania.

Until the end of World War II, Berkeley's Department of Chemistry had been led by physical chemists, primarily because of the strong personality of Gilbert Newton Lewis, who had come to Berkeley in 1912 as professor of chemistry and dean of the College of Chemistry. From that time until his retirement in 1941, Lewis steered the College of Chemistry with a firm hand, recruiting some of its most illustrious faculty, including Joel Hildebrand, Kenneth Pitzer, Glenn Seaborg, Melvin Calvin, and William Giauque. All of these notables were physical chemists, although Calvin later wandered into biochemistry and received the 1961 Nobel Prize for research, begun in 1945, in which he used carbon-14 to elucidate the path of carbon in

photosynthesis. The prevailing attitude at Berkeley in the Lewis era was succinctly expressed in Lewis's definition that "physical chemistry is anything interesting."

In 1945, Wendell Latimer, then dean of the College of Chemistry, recognized the need for Berkeley to establish a program in organic chemistry to balance the department's dominant position in physical chemistry. In 1945 and 1946 Latimer recruited Cason, William Dauben, and Henry Rapoport. Cason, along with Gerald Branch and Melvin Calvin, was assigned the task of designing an organic chemistry curriculum and came up with a five- unit undergraduate organic chemistry course that included laboratory work and was to be required for all chemistry majors. According to Cason, "The old- guard physical chemists were scandalized. Remarks were made such as 'What good is all that pot boiling to physical chemists who make up nearly all of the student body?' and 'Gilbert Lewis would never have tolerated such an outrage.'" Nevertheless, this course was adopted and the seeds planted in these postwar years sprouted and grew into a healthy field, to the point that the Berkeley chemistry department eventually boasted not only the top physical chemistry group in the country, but also one of the two or three best organic chemistry groups in the country.

For almost four decades, Cason taught organic chemistry at Berkeley. He authored four college textbooks on organic chemistry and published more than 100 articles in major scientific journals. His organic chemistry laboratory book, coauthored with Henry Rapoport, went through several editions and was one of a select number of laboratory books used across the U.S. and translated into other languages so that it could be used more widely around the world. His research was in the development of new reagents for organic synthesis, notably the organocadmium reagents, and in the isolation and characterization of naturally occurring branched- chain fatty acids.

Cason served as a member of the Committee on Budget and Interdepartmental Relations in 1953 and as faculty assistant to Chancellor Clark Kerr in 1954-55. The latter position was held during Kerr's second year as chancellor and, when Cason left the post in 1955, it was redefined as vice chancellor for student affairs. In 1955, Cason was appointed acting dean of the College of Chemistry when Kenneth Pitzer took a sabbatical leave in Europe.

Cason's relationship with his students was characterized by a genial commitment to their success coupled with a very "hands- off" supervisory style. He outlined in the broadest terms the research to be pursued and trusted his students to work diligently and independently. He was patient with those who were stymied in their research — often because they were confronted with complex mixtures of structurally similar natural products that resisted conventional separation techniques — and he gave them only general suggestions for navigating past their obstacles. While Cason expected his graduate students and postdoctoral associates to take ownership of their projects and to figure things out for themselves, he willingly nurtured them through difficult personal times, as sometimes happened. He was a caring and patient man, except when he perceived that a student was habitually shirking. In such cases, Cason acted decisively; students who did not share his passion for research did not last.

Cason was a gifted mentor. He was committed to the success of the new organic faculty and readily offered helpful insights to those who sought his counsel. His students benefited similarly. He gave them excellent guidance in selecting potential postdoctoral research advisors and wrote encouraging letters on their behalf. When they were evaluating offers of employment, he again gave useful perspective. For Cason, the basic criteria for accepting a position were the quality of the people in the organization and the quality of their research. Other considerations he considered minor by comparison. Cason took great pleasure in following his students' careers and enjoying their occasional visits until his death.

Cason's decision in 1962 to withdraw from active research was a deep disappointment to his faculty colleagues and his students. A private person, Cason discussed his underlying feelings with reluctance. In the end, he seemed to have taken the transition in federal funding from departmental block grants to competitive principal investigator grants as unwelcome and unacceptable bureaucracy. He felt it demeaning to be required to divert time from devising and directing research in order to generate research proposals that might be denied funding, regardless of their merits. And so, out of principle, he would not go along. However, he did not abandon his students. He had secured enough funding to support them as research assistants until their graduation. By 1965, his last students had received their Ph.D. degrees in the normal time. From that time until his retirement, Cason's efforts were largely devoted to teaching, curriculum refinement, supervision of undergraduate organic chemistry laboratories, and student advising. His advising extended outside of the College of Chemistry to the Energy and Resources Group where he served for a time as the physical science track undergraduate advisor.

Cason retired from the University of California in 1983 at the age of 70, one of the last to be subject to mandatory retirement at that age. For the last 20 years of his life, he and his wife Rebecca split their time between their home in the Berkeley hills and their old- growth redwood property, named "Camelot," near Garberville. For a number of years, the Casons also operated a 65- acre almond orchard ("El Rancho Almendra") near Marysville.

In 2000, Cason published Things Remembered [Rutledge Books, Inc., Danbury, CT, 2000. ISBN: 1-58244-070-0]. In this rambling autobiography, Cason pulled no punches in discussing his interactions with and opinions about his colleagues in the Berkeley College of Chemistry. He also describes his lifelong battle with arthritis (Chapter 16) and his steadfast espousal of amygdalin (laetrile) as a cancer remedy (Chapter 15).

Cason died Monday, November 3, 2003. He was survived by his wife of 68 years, Rebecca Marsden Cason, who passed away in 2004, and their two sons.

Clayton H. Heathcock
Paul A. Bartlett
James D. Burke