

**MEMORIAL RESOLUTION OF THE FACULTY
OF THE UNIVERSITY OF WISCONSIN-MADISON**

ON THE DEATH OF PROFESSOR EMERITUS PAUL J. BENDER

Emeritus Professor Paul J. Bender died on December 30, 2004 at age 87. He is survived by his spouse of 61 years, Dr. Margaret McLean Bender.

Paul Bender did his post-secondary education at Yale, receiving a BS degree in 1938 and the Ph.D. degree in chemistry in 1942. Immediately after receiving the latter degree, he joined the faculty in the Department of Chemistry as instructor. In his 37-year faculty career, 1942 – 1979, he rose through the ranks to full professor. His balanced contributions as a faculty member to the department in research, teaching, and service were a model for his colleagues.

During the first half of his career Paul Bender pursued an active research program in two areas, Raman spectroscopy and thermochemistry. Twenty-two papers in the literature of that period document his research accomplishments. Especially, his faculty career was highlighted by his effective mentoring of his graduate students. From 1942 to 1968, he supervised the research of 25 Ph.D. and 11 M.S. degree recipients, and these students continued to be life-long friends.

Notable in his earlier years was a growing interest in teaching. Throughout his career, he taught advanced undergraduate and introductory graduate courses in physical chemistry, his teaching including both lecture and laboratory courses. His involvement as a coauthor in “Experimental Physical Chemistry,” began in 1949. This book was the most widely used reference for physical chemistry laboratory instruction at universities and colleges in the country for many years. He also published several papers during this time in the Journal of Chemical Education, describing new experiments that he had introduced into the course curriculum.

Paul interacted with undergraduate students extensively through his courses and undergraduate research. He also served for many years as treasurer for the corporation that owns the house occupied by Alpha Chi Sigma, the professional chemistry fraternity.

Mid-career brought a reorientation of activities with a significant emphasis on departmental service. Recognizing the importance of specialized equipment for chemical research, Paul was a leader in establishing a well-equipped departmental machine shop. In the late 1960's, it was becoming evident that sophisticated instrumentation would increasingly be required in all areas of research. Costs of such equipment dictated that a shared instrument facility within the department was the best option. Because instrumentation was a significant part of physical chemistry laboratory instruction, and because Paul's interests in instrumentation were already well-developed, he stepped forward to guide the department to establish the Chemistry Instrument Center. From that time until his retirement, he channeled a substantial part of his efforts to creating and directing this departmental facility.

The importance that students understand the experiments being performed was (and is) a hallmark of Instrument Center operations. The Instrument Center's policy was “hands-on,” students using instruments to obtain their own data. Both formal and informal instruction were prerequisites to student use of instrumentation. Paul's interest in teaching and in mentoring students were a good match for departmental policy. It was a common occurrence for students to acknowledge Paul's specific contributions in their thesis research.

When in 1979 Paul turned over running the Chemistry Instrument Center to his successor, it had become an integral and essential part of the department. The center has continued to grow since then, now

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containing a multi-million dollar inventory of NMR, ESR, mass spectrometry, and x-ray diffraction instrumentation that is used by a large majority of research groups in the department. The policy of student-run instruments remains a hallmark of the facility. In 1993, a small celebration was held and the facility was designated as the Paul J. Bender Chemistry Instrument Center in recognition of his contributions.

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