

## DOCUMENTS OF THE GENERAL FACULTY

**REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR  
ALFRED MARTIN**

The special committee of the General Faculty to prepare a memorial resolution for Alfred Martin, professor emeritus, pharmacy, has filed with the secretary of the General Faculty the following report.

Sue Alexander Greninger, Secretary  
The General Faculty

**IN MEMORIAM  
ALFRED MARTIN**

Alfred (Al) Martin was born on May 1, 1919, in Wildwood, a small town near Pittsburgh, Pennsylvania, where he lived until moving to Philadelphia in order to attend the Philadelphia College of Pharmacy and Sciences. He received his B.S. in pharmacy in 1941 – just as the United States was drawn into World War II. Al put his civilian life “on hold” and enlisted in the Marine Corps. He served as a torpedo bomber pilot, and, in recognition of his heroism in the service of his country, he was decorated with the Navy Air Medal and the Navy Gold Star.

Shortly after his return to the States, he made two of the most important decisions of his life. He married Mary Ziegler in July 1946, and he decided to pursue post-baccalaureate studies in pharmacy rather than pursuing a career as a pharmacist. He was awarded a M.S. degree in pharmaceutical chemistry from Purdue University in 1948 and completed his Ph.D. studies in pharmaceutics at Purdue in 1950.

Upon graduation from Purdue, Al wasted no time in beginning his academic career and starting a family. He joined the faculty of the College of Pharmacy of Temple University in 1950, and his sons, Neil and Douglas, were born in 1951 and 1953. During the ensuing years, both he and Mary encouraged their sons’ interest in the sciences. Neil is currently the chief of neurosurgery at UCLA and Douglas is a chemical engineer with a major oil company.

Al was quickly promoted to associate professor with tenure at Temple in 1953, but he accepted an offer in 1955 from his alma mater and returned to Purdue where he was promoted to professor in 1959 and remained until 1966. He spent two years on the faculty of the Medical College of Virginia but was lured back to Temple where he served as professor and dean from 1968 through 1973.

During his distinguished academic career that spanned roughly thirty-eight years, Professor Martin was the supervising professor for forty-four graduate students. Twenty-six of those students chose careers in pharmaceutical industry, three chose careers in health-related administration, and fifteen followed the path of their mentor into careers in academia. One of those fifteen was James T. Doluisio who joined the faculty of The University of Texas in 1973 as Dean of the College of Pharmacy. During his twenty-five-year tenure as dean, Jim Doluisio transformed the college from one that was actually facing dissolution by the Texas Central Higher Educational Administration in 1973 into an outstanding College of Pharmacy that continues to be ranked second in the nation. His first step in that transformation was to draft and implement a plan to recruit science-oriented faculty to complement the efforts of existing practice-oriented faculty, and his first hire was his former mentor, Alfred Martin.

Professor Martin served as a “nucleation point” for the growth of an energetic new faculty and, consequently, for the growth of a new College of Pharmacy. Doluisio and Martin’s shared vision for the revitalization of research and scholarly activities within the College of Pharmacy lead to the formation of the Drug Dynamics Institute of which Al served as director from 1973-78. Al served as a role model not only for his students but also for the young faculty which Dean Doluisio recruited during the 1970s and early 1980s.

Like the University he grew to love, Al was in continual pursuit of excellence. His attention to detail and his desire to advance scientific knowledge was evident in every paper he wrote and every lecture he gave. These traits were recognized both informally and formally. For example, in 1966, he won the Ebert Medal for the best original research article in what was then the preeminent scientific journal for pharmaceutical research. In the following year, he received the Research Award in Physical Pharmacy from the American Pharmaceutical Association. As indicated below, the award in physical pharmacy was particularly fitting since Professor Martin was and still is regarded by most as “the father of Physical Pharmacy.” However, the recognition of which Al was most proud came directly from the college and the University. When the generosity of the Coulter R. Sublett family provided the first endowed professorship in the College of Pharmacy, that honor was immediately bestowed upon Professor Martin.

When Al Martin began his career as an academician, pharmaceutical research was conducted in a largely empirical fashion. Indeed, the recipes for various pharmaceutical formulations (suspensions, emulsions, ointments, etc.) were more the result of empirical alchemy and “art” than rational chemistry and science. Al Martin literally changed the nature and course of pharmaceutical research. He taught his students and all who read his papers that careful attention to detail and the thoughtful application of fundamental concepts drawn from thermodynamics, physical chemistry, quantum chemistry, and mathematics could greatly enhance research productivity and could transform pharmaceutical research into a scientific discipline worthy of the respect it now commands.

Although his research spanned a broad range of topics, Martin’s name is most often associated with his interest in predicting the solubility of drugs and other chemicals in various solvent systems. This is a subject of immense importance since the bioavailability and, consequently, clinical efficacy of drugs is largely determined by their solubilities. His work in this area extended the fundamental work done by another pioneering giant of science, Professor Joel Hildebrand, for whom Al had particular admiration. Martin’s “extended solubility parameters” are still being used for purposes as diverse as drug discovery and innovative paint technology.

Although he authored roughly 100 papers and presented countless lectures, perhaps the single most important contribution Al made to the advancement of the field of pharmaceutical research was the publication of the world’s first textbook on *Physical Pharmacy*. Indeed, his book remains the only textbook of physical pharmacy and is used in both undergraduate and graduate courses at universities around the world. Literally a labor of love, the first edition was published in 1960. The second edition, of which he was also the sole author, was published in 1969. He recruited the assistance of two co-authors for the third edition, published in 1983, and was hard at work on the fourth edition when he decided to ask the publisher to identify someone else to carry that baton. There are very few scientists with the breadth and depth of expertise required for such a task and fewer still with the desire and energy to see it through. Thus, the fourth edition still has not been published.

Very few were surprised when, at age 69 and after thirty-eight years in academia, Al submitted his letter of resignation in 1988. However, although he never discussed it, some of his closer friends were puzzled by his decision for the following reason. Al not only admired Joel Hildebrand’s work but also admired and shared in Hildebrand’s dedication and enthusiasm for doing good work. The bulletin board outside Al’s office displayed a tattered newspaper article about the fact that Hildebrand was still publishing good work immediately prior to his death at age 101, and Al’s friends knew that he had every intention of doing the same. Why was it, then, that Al decided to resign when he was “only” 69 years old? Why didn’t he finish the fourth edition of his beloved textbook as a retirement pastime?

Al was both a very friendly person and a very private person. Thus, we can only theorize regarding the answers to those questions, but his friends are fairly confident in the following explanation. Al Martin demanded the best of his students, of other scientists whose manuscripts he reviewed, and ... of himself. Al died of Alzheimer’s disease, and it is quite likely that he stopped working when he felt that his work was no longer up to his own demanding standards.

Al Martin was a great teacher, a great scientist, and a great friend to colleagues around the world. He is remembered with great respect, great admiration, and sincere fondness.

This memorial resolution was prepared by a special committee consisting of Professor Robert S. Pearlman (chair), Ms. Barbara Sublett-Guthery, and Professor Emeritus James T. Doluisio.

Distributed to the dean of the College of Pharmacy, the executive vice president and provost, and the president on March 4, 2005. Copies are available on request from the Office of the General Faculty, FAC 22, F9500. This resolution is posted under "Memorials" at: <http://www.utexas.edu/faculty/council/>.