IN MEMORIAM

WILLIAM A. CUNNINGHAM

Professor William Aaron Cunningham died at his home in Austin on September 2, 1987. Known to his legions of friends as "Bill", he spent over a half century of devoted service to The University of Texas at Austin and to the chemical engineering profession. His accomplishments were recognized in many ways, but perhaps the crowning recognition came in 1986 when he received the prestigious Distinguished Alumnus Award of the University. This gave him the satisfaction of reviewing, both in his mind and for a large audience, his many warm associations with students, faculty, professional colleagues, and friends throughout the world.

Professor Cunningham was a Texan through and through, and never resided outside the State. He was born May 22, 1904, in Comanche, Texas and graduated from high school there in 1921. He entered The University of Texas in 1922 and received his BS in 1927, a Master's Degree in 1929, and was awarded the PhD in 1941, all in chemical engineering.

He worked for Texas Pacific Coal and Oil Company, Fort Worth, Texas (1929-30); Freeport Sulphur Company, Freeport, Texas (1930-31 & 1936-39); and Texas Potash Corporation, Austin, Texas (1931-32). He joined University of Texas Lands in San Angelo, Texas, in 1932 and left that job in 1935 to return to Austin to continue his graduate studies. While enrolled as a graduate student he became an instructor in Chemical Engineering in 1935-36 and after that worked for the Bureau of Industrial Chemistry (1939-41). At the same time he carried out his doctoral research under the supervision of Dr. E. P. Schoch, whom he revered throughout his lifetime. His doctoral dissertation was titled, "Properties and Manufacture of a High Strength Plaster."
He was President of Chemoil Consultants (1958-73) and served as Director of Round Rock White Lime Company (1952-62). He was President, University Federal Credit Union (1960-63), and was a member of the National Research Council Advisory Committee (to the Coast Guard) on Hazardous Materials (1971-75). He was Associate Editor (1972-86) of the International Encyclopedia of Chemical Processing and Design, a 50-volume work.

Dr. Cunningham was not only a member, but an extremely active member and a generous contributor, to his professional societies. He was a fifty-year member of both the American Institute of Chemical Engineers (AIChE) and the American Chemical Society (ACS). He served as Chairman and Vice Chairman of local sections of both ACS and AIChE, and was elected National Director of the latter. At the University, Dr. Cunningham was a member of the Friar Society (he was Faculty Advisor 1969), Tau Beta Pi, Sigma Xi, Phi Lambda Upsilon, and Omega Chi Epsilon. He was National Secretary, 1950-59, and National President, 1959-68, of Omega Chi Epsilon, a national honor society for chemical engineering students which he founded in 1939.

Bill Cunningham did not confine his service to the University. He was a member of the Austin Kiwanis Club for twenty years and for three of those years served as Director. He was a member of the Board of Directors of the Austin Area Economic Development Foundation (1950-55). He served as Chairman of the Public Responsibility Council for the Austin State School (1978-81) and did volunteer work on a regular basis at Seton Hospital, where in his orange jacket he never failed to find a friend in any room in which a patient was confined.

He was a devout Christian and for his entire period of residency in Austin was a member of University Presbyterian Church. It was there that he met his future wife, Mary Bolling of Palacios, Texas, and until only a few months before his death he and Mary could always be found in "their pew" at the Sunday morning worship. He was a ruling elder in the church and
With his new PhD in hand, Dr. Cunningham joined the faculty of the Chemical Engineering Department in 1941 as a full-time Associate Professor. He kept "his hand in" industrial practice by summer work and consulting with companies such as Texas Gulf Sulphur, Humble Oil and Refining, Dow Chemical, Gulf Oil, Monsanto, Ethyl, Chemoil, Cosden Oil & Chemical, and Mobil Oil. He also worked part-time for the City of Austin and for Wharton County. He became a full Professor in 1943 and remained in that position until his official retirement in 1971. He was then appointed Professor Emeritus and continued to work in the Department until his death.

Dr. Cunningham's contributions were not confined to his own department or even to the University. He served on numerous important committees, many of them as Chairman. He was Chairman of the Chemical Engineering Department three times, 1942-45, 1947-49, and 1953-55. He was Associate Director of the College of Engineering Bureau of Engineering Research (1962-69). He served on the following University of Texas committees: Engineering Placement; Ceramic Engineering; Engineering Extension; Schedule; Student Social Affairs; General Student Organizations; Engineering Buildings; Dust Elimination; Discipline; Regents Committee on Nature and Value of Dr. Schoch's Inventions; Equipment Needs, College of Engineering; Ramshorn Advisory (Chairman); Special Committee on Students' Use of English, College of Engineering (Chairman); President's Committee on Budget and Personnel Policy; Student Government; Student Union Board; Attendance at Meetings of Learned Societies (Chairman); University Publications; Faculty Advisory Committee on Policy; Loans and Scholarship Information; Chancellor's Advisory Committee on Policy; ad hoc Committee on Future of Division of Extension; Freshman Car Ban Committee; Co-op Program, College of Engineering; Committee on Committees; Committee on Review of Faculty Privileges and Perquisites (Chairman); Advisory Board, Engineering Foundation; Graduate Studies.
served on many boards and committees associated with the church and the Presbyterian denomination. A highlight event was the church celebration of the 50th anniversary of the marriage of Bill and Mary, held on May 4, 1980.

Throughout nearly half a century with The University of Texas at Austin, most of which was with the Department of Chemical Engineering, his primary interests were in the development of a first class department, the acquisition of an outstanding faculty, and direct work with students, particularly at the undergraduate level. Although he had many research accomplishments, the idea of compiling an impressive publication record always ran a poor second to his interest in undergraduate students and their problems - personal, professional and academic.

The growth of the Department has paralleled the growth and development of the hydrocarbons processing industry and the petrochemicals industry in the Southwest. During this time Dr. Cunningham sought to develop in chemical engineering students not merely professional competence, but also a great loyalty to their profession, a consciousness of their ethical responsibility, and a recognition of the place of the American Institute of Chemical Engineers in their professional life. He always felt the greatest reward that ever came to him lay in the privilege of surveying graduates from his school, noting the successes which the young men and young women had achieved in both personal and professional activities, and in his own words "feeling deep in my heart, though probably with a considerable amount of unwarranted egotism, that somehow I had a bit of influence on them which started them off on the right track."

His door was always open, not merely the door to his office, but also the door to his home, and many students sought him for counseling and advice even after they had graduated and left the University. He and his wife, Mary, had students in their home, sometimes for overnight stays, and long-into-the-night conferences, and other times for meals,
ranging all the way from breakfast to dinner. Most of the in-the-home conferences dealt with personal problems ranging from religious uncertainties to courtship and marriage problems. These contacts continued until his death.

If a statistical check were made, it would be found that a major portion of the chemical processing industries and petroleum refining activities of the Southwest are controlled by men he knew and worked with when they were students at The University of Texas at Austin. For many years he was the direct contact man between the Department and industry, and he helped place chemical engineering students in positions in which they could work effectively. These ex-students are to be found not only at all levels in both technical and managerial capacities, but they are also active participants in professional organizations, particularly the American Institute of Chemical Engineers.

During the time Dr. Cunningham was an active member of the faculty, he served as a sort of liaison between the parents of many of the students and the University. He corresponded with parents and met them in person. Some of these contacts were happy and pleasant, others unpleasant and heart-rending, sometimes from the academic standpoint and at other times when it was emotionally very difficult to talk with parents concerning the tragic death of their child.

Dr. Cunningham had a major part in the recruiting development of the chemical engineering faculty. At one time or another he taught almost all of the undergraduate courses ever offered by the Department. He was primarily responsible for the design of the E. P. Schoch Laboratory Building in 1940-41 (the cost of $6.35 per square foot was considered to be highly efficient for its purpose at that time). He was Department Chairman prior to and at the time the Department first received accreditation by the Engineers' Council for Professional Development. He was responsible for formation of The University of Texas at Austin Student Chapter of AIChE and served as its faculty advisor over 20 years.
After his retirement from teaching, he devoted a portion of his time to writing a history of the Department. He gathered photographs, compiled data, and prepared a portion of the text. Currently, the history is being completed and will be published by the Chemical Engineering Department.

Bill Cunningham received many significant recognitions and awards such as the First Annual Distinguished Service Award given by the South Texas Section, AIChE (1959); the First Founders Award National AIChE (1970); Distinguished Advisor Award by the Student Engineering Council (1970 & 1971); Named Fellow of National AIChE (1972); Award for Outstanding Service in Graduate Education (1971); Distinguished Graduate, College of Engineering (1974); Distinguished Alumnus Award, UT Ex-Students' Association (1986); and, in 1974, the establishment by former students of the W. A. (Bill) Cunningham Professorship in Chemical Engineering.

He was a Registered Professional Engineer in Texas (No. 2804), and was listed in American Men of Science, Who's Who in Engineering and Engineers of Distinction.

Dr. Cunningham is survived by his wife, Mary, whom he married June 19, 1930; four children, W. A. Cunningham, Jr., Denver, Colorado; Nancy (Mrs. I. J. Satterfield), Woodstock, Georgia; Betty (Mrs. Fred H. Mitchell), The Woodlands, Texas; Martha (Mrs. Jim Funderburgh), Manhattan, Kansas; and thirteen grandchildren.

Citations taken from some of the wall plaques given to him in the past are as follows:

* "In loving tribute to the life and worth of a man whose very being has been the catalyst for the improvement and development of the equation called 'Chemical Engineer'. Bill Cunningham's Boys, April 1970." (A set of keys to a motor home camper was attached to the plaque. The motor home camper in addition to a $5,000 cash certificate were gifts from ChE Alumni at the time of his retirement.)
* "In recognition of efficient service as a member of the Texas Union Board of Directors, 1959-67."

* "Distinguished Advisor Award to Dr. WAC by Student Engineering Council for his dedication and service as an advisor of students" 1970 and 1971.

* "In appreciation for dedicated service to students and fellow members of South Texas Section, AIChE" - the date the Section dedicated "Dr. Bill Cunningham Day," April 10, 1970.

The following Eulogy delivered by one of his many, many "best" friends and colleagues, John J. McKetta, covers more of his wonderful traits.

It was a joyous occasion last October when The University of Texas conferred its highest recognition by naming Bill Cunningham as its Distinguished Graduate. Since my office has been adjacent to his since 1954 and since my heart has been adjacent to his since 1946 I had the honor of roasting him at the recognition luncheon. If you listened to the tape of the roast you'd hear that Bill laughed louder than anyone - which indicated his great sense of humor.

Bill Cunningham was rich and a great philanthropist. His lifelong campaign of philanthropy was not one of dollars but of love and help to his fellow man. He loved God, his family, his students, his faculty, his staff, the Chemical Engineering Department, and The University of Texas and all other individuals and groups with whom he had come in contact.
Just like Saint Andrew, one of the earliest but lesser known disciples of Jesus, Bill was a man whose convictions were much stronger than his personal ambitions. Bill spent his life helping others into limelight and to success, always in the background, cheering us on, and clearing the way for us to pave our way to success.

He spent his tremendous energy and talent on projects that touched and improved the lives of others, whether it was academic, personal or professional.

He was a father of four to whom strong family ties have always been vital. In all he did he was supported by his lovely wife, Mary. They made a great team. He was a teacher to whom engineering education was a deadly serious business. Yet, his office door was never closed when he was present and he was known by his colleagues, ex-students, other friends throughout the world as just plain "Bill". His love for his students was paramount — because he considered them part of his family.

When I was Chairman he would ask, at budget time, that the increase in salary meant for him be given to some younger faculty member. Hundreds upon hundreds of his students, many present today, have borrowed $25, $50, or even $100 from him without interest so that they could stay in school for another semester. Most of us have benefitted greatly from his wonderful advice and moral support.
He had confidence in his friends and students, way beyond what I considered reasonable. I recall when I was Dean of Engineering we had one student, whom I shall call "Joe", who was the only student I've heard of who stated on his application that he graduated in the 4th quarter of his high school class. Naturally, Joe flunked the 1st and 2nd semesters at U.T. and was placed on probation. He later was readmitted and flunked again and was being dismissed. He appealed to the faculty committee who agreed with me that we should hang him, shoot him or at least toss him out of the building. Then Bill came into my office and said, "Johnny, I had a 'heart to heart' talk with Joe (he always had a 'heart to heart' talk with many of us) and I'm convinced that Joe will make it this time if you will give him one more chance." I just couldn't turn Bill down....Well, three and a half years later Joe graduated with flying colors as a member of Tau Beta Pi, the highest honorary academic group in the College of Engineering. Naturally, I took credit for all this but you know who should have had the credit. But Bill never wanted credit.

To meet him was to love him and he knew how much his family and his friends loved him. He didn't have to be told. I was never embarrassed to tell him to his face that I loved him; in fact, thank the Lord, I told him I loved him three times during our long phone conversation the day before he passed away. He had friends all over the world.
Many years ago, when we only had one Bill Cunningham on our campus, because of a delayed appointment in New York City, I found time to take a boat trip around Manhattan Island. It started to rain soon after I got on board so I went below to the engine room. There I met a man with a big oil can who was oiling the bearings. After greetings, we started to talk and naturally I told him I was from the State of Texas. The man said "I only know one person from Texas." I told him glibly that Texas had over ten million people but the man persisted "My good friend is a perfesser at a big university and his name is Bill Cunningham." Then he told me that Bill had been on the boat and came below to the engine room. Bill subsequently bragged about how much sweeter the native pecans were than the improved ones. The man said "You know, Perfesser Cunningham sends me one quart of native pecans every Christmas and they sure are better than the big ones we buy here in New York City." That's our Bill Cunningham!

The great philosopher, Auguste Conte, coined the word altruism from the Latin word "alter" (other)....Altruism literally means "otherism". As you know, an altruist is one who places thoughtfulness for others above his own interests. Bill's name was Wm. A. Cunningham. The middle initial, from his birth certificate, is Aaron, but to all of us who loved him his middle name is "altruism".

Most important is the fact that our Bill Cunningham pleased God at all times. We will miss him greatly.
To have known him was a privilege; to remember him is to remember the warmth, friendliness and helpfulness which he brought into the lives of those who knew him.

William H. Cunningham, President
The University of Texas at Austin

H. Paul Kelley, Secretary
The General Faculty

This Memorial Resolution was prepared by a Special Committee consisting of Professors John J. McKetta (Chairman), James R. Fair, and Howard F. Rase.
Publications of Wm. A. Cunningham


