



Walter G. Whitman

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1895-1974

By Bruce S. Old

Walter Gordon Whitman, Professor Emeritus and former Head of the Chemical Engineering Department at the Massachusetts Institute of Technology (MIT) and a science advisor to the top levels of the State Department, the Department of Defense, and the United Nations, died at the age of seventy-eight in Scottsdale, Arizona, on April 6, 1974.

Professor Whitman was born November 30, 1895, in Winthrop, Massachusetts. He received a Bachelor of Science degree in chemical engineering at MIT in 1917 and a Master of Science degree in 1920. Subsequently, he was awarded honorary Doctor of Science degrees by Northeastern University in 1954, by Centre College in 1956, and by the University of Pennsylvania in 1956.

Following his graduation from MIT, Whitman remained on the staff as Instructor and Assistant Professor until 1926. During that time he made significant contributions to the theory of gas absorption, developing the "Whitman Two-film Theory of Absorption."

Whitman left MIT in 1926 to join Standard Oil of Indiana, where he rose to become Associate Director of Research. During this period he made important contributions to the prevention of corrosion in refineries and to the fundamentals of the cracking of oils.

In 1934 Whitman returned to MIT to become Professor and Head of the Department of Chemical Engineering. He kept this position for twenty-seven years, during which time he made signifi

cant contributions to engineering education. During this period the department grew in stature and was generally rated the best in the world. He was elected President of the American Institute of Chemical Engineers in 1956 and was presented the Founders Award of the Institute in 1960. He was a Member of the American Chemical Society, an Honorary Member of the American Institute of Chemists, a Councilor of the American Academy of Arts and Sciences, and a Fellow of the American Philosophical Society.

During his long tenure at MIT, Walter Whitman was much sought after to serve his country in important positions. During World War II he served as Director of the Basic Chemicals Division, War Production Board. Also, he acted as Chairman of the Subcommittee on Aircraft Fuels and Lubricants of the National Advisory Committee for Aeronautics, chaired the so-called Whitman Committee on the status of jet propulsion, and was a Member of the U.S.-Canadian Ordnance Committee on Production of Explosives. He returned to MIT in 1948.

Returning to Washington on leave of absence from MIT, Professor Whitman was appointed to the General Advisory Committee of the U.S. Atomic Energy Committee, remaining a Member from 1950 to 1956. In addition, he served the Department of Defense as Chairman of the Research and Development Board from 1951 to 1953.

In 1955 Professor Whitman was appointed by United Nations Secretary General Dag Hammarskjöld to the position of Secretary General of the United Nations Conference on Peaceful Uses of Atomic Energy. The Conference was held in Geneva, and it was unique in that some 3,000 representatives from both sides of the Iron Curtain came together, presented about 1,000 papers, and cooperated wholeheartedly in making the conference a success. The successful outcome of the conference was due to the consummate skill with which it was organized and conducted. The outstanding part played by Professor Whitman prompted the U.S. Delegate to the Conference, Mrs. Eleanor Roosevelt, to mention on her radio program that he should be considered as a candidate for the Nobel Peace Prize.

As a result of Professor Whitman's many contributions toward

international understanding in science and engineering, on September 4, 1960, Secretary of State Christian A. Herter appointed him to the position of Science Advisor. He held this pioneering position in the State Department under the Eisenhower and Kennedy administrations until June 1962.

Obviously, Walter G. Whitman was a very rare individual, combining numerous theoretical engineering contributions, as demonstrated in his many research publications and innovative industrial and educational advancements with superb administrative skills. He provided outstanding leadership to numerous and varied U.S. Government and United Nations studies of many critical scientific and technological problem areas. For all of these many technologically based contributions to industry, government, and university sectors, Whitman was elected to membership in the National Academy of Engineering in 1973.

The leadership characteristics exhibited by Walter Whitman stemmed from his engineering training and knowledge, his quiet, good-humored, and effective administrative skills, and his broad interests in the social-economic progress of all peoples.

Indeed, it was a great privilege to have had so rare and broad an intellect within the membership of the Academy.