

# Wilbur Ernest Meserve

*January 4, 1901 — October 28, 1974*

In the passing of Dr. Wilbur E. Meserve, we lost a distinguished colleague, a dedicated teacher, an accomplished engineer, a kind friend, and above all a humanitarian.

Professor Meserve came from Gorham, Maine. He graduated from the University of Maine at Orono in 1923, with the B.S.E.E. degree. He then worked at Bell Telephone Laboratories for a year. He was an instructor in electrical engineering at Maine from 1924 to 1926 and received his M.S. degree in physics in 1926. He was appointed as an instructor in electrical engineering at Cornell in 1926. Receiving his M.E.E. degree in 1929 and his Ph.D. degree in 1933 from Cornell University, he rose through the ranks and was named professor in 1948.

His teaching and research interests were initially concerned with electrical machines, and his practical expertise in synchros, motors, and generators and his academic training in physics and systems analysis led naturally to his pioneering work in the field of servomechanisms. He participated in Project Lincoln, MIT (the forerunner of Lincoln Laboratory), and contributed heavily to the design of control systems installed in early missiles.

He made definitive contributions in the stability of nonlinear control systems, especially in sampled-data control systems. He and his students introduced the concept of describing function into sampled-data feedback systems containing a relay element. This breakthrough enabled system designers to design and analyze such systems in the frequency domain. He published extensively in technical journals.

He acted as a consultant in the field of automatic control for General Electric, Autonetics Corporation, American Brown-Boveri, Cornell Aeronautical Laboratory, and others.

He initiated teaching of feedback control systems at Cornell and set up the Servomechanisms Laboratory, one of the first in the nation. His skill was legendary. Generations of undergraduate and graduate students remember him as an effective and warm teacher. He was the graduate field representative for 1965-68.

He was a lifetime member and a fellow of the Institute of Electrical and Electronics Engineers. He was also a member of AAAS, Franklin Institute, Sigma Xi, Tau Beta Pi, Phi Kappa Phi, and Eta Kappa Nu.

During 1955 he was a Fulbright Lecturer and organized laboratories in control systems at the University of Sydney and the University of New South Wales in Sydney, Australia. In 1961-62 and 1964-65, he was a visiting professor at the University of Hawaii, in Honolulu.

He retired in 1968 from Cornell University as professor emeritus. In 1969 he worked with graduate students on a NASA-sponsored project on moon-rover design. Their extensive travels and interests in the Pacific Basin led Professor and Mrs. Meserve to move to Honolulu. He was again employed by the University of Hawaii, where he introduced and taught new courses in technology and society. He retired for the second time in 1971.

To those of us who were fortunate enough to know him, Professor Meserve was a kind, considerate, temperate, and above all humanitarian person, and he had a genuine and understanding love for his fellow men.

For many years, especially when there was a shortage of student housing, the Meserves always had one or more students from overseas in their home at 504 Thurston Avenue. Their kindness and helpfulness have long been cherished and remembered by many international students. One of his pleasures was to travel and meet with his students around the globe.

He was a faithful follower of Cornell sports, especially football and basketball. Many a night he could be found sitting at the very top of the south stand in Barton Hall. He was very active in Masonic work and had a continuing interest in the Acacia fraternity.

Professor Meserve is survived by his wife, the former Pearle I. Westervelt, a native Ithacan; his son, David; and two grandchildren, Stephen and Pamela.

*M. Kim, J. L. Rosson, H. G. Smith, H. C. Torng*