

MEMORIAL RESOLUTION

MIKLOS HETENYI (1906 – 1984)

Professor Emeritus Miklos Hetenyi of the Stanford Department of Civil and Mechanical Engineering died on October 31, 1984, at his desk in his home on the Stanford campus while working on the manuscript of a book on structural analysis. He was 77. A brilliant engineer, researcher, and teacher and one of S. P. Timoshenko's favorite students, he was equally competent in the mathematical theory of elasticity and in the intricacies of experimental stress analysis. Among other enduring contributions to the former were his method of solution for the elastic quarter-plane and the analysis of beams on an elastic foundation; and in the experimental field he was responsible, together with Raymond D. Mindlin and Daniel C. Drucker, for the development of three-dimensional photoelasticity, as well as for the use of brittle lacquer in experimental stress analysis.

Born in the important provincial town Debrecen in Hungary on November 5, 1906, Hetenyi received his diploma in civil engineering from the University of Technical Sciences of Budapest, Hungary, in 1931. After three years of practical experience as a bridge designer he came to the United States with a Jeremiah Smith Fellowship to study with S. P. Timoshenko at University of Michigan. He received the Ph. D. in Engineering Mechanics from Michigan in 1936, and the following year he joined the staff of the research laboratories of Westinghouse Electric Corporation; he remained there until 1946 when he became professor at the Technological Institute of Northwestern University. He transferred to Stanford University in 1962 and continued to teach there until his retirement in 1972. He was chairman of the Applied Mechanics Department from 1965 to 1969.

Well known among experts in mechanics is his book Beams on Elastic Foundations published in 1946; and the Handbook of Experimental Stress Analysis of 1950, of which he was Editor-in-Chief, is still the most important reference book in laboratories of mechanics all over the world. In addition he published more than 70 scientific papers on analytical and experimental mechanics and on the theory of structures.

Hetenyi was involved in the rapid expansion of experimental mechanics that took place in this country in the 'thirties and 'forties, and, together with William M. Murray and Raymond D. Mindlin, he founded the Society for Experimental Stress Analysis which later became the Society of Experimental Mechanics. In 1967, to honor him for his contributions, the Society established the Miklos Hetenyi Award for the best paper published each year in Experimental Mechanics, the journal of the Society.

Miklos Hetenyi received many honors from engineering societies and universities. He was an Honorary Member of the American Society of Mechanical Engineers and the Society of Experimental Mechanics, and received honorary doctorates from the University of Technical Sciences of Budapest and the University of Glasgow. He took part in the activities of the International Congresses of Theoretical and Applied Mechanics and the International

Association for Bridge and Structural Engineering, and lectured widely in the United States and abroad. After his retirement from Stanford he taught courses in Korea, Mexico, and Peru.

A student of the history of mechanics, Hetenyi always found time to tell stories about the life and accomplishments of the scientists and engineers whose theories he was demonstrating in class. He has a keen sense of humor and was a good raconteur. He also played the violin and painted. His campus home was full of pictures, most of them by his older brother who was a noted painter in Hungary.

In 1941 Miklos Hetenyi married Jeanie G. Ritchie, a former secretary of S. P. Timoshenko at the Westinghouse Electric Corporation. His wife died in 1973. Two children, Nancy Jean Palmer of Washington, D. C., and John Gilchrist Hetenyi of Tucson, Arizona, survive their father.

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