

## H. NORMAN ABRAMSON

B.S. in Mechanical Engineering, Stanford University, 1950  
M.S. in Engineering Mechanics, Stanford University, 1952  
Ph.D. in Engineering Mechanics, The University of Texas, Austin, 1956

Dr. Abramson is well known in the field of theoretical and applied mechanics and particularly in aeronautics and astronautics. His contributions to problems of dynamic behavior of liquid propellants in rockets and spacecraft earned him an international reputation. The authoritative NASA SP-106 "slosh monograph," which he edited and collaborated in writing with colleagues, reflects the work that he conducted and guided for over 15 years. This background subsequently led him and his associates to conduct important work on liquid dynamic motions in two closely related problem areas, marine engineering (slosh of LNG and other liquid cargoes) and earthquake engineering (seismic-induced slosh in reactors and reservoirs). He is also internationally known in the field of ship structural analysis and dynamics, particularly as an authority in hydroelasticity. Another of his important contributions is reflected in the significant SwRI<sup>TM</sup> program relating to the physical modeling of dynamic structural response. He was awarded the prestigious Structures, Structural Dynamics, Materials Medal of the AIAA in 1991. Besides serving as manager or principal investigator of more than a score of significant research projects, he has also been extensively sought after as a technical consultant and advisor by a large number of governmental agencies and industrial concerns. Dr. Abramson is a member of the U.S. National Academy of Engineering and is listed in *Who's Who in America* and many similar publications.

A past chairman of both the Applied Mechanics and Underwater Engineering Divisions of ASME and also of both the technical committees on Structural Dynamics and Marine Systems of AIAA, Dr. Abramson is a Fellow of the AIAA and a Fellow and Honorary Member of the ASME. He served as Vice President, Basic Engineering, of ASME during 1974-8 and as a member of the ASME Board of Governors for 1981-2; he was also a member of the Board of Directors of AIAA, 1978-81. He received the 1973 Distinguished Service Award of AIAA, the 1988 Applied Mechanics Division Award of ASME, and the 1992 Distinguished Service Award of the American Academy of Mechanics. He also received the 1999 ASME Medal. Dr. Abramson served as an elected member of the Council of the U.S. National Academy of Engineering during 1984-90 and as a member of the U.S. Air Force Scientific Advisory Board during 1986-90. He has served on numerous other national and international professional, scientific, and government advisory committees, such as the Research Advisory Committee of the U.S. Coast Guard, the Advisory Panel on Engineering Mechanics of the National Science Foundation, and the Texas Governor's Science and Technology Council. His professional and scientific society activity includes service on several editorial boards. Dr. Abramson is the author of approximately 75 published research papers in engineering and scientific journals and of a well-known textbook; he has contributed to many important monographs and other publications and has served as editor or co-editor of several others. He has lectured at many universities and governmental and industrial laboratories throughout the United States and Europe. He participated in the Norwegian Visiting Senior Scientist program in 1973 and was a Midwest Mechanics Lecturer in 1970-1. Dr. Abramson was appointed Adjunct Professor of Mechanical Engineering, The University of Texas at Austin in 1983 and the University of Texas at San Antonio in 1986. He is a registered Professional Engineer.

**PROFESSIONAL CHRONOLOGY:** Engineer, Aerodynamics Section, U.S. Naval Air Missile Test Center, Point Mugu, 1947-48; Research Assistant, Stanford University, 1948-51; Project Analytical Engineer, Dynamic Analysis Group, Chance Vought Aircraft, 1951-2; Associate Professor of Aeronautical Engineering, Texas A&M University, 1952-6 (concurrently, Research Engineer, Texas Engineering Experiment Station; consultant to the Department of Oceanography, and staff member, Research Foundation); visiting professor of mathematics, Incarnate Word College of San Antonio, 1958-61; Southwest Research Institute, 1956-(Manager, Engineering Analysis, 1956-9; Department Director, 1959-81; Vice President, Engineering Sciences Division, 1972-85; Executive Vice President, 1985-91).

**MEMBERSHIPS:** U.S. National Academy of Engineering; American Academy of Mechanics; American Institute of Aeronautics and Astronautics; American Society of Mechanical Engineers; Society of Naval Architects and Marine Engineers, Society for Experimental Mechanics; American Association for the Advancement of Science; Sigma Xi, Sigma Gamma Tau; Tau Beta Pi; and Academia Nacional de Ingenieria (Mexico).

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