



Professor Menahem Baruch (1923 – 2010)

#### BIOGRAPHICAL DATA

b. Bulgaria, 1923.

Civil Eng., Sofia Polytechnical Institute, Bulgaria, 1951.

M.Sc., Technion-I.I.T., 1958.

D.Sc., Technion-I.I.T., 1963.

At Technion since 1957. Professor since 1975. Dean 1985-1987. Professor Emeritus since 1991.

#### MAIN INTERESTS

Structures, stability and dynamics of structures, space structures.

#### SELECTED PUBLICATIONS

"Effect of eccentricity of stiffeners on the general instability of stiffened cylindrical shells under hydrostatic pressure", *Mechanical Engineering Science*, 5, 1, March 1963 (with J. Singer).

"Integral equations for nondestructive determination of buckling loads for elastic plates and bars", *Israel J. Technology*, 11, 1-2, 1973.

"Optimal weighted orthogonalization of measured modes", *AIAA J.*, 16, 4, April 1978 (with I.Y. Bar-Itzhack).

"Hamilton's principle, Hamilton's law, 6n correct formulations", *AIAA J.*, 20, 1982, pp. 687-692 (with R. Riff).

"Shape distortion of space structures, postulates and controversy", *J. of Applied Mathematics and Physics (ZAMP)*, 41, 1990, pp. 51-60.

"Free vibrations of sandwich beams with a transversely flexible core: A high order approach", *J. of Sound and Vibrations*, 176, 2, 1994, pp. 195-208 (with Y. Frostig).

"Mass change detection based on reduced measurements", *Acta Mechanica*, 131, 1998, pp. 89-101.