

**Vibrations and Waves - Part A: Vibrations; Part B: Wave**

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*Part A: xiii + 488 PP., hardcover, NLG 330.00; Part B: xi + 382 pp., NLG 280.00. Price for both volumes, NLG 550.00*

These two companion volumes were edited by Sylwester Kaliski in collaboration with Lech Solarz. The first volume is devoted to vibrations, and covers vibrations in continuous systems such as bars, shafts, strings, beams, membranes, plates, and shells. Both linear and non-linear vibrations are treated. Approximate methods treated include the Ritz method, the Rayleigh method, and the Bubnov-Galerkin method. The final chapters of the book are devoted to the physical foundations of the vibration theory of solids. Crystal structures and the stochastic dynamics of vibratory systems are among the topics covered.

Part B is devoted to a study of a variety of topics in wave propagation, including the basic equations of motion, propagation in non-linear elastic media, boundary value problems, plane, cylindrical, and spherical waves, shock waves, surface waves, and stochastic analysis of wave processes.