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Sudhakar E. Nair* (nair@iit.edu), 10 w. 32nd street, Department of Mechanical, Materials and, Aerospace Engineering, IIT, Chicago, IL 60616. *Elastic waves in incompressible anisotropic elasticity—some new results.*

New results related to the propagation of elastic waves in incompressible anisotropic elastic solids will be presented. The incentive for this work comes from modeling biological tissues and certain polymeric materials as incompressible, but anisotropic solids. A brief summary of previous results on interfacial and surface waves will be included. New results pertain to Lamb waves in plates. Dispersion relations between frequencies and wavelengths will be presented in graphical form as explicit solutions are not available. (Received August 06, 2007)