

Article Abstract

Title:	Propagation of shear waves in an irregular magnetoelastic monoclinic layer sandwiched between two isotropic half-spaces
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Journal:	<i>International Journal of Engineering, Science and Technology</i> , Vol. 1, No. 1, 2009, pp. 228-244.
Abstract:	In the present paper, we study the propagation of horizontally polarised shear waves (SH waves) in an internal magnetoelastic monoclinic stratum with rectangular irregularity in lower interface and is sandwiched between two semi-infinite isotropic elastic media. The dispersion equation has been obtained. It is observed that the dispersion equation is in assertion with the classical Love-type wave equation, for isotropic layer sandwiched between two isotropic half spaces, in the absence of magnetic field and irregularity. The effects of depth of irregularity and monoclinic-magnetoelastic coupling parameters on dispersion curves are depicted by means of graphs. This study shows the remarkable effect of wave number, size of irregularity and magnetic field on the phase velocity.
Keywords:	SH wave, magnetoelastic monoclinic, irregularity, dispersion equation, perturbation