

TWO-DIMENSIONAL EVOLUTIONALY EQUATION IN VISCOELASTIC SOILS THE PREPOTENT FREQUENCIES

Abstract

Two-dimensional evolutional equation, describing non-linear wave process in viscoelastic and linearly-hereditary soils has been introduced. It is shown, that the volume perturbation doesn't reduce to rise of non-linear waves are the product to cross waves of shear deformations. In particular case, an exact solutions describing the structures both of shock waves, and solutions are reduced. The conditions for the existence of prepotent frequencies of harmonic oscillations are found.