

D. BRUCE: What defences may be used to prevent frost heaving, in particular for highways with asphalt pavement?

KINOSITA: Soil which is susceptible to strong frost-heaving action is replaced by other materials which have a coarse grain (e.g. sand). The depth of such replacement is 80% of maximum frost penetration. Furthermore replacement is limited only to 40 cm below the pavement surface. Under the 40 cm level a board of thermal insulation, such as polystyrene is placed. The thickness of the insulation depends on the severity of the frost.

CHARACTERISTICS OF PROCESSES OF ELECTRICAL RELAXATION IN FROZEN SOILS

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ABSTRACT. The results of measurements of dielectric properties of frozen soils are analysed on the basis of modified theory of dielectrics. The relaxational character of frequency and temperature dependence is shown and the basic equations are derived. The characteristics of distribution of relaxation times and effective relaxation times as depending on the temperatures are discussed. The values of activation energy are estimated.