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**POTENTIAL METHOD IN THE THEORY OF
THERMOELASTICITY WITH MICROTEMPERATURES**

The linear theory for elastic materials with inner structure whose particles, in addition to the classical displacement and temperature fields, possess microtemperatures was constructed by D. Iesan and R. Quintanilla.

In this paper, the fundamental solution of the system of the equations of steady oscillations is constructed in terms of elementary functions. The Sommerfeld-Kupradze type radiation conditions are established. The existence of eigenfrequencies of the interior homogeneous boundary-value problems of steady oscillations is studied. The basic properties of wave numbers are treated. The connection between plane waves and eigenfrequencies is established. Theorems on the uniqueness and existence of a solution of boundary-value problems by means of the potential method and the theory of multidimensional singular integral equations are proved.