On solutions of Saint-Venant’s problem for elastic dipolar bodies with voids

MARIN MARIN¹, RAHMAT ELLAHİ²,³ and ADINA CHIRILĂ¹

ABSTRACT

This study is dedicated to the Saint-Venant’s problem in the context of the theory of porous dipolar bodies. We consider a right cylinder consisting of an inhomogeneous and anisotropic material. In the equilibrium equations of this problem, the axial variable is regarded as a parameter. The main result describes a class of semi-inverse solutions to the Saint-Venant’s problem in terms of some generalized plane strain problems.

REFERENCES


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Corresponding author: Marin Marin; m.marin@unitbv.ro

1Department of Mathematics and Computer Science
Transilvania University of Brașov
29 B-dul Eroilor, 500036 Brașov, Romania
E-mail address: m.marin@unitbv.ro
E-mail address: adina.chirila@unitbv.ro

2Department of Mathematics and Statistics
International Islamic University
H-10 Main Road, 44000 Islamabad, Pakistan

3Department of Mechanical Engineering
University of California, Riverside
900 University Ave., CA 92521 Riverside, USA
E-mail address: rahmatellahi@yahoo.com