

PULSATILE FLOW OF A MICROPOLAR FLUID BETWEEN PERMEABLE LAYERS

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Abstract

The pulsatile flow of a micropolar fluid between two permeable layers is investigated. The flow between the permeable layers is governed by micropolar fluid model whereas the flow in the permeable layers is described by Darcy law. The expressions for the velocity of the fluid and the microrotation are obtained. Some deductions are made and comparison is made with the earlier works. The effects of permeability, slip and micropolar parameters on the velocity distribution are discussed through graphs. It is found that the fluid velocity and microrotation decreases with increasing permeability parameter σ .

Key Words : *Permeable Layers, Permeability, Slip, Microrotation, Darcy law.*

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