UNSTEADY NATURAL CONVECTION MHD FLOW FROM A POROUS VERTICAL FLAT PLATE WITH CONSTANT HEAT FLUX AND SUCTION (INJECTION)

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Abstract

A numerical study has been carriedout to investigate unsteady natural convection flow of an electrically conducting incompressible fluid from a porous vertical flat plate in the presence of transverse magnetic field. The suction and injection is included in the analysis. The unsteadiness in the flow is caused due to constant heat flux between the plate and ambient fluid. The results of the present work indicate that, the skin friction parameter and surface temperature decreases with the increase of magnetic field in case of suction as well as injection. Velocity and temperature fields are appreciably affected by the unsteadiness in the flow.

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