

**EFFECT OF KUSHINSHKI FLUID ON UNSTEADY LAMINAR
FREE CONVECTIVE FLOW ALONG A MOVING POROUS HOT
VERTICAL PLATE WITH THERMAL DIFFUSION, MASS
TRANSFER AND HALL CURRENTS**

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Abstract

The purpose of the present problem is to study the effect of Kuvshinshki fluid on unsteady laminar free convective flow through porous medium along a moving porous hot vertical plate in the presence of heat source and thermal diffusion with Heat, mass transfer and hall currents. The governing equations of motions are solved by a regular perturbation technique. The velocity of dusty fluid and dust particles and skin friction are discussed with the help of tables and graphs. The velocities of dusty fluid and dust particles increase with the increase in Q (Velocity ratio parameter), but these velocities decrease with the increase in λ_1 (visco - elastic parameter) and M (Hartman number).

Key Words : *Dusty Fluid, Kuvshinshki Fluid, Laminar free convective flow, Thermal diffusion, Heat transfer, Mass transfer, Hall currents.*

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