

**HYDROMAGNETIC NATURAL CONVECTION OF A HEAT ABSORBING FLUID
PAST AN IMPULSIVELY MOVING VERTICAL PLATE WITH RAMPED
TEMPERATURE IN THE PRESENCE OF INDUCED MAGNETIC FIELD**

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ABSTRACT

An investigation of unsteady hydromagnetic natural convection flow of a viscous, incompressible, electrically conducting and heat absorbing fluid past an impulsively moving vertical plate with ramped temperature embedded a porous medium in the presence of induced magnetic field is carried out. Governing equations are solved numerically using Crank-Nicolson implicit finite difference scheme. The numerical values for fluid velocity, induced magnetic field and fluid temperature are depicted graphically while those of skin friction and Nusselt number are presented in tabular form for various values of pertinent flow parameters. Natural convection flow near ramped temperature plate is compared with natural convection flow near isothermal plate.