

**EFFECT OF CHEMICAL REACTION ON MHD FREE CONVECTION FLOW  
PAST AN EXPONENTIALLY ACCELERATE POROUS PLATE WITH  
VARIABLE TEMPERATURE EMBEDDED IN POROUS MEDIUM**

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**ABSTRACT**

Free convection MHD flow of a viscous incompressible fluid past an accelerating infinite vertical plate with variable temperature and mass transfer has been studied. The dimensionless governing equations are solved using Laplace Transformation technique. The temperature and species concentration near the plate are assumed to vary with respect to time. The influences of the various parameters on the flow field, skin friction, rate of heat transfer, rate of mass transfer and Temperature field are extensively discussed from graphs.

**KEYWORDS:** MHD, Free Convection, Vertical Plate, Acceleration, Heat Transfer, Mass Transfer, Variable Temperature, Chemical Reaction and Porous Medium