**ABSTRACT**

An unsteady free convective flow of a viscous incompressible and electrically conducting fluid along an infinite vertical porous plate is investigated with Hall current. The flow is oriented vertically upward along the x\*-axis. The entire system is assumed to be rotating with angular velocity W\* about z\*-axis. The fluid is injected with the constant velocity w0 through the porous plate. The Species Concentration at the plate and temperature of the plate are assumed to be varying cosinusoidally with time. In order to attain a physical insight into the problem, primary velocity field, Secondary velocity field, temperature field, concentration field, rate of heat and mass transfer are calculated numerically for different non-dimensional numbers. Keywords: Magneto hydrodynamics, Porous medium, Hall current.