

A theoretical analysis of unsteady MHD convective flow in a rotating frame of reference is presented when a viscous, incompressible, heat generating, and electrically-conducting fluid flows through a porous medium occupying a semi-infinite region of space bounded by an infinite vertical porous plate. A strong magnetic field is imposed in a plane which makes an angle α with the normal to the plate and the fluid is subjected to a normal suction velocity while the heat flux at the plate is constant. An analytical solution of the problem is obtained and the effects of Hall current on the flows are studied for various values of α .