

Taking Hall and Ion-slip currents into account the steady magnetohydrodynamic convective flow of a partially ionized gas past an infinite vertical porous plate in a rotating frame of reference is investigated theoretically. A strong magnetic field of uniform strength is applied perpendicular to the plate and the fluid is subjected to a normal suction velocity while the heat flux at the plate is constant. An analytic solution of the problem is obtained and the effect of Hall and ion-slip currents, as well as the other parameter entering into the problem, are discussed and shown graphically.