

## LIST OF SYMBOLS AND ABBREVIATIONS

$g$	-	Acceleration due to gravity
$C_\infty$	-	Ambient concentration
$\gamma$	-	Chemical reaction parameter
$\mu$	-	Co efficient of Viscosity
$\beta_c$	-	Coefficient of expansion with concentration
$D$	-	Coefficient of the mass diffusivity
$\beta$	-	Coefficient of volume expansion
$C$	-	Concentration of the fluid
$U_0$	-	Constant velocity
$\bar{q}$	-	Darcy velocity vector
$\Delta C$	-	Difference in concentration
$\nabla$	-	Differential operator
$D_m$	-	Diffusion coefficient
$\theta_r$	-	Dimensionless reference temperature
$\phi(\eta)$	-	Dimensionless species concentration of the fluid
$f(\eta)$	-	Dimensionless stream function
$F_w$	-	Dimensionless suction velocity
$Ec$	-	Eckert Number
$\sigma$	-	Electrical conductivity
$n$	-	Exponent
$B_0$	-	External magnetic field
$\rho$	-	Fluid density
$U$	-	Free Stream velocity
$Gr$	-	Grashof number
$m$	-	Hartman number
$q_w$	-	Heat flux per unit area

$\alpha_i$	- Internal heat generation
$\nu$	- Kinematic viscosity
$B$	- Magnetic field
$M$	- Magnetic Field Parameter
$B_0$	- Magnetic field strength
$Re_m$	- Magnetic Reynold's number
$D_M$	- Mass diffusivity
$M_w$	- Mass flux at the wall
$\theta(\eta)$	- Non dimensional temperature
$\beta$	- Non-Darcy coefficient
$Nu$	- Nusselt number
$k'$	- Permeability of the porous medium
$K$	- Permeability parameter
$Pr$	- Prandtl number
$-\theta'(0)$	- Rate of heat transfer
$\nu_\infty$	- Reference kinematic viscosity
$Re$	- Reynolds number
$Sc$	- Schmidt number
$\eta$	- Similarity variable
$c_p$	- Specific heat at constant pressure
$\sigma^*$	- Stefan – Boltzmann constant
$\Delta\eta$	- Step size
$a$	- Stratification rate of the gradient of ambient temperature profiles
$b$	- Stratification rate of the gradient of concentration profiles
$\psi$	- Stream function
$\theta$	- Temperature
$T_\infty$	- Temperature of the fluid far away from the plate
$T$	- Temperature of the fluid near the plate

$T_w(x)$	-	Temperature of the plate at the wall
$\eta_t$	-	Thermal boundary layer thickness
$k$	-	Thermal conductivity
$\alpha$	-	Thermal diffusivity
$U_0$	-	Uniform velocity of the plate
$V$	-	Velocity
$u$	-	Velocity components in x direction
$v$	-	Velocity components in y direction
$\eta_m$	-	Viscous boundary layer thickness
$Q$	-	Volumetric rate of heat generation
$C_w$	-	Wall Concentration

