

Nomenclature

B_0	Uniform magnetic field
x'	Co-ordinate along the walls
x	Dimensionless Co-ordinate along the walls
y'	Co-ordinate perpendicular of the walls
y	Dimensionless co-ordinate perpendicular to the walls
t'	Time
t	Dimensionless Time
u'	Velocity of fluid
u	Dimensionless Fluid velocity
T'	Temperature
θ	Dimensionless Temperature
C'	Concentration
C	Dimensionless Concentration
w'	Fluid velocity in z' direction
w	Dimensionless Fluid velocity in z' direction
k_3	Vortex viscosity
R	Vortex viscosity parameter
m_1	Temperature ratio
k_4	Thermal conductivity
C_p	Specific heat at constant pressure
k	Permeability parameter
k'	Permeability of porous medium
Ω	Uniform angular velocity
k_1	Rotation parameter
k'_2	Chemical reaction
Kr	Chemical reaction Parameter
ω_1	Frequency
$\omega_1 t$	Phase angle

M	Magnetic field parameter
Pr	Prandtl number
T'_{f}	Temperature of the fluid
T'_{c}	Temperature of the wall at $y' = L$
T'_{h}	Temperature of the wall at $y' = 0$
T'_{m}	Initial temperature of the fluid
D	Diffusion coefficient
D_M	Mass diffusion coefficient
D_T	Thermal diffusion coefficient
Gr	Thermal Grashof number
Gm	Mass Grashof number
m	Hall current
Sc	Schmidt number
H	Heat generation Parameter
q_r	Radiative heat flux
U_0	Uniform velocity of the plate
b	Material parameter
g	Acceleration due to gravity
L	Distance between two vertical walls
ϕ	Porosity of the porous medium
β'_{T}	Volumetric coefficient of thermal expansion
β'_{c}	Volumetric coefficient of concentration expansion
j	Micro-inertia density
μ	Dynamic viscosity
ν	Kinematic viscosity of the fluid
ρ	Fluid density
σ	Electrical conductivity
D_T	Thermal diffusion coefficient
Sr	Soret Number
α	Second grade parameter

γ	Casson fluid parameter
B	Magnetic induction vector
P	Pressure
J	Electric current density
E	Electric field
H_1	Magnetic field intensity
D	Co-efficient of chemical molecular diffusivity
Q	Heat source /Sink per unit mass
μ_e	Magnetic permeability
$J \times B$	Lorentz force per unit volume
\emptyset	Viscous dissipation per unit mass
$\frac{J^2}{\sigma}$	Joulean heat per unit mass
\vec{F}	External forces per unit mass
\vec{E}	Electrostatic field vector
$\vec{\tau}$	Viscous stress
e_{ij}	Rate of strain tensor
ρ_e	Charge density
ξ	Coefficient of bulk viscosity
L	Characteristic Length
h	Conductive thermal resistance
h_m	Conductive Concentration resistance