

Conclusion of the Thesis

The most important findings of the work can be summarized as follows:

- Magnetic parameter M , Velocity slip parameter γ and Suction parameter f_w have retarding effects with velocity.
- Velocity profile increases with increase in Thermal Grashof number Gr_T , Solutal Grashof number Gr_C , Eckert number Ec , Electric parameter E and Micropolar parameter K .
- Weissenberg number We reduces velocity profile while variable viscosity parameter ζ behaves in opposite way.
- Angular velocity profile enhances with increase in concentration of microelements n and Micropolar parameter K , while declines with high values of unsteadiness parameter A and Thermal Grashof number Gr_T .
- Temperature of the fluid observes positive impact of Radiation parameter Rd , Magnetic parameter M , Temperature ratio parameter θ_w , Eckert number Ec and Brinkman number Br .
- A rise in temperature is observed for Heat generation/absorption coefficient β and Dufour number Du , while a decline is observed for Prandtl number Pr and Micropolar parameter K .
- For increasing values of Electric parameter E , Thermal Biot number λ_1 enhance temperature.
- Concentration field increases for Soret number Sr , Chemical reaction parameter K_c , while behaves opposite for Schimdt number Sc .
- For larger values of Suction parameter f_w , concentration decreases, while increases with increase in Solutal biot number λ_2 .

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- Skin friction factor enhances with increase in Weissenberg number We , velocity slip parameter γ , Thermal Grashof number Gr_T and Solutal Gashof number Gr_C whereas declined for Magnetic parameter M , Variable viscosity parameter ζ and Suction parameter f_w .
 - Nusselt number is enhanced against rising values of Prandtl number Pr , temperature ratio parameter θ_w , Thermal Biot number λ_1 , Thermal Grashof number Gr_T and Radiation parameter Rd , while decreases for Dufour number Du , Heat generation/absorption coefficient β and Brinkman number Br .
 - Skin friction and number of Sherwood decreases for the broad unsteadiness parameter A values.
 - Sherwood number is raised for Schmidt number Sc .
 - N_G augmented when increment occurs in Magnetic parameter M , Diffusion parameter L^* , Thermal Grashof number Gr_T , temperature difference parameter α_1 and Brinkman number Br .
 - Bejan number has increment for large amount of α_1 , L^* and M while decreases for higher values of Br .