

Conclusion of the Thesis

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

- Magnetic field parameter M , second grade parameter α and chemical reaction parameter Kr have retarding effects with velocity.
- Velocity profile declines with escalation in Magnetic parameter and Casson parameter γ
- Permeability of porous medium k and Thermal radiation parameter R have affirmative correlation with velocity.
- Heat generation parameter H have positive impacts with velocity.
- Velocity profile increase with increase in Grashof and Reynolds numbers.
- Velocity, temperature and concentration in constant temperature and constant surface temperature is more than those in variable temperature and variable surface concentration.
- Temperature of the fluid observes positive impact of thermal radiation parameter but, negative impact with Pr .
- Temperature of the fluid has increase tendency with heat generation parameter H and thermal radiation parameter R .
- Temperature increases with increase in Soret effect Sr .
- Temperature tends to decrease with Dufour effect.
- Temperature of Nanofluid can be raised by raising thermophoresis or Brownian motion parameter.
- Concentration declines with increasing value of Thermophoresis parameter, Schmidt number and Brownian parameter.
- Concentration profile increase with increase in Soret effect Sr and Dufour effect Df and decrease with increase in chemical reaction Kr .
- Skin friction reduces on increasing K .
- Nb has positive impact on the Sherwood number.
- Nusselt number decreases with increase in Nb .