عنوان مقاله:

Numerical Analysis of Three-Dimensional stagnation Point Flow on a Vertical Surface in a Hybrid Nanofluid

محل انتشار:

سی امین همایش سالانه بین المللی انجمن مهندسان مکانیک ایران (سال: 1401)

تعداد صفحات اصل مقاله: 6

نویسندگان:

M.R. Zangooee - *Assistant Professor, Department of Mechanical Engineering, Payame Noor University (PNU), P.O. ,BOX ۱۹۳۹۵-۳۶۹۷,Tehran, Iran*

,Kh. Hosseinzadeh - *Department of Mechanical Engineering, Babol Noushirvani University of Technology, Babol, Iran*

H. Babaei - *۳ B.S. degree Student, Department of Mechanical Engineering, Payame Noor University (PNU), Tehran, ,Iran*

خلاصه مقاله:

Hybrid nanofluids have attracted burgeoning attention owing to their outstanding capacity to improve heat transfer. This study investigated the effect of slip and volume fraction of NPs on a vertical plate in the presence of suction and slip parameters. The study's governing partial differential equations were converted to a typical differential equation system through similarity transformations. Equations were then solved employing the fifth-order Runge-Kutta method. From this study, it was showed that with increment of volume fraction of copper, the temperature is increased and he absolute of temperature gradient is increased. Also increasing velocity slip parameter and temperature slip parameter .leads to decrease of temperature profile and absolute temperature gradient

کلمات کلیدی:

Hybrid nanofluid, stagnation point, temperature slip parameter, velocity slip parameter