

## عنوان مقاله:

Effects of Slip Condition, Variable Viscosity and Inclined Magnetic Field on the Peristaltic Motion of a Non-Newtonian Fluid in an Inclined Asymmetric Channel

## محل انتشار:

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## خلاصه مقاله:

The peristaltic motion of a third order fluid due to asymmetric waves propagating on the sidewalls of a inclined asymmetric channel is discussed. The key features of the problem includes longwavelength and low-Reynolds number assumptions. A mathematical analysis has been carried out to investigate the effect of slip condition, variable viscosity and magnetohydrodynamics (MHD). Followed by the nondimensionalization of the nonlinear governing equations along with the nonlinear boundary conditions, a perturbation analysis is made. For the validity of the approximate solution, a numerical solution is obtained using the iterative collocation technique.

## کلمات کلیدی:

Third order fluid, variable viscosity, Inclined asymmetric channel, Slip conditions, Peristaltic flow

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1383614>

