عنوان مقاله:

A Study on the Effect of Peristalsis and Cilia of MHD Micropolar Fluid Flow through an Inclined Porous Channel

نویسندگان:

S. V. H. N. Krishna Kumari. P - *Department of Mathematics, Koneru Lakshmaiah Educational Foundation, Hyderabad, India*

D. Saroj Vernekar - *Department of Mathematics, Stanley College of Engineering and Technology for Women, Hyderabad.*

.Y. V. K. Ravi Kumar - *Birla Institute of Technology & Science (BITS)-Pilani, Hyderabad, India*

خلاصه مقاله:

The study of the influence of magnetic field, channel inclination, porous medium and cilia on the Micropolar fluid under different boundary conditions is carried out. The methods of solving Navier Stokes equation specific to Micropolar fluid under the joint influence of these effects are presented. The profiles of velocity (along the flow direction), the micro rotation vector and the variation of pressure rise with time average flow rate for fixed values of other parameters were carried out and the results are discussed.

کلمات کلیدی:

Cilia, Micropolar fluid, Peristalsis, Magnetic field, Porous medium