Slip and Heat Transfer Effects on Peristaltic Motion of a Carreau Fluid in an Asymmetric Channel

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An analysis has been carried out for peristaltic flow and heat transfer of a Carreau fluid in an asymmetric channel with slip effect. The governing problem is solved under long wavelength approximation. The variations of pertinent dimensionless parameters on temperature are discussed. Pumping and trapping phenomena are studied.

Key words: Heat Transfer; Slip Condition; Carreau Fluid; Asymmetric Channel.