
Effect of Hematocrit on Wall Shear Stress for Blood Flow through Tapered Artery

Dr. A.K. Singh*, D.P. Singh

*Assistant Professor, RBS Engineering Technical Campus, Agra

Associate Professor, RBS College, Agra

ABSTRACT:

The purpose of this study to show the effects of Hematocrit (Red blood cells), height of stenosis, porous parameter and velocity of blood on wall shear stress of the flow of blood through tapered artery. The study reveals that wall shear stress reduces for increasing Hematocrit percentage. It is also observed that wall shear stress increases as stenosis height and porous parameter increase whereas it decreases with the increasing values of velocity of blood and slope of tapered artery.

Keywords: *Wall Shear Stress, Hematocrit, porous parameter, Velocity of Blood*