

## Documents

Akbar, N.S., Nadeem, S., Lee, C.

**Influence of heat transfer and chemical reactions on williamson fluid model for blood flow through a tapered artery with a stenosis**  
(2012) *Asian Journal of Chemistry*, 24 (6), pp. 2433-2441. Cited 7 times.

### Abstract

In the present paper, the blood flow through a tapered artery with a stenosis by considering axially non-symmetric but radially symmetric mild stenosis on blood flow characteristics is analyzed, assuming the flow is steady and blood is treated as Williamson fluid. The effects of heat and mass transfer are also carried out. Perturbation solutions have been calculated for velocity, temperature, concentration, resistance impedance, wall shear stress and shearing stress at the stenosis throat. The graphical results of different type of tapered arteries (i.e., converging tapering, diverging tapering, non-tapered artery) have been examined for different parameters of interest. Stream lines have been plotted at the end of the article.

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