

## Documents

Munawar, S., Ali, A., Saleem, N., Naqeeb, A.

**Swirling flow over an oscillatory stretchable disk**

(2014) *Journal of Mechanics*, 30 (4), pp. 339-347. Cited 3 times.

**Abstract**

In this work a numerical investigation has been conducted to study the unsteady oscillatory flow of a viscous fluid induced by a swirling disk. The disk stretches radially with the time-based sinusoidal oscillations. The governing equations for the three-dimensional boundary layer-flow are normalized using a suitable set of similarity transformations. The normalized partial differential equations are then solved numerically using a finite difference scheme by altering the semi-infinite domain to a finite domain. The effects of various imperative parameters on the oscillatory flow are discussed with graphs and tables. Copyright © The Society of Theoretical and Applied Mechanics, R.O.C. 2014.

2-s2.0-84905587596

**Document Type:** Article

**Publication Stage:** Final

**Source:** Scopus