



Peri K Kameswaran

30 – 10/06/1983

Applied Mathematics

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INDIA

I am working on Numerical Studies on Mixed Convective Heat and Mass Transfer in Nano fluids. I completed my PhD in Andhra University, Visakhapatnam, Andhra Pradesh, India. During my PhD I worked several problems on Effects of Chemical reaction, double dispersion and Radiation on heat and mass transfer in non-Darcy fluid flows. I like working on problems related to the Nano fluids and clear fluids by using numerical techniques. I have also member of some mathematical societies. I have presented number of papers in various national and international conferences. I have presented a paper in 2009 in ASME Conference, Florida, USA

## CURRENT RESEARCH

### Topic

Numerical studies on Newtonian and Non Newtonian Nano fluid flows on Heat and Mass Transfer.

### Methodology

- I am using Numerical methods to solve the problems, like
- Runge-Kutta Method
- Bvp4c solver
- Spectral methods

### Application

Application in industries and technology, Melts of polymers, Biological solutions, Paints, tars and Glues

## UKZN main Publications

1. P.K.Kameswaran, S.Shaw, P.Sibanda and P.V.S.N.Murthy, Homogeneous heterogeneous reactions in a nano fluid flow due to a porous stretching sheet. International Journal of Heat and Mass Transfer. 57: 465 - 472 (2013) Impact factor 2.315.
2. P.K.Kameswaran, P.Sibanda and A.S.N.Murti, Nanofluid flow over a permeable surface with convective boundary conditions and radiative heat transfer, Mathematical Problems in Engineering. <http://dx.doi.org/10.1155/2013/201219> (2013) Article ID 201219, 11 pages, Impact factor 1.383.
3. P.K.Kameswaran, M.Narayana, P.Sibanda and P.V.S.N.Murthy, Hydromagnetic nanofluid flow due to a stretching or shrinking sheet with viscous dissipation and chemical reaction effects. International Journal of Heat and Mass Transfer. 55: 7587 - 7595 (2012) Impact factor 2.315.
4. P.K.Kameswaran, M.K.Partha, P.V.S.N.Murthy and P.Sibanda, Thermophoretic and non-linear convection in non-Darcy porous medium. Journal of Heat Transfer, Transactions of the ASME. (2013) Impact factor 1.718 (Accepted)

## Past researches

I have Published several paper with my PhD supervisor Prof. A.S.N.Murti and some of my research collaborators Dr. DRVSRK. Sastry, Dr.T.Poorna Kantha and Prof. P.V.S.N.Murthy from India Institute of technology, Kharapur.

## Future Interests

1. Placement in an academic position (i.e., faculty or research scientist) that allows for advanced research in computational fluid dynamics with a particular focus on the heat and mass transfer problems.

## Extra Interests

Listening Music and watching cricket