# Mixed convection flow of a nanofluid between two inclined parallel plates filled with a porous medium- the case of an adiabatic plate

**Dalia Cimpean and Ioan Pop**

The fully developed mixed convection flow of a nanofluid between two inclined parallel plates filled with a porous medium is presented in this paper. Both cases, of the upper and lower adiabatic plate when the other plate is heated by a uniform heat flux, are studied .

A uniform flow rate is considered up through the channel. The equations of the problem are made non-dimensional and are observed to depend on the dimensionless parameters, namely the mixed convection parameter, the Peclet number, the inclination angle of the channel to the horizontal and the nanoparticle volume fraction. The effects of these parameters on the fluid and heat transfer characteristics are in detail discussed for different considered nanofluids.