

The problem of laminar forced convection heat transfer and fluid flow characteristics in a corrugated channel is studied numerically. The channel walls are maintained at constant temperature higher than fluid. The governing equations are written in two – dimensional Cartesian coordinates and solved by finite difference method with body fitted coordinates system (BFC) was used to stretch over the physical domain of the presented problem. Effect of wavy angle and Reynolds number on heat transfer and fluid flow were studied. The solutions are carried for Reynolds numbers range from 500 to 2500, wavy angles range from 0° to 60° and Prandtl number is 0.71. The results have indicated that heat transfer and pressure drop increase with increasing wavy angle at same Reynolds numbers. The results are compared with previous experimental results and show good agreement.