ROLES & RESPONSIBILITIES

•Investigated the performance of solar hybrid system using liquid metal alloy GaInSn, water and air as a coolants using ANSYS FLUENT

•Validated simulation values through values obtained from experimental setup conducted at India

•Plotted characteristic plots using results obtained from ANSYS FLUENT and compared these with results with that of air and water

•Determined important perfomace characteristics such as exergy, thermal and electrical efficiency using GaInSn as coolant

RESULTS

Using GaInSn as coolant in hybrid solar system resulted in improving thermal, exergy and electrical efficiencies of system by 12%, 23% & 11% respectively as compared to those of air and water

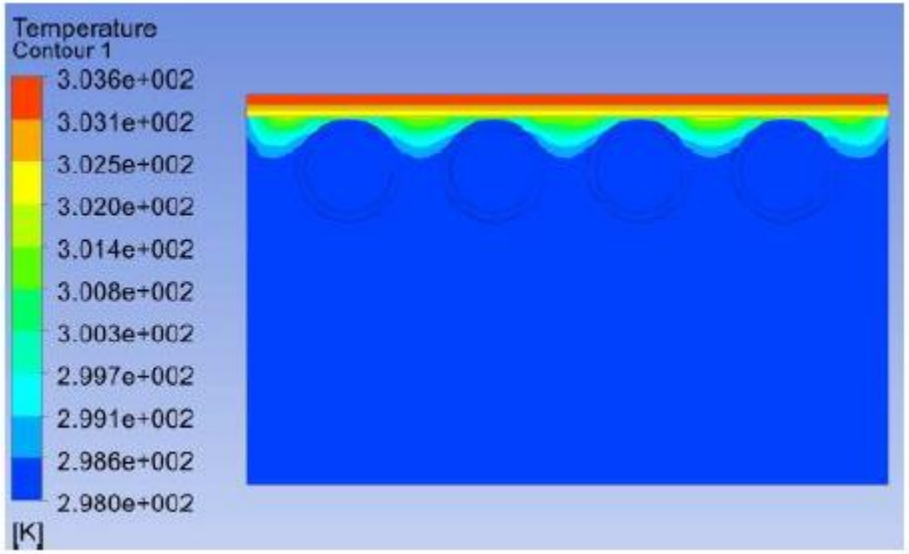

Fig 1.Temperature contours on hybrid solar cell using GaInSn as coolant

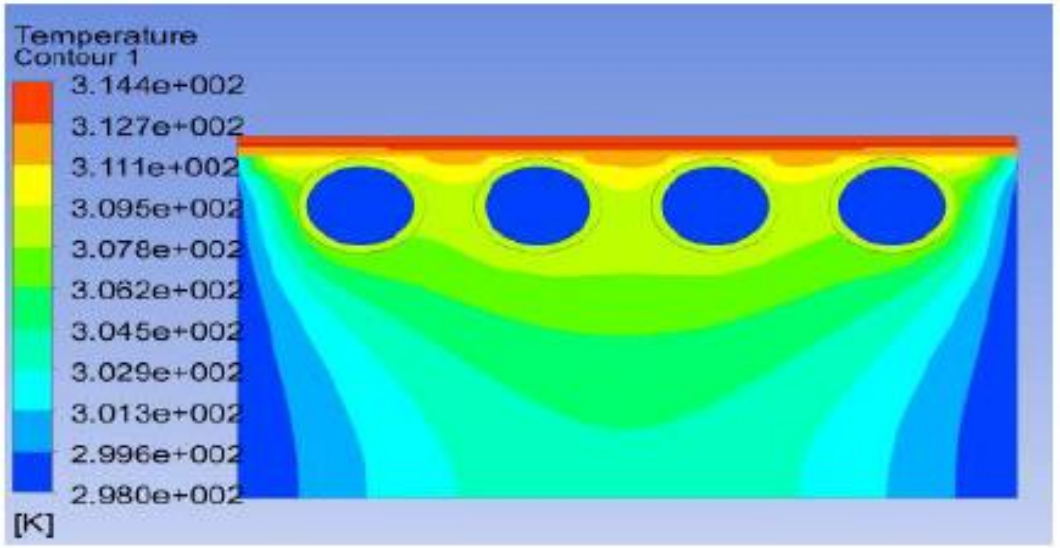

Fig 2.Temperature contours on hybrid solar cell using air as coolant

* For more information on this project kindly view journal sections of my web page