

# **Design, simulation and characterization of moly permalloy based electromagnetic sensor**

## **Abstract**

In this paper it is shown the design, simulation and characterization of Moly Permalloy based electromagnetic sensor in MEMS software. The dimension of the device is minimized to the smallest the software can simulate which is 1 micron. Total of 9 models had been simulated which differs in thickness of the material and designs. A new design was created to compare the results with the existing designs. The creation of the new design has given better results than the existing designs in terms of the current flow and the magnetic induction.