**Abstract**

**CuFe2O4/ Polyaniline, a low temperature nanostructured gas sensor will be used for enhancing LPG sensing. It is shown that presence of Polyaniline enhances the sensitivity at low temperature. Because of having various structures with miscellaneous morphologies such as nanowire, PANI attracts much attention as a sensor. CuFe2O4/ Polyanaline will be Characterized by XRD, UV VISIBLE, SEM, TEM, PSA, AFM, FTIR etc. The further studies of CuFe2O4/PANI hybrid materials will be carried out on detecting LPG, NO2 and their comparative studies**