## **ABSTRACT**

Till date, the present investigation contains literature review on magnetism, Superparamagnetism, Nanomagnetism L their application, Ferrites, Nickel Ferrites nanoparticles. The nickel ferrite nanoparticles will be prepared here through a newly developed simple, versatile and economical route. The present report contains the disadvantages of the established preparation technique L it also includes the advantages of the present technique. The compositional characterization of the commercially available Nickel ferrite sample is studied under FTIR Spectroscopy (FTIR-Model no: IMPAC410 NICOLET) and the analysis of the curve is also included in the report. The last section includes conclusion, future plans, L Bibliography.