**Dielectric properties of nickel zinc ferrite-polypropylene composite**


ABSTRACT

Nickel-zinc ferrite (Ni0.2Zn0.8Fe2O4) was prepared using conventional solid-state method. It acts as a filler with polypropylene as the matrix. The samples were characterized by XRD and dielectric measurement was done using Agilent 4291B Impedance/Material Analyzer. It was observed that the composition of 30% doped nickel-zinc ferrite (Ni0.2Zn0.8Fe2O4) gives the highest value of the dielectric constant in the frequency range of 1 MHz to 1.5 GHz at room temperature.