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Synthesis and Characterization of $Nd_2CuFe_2O_7$ Magnetic Nanocomposites.

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Multi-phase solids that have one of the components with features between 1 and 100 nm, refer to nanocomposites or structures that have repeating distances in the nanoscale between the different phases that make up the material or structures with repeating distances in the nano scale between the different phases that make up the material [1]. The resent work reports synthesis of $Nd_2CuFe_2O_7$ nanocomposites (NCuFO) by the Co-precipitation method. The synthesized nanocomposites were characterized by Fourier transfer infrared (FT–IR) spectroscopy , X-ray diffraction, transmission electron microscopy. Alternating gradient force magnetometer illustrates magnetic behavior of mixed metal oxides of $Nd_2CuFe_2O_7$ nanocomposites. The results show that uniform particles in nanometer sizes have been synthesized.

Keywords: Nanocomposites, Co-precipitation , Magnetic**,**

References

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