

## Dr. Solagna Modak

- P. K. Chakrabarti, K. N. Chattopadhyay, S. Modak, J. Mondal, *Hyperfine Interactions* 175, 131 (2007). [Magnetic, thermal and hyperfine behaviours of  $Tm^{3+}$  in  $TmPO_4$ ,  $YPO_4$  and  $LuPO_4$ : a comparative study.]
- S. Modak, S. Karan, S. K. Roy, S. Mukherjee, D. Das, P. K. Chakrabarti, *Journal of Magnetism and Magnetic Materials*, 321,169 (2009). [Preparation and characterizations of  $SiO_2$  - coated nanoparticles of  $Mn_{0.4}Zn_{0.6}Fe_2O_4$ ]
- S. Modak, M. Ammar, F. Mazaleyrat, S. Das, P.K. Chakrabarti, *Journal of Alloys and Compounds*, 473, 15 (2009). [XRD, HRTEM and magnetic properties of mixed spinel nanocrystalline Ni-Zn-Cu-ferrite]
- S. Acharya, A. Bandyopadhyay, S. Modak, S. Mukherjee, D. Das, P.K. Chakrabarti, *Journal of Magnetism and Magnetic Materials*, 321, 2701 (2009). [XRD, HRTEM, magnetic and Mössbauer studies on chemically prepared  $Fe_{3+}$  - doped nanoparticles of cerium oxide]
- A. Bandhu, S. Mukherjee, S. Acharya, S. Modak, S. K. Brahma, P. K. Chakrabarti, *Solid State Communications*, 149, 1790 (2009). [Dynamic magnetic behaviour and Mössbauer effect measurements of magnetite nanoparticles prepared by a new technique in the co-precipitation method]
- S. Modak, S. Acharya, A. Bandyopadhyay, S. Karan, S. K. Roy, P. K. Chakrabarti, *Journal of Magnetism and Magnetic Materials*, 322, 283 (2010). [Micro-structural investigations and paramagnetic susceptibilities of zinc oxide, europium oxide and their nanocomposite]
- Bandyopadhyay, S. Modak, S. Acharya, A. K. Deb, P. K. Chakrabarti, *Solid State Sciences*, 12, 448 (2010). [Microstructural, magnetic and crystal field investigations of nanocrystalline  $Dy^{3+}$  doped zinc oxide]
- S. Modak, S. Karan, S. K. Roy, P. K. Chakrabarti, *Journal of Applied Physics*, 108, 093912 (2010). [Static and dynamic magnetic behavior of nanocrystalline and nanocomposites of  $(Mn_{0.6}Zn_{0.4}Fe_2O_4)_{(1-z)}(SiO_2)_z$  ( $z = 0.0, 0.10, 0.15, 0.25$ ).
- K. Mukhopadhyay, S. Sutradhar, S. Modak, S. Roy, P. K. Chakrabarti, , *The Journal of Physical Chemistry C*, 116, 4948 (2012). [Enhanced Magnetic Behavior of Chemically Prepared Multiferroic Nanoparticles of  $GaFeO_3$  in  $(GaFeO_3)_{0.50}(Ni_{0.4}Zn_{0.4}Cu_{0.2}Fe_2O_4)_{0.5}$  Nanocomposite].

**PAPER PRESENTED/ ACCEPTED IN NATIONAL/ INTERNATIONAL CONFERENCE/ WORKSHOP:**

- Soft magnetic properties of nanocrystalline Ni-Zn-Cu Ferrite, S. Modak, S. Das, M. Ammar, F. Mazaleyrat and P.K.Chakrabarti, Proceedings of the DAE Solid State Physics Symposium (2007).
- Preparations and characterizations of SiO<sub>2</sub> coated nanoparticles of Zn substituted manganese ferrite in core/shell structure, S. Modak, S. Mukherjee, D. Das, P.K. Chakrabarti, International Conference on Soft System (ICSS-2008), February 13-15, 2008, Indian Society for Surface Science and Technology and Centre for Surface Science, Department of Chemistry, Jadavpur University, Kolkata- 700032, India.
- Fourth National Workshop on Characterisation of Laser & Nanomaterials (FNWCLNM- 2008), March 7-8, 2008, Department of Physics, The University of Burdwan, Burdwan- 713104, West Bengal, India.
- National Seminar on Recent Advances in Physics (NSRAP), March-27 & 28, 2008, Department of Physics, The University of Burdwan, Burdwan- 713104, West Bengal, India.
- Optical and magnetic studies on chemically synthesized nanocomposite system of [(ZnO)<sub>(1-x)</sub> (Eu<sub>2</sub>O<sub>3</sub>)<sub>x</sub>] (x = 0.45), S. Modak, A. Bandyopadhyay, S. Acharya and P.K. Chakrabarti, National Workshop on Radiation Science and Applications, November 10-12, 2008, Department of Physics, The University of Burdwan, Burdwan- 713104, West Bengal, India.
- National Seminar on New Era in Nuclear and Particle Physics (NENPP - 08), November 28-29, 2008, Department of Physics, The University of Burdwan, Burdwan- 713104, West Bengal, India.
- 1st International Conference on Nanostructured Materials and nanocomposites (ICNM- 2009), April 6-8, 2009, Institute of Macromolecular Science and Engineering (IMSE), Perumpaikadu, Kottayam- 686028, Kerala, India.
- XRD, HRTEM, Mössbauer spectroscopy and magnetic studies of SiO<sub>2</sub> coated nanoparticles of Mn<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> in core/ shell structure, S. Modak, S. Karan, K. Mukhopadhyay, A. Bandhu, S. K. Roy, D. Das, P. K. Chakrabarti. International Conference on Radiation Physics and Its Applications-2010.
- Estimation of particle sizes, their distributions and nanocrystalline magnetic anisotropy of nanocomposite (Mn<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>)<sub>(1-z)</sub>(SiO<sub>2</sub>)<sub>z</sub> [z = 0.0, 0.10, 0.15, 0.25], S.

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