
SEMINAR FIZIČKOG ODSJEKA

Vrijeme: utorak, 24. 11. 2009., 14:15 sati (točno)
Mjesto: Fizički odsjek, Bijenička c. 32, predavaonica F201

SYNTHESIS OF NANO SIZE SPINEL FERRITES AND THEIR MAGNETIC AND STRUCTURAL STUDIES

A.T. Raghavender#

Department of Physics, Faculty of Science,
University of Zagreb, Bijenicka C. 32, Zagreb, Croatia,

#On leave from home institution "Nishitha College of Engineering and technology, Hyderabad, India" for doing Postdoc, sponsored by The National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia .

Nanospinel ferrites are the class of the magnetic materials having wide applications in industry and are current subject of study. When compared some other kinds of magnetic materials, spinel ferrites are easily synthesizable at nanoscale. The structural and magnetic properties of these materials are dependent up on the type of metal ions, doping concentration, synthesis technique and calcination temperature. The magnetic properties especially in the case of spinel ferrites are dependent up on the occupancy of metal ions in the two crystallographic sites namely tetrahedral (A) and octahedral [B].

In this talk, sol-gel auto-ignition technique used for nanoferrites synthesis will be explained. Some of the results obtained on NiFeO4 doped with Al and Zn, CoAlxFe2-xO4 and CuGdxFe2-xO4 nanoferrites will be presented.

Voditelj seminara FO
Hrvoje Buljan, hbuljan@phy.hr
