

### S.N. BOSE NATIONAL CENTRE FOR BASIC SCIENCES

BLOCK JD, SECTOR - III, SALT LAKE, KOLKATA-700 098

Dated 9<sup>th</sup> November 2009

### JUNIOR RESEARCH FELLOW Position available : Two

Applications are invited from students willing to take up a career in scientific research and attain a Ph.D. degree in Physical Sciences. The programme is residential.

# 1. Qualification: M. Sc. in Physics (at least 55%) preferably with CSIR-UGC-NET- (JRF/LS)

#### 2. Title/Topic of research:

**2.1.1 Title**: Measurement of magnetic field induced strain in ferromagnetic shape Alloys

**2.1.2 Topic**: FSMA materials exhibit the largest known external stress (here magnetic field) induced strain of any known material. Here we plan to make such samples and measure their strains for possible use in device application.

**2.2.1 Title**: Superconductivity of exotic systems.

**2.2.2 Topic**: The theoretical study of superconductivity in layered systems will be taken up invoking various types of possible mechanisms. The formalism and calculational scheme developed will be applied to different classes of materials.

# 3. FELLOWSHIP: Rs. 12,000.00 per month (with free hostel accommodation)

 CONTINGENCY AND OTHER SUPPORT: Grant for books and attending National / International Conferences.

Applications should reach **within 15 days** from the date of publication of this advertisement.

THE CONVENER ADMISSION COMMITTEE Phone: 033-23355706-08/ 23353057/61

Fax: 033-23359176 Website: www.bose.res.in E-Mail: admission@bose.res.in

