

DST - SERC School on “Advanced Functional Magnetic Materials” February 3 – 21, 2014

The SERC School in Condensed Matter Physics will be held at Goa University, Goa during February 03-21, 2014. The focus area for the school will be “Advanced Functional Magnetic Materials”. The School is sponsored by Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.

The primary goal of this school is to expose and motivate young researchers to the recent advances in the field of magnetism and magnetic materials over a period of three weeks. In the first week, the basics of magnetism, including theoretical concepts and the magnetic measurement techniques will be covered. The lectures in the second week would focus on various advanced functional magnetic materials. In the third week, the main emphasis will be on the methodology involved in search for new functional materials and applications. Lectures will be supplemented by tutorials. The faculty for the school will comprise of experts from within the country.

Broad Topics to be covered in School include

**| Theoretical concepts and basics of Magnetism | Magnetic Measurement Techniques |
| Research and Development in Magnetic Materials after 1973 |
| Shape memory alloys and Magnetocaloric Materials |
| Magnetostrictive materials | Spintronics and Magnetic thin films |
| Magnetic Nanomaterials | Multiferroics | Strongly Correlated Electron Systems |
| Energy Materials |**

In addition there will be special lectures on areas of recent research.

Applications are invited from research scholars with one or two years of experience, post-doctoral fellows and young researchers from Universities and Colleges for participation in the School. The upper age limit for participants is 35 years which could be relaxed in exceptional cases. The total number of participants in the School is restricted to about forty.

Interested persons should send their applications to the School Director, via e-mail (preferred) or by post including, (i) CV (having full postal and e-mail address), (ii) a brief write-up of the current research activities, (iii) list of publications (if any), (iv) letter of recommendation from guide or Head of Department, and (v) a short write-up indicating how the School is expected to benefit the research activities of the candidate. All the selected participants will be provided to-and-fro train fare (up to II AC), free boarding and lodging, and course related educational material.

Application forms can be downloaded from www.unigoa.ac.in and submitted (along with the above information) either by e-mail or post to:

Director, DST-SERC School, Department of Physics, Goa University, Taleigao Plateau, Goa 403206
e-mail: serc@unigoa.ac.in

DEADLINE FOR RECEIVING APPLICATIONS: November 10, 2013

Planning Committee:

Prof. A. K. Nigam, TIFR, Mumbai
Prof. S. K. Dhar, TIFR, Mumbai
Prof. S. N. Kaul, University of Hyderabad, Hyderabad
Prof. Shiva Prasad, IIT Bombay, Mumbai
Prof. R. Ranganathan, SINP, Kolkata
Dr. S. B. Roy, RRCAT, Indore
Dr. A. K. Tyagi, IGCAR, Kalpakkam
Dr. Amitava Roy, DST, New Delhi

Course Directors:

Dr. R. V. Pai and Dr. K. R. Priolkar,
Department of Physics,
Goa University, Goa 403 206