

## Homi Bhabha Centre for Science Education

Tata Institute of Fundamental Research  
(A Deemed University)  
Advt. No. 2/06

### Research Scholarships

HBCSE, a National Centre of TIFR, is looking for committed post-graduates for its Ph.D. programme in Science Education, 2006. The Centre is devoted to R&D in science and mathematics education from primary school to college level. Its activities are informed by research in cognitive, historical and socio-cultural aspects of science education.

Recent M.Sc.'s (or those in their final year) in any of the physical/chemical/biological/earth sciences or mathematics/statistics/computer science, with a consistently good academic record are eligible to apply. Research Scholars are offered a fixed monthly scholarship of Rs 8000/- (enhanced to Rs 9500/- after registration for Ph.D.) and an annual contingency grant of Rs 10,000/- in addition to a tuition grant of Rs 4000/- per annum, which will cover the university fees of TIFR. Admissions are for a year, renewable annually for up to 5 years. Accommodation on campus may be provided at nominal cost.

For application forms and details please write to The Sr. Administrative Officer, Homi Bhabha Centre for Science Education, TIFR, V. N. Purav Marg, Mankhurd, Mumbai 400 088 enclosing a 25.5 cm × 15.5 cm self-addressed envelope affixed with stamps of Rs 10/- superscribed as '**Research Scholarship 2006 in Science Education**'. Completed forms should be sent by post along with a demand draft of Rs 300/- (non-refundable application fee) payable at Mumbai in favour of Homi Bhabha Centre for Science Education to reach us latest by **01 May 2006**. Only candidates with consistently good academic record will be eligible for test/interview. The academic year will begin on **01 August 2006**. You can download the form from the 'Events' link on our website: <http://www.hbcse.tifr.res.in>

### Postdoctoral Position Available at CERMAV-CNRS, France

**Funding Agency:** Indo-French Centre of the Promotion of Advanced Research

**Project Title:** Synthesis and structural studies of N-glycoprotein analogs

**Description:** Glycoproteins are major constituents of cell membranes, and in order to be able to model their structures and dynamics, a precise knowledge of the covalent linkage between the protein moiety and the sugar moiety is required. We propose research work on molecular modelling of the linkage between N-acetylglucosamine (monosaccharide) and asparagine (amino acid). The approach will include search in structural data base, force-field parameterization using quantum chemistry, molecular mechanics and molecular dynamics calculation.

This project is presented in the framework of collaboration between Prof. D. Loganathan (Indian Institute of Technology Madras, Chennai) and Dr. A. Imberty (Centre de Recherche sur les Macromolécules Végétales, Grenoble). The selected candidate will work as a post-doctoral researcher at Centre de Recherche sur les Macromolécules Végétales, Grenoble, France.

**Duration:** 12 months (starting 1 June 2006)

**Salary:** Monthly emoluments of 1,850 Euros.

**Requirements:** Doctorate in theoretical chemistry. Experience in quantum chemistry calculations (program Gaussian), molecular mechanics and molecular dynamics calculations of organic compounds.

**Person to contact before 31 March 2006:** Please send a cover letter with curriculum vitae, a description of research accomplishments, and contact information of three references to Dr. Anne Imberty (imberty@cermav.cnrs.fr) CERMAV-CNRS, BP 53, 601 rue de la Chimie, F38041 Grenoble, Cedex 9, France