

Centre for Excellence in Basic Sciences Graduate Programme

The **Centre for Excellence in Basic Sciences (CBS)** is a teaching and research centre, set up jointly by the Department of Atomic Energy, Govt of India, and the University of Mumbai. CBS is located in the beautiful Kalina campus of the University of Mumbai.

Highly-motivated individuals are invited for the CBS Graduate Programme in the physical, chemical, mathematical and life sciences, commencing August 2009, and leading to a Ph.D. degree of the University of Mumbai.

Our Graduate Programme includes course-work and research; it is designed to prepare students for careers at the most advanced level of research in basic sciences. CBS is closely linked to proximate premier research institutions such as Bhabha Atomic Research Centre, Tata Institute of Fundamental Research, Indian Institute of Technology Bombay, Institute of Chemical Technology, Mumbai, etc. and a close research relationship exists between these institutions and CBS.

CBS has a vibrant programme of research that has already led to publications in high-quality journals like *Science*, *Physical Review*, *Optics Express*, etc. Present research interests of CBS faculty are interdisciplinary and include:

Physical sciences: Nuclear physics and nuclear astrophysics; archeo-astronomy; high-field physics and ultrafast laser science; biological physics; particle and plasma-based accelerators; free-electron lasers.

Chemical sciences: Ultrafast chemical reaction dynamics; photochemistry; biochemistry; theoretical chemistry.

Mathematical sciences: Commutative algebra; algebraic geometry; dynamics on groups.

Life sciences: Cell and developmental biology; genetics; molecular biology; macromolecular interactions; environmental biology.

Details of current research activities can be found on the CBS website.

Eligibility: Students with a good Master's degree in Physics, Chemistry, Biology, Biophysics, Biotechnology or Mathematics; a Bachelor's degree in Engineering Physics, Chemical Technology are eligible to apply. Students in the final year of these programmes, or whose results have not yet been declared, may also apply; if selected, their selection shall be provisional and contingent upon meeting the eligibility criteria by December 2009.

Selection: Selection will be through an interview, to be held in Mumbai in July 2009; eligible students will be informed by e-mail at least 2 weeks in advance. Candidates called for interview will be paid appropriate TA/DA. Selected students will be given a Fellowship by CBS, including a contingency grant, subject to continuing good performance.

Application: Applications should be sent, by e-mail only, to: info@cbs.ac.in. Forms can be downloaded from the CBS website. In addition, you should e-mail a brief (1–2 page) write-up on why you wish to pursue research in science and your interests, motivations and expectations. Please DO NOT send copies of certificates.

For more details, please visit the CBS website: <http://www.tifr.res.in/~cbs>

Last date for receipt of applications is **12 June 2009**