

TATA INSTITUTE OF FUNDAMENTAL RESEARCH (A Deemed University)

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Research opportunities for exceptionally talented and strongly motivated students

PH.D. PROGRAMME IN MATHEMATICS, PHYSICS, CHEMISTRY, BIOLOGY, COMPUTER & SYSTEMS SCIENCES AND SCIENCE EDUCATION;

INTEGRATED PH.D. PROGRAMME IN MATHEMATICS (BENGALURU) AND BIOLOGY;

M.SC. PROGRAMME IN BIOLOGY; DBS AND WILDLIFE BIOLOGY & CONSERVATION, BENGALURU BEGINNING FROM AUGUST 1, 2012

The Tata Institute of Fundamental Research conducts a graduate programme leading to the award of Ph.D. degree, as well as M.Sc. and Integrated Ph.D. degrees in certain subjects.

SUBJECTS: ● **Mathematics:** School of Mathematics, Mumbai (Ph.D. programme, <http://www.math.tifr.res.in>) and Centre for Applicable Mathematics (CAM), Bengaluru (Ph.D. and Integrated Ph.D. programme in Applicable Mathematics, <http://math.tifrbng.res.in>). ● **Physics:** (http://www.tifr.res.in/~sbp): Department of Astronomy & Astrophysics, Department of Condensed Matter Physics & Materials Science, Department of High Energy Physics, Department of Nuclear & Atomic Physics, Department of Theoretical Physics (all at Mumbai campus); National Centre for Radio Astrophysics (NCRA), Pune (<http://ncra.tifr.res.in>), Biophysics at the Department of Chemical Sciences, Mumbai and NCBS, Bengaluru (<http://www.ncbs.res.in/bio>). ● **Chemistry:** Department of Chemical Sciences, Mumbai (<http://www.tifr.res.in/~dcs>); Biological Chemistry at NCBS, Bengaluru (<http://www.ncbs.res.in/bio>). ● **Biology:** Department of Biological Sciences, Mumbai (<http://www.tifr.res.in/~dbs>); National Centre for Biological Sciences (NCBS), Bengaluru (<http://www.ncbs.res.in>). M.Sc in Wildlife Biology and Conservation at NCBS, Bengaluru http://www.ncbs.res.in/msc_program. ● **Computer & Systems Sciences:** School of Technology & Computer Science (STCS), Mumbai (<http://www.tcs.tifr.res.in>). ● **Science Education:** Homi Bhabha Centre for Science Education (HBCSE), Mumbai. For details about admission to the Ph.D. programme in Science Education, please see <http://www.hbcse.tifr.res.in>

In addition to the above, the newly established TIFR Centre for Interdisciplinary Sciences (TCIS) at Hyderabad and International Centre for Theoretical Sciences (ICTS) at Bangalore will conduct a graduate programme. The programme at Hyderabad will be in the selected areas, both theoretical and experimental, in Material Science, Optics and Biology, which is open to Master's level degree holders in Physics, Chemistry or Biological Sciences. The programme at ICTS, Bangalore will be in selected areas of Theoretical Sciences, open to Master's level degree holders in Physics, Chemistry, Mathematics or Biology.

GRADUATE SCHOOL (GS-2012): The academic year starts from August 1, 2012. **Stipend:** Ph.D. and Integrated Ph.D. students receive a monthly scholarship of Rs.16,000/- enhanced to Rs.18,000/- after registration. M.Sc Wildlife Biology and Conservation students receive a monthly scholarship of Rs 10000/-.

ELIGIBILITY:

● **Mathematics: For Ph.D. (Mumbai):** M.Sc./B.E./B.Tech./M.Tech./M.A./B.A./B.Sc. degree holders. **For Ph.D. (Bengaluru):** M.A./M.Sc. degree holders. **For Integrated Ph.D. (Bengaluru):** B.A./B.Sc./B.E./B.Tech. degree holders. ● **Physics & Chemistry: For Ph.D.:** M.Sc./B.E./B.Tech./M.Tech. degree holders. Final year B.Sc. students may also apply. ● **Biology: For Ph.D.:** Masters in Basic Science or Bachelors in Applied Science. These include, M.Sc.(Ag.), B.Tech., B.E., B.V.Sc., B.Pharm. (4 years course), MBBS, BDS, M.Pharm. **For Integrated Ph.D./M.Sc.:** Bachelors in any Basic Science and **For M.Sc. Wildlife Biology & Conservation:** Indian nationals who have a bachelors degree in any discipline (with a minimum of 50% in core subjects), less than 35 years of age as on July 1 2012 and a strong interest in wildlife research and conservation. Candidates in the final year of qualifying degree can also apply. ● **Computer & Systems Sciences: For Ph.D.:** B.E./B.Tech./M.E./M.Tech./M.C.A./M.Sc. (Computer Science / Electrical / Engineering / Electronics Engineering / Information Technology) degree holders. Exceptionally well qualified students with B.E./B.Tech./M.E./M.Tech./M.Sc. or equivalent degrees in other disciplines may also be considered.

*Final year students with consistently good academic record and knowledge of advanced topics may also apply for the relevant subjects.
*Candidates not holding a Master's degree and admitted to a Ph.D. programme can receive an M.Sc. degree by fulfilling prescribed requirements (see <http://www.tifr.res.in/~gsoffice> for details).

ADMISSION PROCEDURE: The admissions procedure (in all subjects except Science Education) consist of a written test at one of the several nationwide centres followed by interviews of shortlisted candidates. The written test will be held on Sunday, December 11, 2011 at the following centres: **Ahmedabad** (St. Xavier's Coll.), **Bengaluru** (UAS), **Bhubaneswar** (Utkal U.), **Chandigarh** (Panjab U), **Chennai** (IIT), **Cochin** (CUSAT), **Delhi** (Miranda House/S.G.T.B. Khalsa Coll.), **Guwahati** (IIT), **Haldwani** (M.B. Govt. P.G. Coll.), **Hyderabad** (Hyderabad U), **Indore** (Devi Ahilya U), **Jammu & Kashmir** (Jammu U), **Jaipur** (India Intl. School), **Kanpur** (IIT), **Kolkata** (St. Xavier's Coll./Jadavpur Univ.), **Madurai** (The Madura Coll.), **Mangalore** (India. Coll.), **Mumbai** (K.V. No. 1, Colaba), **Nagpur** (Shri Ramdeo Baba Kamla Nehru Engg. Coll.), **Patna** (Radiant Intl. School), **Pune** (IUCAA), **Varanasi** (BHU), **Visakhapatnam** (Andhra Univ. Coll. Of Science & Tech.). **Interviews:** For information on subsequent interviews, please check our website.

APPLICATION PROCEDURE: Submit online applications at <http://univ.tifr.res.in>

Only students from remote areas who have no access to internet may send their request for application form along with a self-addressed stamped (Rs.20/-) envelope (size 25cmx17cm) superscribed GS-2012 (Subject). All others to submit online applications only.

APPLICATION FEE (Non-Refundable): Rs.500/- for applications submitted online and Rs.550/- for applications sent manually by post. Female candidates are exempted from payment of application fee. Payment can be made online by Credit/Debit cards **OR** by Demand Draft drawn on State Bank of India.

● **For Biology and M.Sc. Wildlife Biology & Conservation:** DD to be drawn in favour of "National Centre for Biological Sciences", payable at Bengaluru.

● **For all other subjects:** DD to be drawn in favour of "Tata Institute of Fundamental Research", payable at Mumbai. Hall Tickets will be issued only after receipt of application fee. Online applicants sending DD (Rs. 500/-) by post should write their reference code, name and telephone number behind the DD and send it to the address as given below. Students applying manually should send the DD for (Rs.550/-) along with the filled-in application form.

Address for mailing application/DD: ● **For Biology and M.Sc. Wildlife Biology & Conservation:** Admissions Section, National Centre for Biological Sciences, TIFR, GKVK, Bellary Road, Bengaluru 560065. Enquiries to phd@ncbs.res.in or call 080-23666404. Enquiries on M.Sc Wildlife Biology and Conservation to mscwildlife@ncbs.res.in ● **For all other subjects:** University Cell, Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai 40005.

A waiver of application fee on grounds of financial distress may be requested by a letter from the Principal or the Head of the Department justifying the request. Students may apply online and send the waiver letter/request from the Principal/HOD (on their letter head duly signed and stamped) by post with a covering letter mentioning the reference code. Manual applicants may send the waiver letter along with the filled-in application form. These requests would be considered depending on availability of seats in each Centre and cannot be guaranteed.

Candidates may appear for the written test in multiple subjects if the timings do not clash. Please send/submit separate application (including Demand Draft) for each subject.

Last date for receiving applications for Hall Tickets: October 16, 2011.

WALK-IN CANDIDATES: Some candidates without hall tickets may be admitted if seats are available. In this case the application fee is Rs. 800/- (no waivers). Please be present at the Centre 2 hours early for Biology and 1 hour early for other subjects and bring Demand Draft of Rs. 800/- and 2 photos and any photo identity card.

PH: As per rules 3% reservation for students with disabilities shall be provided.

DATE AND TIME OF NATIONWIDE ENTRANCE EXAMINATION: SUNDAY, DECEMBER 11, 2011

Physics, Chemistry, Computer & Systems Sciences and Wildlife Biology & Conservation: 9:30 a.m. to 12:30 p.m.

Mathematics and Biology: 2:30 p.m. to 4:30 p.m.