THE INSTITUTE OF MATHEMATICAL SCIENCES

(An Autonomous Institution, under Dept.of Atomic Energy, Govt.of India)

CIT CAMPUS,THARAMANI, CHENNAI 600 113.

Advt No. IMSc 02/2011-PA/SRF

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Date: April 8, 2011

The Institute of Mathematical Sciences (IMSc), Chennai is a National Institute of higher learning which fosters high quality fundamental research in frontier disciplines of Mathematical Sciences. Applications are invited for filling up of the following temporary positions from the eligible candidates who fulfill requisite qualifications/ specifications mentioned therein. The positions are proposed to be filled purely on contract basis under ongoing plan projects of the Institute initially for a period of one year and may be continued further. IMSc is home to a growing community of computational scientists working on problems in computational biology, complex systems and other interdisciplinary fields.

Sl/ NO	NAME OF THE PROJECT	POSITION AND CODE No.	NO. OF POSITIONS	AREA OF WORK	JOB REQUIREMENT & QUALIFICATIONS
1	**Project of Inter-disciplinary Science and Modelling (PRISM)**	i). Project Assistant	ONE	**Glaciers and Climatic Change**.	The candidate must have B.E/B.Tech/M.Sc in quantitative sciences/ engineering. The candidate must have competence in computer programming; competence in statistical analysis methods; competence in college level Physics and Mathematics
		ii). Project Assistant	ONE	**Collaboration with the Ecology, Behaviour and Conservation Group of the National Institutes of Advanced Studies (NIAS), Bangalore, on theoretical approaches to understand the network of social interactions in nonhuman primates.** This involves I) using complex network techniques to reconstruct primate social networks from field-observation data, and II) developing agent-based models of "strategy" - following individuals to reproduce the observed features of the empirical networks. Such a study will show how primate groups work as a cohesive society, and also shed light on the	The candidate should necessarily have a M.Sc/BE/BTech in quantitative/mathematical sciences or engineering, have some experience in using analytical and computational techniques, and have a strong interest in biological systems. Knowledge of MATLAB or equivalent scientific software is desirable.

				formation of complex societies with hierarchical organization	
2	**IMSc Complex Systems.**	iii). Project Assistant	ONE	**Computer Modeling of the Electro-physiological Dynamics of the heart.** The Project will focus on investigating the genesis of cardiac arrhythmias (such as ventricular tachycardia, fibrillation etc.,) , the role of inhomogeneities in the evolution of cardiac dynamics and on devising improved methods for treatment of arrhythmias using electrical shocks and/or pharmaceutical drugs.	The candidate must have B.E/B.Tech/M.Sc from a reputed Institute with a good background either in physical/mathematical sciences or engineering or in biology, have some experience in using analytical & computational techniques, and have a strong interest in biological systems. Knowledge of MATLAB or equivalent scientific software is desirable.
3	**Department of Bio-Technology - sponsored project on "Developing tools for dynamical modelling of C. elegans neuronal network activity" in the Institute of Mathematical Sciences**	iv). Senior Research Fellow	ONE	**Developing a computational model of nervous system activity in the nematode, Caenorhabditis elegans, the only organism whose entire neuronal network has been mapped in detail**	The candidate should necessarily have a background (MSc/BE/BTech) in quantitative/mathematical sciences or engineering, and, 2 years research experience after completing their MSc/BE/BTech degree. The candidate should be skilled in computational techniques/programming and have a strong interest in biological systems. Knowledge of MATLAB or equivalent scientific software is desirable but not essential.

Consolidated Salary:

Project Assistant: Rs. 16,000 + HRA @ 30% on consolidated salary.

Senior Research Fellow: Rs. 18,000 + HRA @ 30% on consolidated salary.

Interested candidates are requested to confirm their interest through e-mail to the following mail id besides forwarding their resume by April 30, 2011:
   1) <advt02pa@imsc.res.in> **for the position of Project Assistant mentioning the code number.**
   2) <advt02srf@imsc.res.in> **for the position of Senior Research Fellow.**

The Candidates are requested to note the following:

1. No separate letter/confirmation will be sent by this Institute in response to those mails through which the candidates have expressed their interest on or before **April 30, 2011**.

2. All those candidates who have applied for the position of "Project Assistant" (or) "Senior Research Fellow" are requested to report sharp at **0930 hrs on May 16, 2011 [Monday]** at the following venue with one copy of resume already submitted with photo pasted on it , all original certificates and one set of copies of all certificates as to proof of age, educational qualifications and experience.

   Ramanujan Auditorium
   The Institute of Mathematical Sciences
   4th cross road, CIT campus,
   Taramani, Chennai 600 113.

3. The duration of the written test is one hour from 1000hrs to 1100 hrs.

4. The list of successful candidates of the written test will be displayed on the notice board at about 1300 hrs at the test venue.

5. Only those candidates who clear the written test are required to appear for Interview which commences at about 1400 hrs on the same day i.e. **May 16, 2011**.

6. **Those candidates who possess Ph.D. Degree or submitted the Ph.D. Thesis will not be considered for the position of "Project Assistant"/"Senior Research Fellow".**

General Conditions:

1. The prescribed qualifications are minimum and mere possession of the same does not entitle the candidate to be considered for the advertised position. The decision of the Director of this Institute in all matters will be final and no enquiry or correspondence will be entertained in this matter.

2. Only outstation candidates belonging to SC/ST appearing for the written test and selected for interview only will be reimbursed to and fro Second Class Railway Fare/Bus Fare by the shortest route from the station of residence/work place to Chennai on production of tickets.

3. Please visit Careers Page of our website www.imsc.res.in for further information and location guidance.

4. **The e-mails conveying the confirmation received beyond April 30, 2011 will not be considered under any circumstances.**

                                                                                          DIRECTOR