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/PA & RA/2011
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Date: January 11, 2011

The Institute of Mathematical Sciences(IMSc), Chennai is a National Institue 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 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 candiate must have competence in computer programming; competence in statistical analysis methods; competence in college level Physics and Mathematics
		ii). Project Assistant	ONE	**Fluctuation phenomena is Biochemical Reactions.**	The candidate must have a B.Tech in Biotechnology; be familiar with Matlab Programming and have knowledge of stochastic stimulation methods.
		iii). 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" -	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.

				following individuals to reproduce the observed features of the emprical networks. Such a study will show how primate groups work as a cohesive society, and also shed light on the formation of complex societies with hierarchical organization	
		iv). Research Associate	ONE	**Systems Biology (Modeling the Dynamics of Intra-cellular Signaling Networks) and/or Computational Genomics.**	The candidate must have a Ph.D in Bioinformatics/ Computational Biology/Physics/Chemistry/Computer Science or related areas from a reputed institution, and good computational skills. Candidate with previous experience in computational biology will be given preference.
2	**IMSc Complex Systems.**	v). Project Assistant	ONE	**Computer Modeling of the Electrophysiological 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 expereince in using analytical & computational techniques, and have a strong interest in bilological systems. Knowledge of MATLAB or equivalent scientific software is desirable.
		vi). Research Associate	ONE	Same as above.	While other details are same as above,the candidate must have a Ph.D from a reputed Insititue besides the following desirable requirement: Previous experience in working on cardiac modeling and/or computer simulation in massively parallel high-performance computer systems.

Consolidated Salary:

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

Research Associate:

For the Research Associate position, candidates who have submitted their thesis but not yet been awarded Ph.D degree will also be considered.

1.Submitted thesis and yet to receive Ph.D. Degree   = Rs. 21,000/- p.m consolidated
2.Defended thesis (proof to be submitted)   = Rs. 22,000/- p.m consolidated
3.Completed one year from the date of defense   = Rs. 23,000/- p.m consolidated
4.Completed two years from the date of defense   = Rs. 24,000/- p.m consolidated

       In addition to the above consolidated salary the incumbent is eligible for HRA @30% on consolidated salary.

Interested candidates are requested to confirm their interest by e-mail to the Institute's Administrative Officer, Mr. S. Vishnu Prasad <svishnu@imsc.res.in> not later than January 31, 2011, and report for written test followed by an interview at the Institute on February 14, 2011 [Monday].

The candidates should report with applications on plain paper, curriculam vitae, originals and copies of all certificates as to proof of age, educational qualifications, expereince and a passport size photograph. The confirmatory e-mail and the application should clearly mention which of the above positions with code number the candidate is interested in.

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 interview 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.

                                        DIRECTOR