

SRF position in Computational Systems Biology

Computational biology Group, IIT-Delhi

An opportunity to perform research in DST supported project that involves building of mathematical models to understand the functional relationship between circadian rhythms and memory formation under stressful condition. In this project, mathematical model of circadian rhythms based on gene regulatory mechanisms will be unified with the mathematical model of calcium signal transduction pathway to understand and predict the formation of fear memory under stressful conditions. The research scholar will spend full time on this project to build new models and expected to contribute significantly to prepare the results for publication and presentation, and to contribute to grant proposals.

Required Qualifications: Masters in physics/chemistry/mathematics (or) MTech in bioengineering, chemical (or) Masters in any traditional field of science with outstanding performance throughout the program. Candidate should have cleared GATE/UGC-CSIR examinations. Applicant should have done basic mathematics courses like calculus, differential equations, numerical analysis etc in their degree program and have obtained good grades in those courses. Knowledge of MATLAB and C or at least one traditional programming language is absolutely necessary. Strong inclination to understand biological concepts is a must for this research work as this project is about modeling biological systems.

Salary: A fixed salary of Rs 18000 PM including HRA will be paid.

Last date for application: This advertisement is open until suitable candidate is found for the project.

Preferred Qualifications:

- Expertise in dynamical systems theory, bifurcation theory, numerical simulations, parameter estimation.
- Independence and high motivation for carrying out interdisciplinary research.
- Excellent communication skills and ability to work independently.
- Good working habits.

Interested candidates should submit both curriculum vitae and statement of interest in PDF format to sriramk@iiitd.ac.in and should clearly mention in the subject "Application for SRF".