

Applications are invited for a post-doctoral position in biological-physics at IOP Bhubaneswar

Applications are invited for a post-doctoral position at IOP Bhubanswar. The work is a part of SERB funded project on "*Entropic and active forces on confined polymers: Organization and dynamics of bacterial chromosomes*".

Applicants must have obtained a PhD degree within the last three years, have proven record of expertise in numerical simulations and analytical techniques of statistical mechanics and/or soft condensed matter physics. Experience in molecular dynamics simulations and/or active systems will be desirable.

The selected candidate will work at IOP Bhubaneswar in the group of Dr. Debasish Chaudhuri. The work may involve collaboration with experimental groups in India and abroad.

Goal : *In this project we will explore a physical model of bacterial chromosome using numerical simulations, and analytical calculations to understand emergent morphology of chromosome, dynamics and segregation, in presence of molecular crowding and confinement. Local loop formation on DNA due to associated proteins will be examined using Langevin and active dynamics.*

Duration: Initial appointment of the candidate will be for one year, extendable to another year depending on the performance of the candidate and subject to availability of funds.

No. of Positions: 1

Fellowship: The starting emolument for a candidate with fresh Ph.D. degree will be INR 36,000/ month. Candidates with prior postdoctoral experience may be offered an increased salary as per institute norms. A candidate who has submitted Ph.D. thesis, awaiting award of the degree, will be offered INR 32,000/ month, until the degree is awarded.

Application procedure: Candidates are requested to send a (i) CV (mentioning the date of Ph.D. degree awarded), (ii) a list of publications, (iii) a list of referees, and arrange for sending two reference letters "mentioning the name of the candidate in subject line" directly to: serb16_1454@iopb.res.in.

Last Date of receipt of applications : 10th November, 2017.

Contact Person:

Dr. Debasish Chaudhuri

Institute of Physics, Bhubaneswar, India

Email: serb16_1454@iopb.res.in

group website: <http://www.iopb.res.in/~debc/index.html>