

BOSE INSTITUTE
KOLKATA

ADVT. NO. BI/09/2009-10

RECRUITMENT OF TWO (02) NOS. JUNIOR (INSTITUTE) RESEARCH SCHOLAR

Tenable in the Department of Chemistry under Institutional Programmes –
(i) Structure, Function and Engineering Protein and (ii) Development of Systems Biology

i. FOR POSITION –1 (Dr. Suman Kr. Banik)

- 1. *ESSENTIAL QUALIFICATION*** : A good M. Sc. in Physics / Chemistry / Biochemistry / Biophysics with NET / GATE qualifications / other discipline interested in doing research work in interdisciplinary topic.
- 2. *DESIRABLE QUALIFICATION*** : Knowledge of chemical kinetics differential equation, molecular biology, biochemistry and/or molecular genetics is desirable. The applicant with Knowledge of nonlinear dynamics will be given preference.
- 3. *BRIEF DRESCRIPTION OF WORK*** : Eukaryotic cells respond to the changes made in the environment through the activation of their signaling pathways. Mitogen Activated Protein Kinase (MAPK) pathway is one of them. In our dry lab we plan to model and study MAPK pathways in eukaryotic cell based on the existing experimental results to understand the signaling cascade in details.

ii. FOR POSITION –2 (Dr. Jayanta Mukhopadhyay)

- 1. *ESSENTIAL QUALIFICATION*** : A good M. Sc. in Biochemistry / Biophysics / Biotechnology or any relevant subject with NET / GATE qualifications.
- 2. *DESIRABLE QUALIFICATION*** : Candidates having B.Sc. level knowledge of Physics and Chemistry is desirable.
- 3. *BRIEF DRESCRIPTION OF WORK*** : Transcription is the first step in gene expression where most regulation occurs. RNAP core enzyme together with sigma factors and numerous regulators orchestrates the gene expression in bacteria. Our lab seeks to characterize the interactions among RNAP, sigma factors, and regulators required for various gene expressions in *Mycobacterium tuberculosis*. The proposed work will use integrated biophysical, biochemical and genetic approaches, along with a recombinant *in vitro* transcription system to address two specific aims :
 - A. Determine the role of alternative sigma factors in gene regulation of *M. tuberculosis*.
 - B. Identify and characterize inhibitors of *M. tuberculosis* gene expression.

FELLOWSHIP : Rs. 12,000/- p.m., plus admissible HRA and Medical benefit.

AGE : Below 28 years (relaxable in case of SC/ST/OBC/WOMEN candidates only).

GENERAL

1. Application should be submitted in the prescribed format given here in below.
2. Copies of Certificates and Testimonials should accompany the application.
3. Envelop should be superscribed with the Advertisement No. and post applied for.
4. Age will be reckoned on the last of date of receipt of application.
5. 2nd Class to and fro Railway fare by shortest route will be reimbursed to the outstation (out of West Bengal) candidates on production of Railway Tickets.
6. Application should be submitted to the Office of the Registrar, Bose Institute, P-1/12, C.I.T. Scheme VII-M, Kankurgachi, Kolkata – 700 054.
7. Last date for receipt of application is 2nd July 2009.

REGISTRAR

APPLICATION FORM

1. Post Applied for :

2. Advt. No. & Date :

3. Name in capital letters :

4. Sex :

5. Marital Status :

6. Date of Birth (dd/mm/yyyy) :

7. Father's Name :

8. Occupation :

9. Mother's Name :

10. Occupation :

11. Present Address :

12. Permanent Address :

13. E-mail Address :

14. Contact No. :

15. Details of Qualification :

Name of the Examination	Name of the Board / University	Year	Subject	Percentage of Marks
Secondary or equivalent				
Higher Secondary or equivalent				
Graduation				
Master Degree				
NET / GATE				

16. Any other qualification :

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