



SATYENDRA NATH BOSE NATIONAL CENTRE FOR BASIC SCIENCES
Block-JD, Sector-III, Salt Lake, Kolkata 700106

SNB/Advt/22-23/009

27th October, 2022

Sub : Advertisement for Faculty Recruitment

Satyendra Nath Bose National Centre for Basic Sciences (SNBNCBS), JD Block, Sector – III, Salt Lake, Kolkata –700106 (established in 1986 with a 15 acre green campus) is an autonomous institution funded by the Department of Science and Technology, Government of India. The Centre, with a current strength of more than 30 faculty members, more than 15 postdoctoral research fellows/scientists and about 180 students, has research activities in different focused areas of basic sciences. It has research activities (Theoretical, Computational and Experimental) in different areas of Physical, Chemical and Mathematical sciences. In recent years the Centre has made significant investment to establish new experimental research and computational facilities (visit our website: <http://newweb.bose.res.in>). The Centre runs a post M.Sc. and an Integrated Ph.D. Research programme.

The Centre consists of four Departments, (i) Astrophysics and High Energy Physics (DAHEP); (ii) Chemical and Biological Sciences (DCBS); (iii) Condensed Matter and Materials Physics (DCMMP) and (iv) Physics of Complex Systems (DPCS). The present and future research activities of the four departments are as listed below.

(i) DAHEP: Astrophysics and Astrochemistry: Theory and experiments, Observational Astronomy in Optical and Near-IR, High Energy Physics and Quantum Field Theory; Cosmology, Quantum gravity; Generalized uncertainty principle; Quantum foundation.

(ii) DCBS: Ultrafast (fluorescence), THz and GHz frequency and cavity ring down spectroscopy; Medical instrumentations; Non-equilibrium statistical mechanics and quantum mechanics of chemical systems; Computational biology.

(iii) DCMMP: Experimental condensed matter physics, Theoretical and computational condensed matter physics, Nanoscience and technology, Physics at low dimensions, Strongly correlated electron systems, Low temperature quantum phenomena, Quantum and topological materials, Semiconductor, Spintronics and spin dynamics, Photonics, Ultrafast phenomena.

(iv) DPCS: Statistical Physics: Complex Systems in and out of Equilibrium, Quantum Optics and Quantum Information Science; Quantum Condensed Matter Theory; Soft Matter Physics.

SNBNCBS invites applications from the Indian nationals for the posts of **Assistant Professor** with Pay Level-12 and **Associate Professor** with Pay Level-13. Applications

are invited from candidates having overlapping research interests with activities in these four departments.

Faculty members participate in the research and teaching activities. A faculty member is expected to execute his / her own science research programs, secure extramural research funding, supervise students in the Ph. D. level and mentoring in the post-doctoral level as well as take part in teaching the students on a regular basis.

The following research areas will be given preferences:

- a. Experimental Optics: Classical and/or Quantum Optics;**
- b. Machine Learning and its Applications in Astrophysics/Materials Science/Biological Systems;**
- c. Single-molecule Spectroscopy experiments;**
- d. High Energy Physics Experiment/Theory.**

B. Qualification required

Minimum Qualification (for all faculty positions): Ph. D. with first class or equivalent (in terms of grades, etc.) at the preceding degree in the appropriate branch, with a very good academic record throughout (also see in Notes below). Successful applicants after joining are expected to carry out independent research and guide Ph. D. students. He / she are expected to publish high quality research papers in peer -reviewed journals.

Associate Professor: Not exceeding 45 years of age (as on 15.12.2022) with five years' teaching and / or research experience of which at least two years should be at the level of Assistant Professor or equivalent. Past records of securing extramural funding and supervising postgraduate students are desirable.

Assistant Professor: Not exceeding 40 years of age (as on 15.12.2022) and having post-doctoral experience of at least three years.

The incumbents are expected to carry out independent research and guide Ph.D. students. He is expected to publish high quality research papers in peer-reviewed journals.

C. Pay level and initial pay at the entry point

Post	Pay Level (7th CPC)	Initial Pay
Associate Professor	13	Rs. 1,23,100/-
Assistant Professor	12	Rs. 78,800/-

The pay carries all other allowances as admissible to a Central Government employee stationed at Kolkata. The other benefits, such as book grants, research initiation grant, financial support towards national and international conferences etc. shall be permitted as per the Centre's norms.

D. Application

An application form for faculty positions in the form of a .doc file is available at [CLICK HERE](#). The application must be complete in all respects as prescribed in this form. The duly filled and appropriately signed form forwarded through proper channel should be sent along with all enclosures to: **Registrar, Satyendra Nath Bose National Centre for Basic Sciences, Block-JD, Sector-III, Salt Lake, Kolkata 700106**. A soft copy should be sent by e-mail to: facultyapplications_2022@bose.res.in (photo and signature not required in soft copy). The last date of receiving applications is 15th December 2022.

More information about the on-going research in various departments and teaching activities may be obtained at the site <http://newweb.bose.res.in>. The process of selection will consist of a seminar and academic interaction followed by a Selection Committee Meeting (for shortlisted candidates only).

E. General Terms and Conditions

The experience can be relaxed by the Selection Committee for exceptional candidates with brilliant academic record and outstanding research profile. Age relaxation will be as per Government of India Rules.

Mere fulfilling of the minimum requirements does not necessarily make an applicant eligible to be called for interview. Reservations rules will be applicable as per Government of India norms.

The Centre reserves the right to withdraw the advertisement at any time without assigning any reason.

Applications not found suitable for higher positions may be considered for lower positions in the same area of specialization, as per decision of the Competent Authority.

F. Additional Information

1. Applicants are not required to mention any department's name while sending the application. Once selected, a mutual concurrence of the applicant and the Centre would determine which department the applicant is going to join.
2. (a) On the first page of the Application Form, (columns 1 to 11), the desired particulars are to be filled in by the applicant supported by certificates and documentary proofs (where necessary).

(b) On the second page (columns 12 to 16) separate sheet (s) for each sub-heading in the format is indicated to be used indicating cross references in the columns provided and the annexure attached.

(c) All annexure and the application form must bear full name and signature of the applicant on each page at the bottom.

3. Applicants who are employed in Government, Semi-Government Organizations or Institutions should send their applications **THROUGH PROPER CHANNEL** else they will be required to produce a **NO OBJECTION CERTIFICATE** from their employer at the time of interview.
5. Incomplete applications will be rejected.

Registrar