

SATYENDRA NATH BOSE NATIONAL CENTRE FOR BASIC SCIENCES Block-JD, Sector-III, Salt Lake, Kolkata 700098

ADVERTISEMENT FOR FACULTY RECRUITMENT Advertisement No.: SNB/60.4/16-17/014 (Updated on: April, 2018)

Satyendra Nath Bose National Centre for Basic Sciences (SNBNCBS), JD Block, Sector –III, Salt Lake, Kolkata –700098 (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 150 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 facilities and computational facilities (visit our website: http://newweb.bose.res.in). The Centre runs a post M. Sc. and an Integrated Ph. D. Research programmes.

SNBNCBS invites applications from the Indian nationals for the posts of **Assistant Professors** with pay in the pay band of Rs. 15600-39100 with Grade Pay of Rs. 7600 and **Associate Professors** with pay in the pay band of Rs. 37400 -67000 with Grade Pay of Rs. 8700.

The Centre consists of four Departments, (i) Astrophysics and Cosmology (DAC); (ii) Chemical Biological and Macro-Molecular Sciences (DCBMS); (iii) Condensed Matter Physics and Material Sciences (DCMPMS) and (iv) Theoretical Sciences (DTS). The research activities of the four departments are as listed below.

(i) **DAC**: Astrophysics and Astrochemistry: Theory and experiments; Analysis of X-ray Data of Past, Present and Future Satellites and comparison with theoretical models; Cosmology; dark matter; dark energy; large scale structure; cosmic microwave background; Quantum Information Science: theory & experiment; Observational Astronomy in Optical and Near-IR wavelengths - handling of large imaging and spectroscopic data sets, data pipeline work, observing with medium/large telescopes, and knowledge of Astronomical Instruments.

(ii) **DCBMS**: Soft materials, statics and dynamics of macromolecules in solution, chemical kinetics, structure and dynamics of biologically important molecules. Ultrafast (fluorescence), high frequency and ring down spectroscopy. The theoretical studies involve applications of equilibrium and non-equilibrium statistical mechanics, investigations of biology-inspired physics and quantum chemical calculations.

(iii) **DCMPMS**: Experimental Condensed Matter Physics, Theoretical and Computational Condensed Matter Physics, Nanoscience and Technology and Physics at Low-dimension, Strongly Correlated Electron Systems, Low Temperature Quantum Phenomena, Spintronics and Spin Dynamics, Photonics, Ultrafast Phenomena.

(iv) **DTS:** Statistical Physics of Complex Systems, Systems in and out of Equilibrium, High Energy Physics and Quantum Field Theory, General Relativity, Gravity and Cosmology, Mathematics and Mathematical Physics, Quantum Optics and Quantum Information, , Non-linear Dynamics, Quantum Field Theory- Condensed Matter Physics Interface.

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

Faculties 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.

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: Preferably below 45 years of age 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: Preferably below 40 years of age 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.

Post	Grade Pay	Pay Band (Rs.)	Total approximate emoluments (Rs.)
Associate Professor	Rs. 8,700	PB-4 (Rs. 37400-67000)	Rs. 1,07,500/-
Assistant Professor	Rs. 7,600	PB-3 (Rs. 15,600-39,100)	Rs. 70,980/-

C. Pay scales (unrevised) and total emoluments at the entry point

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. <u>Application</u>

An application form for faculty positions in the form of a .doc file is available at <u>CLICK</u><u>HERE</u>. 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: The Chairman, Faculty Search Committee, Satyendra Nath Bose National Centre for Basic Sciences, Block-JD, Sector-III, Salt Lake, Kolkata 700106. A soft copy is to be sent by E-mail to: <u>fsc@bose.res.in</u> (photo and signature not required in soft copy).

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

E. General Terms and Conditions

- □ Mere fulfilling of the minimum requirements does not necessarily make an applicant eligible to be called for interview.
- □ The age and experience can be relaxed by the Selection Committee for exceptional candidates with brilliant academic record and outstanding research profile.
- \Box Reservations rules will be applicable as per Government of India norms.
- \Box 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). Do not send originals at this time. Soft copies preferred.

(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. Higher initial pay is admissible to exceptionally qualified and deserving applicants as per decision of the Competent Authority.
- 4. 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