



## S.N. Bose National Centre for Basic Sciences Sector III, Block – JD, Salt Lake, Kolkata 700 098

The S.N. Bose National Centre for Basic Sciences, an autonomous institute under the Department of Science & Technology, Government of India invites applications from Indian nationals for the post of **Research Associate/Project Assistant** to work at DST sanctioned research program, '**Advanced Materials Research Unit**'.

**Description:** In this project, as proposed to the Department of Science and Technology, funds have been allocated for the setting up of a specialized unit within the S.N. Bose National Centre for Basic Sciences for facilitating interdisciplinary research in the area of computational materials science. Typical academic problems which will be considered within the ambit of the Advanced Materials Research Unit may be loosely classified under four broad categories: (a) Electronic Materials, (b) Behavior of Materials at Long Length scales, (c) Functional Soft Matter, and (d) Quantum Phenomena and Confined Materials. In the first category, problems related to electronic behaviour of novel and complex bulk materials like oxides, multiferroics, CMR materials and materials at nano-scale will be dealt. In the second category, large length scale phenomena like interface motion, microstructure selection and charge or energy transport will be considered. In the third category, focus will be on classes of materials consisting of colloidal dispersions, and biologically relevant macromolecules in aqueous solution. In the fourth category, problems involving quantum phenomena like cold atoms in optical traps, ultra cold dipolar fermionic atoms in bilayers, phase transitions in quantum spin chains etc. will be considered.

**Requirement:** The project will involve quantum mechanical/classical calculations and computer simulation studies.

**Qualifications:** *For Research Associate:* A fresh Ph.D. who has submitted thesis experienced in Quantum chemical/Classical Calculations and/or Computer simulations.

*For Project Assistant:* Master's degree in Physics or Physical Chemistry.

**Salary:** *For Research Associate:* Rs 18,000 (consolidated) per month + HRA as per rules

*For Project Assistant:* Rs 12,000 (consolidated) per month + HRA as per rules.

**Period of Appointment:** *For Research Associate:* Initially for a period of one year, with the possibility of extension of another one year.

*For Project Assistant:* Initially for a period of two years, with the possibility of extension of another one year.

The Project Assistant position may be converted at a later stage to a Ph.D. programme if the candidate can clear the regular Ph.D. interview held by SNBNCBS.

Interested candidates may apply with complete bio-data and two letters of reference to Dr T. Saha-Dasgupta (tanusri@bose.res.in) within 1 month of the date mentioned above. The subject line may be inscribed with the words '**Application for Research Assistant/Project Assistant**'. Applications by e-mail are acceptable.