

**बसु बिज्ञान मन्दिर**  
**BOSE INSTITUTE**  
(भारत सरकार के विज्ञान और प्रौद्योगिकी  
मंत्रालय द्वारा वित्तपोषित सोसाइटी)  
(A Society for Scientific Research financed by  
the Ministry of Science & Technology, Govt. of India)

**ADVT. NO. : S/PHY/04/2013-14**

Bose Institute, Kolkata, invites applications from Indian Citizens for the following temporary positions in the **DST** sponsored project entitled “**ALICE-Operation and Utilization**”. Duration of all the following positions will be initially upto 31<sup>st</sup> March 2014.

**A. Research Associate (Position-01) :**

**Essential Qualification** : Ph.D. in experimental nuclear / particle physics.

**Desirable Qualification:** i) Experience in data analysis using ROOT based analysis tools preferably in large collider accelerator experiments.  
ii) Knowledge of writing analysis codes in C++  
iii) Ability to work within a large collaborative environment.

**Associateship** : Rs. 22,000/- p.m., plus admissible HRA and Medical benefit

**B. Junior Research Fellow (Position-02) :**

**Essential Qualification** : 1<sup>st</sup> class M.Sc. degree in Physics from recognized University with CSIR-UGC NET-JRF or CSIR-UGC NET-LS / GATE qualification.

**Fellowship** : Rs. 16,000/- p.m., plus admissible HRA and Medical benefit for CSIR-UGC NET-JRF  
Rs. 12,000/- p.m., plus admissible HRA and Medical benefit for CSIR-UGC NET-LS / GATE.

**C. Technical Assistant (Position-01) :**

**Essential Qualification** : 1<sup>st</sup> class B.E. / B.Tech/M.Sc. in electronics from recognized University

**Desirable Qualification** : Experience in working with FPGA based embedded system developments.

**Consolidated Pay** : Rs. 20,000/- p.m.

**Age\* :**

For **Research Associate** - Below 35 years  
For **Junior Research Fellow** - Below 28 years  
For **Technical Assistant** - Below 30 years

**\*(relaxable in case of SC/ST/OBC/WOMEN candidates only as per rule).**

Interested and eligible candidates should apply on plain paper quoting advertisement No. and position on the envelop as well as application with complete Bio-data giving e-mail ID / Phone No. and details of qualification i.e. examination passed, year, division, percentage of marks from Secondary onwards with Attested copies of testimonials addressed to the **Registrar, Bose Institute**, P-1/12, C.I.T. Scheme VII-M, Kankurgachi, Kolkata – 700 054 on or before **17<sup>th</sup> May, 2013**.

**RESEARCH ASSOCIATE, JUNIOR RESEARCH FELLOW AND TECHNICAL ASSISTANT  
POSITIONS IN HIGH ENERGY PHYSICS GROUP AT BOSE INSTITUTE, KOLKATA**

The high energy physics group at Bose Institute is involved in relativistic heavy ion collision experiment ALICE at Large Hadron Collider, CERN. In particular we are responsible for R&D for the proposed forward calorimeter to be included in the ALICE upgrade program. This new sampling type calorimeter will measure photons,  $\pi^0$  and jets at the forward rapidities enabling access to the small-x physics at these energies. Alongwith this we are taking part in the challenging task of development of a common readout unit (CRU) which will be used by all sub detectors in ALICE post a luminosity upgrade in LHC. The components for this must be radiation hard and based on FPGA technology. The fact that some of the detectors will ship data at a rate of more than 1 GBit/s on a single link to this CRU poses a challenge in terms of board design, layout and overall timing synchronisation.

We are also involved in analysis of the available data from the experiment after its running at several center of mass energies for the last two years. Several open problems in the area of heavy flavor physics and other topics are available for analysis.

The JRFs will be working in data analysis. The candidate for Research Associate has to take the leadership in data analysis forming a cohesive group with the JRFs. Both the JRFs and RA are also expected to take part in the detector R&D program as and when required.

For further information please contact : **2569 3109** or [supriya@bosemain.boseinst.ac.in](mailto:supriya@bosemain.boseinst.ac.in)

**REGISTRAR**