



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

**Advertisement No.: IRCC/EXT236/2022**

**Job Title**

Junior Research Fellow

**Job Reference Number**

50364378

**Application End Date**

24.11.2022

**Type of Employment**

Proj. Staff Contract

**No. of Position(s)**

1

**IITB Project Recruitment:**

Project title: Compton imaging in Hard x-rays (Demonstrate the Feasibility of using Compton Imaging Techniques at Hard X-ray Energies)

About the project: We are building a prototype Compton Imager for eventual launch into space. The project involves working with development of electronics boards, detector interfaces, FPGA programming, and labview development on a PC. The project has an aggressive development timeline.

**Essential Qualifications & Experience:**

Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course selected through a process described through any one of the following:

- a. Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE.
- b. The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc.

Candidate must have at least one year of experience in FPGA programming, labview development.

**Job Profile:**

The candidate will undertake several of the following tasks:

- \* FPGA programming for detector interfacing and communication with host PC
- \* Implementation of signal processing of detector outputs - on FPGA and/or host PC
- \* Development of data visualisation tools on host PC using LabVIEW or python GUI
- \* Board design and layout for FPGA + detectors + power electronics
- \* Testing and characterization of assembled electronics boards and detectors
- \* Job may require frequent travel to collaborating Indian institutes.

**Pay Details:**

Consolidated salary Rs.31000/- p.m. + HRA

**To apply, go to  
<https://ep.iitb.ac.in/jobsearch#>  
and select IRCC/EXT236/2022**

***General information:***

The position is temporary for a period of 1 year and tenable only for the duration of the project. The appointment is for time bound project and the candidate is required to work mainly for the successful completion of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.

Candidates called for interview will be required to attend at his/ her own expenses.

For any queries/clarification please contact: [recruit@ircc.iitb.ac.in](mailto:recruit@ircc.iitb.ac.in)