



भारतीय प्रौद्योगिकी  
संस्थान जम्मू  
INDIAN INSTITUTE OF  
TECHNOLOGY JAMMU

विद्यया धनं सर्वधनं प्रधानम्

An Institution of National Importance under MHRD, Govt. of India  
Department of Physics

Advt. No.: IITJmu/R&C/Advt/2021/12

Date: 23.03.2021

**Advertisement for the Position of JRF**

Applications are invited from the interested candidates for one post of Junior Research Fellow (JRF) to work on the R&D project titled “**Room Temperature Electrically Controlled Single Photon Emitter**” sanctioned by the Science and Engineering Research Board (SERB). The JRF will be appointed initially for one year (on contract) or up to the duration of the project, whichever is earlier.

The current project focuses on the design and development of room temperature single photon emitters based on van der Waals materials. The main objectives of this project will be,

- Design and development of new kind of single photon emitters.
- Setting up optics for single photon detection: designing a Hanbury Brown-Twiss (HBT) set up
- Performing correlation measurements to check photon antibunching

The candidate requires under this project will work on device fabrication and building van der Waals heterostructures along with setting up optical experiments.

No.	Position	Requirement	Duration	Consolidated salary	Number of positions
1	Junior Research Fellow	Basic understanding of device fabrication, electroluminescent devices, optics, spectroscopy	Initially for one year or completion of the project, whichever is earlier.	Rs. 31,000/- (Per month) +HRA	01 (one)

**\*Eligibility and essential skills:**

- 1. M. Sc./MS (R) in Physics/Material Science/Nanoscience or equivalent with a valid GATE score/CSIR-NET qualification.**
- Candidate having the following educational background can apply
  - M. Sc. /M.S(R) with at least 6.5 CGPA or 60 percent marks in aggregate from a recognized technical institute/university as a full-time program.
  - B.Tech/B.E in Electrical/Electronic Engineering, Instrumentation and relevant discipline with 6.5 CGPA 60 percent marks and valid GATE score
  - M.Tech/M.E/MSc./M.S(R) in Electrical/Electronic Engineering, Instrumentation and relevant discipline with 6.5 CGPA 60 percent marks
3. Knowledge about optics, device fabrication techniques and instrument interfacing will be desirable.
4. Preference may be given to the candidate having appropriate knowledge of experimentation and scientific writing.

## **Application Process**

Duly filled application form along with the requested details, scanned copies of certificates, other supporting documents, including the letter of experience, should be uploaded through the online portal (<https://apply.iitjammu.ac.in/#/home>) latest by **April 3<sup>rd</sup>, 2021**. Please apply through the [contract/project staff/JRF/SRF] tab on the referred application portal. Candidates who are already employed should produce a relieving certificate from their employers if selected. The written test/interview will be conducted for all shortlisted candidates.

### **Attention:**

1. The applicant will be responsible for the authenticity of the information, other documents, and photographs submitted.
2. The Institute reserves the right to accept the application at any time and consider candidates with exceptional credentials without applications. Qualification and experience may be relaxed at any point of time for otherwise exceptional candidates.
3. Merely possessing the prescribed qualification does not ensure that the candidate would be called for an Interview. The candidates may be shortlisted based on merit and need for the project.
4. Shortlisted candidates will be informed by e-mail about the interview. So, the candidate must provide valid e-mail IDs, phone number information in their applications.
5. Shortlisted candidates must present themselves for the interview on the interview date with an updated CV and original and attested photocopies of mark sheets/ certificates in support of their academic qualifications. Only shortlisted candidates will be called for the interview. The time of the interview will be informed to the shortlisted candidates by e-mail. The interview will be held by using the online platform.
6. Candidates who are already employed should produce a relieving certificate from their employers if selected.
7. Bio-data format is being provided with this notification. The candidates must send duly filled in bio-data format and photocopies of required documents in a single PDF file by e-mail ([biswanath.chakraborty@iitjammu.ac.in](mailto:biswanath.chakraborty@iitjammu.ac.in)) after filling the online application form.
8. **It is expected that the selected candidate will join by the 1<sup>st</sup> week of May 2021.**
9. The last date for receiving the duly filled in application is **April 3<sup>rd</sup>, 2021**, through an online portal.
10. The Interview will be held online on **April 9<sup>th</sup>, 2021**.

### **Address for Correspondence**

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