



भारतीय प्रौद्योगिकी  
संस्थान जम्मू  
INDIAN INSTITUTE OF  
TECHNOLOGY JAMMU

विद्याधनं सर्वधनं प्रधानम्

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

Advt. No.: IITJmu/R&C/Advt/2021/5

Dated: 22.01.2021

## 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 “**Molecular Dynamics Modeling of Electrostatic Turbulence in Dusty Plasma**” sanctioned by the Science and Engineering Research Board (SERB), New Delhi. The staff will be appointed initially for one year (on contract), and his/her services can be extended for next year based on the performance review.

The current project focuses on the modeling turbulence in the dusty plasma using molecular dynamics simulations. The main objectives of this project will be,

- Modeling dusty plasma as one component plasma using molecular dynamics.
- Developing diagnostics to analyse modeling data to interpret the underlying Physics.
- Contributing to dusty plasma experiments in laboratory.

The candidate requires under this project will work on the synthesis and analysis of novel nanoporous materials for energy storage applications.

No.	Position	Requirement	Duration	Consolidated salary	Number of positions
1	Junior Research Fellow	The work requires study of dusty plasmas at particle level for its collective properties. Work also involves some amount of C++ and/or MATLAB code development.	01 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.**
2. 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. Sc./equivalent degree from the reputed Institute with at least 6.5 CGPA or 60 percent marks.
3. Knowledge about molecular dynamics simulations, MATLAB will be of advantage.
4. Preference will be given to the candidate having appropriate knowledge of plasma modelling 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 **February 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 only the shortlisted candidates by e-mail. The interview will be held by using the online Zoom 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 ([sanat.tiwari@iitjammu.ac.in](mailto:sanat.tiwari@iitjammu.ac.in)) after filling the online application form.
8. **It is expected that the selected candidate will join by the last week of Feb 2021.**
9. The last date for receiving the duly filled in application is **February 3<sup>rd</sup>, 2021**, through an online portal.
10. The Interview will be held on **Feb 6, 2021**.

### **Address for Correspondence**

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<https://sites.google.com/view/shivalikplasmalab/home>