



# Indian Institute of Information Technology Allahabad

Department of Electronics and Communication Engineering

(An institute of National Importance by Act of Parliament)

Deoghat, Jhalwa, Prayagraj (UP) - 211 015, India

Advt. No. IIITA/EC/SB/CRG/2023/000476

Dated - 18/12/2024

## Walk-in-Interview-Advertisement for the Post of Junior Research Fellow (JRF) (On Contract)

Applications are invited for the post of **Junior Research Fellow (JRF)** (on contract) in a three-years research project sanctioned by **Anusandhan National Research Foundation (ANRF) Science and Engineering Research Board (SERB) Core Research Grant Scheme**.

The JRF is supposed to work in the area of electron-hole interactions (excitons) in semiconductors. The candidate is expected to carry out massive parallel computations (high performance computers located in CDAC, India & European supercomputer clusters) in the area of semiconductor physics. It is therefore desirable that the candidate should have some prior knowledge in the area of density functional theory. The results achieved from this project will be showcased in various reputed high quality journals such as Phys. Rev. B., JPCC, etc.

The JRF selected for this position may also apply for the regular Ph.D. program in the Department of Electronics and Communication Engineering, provided she/he satisfies the eligibility criterion followed by the selection process laid down by the institute.

The candidates interested in applying must **email** a completed application in the prescribed format along with copies of supporting documents as a single pdf attachment to [sitangshu@iita.ac.in](mailto:sitangshu@iita.ac.in) with subject line "Advt. No. IIITA/EC/SB/CRG/2023/000476" on or before **31<sup>st</sup> December 2024**. The shortlisted candidates' names will be posted on the institute's website or communicated individually by email.

**Title of the Project:** "Ab-initio techniques of obtaining exciton-phonon driven optical luminescence and nonlinear responses in two-dimensional semiconductors"

**Name of Position:** Junior Research Fellow (JRF)

**Number of Positions:** 01 (one)

**Project Duration:** Maximum three (03) years or date of completion of the project

**Essential Qualifications:** M.Sc. (Physics/Chemistry/Electronics)/M.E./M.Tech./MS/B.E./B.Tech in (ECE/ CSE/ IT/ EI /EE/ all relevant disciplines) and **MUST** have secured at least 65% cumulatively or equivalent CGPI in the qualifying degree. A 5% relaxation shall be applicable for SC/ST/PWD Candidates. Candidates **MUST** have GATE Score/UGC/CSIR NET or JRF certificate.

**Fellowship:** Rs. 37,000/- PM (Fixed) for two years and Rs. 42,000/- PM (Fixed) for the third year.

**HRA:** As per institute norms (If applicable).

**Desirable Skills:** The applicant may be preferred if she/he has the prior knowledge of density functional theory and tools such as Quantum Espresso, etc., material science/solid state physics/chemistry, familiarity in unix platform, basics of parallel programming and coding skills such as in shell script/python, etc.

For more information, logon to: <https://profile.iita.ac.in/sitangshu/>

Name of Principal Investigator: Dr. Sitangshu Bhattacharya

Designation: Assistant Professor

Department of Electronics & Communication

Indian Institute of Information Technology-Allahabad



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## Note(s)

1. The candidate should be able to travel across various Institutes/Research Centers for the project related work whenever needed.
2. The applicant will be responsible for the authenticity of the information, other documents, and photographs submitted.
3. The institute reserves the right to accept/reject the application at any time, and/or consider candidates of exceptional credentials without applications. Qualification and experience may be relaxed at any point of time for exceptional candidates.
4. Mere, possessing the prescribed qualification does not ensure that the candidate will be called for an Interview. The candidates will be shortlisted on the basis of merit and need of the project.
5. Shortlisted candidates will be informed by e-mail about the interview date.
6. Shortlisted candidates have to present themselves for the interview on the interview date with updated CV, original and attested photocopies of mark sheets/certificates in support of their academic qualifications.
7. Applicants in employment (private, government or any other organization) are required to submit a “**No Objection Certificate**” from the employer at the time of interview.
8. No TA/DA will be paid for appearing in the interview.
9. The first and foremost responsibility of the candidate is to fulfill the jobs’ requirements to complete the above mentioned project in timely manner.
10. The association between PI and the candidate can be discontinued at any time by giving one month’ s notice in writing either by the PI of the project to the candidate, or by candidate to the PI of the project.
11. Candidate selected for this position may also apply for the regular Ph.D. program in the Department of Electronics and Communication Engineering, provided he/she satisfies the eligibility criterion followed by the selection process laid down by the institute (IIITA).
12. Hostel accommodation may be provided as per institute norms.

For more information, logon to: <https://profile.iiita.ac.in/sitangshu/>

Name of Principal Investigator: Dr. Sitangshu Bhattacharya

Designation: Assistant Professor

Department of Electronics & Communication Engineering,  
Indian Institute of Information Technology-Allahabad.



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For office use only

Application No .....

## APPLICATION FORM

**Research Project Entitled-** “Ab-initio techniques of obtaining exciton-phonon driven optical luminescence and nonlinear responses in two-dimensional semiconductors”

**File No. :** IIITA/EC/SB/CRG/2023/000476

**Funding Agency:** Anusandhan National Research Foundation (ANRF) Science and Engineering Research Board (SERB)  
Core Research Grant Scheme

**Name of P.I.:** Dr. Sitangshu Bhattacharya

**Name of position:** Junior Research Fellow (on contract)

**Department/Section:** Department of Electronics & Communication Engineering

1. Name of the Candidate (In Capital):
2. Gender (Male/Female):
3. Marital Status (Married/Unmarried):
4. Date of Birth (*Attach proof*):
5. Age (as on last date of application): \_\_\_\_\_ Years \_\_\_\_\_ Months \_\_\_\_\_ Days
6. Father' s / Husband' s Name:
7. Present/Contact Address:
8. Permanent Address:
9. Mobile No:
10. E-mail:
11. Nationality:
12. Category Gen/EWS/SC/ST/OBC/PH (*Attach proof if applicable*):
13. GATE/NET (*Attach proof*):

Branch	Year	Valid up to	Percentile (& Score)	All India Rank

14. Educational Qualification (Attach proof):

Qualification	Subject/Discipline	Board/Institute/Univ.	Year of passing	% of marks	Division
10th					
12th					
Diploma, if any					
B.E./B.Tech/M.Sc./MCA					
M.E./M.Tech					

15. Summary of M.E/M.Tech. Thesis (Maximum 150 words): Enclose a separate sheet

16. Research Publications (Maximum Best 5): Enclose a separate sheet

17. Details of Experience in chronological order. Enclose a separate sheet

18. Any other information: Enclose a separate sheet

19. Indicate whether you propose to register for higher degree at IIITA, Allahabad: Yes/No(Name of higher degree is Ph.D.)

### DECLARATION

I hereby declare that all the statements made in this application are true and complete, and nothing has been concealed/distorted. I am aware that, if at any time I am found to have concealed/distorted any material information, my engagement is liable to be summarily terminated without notice.

Place:

Signature of the Applicant

Date:

### Checklist-

1. Self-attested copy of documents
2. Proof of Date of Birth
3. Mark sheets & certificates of all the examinations passed
4. Category Certificate, if applicable
5. GATE/NET score card, if applicable
6. Experience certificate, if any