



**Advertisement for the Post of a Project Associate-I (JRF) in a SERB Funded Project in  
Physics**

Online applications are invited for the post of a Project Associate-I (JRF) in a SERB funded research project.

**Title of the project:** *Study the dynamical evolution of spin and valley related many particle electronic states in two dimensional transition metal dichalcogenides using ultrafast time-resolved spectroscopy*

**Short description of the research project:** Ultrathin two dimensional (2D) transition metal dichalcogenides (TMDs) have recently emerged as a class of promising materials for many electronic, optoelectronic and spintronic device applications. Strong Coulomb interaction and reduced screening make them suitable candidates for investigating many-body states (exciton, biexcitons, trions etc.) at room temperature. In this project femtosecond laser based optical spectroscopy will be employed to investigate the many-body interactions in 2D TMDs. Effort will be made to study spin and valley related dynamics in 2D TMDs.

**Investigator:** Dr. Suman Kalyan Pal (PI) (to know more about the group visit <http://faculty.iitmandi.ac.in/~suman/USOLab/>)

Professor, School of Basic Sciences

IIT Mandi, Kamand, Mandi -175 005 (H.P.)

**Fellowship** : Rs. 31,000/- p.m. (subject to fulfilling eligibility criteria)

**Minimum Qualifications:** M.Sc. (Physics) with 55% marks or equivalent CGPA. Candidates with NET/GATE qualification and/or experience in working in experimental condensed matter physics laboratory will be given preference in shortlisting for interview.

**Duration:** Till 11<sup>th</sup> March, 2022. The selected candidate has to join immediately. **The selected staff may be provided with an opportunity to pursue Ph.D. degree subject to fulfilling the eligibility criteria and satisfying the academic selection norms.**

**Age Limit:** Maximum 28 years as on the date of advertisement. (SC/ST/OBC and physically handicapped candidates will be entitled for the relaxation in age limit as per the government norms)

**How to apply:** Interested and eligible candidates may apply with an updated resume (in DOC or PDF file) mentioning personal details and academic qualifications with the file name “SERB\_first

name \_last name” and email to the ID [suman@iitmandi.ac.in](mailto:suman@iitmandi.ac.in) (The subject line of the email should be ‘Application for the post of project associate’). The candidate should clearly mention the details about NET/GATE qualification (Year, rank etc.) and work experience, if they have, in the resume.

**Important Dates:**

1. Last date of resume submission: **5<sup>th</sup> March 2021**

2. Merely fulfilling the eligibility requirement does not guarantee shortlisting for interview; additional criteria may be imposed for shortlisting. The shortlisted candidates will only be informed about the date and time of the online interview.

(No information or communication will be made with candidates who are not shortlisted.)

3. Date of online interview: **10<sup>th</sup> March 2021**

(Students should have all documents in original to support their resume and the same will be verified at the time of joining, if the candidate is selected).

**Note:** Project investigator will not be responsible for any miss communication/connectivity issue during online-interview session. Schedule of such session once decided will not be changes. It will be responsibility of the candidate to ensure all that he/she is well connected and present during allotted slot. The online interview committee will call the student during their allotted slot.

- For any further information, contact to PI at [suman@iitmandi.ac.in](mailto:suman@iitmandi.ac.in).

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- For any further information, contact to PI at [kaustav@iitmandi.ac.in](mailto:kaustav@iitmandi.ac.in)