

# INDIAN INSTITUTE OF TECHNOLOGY MANDI, H.P., INDIA

## Advertisement for the Post of a JRF in SERB funded project in Physics

**Date: 2<sup>nd</sup> March, 2019**

Applications are invited from citizens of India for filling up **one Project associate (JRF)** position in a sponsored project from Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Government of India undertaken in the School of Basic Sciences (Physics), IIT Mandi.

**Title of the research 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.

**Investigator:** Dr. Suman Kalyan Pal (**PI**)

Associate Professor, School of Basic Sciences

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

**Duration** : 36 Months

**Fellowship** : Rs. 31,000/- p.m.

**Minimum Qualification:** M. Sc. or equivalent degree in Physics with National Eligibility Test (NET (JRF or LS)/GATE/Equivalent) qualification.

**Age Limit:** The upper age limit for JRF is 28 years.

Age relaxation: upper age limit is relaxable upto 5 years for SC/ST/OBC/Women and Physically handicapped candidates

**Project associate may get PhD admission in fulfilling admission criteria of IIT Mandi.**

**How to apply:** Interested eligible candidates may apply with an updated bio-data (in DOC or PDF file with the file name “SERB\_first name\_last name”) mentioning personal details, academic qualifications, future goal and email to the ID [suman@iitmandi.ac.in](mailto:suman@iitmandi.ac.in) (subject line should be ‘Application for the Post of JRF in SERB funded project’).

**The candidate should clearly mention details about NET/GATE qualification (Year, rank etc.), in the bio-data.**

For further information, contact to PI: [suman@iitmandi.ac.in](mailto:suman@iitmandi.ac.in), 09459528125

**Deadline for Application: 25-03-2019**