

## **Advertisement for the recruitment of Junior Research Fellow (JRF) Position in the Discipline of Physics**

*Advanced Manufacturing and Technology DST*

Applications are invited from highly motivated candidates for a JRF position in the field of “Oxide semiconductor thin films and their applications in the field of energy and DRA”. The work will be more focused towards material synthesis of modified oxides by sol-gel method and thereafter thin film fabrication, experimental characterization, and theoretical investigations.

### **Eligibility**

- At least MSc with first class in Physics
- At least 6 months experimental project in any branch of physics
- Applicant should have first author publications in complex perovskite oxides and also have experience in fabrication of thin films of oxide materials
- Candidates should have a strong understanding of material characterisation and sol gel synthesis. Materials characterization techniques should include the following: XRD, FESEM, DTA, TGA, Raman/FTIR spectroscopy, UV-vis/PL spectroscopy, Ferroelectric measurements, Magneto-electric measurement techniques, Dielectric properties
- Strong understanding of refinement of crystal structure using Fullprof software. Structural modelling using Mercury/VESTA software

### **Desirable qualification**

Mechanical properties measurement

### **Fellowship details:**

Junior research fellows will be paid consolidated salary based on the salary structure of the DST for JRF category and other emoluments per month. The fellowship is for a period of start of joining till Oct 31st 2021

### **Service conditions:**

- (i) DA will not be entitled for JRF
- (ii) House Rent Allowance (HRA): JRF may be provided accommodation based on availability and those residing in accommodation provided by the institute will not be eligible for drawing HRA. Wherever provision of hostel accommodation is not possible, HRA may be allowed as per Government norms applicable in the city/location where they are working. The fellowship amount may be taken as basic for calculating the HRA.
- (iii) Medical Benefits: The JRF will be entitled to medical allowance as per institute policy.
- (iv) The travel entitlement for JRF for participation in scientific events/workshops in India

will continue to be as per institute norms.

Duration: Until 31<sup>st</sup> March 2022

Interview date: 25th October 2021

Kindly send your resume to Dr. S. Sen through email: [sens@iiti.ac.in](mailto:sens@iiti.ac.in) with the subject “**JRF under DST AMT**”. Only shortlisted candidates will be called for an interview on Google Meet. No TA/DA will be paid for the candidates appearing in the interview or for joining services. The last date for sending the resume is 22th October 2021