



# Indian Institute of Technology Indore

Simrol Campus: Khandwa Road, Simrol Indore 453552

Dated 25.08.2020

Ref.: IITI/DCE/ISRO/06/2020/01

## Advertisement for Junior Research Fellow (JRF) Position

Applications are invited from highly motivated candidates for one junior Research Fellow (JRF) position in ISRO funded research project “ Geospatial numerical modeling of debris flow for quantitative landslide risk assessment considering the entrainment” in the Discipline of Civil Engineering, Indian Institute of Technology Indore. The objectives of the project are:

1. To develop a new model which would incorporate various rheologies at the same time using two phase flows and the results to be displayed on GIS application.
2. To evaluate the applicability of existing rheological run out models in the Himalayan region, its functionality and accuracy determination.
3. To perform a model calibration by conducting a parameterization of the input parameters based on back calculation of past debris flows.
4. To perform a sensitivity analysis of the rheological parameters and the entrainment parameters on the debris runout distance, flow height, flow velocity and the eroded volume.
5. To analyze the bed sediment entrainment mechanism in debris flows including evaluation of the different entrainment laws.

Eligibility (As Per ISRO):

Minimum Qualification:

- (i) Master's degree in civil engineering: Geotechnical Engineering/ Computer Science Engineering with a valid GATE score or UGC/ CSIR-NET qualification.

*Desirable Qualification:*

Candidates having experience in programming in Python, Matlab, or R are encouraged to apply.

Stipend:

As per DST norms: Rs.25,000 per month + 16% HRA (if hostel accommodation is not availed).

Duration:

Initial appointment will be for one year and is extendable up to a maximum of three years, solely based on performance. Selected candidate may be considered for admission to full- time Ph.D. program in the Discipline of Civil at IIT Indore, depending on the eligibility criterion set by the discipline.

**How To Apply:**

Interested candidates are requested to send a detailed CV including academic background and work experience to **Dr. Neelima Satyam D.**, Discipline of Civil Engineering, IIT Indore, via e-mail: [neelima.satyam@iiti.ac.in](mailto:neelima.satyam@iiti.ac.in) with subject line" Application for IRF position on ISRO" latest by September 07, 2020, Complete information with respect to GATE and /or UGC/CSIR-NET should be mentioned in the CV. Incomplete application will not be entertained.

Only shortlisted candidates will be called for interview. Selected candidates will be intimated by email.

No TA/DA will be paid for appearing in the interview.

Note: The Institute reserves the right to fill or not to fill the post advertised.

24/8-20