

**INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE**  
**DEPARTMENT OF WATER RESOURCES DEVELOPMENT & MANAGEMENT**

Dated: 05 September 2024

**ADVERTISEMENT TO FILL UP PROJECT POSITIONS\***

Applications are invited from Indian nationals only for project position(s) as per the details given below for the consultancy project(s) under the Principal investigator Prof. Mohit Prakash Mohanty, Assistant Professor, Department of Water Resources Development & Management, Indian Institute of Technology Roorkee-247667, Uttarakhand (India).

1. Title of project: Development of a web-based GLOF information system: An integrated approach for quantifying flood hazards over Safed Lake, Uttarakhand
2. Sponsor of the project: ISRO, Bengaluru
3. Project position(s) and number

Position and Monthly Emoluments	Required Qualifications
Junior Research Fellow (One no.) Rs. 31,000 per month+ HRA@9%	<b>Junior Research Fellow (JRF):</b> Master's degree in water resources engineering/Land and Water Resources Engineering/Water and Land Management/Hydrology/Water Resources Development and Management or M.Tech. (*) in relevant discipline with <u>GATE</u> score <b>Desirable qualifications:</b> Candidates having prior experience in hydro-climatological analysis, Remote sensing and GIS, numerical flood inundation modeling, statistical analysis, web development, skills, and Python/R/MATLAB programming

(\*) Academic/Field/Research experience and qualification in Civil Engineering (Water Resources Engineering)/Hydrology/Water Resources Development and Management and allied branches

5. Qualifications: As described above
6. Emoluments: As described above
7. Duration: Upto 06 February 2027
8. Job description: Site exploration and inventory of the glacial lake; collect and analyse ground-based and satellite observations for determining the spatial and temporal changes of glacial lake development; develop various scenarios of GLOF based on breach depths, breach widths and time of moraine failure; develop a comprehensive 1D-2D dynamically coupled numerical flood model and generate a set of flood inundation and hazard maps based on the pre-conceptualized scenarios; develop a GLOF inundation library; and create an user-friendly web-based platform to disseminate GLOF-related information

1. Duration: 2 years and 4 months or the project completion duration, wherever it is earlier.
  2. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
  3. Candidates desiring to appear for the interview should submit their applications with the following documents to the office of the Principal Investigator through email, by post, or produce at the time of the Interview in the following order:
    - Application in a plain paper with detailed CV including chronological discipline of degree/certificates obtained.
    - Experience including research, industrial field and others.
    - Attested copies of degree/certificate and experience certificate.
  4. Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview for verification.
  5. Preference will be given to SC/ST candidates on equal qualifications and experience.
  6. Please note that no TA/DA is admissible for attending the interview.
- Note: The selected candidate may get an opportunity for PhD admission.**

The interview of the shortlisted candidates will be held in the WRD&M on 20 September 2024 at 15:30 Hrs (to be given only for walk-in interviews).

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*Mohit* 5/9/24  
Prof. Mohit P. Mohanty  
(Principal Investigator)

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1. Dean SRIC
2. Institute Website, IIT Roorkee

\*To be uploaded to the IIT Roorkee website.

**Approved**  
*(Signature)* 5/9/24  
Dean (SRIC)/(Dean SRIC)  
भा. प्रौ. सं. रुड़की/IIT Roorkee  
*(Signature)* 05/9/24