

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
Department of Civil Engineering

Dated: 26-09-2025

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/research project(s) under the investigator **Dr. Bihu Suchetana (PI)**, Department Civil Engineering, IIT Roorkee

1. **Title of project:** Development of a Satellite Imagery-informed Decision Support System for Climate Resilient Drinking Water Treatment (SiDCReW)
2. **Sponsor of the project:** ISRO-IITR Space Technology Cell
3. **Project position(s) and number:** Junior Research Fellow, One (1)
4. **Qualifications:** M.Tech./M.E./M.Sc. in Civil Engineering (with specialization in Water Resources or Environmental Engineering), or related fields with valid GATE/NET (UGC, CSIR, etc.) qualified
5. **Emoluments:** Rs. 37,000 per month + HRA (as per Institute Guidelines)
6. **Duration:** 36 months
7. **Job description:** The project involves utilizing satellite imagery-derived water quality information, along with relevant machine learning models for the development of climate resilient drinking water treatment plant operations, focusing on their response to extreme weather event-driven changes in source water quality.

Responsibilities:

- Conduct extensive field sampling of surface waters and subsequent laboratory testing for characterization
- Analyze remote sensing imagery for determination of the concentrations of optically and non-optically active water quality parameters
- Design and develop machine learning models for analyzing quality changes in surface water bodies
- Communicate research findings to a wide range of audiences

Desired Skills:

- Demonstrable, hands-on experience in applications of satellite imagery for environmental monitoring and prediction
- Demonstrable experience in statistical/machine learning with environmental applications
- Proficiency in R or Python
- Excellent interpersonal and communications skills (both oral and written)

Selected candidate will be working in the Department of Civil Engineering.

1. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
2. Candidates desiring to appear for the Interview should submit their applications, along with the following documents to bihu@ce.iitr.ac.in:
 - Latest and detailed CV with details of degrees/certificates obtained in chronological order
 - Experience including research papers published (if any), GitHub links/ coding samples etc.
 - Scanned attested copies of degree/certificate and experience certificate
 - Valid GATE/NET (UGC, CSIR, etc.) score card
 - Cover Letter summarizing relevant previous experience and reason for interest in this position



3. Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview for verification.
4. Preference will be given to SC/ST candidates on equal qualifications and experience.
5. Please note that no TA/DA is admissible for attending the interview.

The last date for application to be submitted to the Principal Investigator is 12-10-2025 by 5 PM.

The schedule of the interview (ONLINE) will be intimated through email to the shortlisted candidates.

Bihu Suchetana

(Bihu Suchetana)

Tel:

+91-1332-284970

Names and signatures of Principal Investigator

Email: bihu@ce.iitr.ac.in

*To be uploaded on IIT Roorkee website and copy may be sent to appropriate addresses by PI for wider circulation.

APPROVED

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