



**Department of Civil Engineering**  
**National Institute of Technology Karnataka, Surathkal, India,**  
**Srinivasnagar, Mangalore, Karnataka - 575025**

Ref. No: NITK/CED/2023/390

Date:07-02-2023

**Advertisement for Junior Research Fellow (JRF)**

Applications are invited from the interested candidates for the post of Junior Research Fellow (JRF) to work on the R&D project titled “**New Resilient Breakwater for Safety of Port and Harbour against Tsunami**” funded by Ministry of Ports, Shipping and Waterways, Government of India, New Delhi. The duration of the project is 03 years (2022-2025).

The details are given as below:

SN	Position	Area of Specialisation	Duration	Consolidated Emoluments per month	Number of Positions
1	Junior Research Fellow (JRF)	Geotechnical Engineering/Civil Engineering	Initially for <b>one (01) year</b> (Can be extended till the end/termination of the project)	Rs. 31,000/-	One (01)

**Brief Description of the R&D Project**

<b>Project Title</b>	<b>New Resilient Breakwater for Safety of Port and Harbour against Tsunami</b>
<b>Funding Agency</b>	Ministry of Ports, Shipping and Waterways, GOI, New Delhi
<b>Duration</b>	03 Years (2022-2025)
<b>Principal Investigator (PI)</b>	Dr. Babloo Chaudhary, Dept. of Civil Engg., NITK Surathkal
<b>Co-Investigators (CIs)</b>	Prof. Katta Venkataramana, Dept. of Civil Engg., NITK Surathkal Dr. Sridhar G, Dept. of Civil Engg., NITK Surathkal
<b>Details of the Project</b>	<p>Rubble Mound (RM) breakwaters are coastal structures constructed to protect the port and coastal areas from devastating impacts of sea waves, currents, typhoons. The breakwater can be also used to protect the ports from tsunami. But, during the past Geo-disasters such as the 2004 Indian Ocean earthquake and tsunami, many breakwaters damaged and even collapsed due to the earthquakes and subsequent tsunamis. This let catastrophic losses in the coastal areas. Hence, there is an urgent need for development of countermeasures to mitigate the earthquake and subsequent tsunami-induced damage of RM breakwater so that the tsunami resilient breakwater can block the tsunami in the sea or at least reduce tsunami height up to a great extent in order to protect ports and coastal areas from devastating damage of the tsunamis.</p> <p>The main objective of the project is to develop new technique of countermeasure to mitigate the damage of the breakwater caused by</p>



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	a tsunami. Generally, an earthquake triggered a tsunami, and the tsunami strikes after few minutes of the earthquake. Therefore, an earthquake will consider before a tsunami in the lab tests. Effectiveness of these techniques will be evaluated by conducting physical model tests and numerical simulations. To the end, a series of shake table tests and tsunami overflow tests will be conducted on scaled models of the existing RM breakwater. Numerical simulations will be also carried out by using the program PLAXIS/FLAC to make clear the mechanism.
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### Information for the Position of JRF

<b>Essential Qualifications</b>	(i) B.E/B.Tech. (Civil Engineering) and M.E/M.Tech. in Geotechnical Engineering (or Ocean Engineering or Marine Structures or a suitable specialisation) or equivalent degrees. Candidates must have at least 60% (CGPA 6.5/10) marks in aggregate from a recognized technical institute or university.  (ii) Candidate should have qualified GATE at least once in his/her academic career.
<b>Preferable Experience/quality</b>	Candidate should be able to work independently and flexibly. The following criteria are preferable for the post. (i) Experience of conducting lab tests or physical model tests. (ii) Ability to carry out numerical simulation by using PLAXIS/FLAC. (iii) Good communication and writing skills for technical report/article.
<b>Age Limit</b>	30 Years (Preferable), Age relaxation as per GOI rule.
<b>Duration</b>	<b>Initially for one (01) year</b> (Can be extended till the termination/end of the project.)
<b>Last date for receipt of the application</b> <i>(extended)</i>	<b>15<sup>th</sup> May 2023</b>

### Application Process:

Interested candidates may apply in the prescribed format along with resume, photo copies of relevant certificates, grade/mark sheets, publications etc. They need to send the below mentioned documents to the correspondence address.

- (i) Duly filled application form in the prescribed format with recent passport-size photograph.
- (ii) Covering letter
- (iii) Resume
- (iv) Xerox copies of the educational certificates and mark sheets (class X onwards)
- (v) Xerox copy of GATE score card
- (vi) Proof for research experience, publications, special achievements and patents, if any.

***In addition, scanned copy of all the documents along with duly filled application form in the prescribed format must be sent as a single PDF file to the email id: [babloo@nitk.edu.in](mailto:babloo@nitk.edu.in)***



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**The hard copies of all the mentioned documents along with duly filled application form should be sent on or before **15<sup>th</sup> May 2023** to the address given below.**

**Correspondence Address:**

Dr. Babloo Chaudhary  
Assistant Professor,  
Department of Civil Engineering,  
National Institute of Technology Karnataka (NITK), Surathkal,  
P.O. Srinivasnagar, Mangalore – 575 025. Karnataka, India.  
Mobile: 8724041225, Office Phone: 0824-2473978/2473041 (O)  
E-mail ID: [babloo@nitk.edu.in](mailto:babloo@nitk.edu.in)

**Additional Information:**

1. The JRF will be encouraged to apply for admission to the PhD program at NITK Surathkal by fulfilling the admission criteria of the institute.
  2. **The shortlisted candidates will be informed by email/phone; and will be called for a written test and/or interview.** The test/interview is most likely to be held in the month of May or June 2023.
  3. Selected candidates will be required to join immediately or as soon as possible.
  4. Selection will be based on qualification, interview and relevant experience.
  5. Candidates before appearing for the test/interview shall ensure that they are eligible for the position, they intend to apply. Please note that no TA/DA/any other allowance(s) will be provided for attending the test/interview.
  6. If selected, the candidate who is already employed, should produce relieving certificate from their employers at the time of joining.
  7. The appointment will be on a purely temporary basis co-terminus before or with the project. The selection committee decision will be final. The duration of the post is one year initially, but it can be extended up to the end/termination of the project, subject to performance of the candidate and other factors.
  8. Merely fulfilling the eligibility requirement does not guarantee shortlisting for interview; additional criteria may be imposed for shortlisting. NITK Surathkal reserves the right to reject any or all the application without assigning any reasons thereof.
  9. For any further information and clarification, candidates may contact Principal Investigator (PI), **Dr. Babloo Chaudhary** on the address given for the correspondence.
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**APPLICATION FOR THE POST OF JUNIOR RESEARCH FELLOW (JRF)**

<b><u>For Office Use:</u></b>	Paste your recent passport size photo
Serial Number: .....	
Eligible for Written exam/Interview: Yes / No	
Verified the Certificates: .....	

***Post Applied for*** | ***Junior Research Fellow (JRF)***

<b>1. Name of the Candidate:</b> (Block Letters)	
<b>2(a) Father's Name:</b>	
<b>2(b) Mother's Name:</b>	
<b>3(a) Date of Birth:</b> (DD/MM/YYYY)	<b>3(b) Nationality:</b>
<b>3(c) Sex: Male/Female/other</b>	<b>3(d) Marital Status: Married/Single</b>
<b>3(e) Category (Open/OBC/SC/ST/PWD):</b>	
<b>3(f) Age on 01.02.2023 (in Years):</b>	

**4. Address for Communication:**

<b>(i) Address for communication:</b>	
<b>(ii) Mobile No:</b>	
<b>(iii) Email ID:</b>	

**5(a) Educational Qualifications (Attach self-attested copies of all certificates)**

<b>Name of Exam Passed</b>	<b>Discipline/ Specialization</b>	<b>Board/ University</b>	<b>Name of Institute/ College</b>	<b>Marks/ CGPA</b>	<b>Year of Passing</b>
X					
XII					
B.E./B.Tech					
M.E./M.Tech					
Other (s)					



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### 5(b) GATE Exam

Exam	Qualified	Marks obtained/Total marks	Rank	Year
GATE	Yes / No			

\*Attach self-attested copies of all certificates.

### 5(c) B.Tech/M.Tech Project Titles

B.Tech Project Title	
M.Tech Project Title	

### 6. Work/Research Experience (if yes, describe it in 200 words in an additional sheet)

Organization	Designation	Duration (Year)	Responsibilities

### 7. Number of Publications (Attach a separate list of publications with full details, if required):

National	International

### 8. Workshop/Training programs attended (Attach a separate sheet, if required):

S. No.	Details

### 9. Other Achievements (Attach a separate sheet, if required):

S. No.	Details



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**10. Contact Details of Two Referees:**

Particulars	Referee I	Referee II
Name		
Designation:		
Organization:		
Office Address:		
Contact Number:		
Email ID:		

**11. Declaration:** I hereby declare that I have carefully read the instructions and particulars supplied to the recruitment and that the entries made in this application form are correct to the best of my knowledge and belief. I understand that, if the provided information will be found incorrect, I may be disallowed to appear in the test/interview or terminated at any stage even after selection. If selected for the post, I promise to abide by the rules and discipline of the Institute and Ministry of Ports, Shipping and Waterways, Government of India, New Delhi. I note that the decision of the Institute is final in regard to selection for the post and assignment to a particular Department and field of study. The Institute shall have the right to expel me from the Institute at any time after my admission, provided it is satisfied that I was admitted on false particulars furnished by me or my antecedents prove that my continuance in the Institute is not desirable. Further, if my performance is found not satisfactory, my service can be terminated at any stage. Moreover, my service can be terminated at any stage due to shortage of fund or any other reason(s). I agree that I shall abide by the decision of the Institute, which shall be final.

**Date:**

**Place:**

**Signature of the Candidate**

**Note:** Attach the list of enclosures along with the application.

**NOTE:** The envelope containing the application should be super scribed as,

**“Application for the Position of JRF under Ministry of Shipping project”**  
on  
**“ New Resilient Breakwater for Safety of Port and Harbour against Tsunami”**