

**INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE**  
**(Department of Mechanical and Industrial Engineering)**  
**ADVERTISEMENT TO FILL UP PROJECT POSITIONS\***

Dated: 26/10/2023

Applications are invited from Indian nationals only for project position(s) as per the details given below for the research project(s) under the Principal investigator (Name: Dr Abinash Kumar Swain), Dept. Mechanical & Industrial Engineering, Indian Institute of Technology, Roorkee.

1. **Title of project:** Analysis of the effect of multiple impact penetration load on electronics system housed in KE Projectile and suitable techniques for its mitigation
2. **Sponsor of the project:** Defence Research and Development Organisation (DRDO)
3. **Project position(s) and number:** Junior Research Fellow (JRF), 03 (Three)
4. **Qualifications:**

I. B.Tech in Mechanical Engineering/Production Engineering and M.Tech degree in Mechanical Engineering preferably in Machine Design/Applied Mechanics. **Candidates must have qualified GATE exam.**

**OR**

B.Tech in Mechanical Engineering/Production Engineering. Candidate from Centrally Funded Technical Institutes (CFTIs): a minimum CGPA of 7.0 on a 10-point scale or 70% marks. Candidate from institutions other than CFTIs: a minimum CGPA of 7.50 on a 10-point scale or 75% marks. **Candidates must have qualified GATE exam.**

- II. The candidates with exposure and interest in Machine design, Applied mechanics, Modeling and simulation, Impact dynamics, FEM, Wave propagation, Explicit dynamics, LS-DYNA, Ansys Autodyne, ABAQUS, and experience in experimentation and developing new materials will be given preferences.
5. **Emoluments:** Rs. 37,000 per month
6. **Duration:** 2 years
7. **Job description:** Development of computational platforms for shock mitigation using various available materials. Additionally, it is required to develop new materials for shock mitigation as part of an experimental study. Furthermore, numerical simulations will be carried out using FE code. The role includes conducting research work, planning and executing project-related activities including experiments, preparing presentations, reports, and related manuscripts for publication. For more details about the work or any other queries, interested parties may contact the principal investigator.
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 with the following documents to the Principal Investigator through **email only** as a **single pdf file**.
  - Application with detailed CV including chronological discipline of degree/certificates obtained.
  - Copy of **Gate Score Card** and attested copies of degree/certificate, mark sheets and relevant experience certificate (research and industrial field).
3. Candidate shall bring along with them the original degree(s)/certificate(s) and other related document(s) at the time of interview/joining 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.

**Note: The selected candidate may get an opportunity for PhD admission (Once project is over, the candidate may be considered for institute assistanceship as per Institute policy).**

The last date of application to be submitted by email to principal investigator is **5<sup>th</sup> November 2023**. The interview date (online or with physical presence) will be conveyed after shortlisting.

Tel: +91 1332 285277

Email: abinash.swain@me.iitr.ac.in

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

Name and signature of Principal Investigator

**APPROVED**

  
 डीन (SRIC) (Dean SRIC)  
 भा. प्रौ. सं. सं. इ. तक. IIT Roorkee  
 Swain  
 27.10.23 Palak  
 27/10