

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
(Department of Mechanical and Industrial Engineering)

Dated: **October 15, 2026**

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 Principal investigator (**Prof. Indra Vir Singh**), Dept./Centre: **Department of Mechanical and Industrial Engineering, Indian Institute of Technology, Roorkee.**

1. Title of project: **Effect of Hygroscopic Ageing on the Mechanical and Fracture-Fatigue Behaviour of Sandwich Composites for Armament Applications**
2. Sponsor of the project: **Armament Research Board, DRDO, Delhi**
3. Project position(s) and number: **JRF (One)**
4. Qualifications
 - (a) B.Tech. in Mechanical Engg./Production Engg./Aerospace Engg./Equivalent
 - (b) ME/M.Tech in Machine Design/Applied Mechanics/Aerospace Engg./Equivalent
 - (c) GATE qualified candidates will be preferred.
5. Emoluments: **Rs. 37,000 pm**
6. Duration: **01/01/2026 – 31/12/2028 (3 Years)**
7. Job description
 This project aims at a systematic investigation of the structural behaviour of unaged and aged sandwich composites for armament applications. A systematic experimental approach will be employed to characterize Nomex, PMI foam, and PVC foam core sandwich composites. Hygroscopically aged specimens will be evaluated to verify moisture resistance and its detrimental effect on the mechanical properties. Delamination behavior will be examined under Mode-I and Mode-II loading for both aged and unaged samples. The fatigue performance of various aged sandwich composite samples will be assessed and benchmarked against unaged Nomex, PMI and PVC core-based sandwich composites.
8. Candidates before appearing for the interview shall ensure that they are eligible for the position. Only the shortlisted candidates will be notified through email for interview.
9. Candidates should submit their applications with the following documents to the office of Principal Investigator through email as a **Single pdf** file in 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.
10. Preference will be given to SC/ST candidates on equal qualifications and experience.
11. Interview will be held online through Webex or Google Meet.
 Note: Selected candidate will get an opportunity to pursue PhD (once project is over, PhD candidate will be given MHRD fellowship as per Institute Policy)

The last date for application to be submitted by email to Principal Investigator is **November 15, 2026 by 5 PM.** The shortlisted candidates will be informed about the interview date through email.

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Sponsored Research & Industrial Consultancy
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Name and Signature
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*To be uploaded on IIT Roorkee website and copy may be sent to appropriate addresses by PI for wider circulation.