मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान भोपाल
भोपाल, मध्य प्रदेश, 462003

Maulana Azad National Institute of Technology Bhopal
Bhopal, Madhya Pradesh, 462003

Advertisement for Junior Research Fellow (JRF)

(Adv No.: MECH/2026/JUN/00067 Dated 01-07-2026)

File Number: ANRF/IRG/2025/000502/ENS **Dated 01-07-2026**

Applications are invited from **highly motivated, dynamic, and research-oriented candidates** for the position of **Junior Research Fellow (JRF)** (for 2 years), extendable to **Senior Research Fellow (SRF)** (for 1 additional year based on performance), under a research project entitled "***Integration of Hybrid Triboelectric Nanogenerator into Railway Braking System for Enhanced Tribological Performance, Energy Harvesting, and Real-Time Monitoring***" funded by the Anusandhan National Research Foundation **(ANRF)** for a duration of 36 months vide sanctioned file no. ANRF/IRG/2025/000502/ENS dated 20/03/2026.

The details of the position are given below:

Name of the Post	Junior Research Fellow (JRF)
Number of Post	**1 (One)**
Principal Investigator	**Dr. Soumya Ranjan Guru** Assistant Professor Department of Mechanical Engineering Maulana Azad National Institute of Technology (MANIT) Bhopal, Madhya Pradesh, India – 462003 Mobile: 8019473317 Email: soumyaguru@manit.ac.in / soumyaranjanguru03@gmail.com
Age Limit	Should not be over 33 years as on the date of advertisement. There may be age relaxation as per the Government of India (GOI) rules for SC/ST/ OBC/ Women and Physical Handicapped candidates.
Tenure of Project	**Initially for 2 years**, **extendable** up to **3 years** based on performance and project requirements. *(The total project duration is 3 years. During the 1st and 2nd years, the candidate will be appointed as a Junior Research Fellow (JRF). In the 3rd year, the candidate will be promoted to Senior Research Fellow (SRF) (subject to eligibility and performance).)*
Essential Qualification	M.E./ M.Tech/ in Mechanical / Automobile / Production / Material science/ Manufacturing / Mechatronics / Electronics/ or M.Sc in Physics or in relevant specialization **OR**

	Candidates with a B.Tech./B.E. or an Integrated Professional Degree in the relevant field of expertise are also eligible to apply, provided they have secured a minimum CGPA of 7.5 on a 10-point scale and qualified in GATE Examination.
Desirable Skills	Candidates with one or more of the following will be preferred: ➢ Knowledge of Tribology / Surface Engineering / Contact Mechanics/ Machine Design/ Materials/ Electronics/ IoT ➢ Understanding of basic Electronics, Sensors, Signal Processing, and Data Acquisition Systems (DAQ) ➢ Experience in embedded systems, microcontrollers (Arduino, Raspberry Pi, etc.) ➢ Familiarity with Energy Harvesting / Smart Materials / TENG systems ➢ Hands-on experience with CAD/CAE tools (ANSYS, MATLAB, SolidWorks, COMSOL etc.) ➢ Strong technical writing and research publication skills
Job Description	The candidate will be primarily responsible for conducting experimental and analytical research in the areas of tribology, energy harvesting, and smart sensing systems. The work will involve the design and development of hybrid triboelectric nanogenerator (TENG) systems, their integration with railway braking mechanisms, and evaluation of performance under real or simulated operating conditions. The candidate will be expected to set up and handle laboratory experiments, instrumentation, and data acquisition systems, followed by detailed data analysis and interpretation. In addition, the candidate will contribute to prototype development, assist in testing and validation, and support interdisciplinary research activities involving materials, mechanics, and electronics.
Fellowship	***Fellowship as per DST-ANRF Norms*** For Junior Research Fellow (JRF): ₹37,000/- + HRA For Senior Research Fellow (SRF): ₹42,000/- + HRA
Add on Benefits	The selected candidate is eligible to register for Ph.D. degree at MANIT Bhopal as per the Institute Norms.
How to apply	Interested candidates need to register online using the link: https://forms.gle/1DCN8uX5bm4sCvFBA. The candidates shall appear for the **walk-in interview** along with the filled-in application form in the prescribed format (form attached below), all originals and self-attested photocopies of relevant certificates as per the above schedule at Committee Room, Ground Floor, Mechanical Engineering Department, MANIT Bhopal, (M.P) - 462003.

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Tentative date of the walk-in interview	**Date of interview: 17-07-2026** Reporting Time: 10.00 AM Venue: Committee Room, Ground Floor, Mechanical Engineering Department, MANIT Bhopal.

General Terms and Conditions:

1. During the interview, candidates must bring one set of photocopies along with the original documents of all academic certificates, including complete academic details from Class X onwards (grades/percentages, year of passing, and institution/university). They should also provide GATE details (year, discipline, and score), contact information, and a valid email ID. Relevant work experience in the related field should be clearly described.
2. Only candidates who report on or before the specified reporting time on the scheduled date will be considered for the interview. Candidates arriving after the reporting time for document verification will not be permitted to appear for the interview.
3. MANIT Bhopal has the right to cancel the recruitment for the aforesaid post at any time without providing any clarifications/information.
4. The equivalency criteria shall be determined by the committee in accordance with the rules of MANIT, and the committee's decision will be final and binding.
5. No interim correspondence will be entertained and canvassing in any form will lead to disqualification.
6. No TA/DA will be paid for attending the Interview.
7. The post is purely on a temporary basis and the Institute will not have liability whatsoever for sustaining temporary staff recruited under the above-mentioned project, after its completion/termination.
8. For any queries related to the project, they may contact Dr. Soumya Ranjan Guru via email.

Contact:

Dr. Soumya Ranjan Guru

Assistant Professor and PI

Mechanical Engineering Department

Maulana Azad National Institute of Technology Bhopal 462003.

Email: soumyaguru@manit.ac.in / soumyaranjanguru03@gmail.com

Phone: +91-8019473317

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Application form the post of JRF for ANRF -funded Research Project on " Integration of Hybrid Triboelectric Nanogenerator into Railway Braking System for Enhanced Tribological Performance, Energy Harvesting, and Real-Time Monitoring"

Adv No.: MECH/2026/JUN/00067

Personal Details:

Name of the Applicant	
Category (Gen/EWS/OBC/SC/ST)	
Gender	
Date of Birth	
Marital Status	
Correspondence address	
Email id	
Mobile Number	

Paste Passport Size Photo

Educational Qualifications:

Degree	Name of the Institute/University	Subjects/ Specialization	Division	Percentage	Year of Completion
BE/BTech/B.Sc					
ME/M. Tech/ M. Sc					

Professional Experience details:

Name of the Organization	Position in the Organization	Total Experience (in years)	Appointment Type (Permanent/Contractual)	Nature of Work

Other details:

GATE/NET, examination qualification details	
Knowledge of any software/simulation tools (give details)	
Publication details, if any	

I agree with the following terms and conditions:

- No TA/DA will be paid to attend the interview.
- The above position is purely temporary and on a contract basis and co-terminus at any time from the project without any notification.
- Continuation will depend on the satisfaction of research performance.
- If selected, I will not be permitted to claim for any regular/part-time appointments in the institute.
- Canvassing in any form will disqualify my candidature.

The filled-in application form, curriculum vitae and photocopy of the relevant documents are attached along with this form.

Date:

Place: Signature of the Applicant