



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
TAMIL NADU, INDIA – 620015



ADVERTISEMENT FOR RECRUITMENT OF JUNIOR RESEARCH FELLOWSHIP (JRF)

Ref. NITT/EEE/DRDO/JRF

Dated: 31.01.2025

Applications are invited from Indian Nationals only for Project Positions as per the details given below, for research project, under the principal investigator **Dr. N. Kumaresan** and Co-principal investigator **Dr. K. Sateesh Kumar, Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli-15, Tamil Nadu.**

1. Title of the Project: **Configurable AC Electronics Load for Testing Sonar Power Amplifier**
2. Funding Agency for the Project: **Defence Research & Development Organisation (DRDO) / Directorate of Futuristic Technology Management (DFTM)**
3. Project Position and Number: **Junior Research Fellow (JRF) and 01**
4. Qualifications:
Essential: First Class B.E. or B.Tech. in Electrical or Electrical and Electronics Engineering & First Class M.E./M.Tech. in Power Electronics / Applied Electronics
Desirable: GATE Exam Qualified.
5. Emoluments (per month): **Rs. 37,000 + HRA (As per norms)**
6. Duration: **Tentatively March 2025 to January 2028**
7. Interview Date: **28.02.2025, Reporting Time: 9.00 am, Venue: EEE Department**
8. Job Description:
 - a. To model and develop a configurable AC Electronic load which is suitable for testing the SONAR power amplifier.
 - b. To develop the prototype for single-phase, 1 kW & 5 kW configurable ac load system with frequency range (500-2000) Hz.
 - c. To support in processing the project related files.

Essential:

- 1) The candidate is expected to be good in modelling the Power Electronic Converters and hands-on experience for hardware implementation.
 - 2) The candidate is expected to be good in embedded controllers like DSP/FPGA for power electronic applications
 - 3) The candidate is expected to be good in various control schemes for power converters
 - 4) The candidate is expected to be good in doing simulations in MATLAB/PSIM
9. Age Limit: Should be less than 28 Years as on 28.02.2025. (SC/ST/OBC/WOMEN/PWD candidates will get relaxation as per Govt. of India Rules.)
10. Selected candidates are eligible to register for Ph.D. as per institute norms.



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Instructions:

- A. Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
- B. For any clarification, please contact the PI by E-Mail: nkumar@nitt.edu, Co-PI: sateesh@nitt.edu with the subject marked as “Clarification on JRF Application- “NITT/EEE/DRDO/JRF”.
- C. **Candidates should bring the original certificates with them during the interview for verification along with one set of attested copies.**
- D. Please note that no TA/DA is admissible for attending the interview.
- E. **Application should be furnished only in the prescribed format and should be brought at the time of interview (as per FORM No. 8). Also, must fill the details in the attached Google form: <https://forms.gle/Mp9GtuEL6XeXctRt5>**
- F. Last date for the application is 17.02.2025 through e-mail (sateesh@nitt.edu).
- G. The selected candidates will be informed on 21.02.2025 through an email. The interview will be held on 28.02.2025 @ 9.00 am at Electrical and Electronics Engineering Department, NIT Tiruchirappalli followed by the written test.

Project Investigator

Dr. N.Kumaresan

Professor

Department of Electrical and Electronics Engineering
NIT Tiruchirappalli

**OFFICE OF THE DEAN (R & C), NIT, TIRUCHIRAPPALLI
RECRUITMENT OF TEMPORARY PROJECT STAFF - PRESCRIBED APPLICATION FOR THE POST
JUNIOR RESEARCH FELLOW (JRF)**

<p style="text-align: center;">For Office Use only</p> <p>Serial Number allotted to the Applicant</p> <p style="text-align: center; margin-top: 20px;">Signature of the Application Screening Committee Chairman</p>	<p style="text-align: center;">Paste here your recent passport size colour Photograph</p>
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APPLICATION FOR THE POST OF JRF

1. Name of the Candidate in full	
2. Nationality	
3. Mother Tongue	
4. Date of Birth	Date Month Year
5. Sex	Male / Female
6. Marital Status	Married / Single
7. Category: SC / ST / OBC / EWS / General	Please specify
8. Address for communication with Mobile number and E Mail ID	
9. Project Title	Configurable AC Electronics Load for Testing Sonar Power Amplifier
10. Name of the Post applied for	Junior Research Fellow
11. Advertisement Number with Date	NITT/EEE/DRDO/JRF Dt.31.02.2025

Academic Career : Enclose photo copies of the qualifying degree certificates and mark sheets/ grade cards showing the percentage of marks or CGPA from SSLC onwards

Name of Exam	School / University	Board/ University	Broad subjects of study	Year of Passing	% of marks / CGPA
S.S.L.C					
H.S.C					
Graduation					
Post-Graduation					
Any other					

Enclose self-attested Xerox copies

12. GATE ScoreSubject
.....Year.....

13. NET Score
.....Subject.....Year.....

14. Work Experience/Research Experience

Organization	Designation	Duration		Nature of Job
		From	To	

14. Previous Research work and publication, if any (enclose copies of published or unpublished work)

15. Proof of past study as a sponsored candidate, or other contractual obligation, if any:

16. Reference

Name	Address	Phone & E Mail ID

17. I do not have a relative among Faculty and Staff of the NIT, Tiruchirappalli.

18. Declaration: I do hereby that the information furnished in the application is true to the best of my knowledge and belief. If admitted, I shall abide by the rules and regulations of the Institute and Project associated to it. If any information furnished in this application is found to be untrue, I am liable to forfeit the seat / appointment allotted to me any time in future and legal action be taken against me.

Date:

Full signature of the Applicant

List of Enclosures: (1)
(2)
(3)
(4)