SRIC/06

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
(Electronics and Communications Engineering)

Dated: 12/05/2026

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 (Name: **Prof. Karun Rawat**), Department of **Electronics and Communications Engineering, Indian Institute of Technology, Roorkee.**

1. Title of project **Design and Implementation of Advance Techniques in Non-linear Power Amplifiers Optimizing Size, Weight & power (SWAP).**
2. Sponsor of the project: **DRDO, New Delhi.**
3. Project position(s) and number: **Postdoctoral Fellow-03 nos**
   a. One Position in RF and Microwave domain especially related design of Power Amplifiers
   b. One Position in Linearisation techniques of RF PAs,
   c. One Position in thermal management of RF PAs (PhD in Mechanical Engg., would be preferred).
4. **Qualifications**: Ph.D. degree in Electronics/Electrical Engineering or a relevant discipline from a recognized university or institute
5. **Desirable Skills:**
   a. Strong background in EM simulation, RF circuit design, and experience with tools (such as ADS, CST or HFSS, and MATLAB), and Expertise in RF measurements.
   b. Strong Background in Linearisation Techniques, and proven experience in this domain.
   c. Experience in 3D FEM software's such as Ansys fluent/COMSOL Multiphysics for the efficient design for the thermal management in RF PAs.

   Along with the above, candidate should have atleast two research publication in a Science Citation Indexed (SCI) journal or a reputed international conference.
6. **Emoluments:** 80000 pm/- (Consolidated).
7. **Duration:** 1 year or until the completion of project.
8. **Job Description:** The selected candidate will be involved in research and development activities related to the design and implementation of advanced techniques in non-linear RF power amplifiers with a focus on optimizing Size, Weight, and Power (SWaP). The candidate will work on
   a. Design and simulate RF/microwave circuits and systems, including PAs, RF front-end modules, and passive components. Perform full-wave EM simulations and circuit co-design using industry-standard tools.
   b. Conduct RF measurements and characterization (S-parameters, load-pull, large-signal analysis, linearity metrics such as ACPR, IMD).
   c. Develop and implement linearisation techniques (e.g., DPD, feedforward, envelope tracking).
   d. Design and analyze thermal management solutions for RF PAs using multiphysics simulation tools.
   e. Collaborate with multidisciplinary teams for system integration and optimization.
   f. He/She will be required to document research outcomes and publish findings in reputed journals and conferences. Additionally, the candidate will assist in preparing technical reports, project progress updates, and documentation for the sponsoring agency. He/She must adhere to the rules and regulations of the host institute/organization.
9. **Guidelines for the Applicant:**
   - Candidates before appearing for the interview shall ensure that they are eligible for the position they intend to apply.
   - Application in plain paper with a detailed CV including chronological discipline of degree/certificates obtained.
   - Experience certificates including research, industrial field, and others.
   - Attested copies of degree/certificate and experience certificate.
   - Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview for verification.
   - Preference will be given to SC/ST candidates on equal qualifications and experience.
   - Please note that no TA/DA is admissible for attending the interview.

Candidates wishing to appear for the interview should submit their applications via email & Google form along with the required qualification documents to

Mail Id: shankhraj.ece@sric.iitr.ac.in

Google Form
https://docs.google.com/forms/d/e/1FAIpQLSc8sO6FribzXZFVTIXGkkWoXdONl054WZQ4RRSTc1nGSO4QoA/viewform?usp=publish-editor

The submitted documents will be used for shortlisting, and only shortlisted candidates will be called for the interview.The last date of application is 01 June, 2026, by 5:00 PM IST.
All shortlisted candidates will be informed about the interview date via phone or email.

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Dean
Sponsored Research & Industrial Consultancy
Indian Institute of Technology Roorkee
Roorkee-247 667 (INDIA)

19/5/26

Tel: +911332284830
Email: karun.rawat@ece.iitr.ac.in

Prof. Karun Rawat
(Principal Investigator)

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