

INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE
ADVERTISEMENT TO FILL UP PROJECT POSITIONS*

Dated: 12/8/2026

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 **Prof. Anil Kumar Gourishetty**, Deptt./Centre of **Physics**, Indian Institute of Technology, Roorkee.

1. Title of project : Advanced Additive Manufacturing of Hetero-structured Scintillators using Bridgman-Grown Single Crystals and 3D-Printed plastics & ceramic Scintillators for TOF-PET and related applications
 2. Sponsor of the project : ANRF
 3. Project position(s) and number : JRF (1)
 4. Qualifications (Eligibility) :
 - Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course selected through a process described through any one of the following:
 - a. Scholars who are selected through National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) and GATE.
 - b. The selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MOE, ICAR, ICMR, IIT, IISC, IISER, NISER etc.
 - c. Candidates should have a sound understanding of basic experimental physics and an aptitude for laboratory-based research.
- Desirable Qualifications : Preference may be given to candidates having one or more of the following:
- Interest or basic knowledge in radiation detectors, scintillator materials, nuclear/particle physics, or photonics.
 - Familiarity with basic electronics, radiation measurements, spectroscopy, or data acquisition systems.
 - Exposure to materials synthesis/characterization, polymers, ceramics, or additive manufacturing/3D printing.
 - Basic experience with scientific data analysis/programming using Python, MATLAB, ROOT, Origin, or similar software.
 - Experience with experimental research through an M.Sc./M.S. dissertation, summer internship, or research

project.

- Good analytical, problem-solving, communication, and scientific writing skills.

- Strong motivation to pursue experimental research and willingness to work across the interdisciplinary areas of scintillator materials, 3D printing, radiation detection, and detector instrumentation.

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| 5. Emoluments | : | Rs. 37000 |
| 6. Duration | : | 2 Years 7 Months 16 Days |
| 7. Job description | : | The selected candidate will work on an ANRF-funded research project focused on developing 3D-printed scintillators and detector structures for time-of-flight (ToF) applications. |

The work will primarily involve:

- Development and optimization of 3D-printed plastic and/or inorganic scintillator materials and structures.

- Preparation of scintillator formulations and fabrication of samples using additive manufacturing/3D-printing techniques.

- Optical, structural, and scintillation characterization of the fabricated materials.

- Design and investigation of different scintillator geometries and heterostructured detector configurations for improved timing and detection performance.

The position will provide interdisciplinary research exposure spanning scintillation materials, additive manufacturing, radiation-detector instrumentation, photodetectors, electronics, and data analysis.

8. The selected candidate may get an opportunity for PhD admission.

9. Terms & Conditions:

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 through email by 15/9/2026:
 - CV
 - Degree Certificates
 - Experience Certificates
 - NOC from current employer
 - Publications
3. Candidate shall bring along with them the original degree(s)/certificate(s) and experience certificate(s) at the time of interview 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.
10. Please review the desired qualifications carefully and include the relevant points in the CV as a separate section.

The last date for application to be submitted to office of Principal Investigator is **15/9/2026** by **11:59 PM**.

If selected, the candidate will be joining the position **as soon as possible**.

Please submit your application via email to: **anil.gourishetty@ph.iitr.ac.in**

Tel:



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