

Advertisement for the Post of JRF in MoE-STARS sponsored project

Applications are invited for the following assignment on a purely time-bound research project undertaken in the Department of Physics of the Indian Institute of Technology Hyderabad.

1.	Name of the post	Junior Research Fellow (JRF)
2.	Number of Posts	(04)
3.	Name of the Research Project	1. Laser Driven Bright X ray Sources for Imaging 2. Ultrafast Terahertz Super-Spintronics
4.	Name of the Sponsoring Agency	MoE-Stars, Govt. of India
4.	Duration of the Position	Three years (03)
5.	Consolidated Stipend	Rs. 37,000/- per month (first two years) Rs 42,000/- per month (third year) HRA according to the norms of the funding agency.
6.	Essential Qualifications	M.Sc. Physics or M. Tech in Laser science/Applied Physics/ Photonics/Materials Science with 60% marks or equivalent CGPA. Valid GATE score is essential. CSIR/NET preferred.
7.	Age	Candidates should not be more than 28 years.
8.	<p>For technical information of the project, the candidate may contact the Principal Investigator at the following address/phone:</p> <p>1. Name : Dr. Bhuvanesh Ramakrishna (Laser Driven Bright X ray Sources for Imaging) Email: bhuvan@phy.iith.ac.in,</p> <p>Dr. Yogesh Kumar Srivastava (Ultrafast Terahertz Super-Spintronics), Email: yogesh.srivastava@phy.iith.ac.in,</p> <p>Address : Department of Physics, Indian Institute of Technology Hyderabad, Kandi, TS-502285, India Tele. No: 040-2301-8458. E-mail: bhuvan@phy.iith.ac.in, Yogesh.srivastava@phy.iith.ac.in</p>	

- Eligible candidates should apply with their CV via email to bhuvan@phy.iith.ac.in and yogesh.srivastava@phy.iith.ac.in on or before July 20th, 2024, with the subject marked as “JRF- STARS”.
- Candidates will be short listed for the interview based on merit and will be informed via email.
- Candidates shortlisted for interview should appear in person/ **online** with originals of degree certificates (one set of xerox), and date of birth proof along with any other relevant information (like copies of publications, awards, recommendations etc.).
- No travelling or any other allowances is admissible for attending the interview.
- Initially the JRF will be appointed for a period of one year and subsequently extended till the end of the project based on the student’s performance.

Details about the projects:

- 1. Ultrafast Terahertz Super-Spintronics:** The aim of this project is to experimentally realize, comprehend, and enhance the spin transport in superconductors and heavy metals using terahertz emission and detection at cryogenic temperatures. The project involves the fabrication of thin films, terahertz set-up preparation, characterization and data analysis. The candidates should have interest in the above-mentioned job scope. The candidates with experience in optics, photonics, terahertz science, thin film deposition and characterization, low temperature measurements will be preferred.
- 2. Laser Driven Bright X ray Sources for Imaging:** The project aims to investigate an important process-taking place during the interaction of very high power laser radiation with matter, namely the generation of High Harmonics. The objectives involved in this project are to reach XUV energies over micrometric distances, the energies that are otherwise unavailable with large-scale accelerators. The candidates with experience in optics, photonics, high power laser science will be preferred.