భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
కంది – ౫౦౨ ౨౮౪, సంగారెడ్డి, తెలంగాణ, భారత దేశం
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
कंदी – ५०२ २८४, संगारेड्डी, तेलंगाना, भारत
Indian Institute of Technology Hyderabad
Kandi – 502 284, Sangareddy, Telangana, INDIA

Department of Physics
Indian Institute of Technology Hyderabad
Kandi Sangareddy Telangana – 502284

Advertisement for the Post of Research Associate-I (RA-I)

Applications are invited for the Research Associate-I (RA-I) position in a research project funded by DRDO to be carried out at the Department of Physics, IIT Hyderabad.

1	Name of post	Research Associate-I
2	Project title	Numerical Simulation of Orbital Propagation and Experimental Validation of the LEO Objects using Optical Tracking Approach
3	Job description	Year 1: Develop a Machine Learning/Neural Network-assisted orbital track predictive simulation of Low Earth Orbit objects using the high-precision orbital predictor Year 2: Data Analysis and Processing: management of large datasets, including satellite telemetry, radar observations, and optical tracking data. Processing, cleaning, and analysing the data to track and predict space object trajectories.
4	Funding agency	DRDO, Government of India
5	Duration of the project	2 Years, with a possibility of further extension based on performance, funding availability and an opportunity to work with the DRDO Labs.
6	Number of vacancies	1
7	Monthly compensation	Rs. 58,000 + HRA (as per Govt. norm)
8	Minimum eligibility requirements	1. M.Sc. in Physics/Astrophysics/Space Physics from recognised institutions with a minimum 70% Marks or 7.0 CGPA OR 2. First class in M.Tech/M.E. in Computer Science/Electronics and Instrumentation/Aerospace from a recognised institute AND 3. Doctor of Philosophy (Ph.D.) in Physics/Astrophysics/Space Physics/Computer Science/Electronics and Instrumentation/Aerospace from a recognised institute (Thesis submitted can also apply)

9	Desirable qualifications	Knowledge of orbital dynamics, Astrodynamics, or experience with the operation of a telescope, intermediate/advanced Python programming skills, knowledge of AI/ML techniques and applications (intermediate to advanced level)
10	Age limit	32 years as of 31 July 2025

Application Procedure
Eligible candidates are requested to submit the following documents (in a single PDF) via email to mayukh@phy.iith.ac.in with the subject line: "RA-I PHYSICS <Applicant Name>":

1. Updated CV with photograph
2. Scanned copies of degree certificates and grade sheets/transcripts (B.Tech and M.Tech)
3. Ph.D. degree certificate or thesis submission certificate
4. Proof of date of birth
5. Statement of Purpose: (maximum 3 pages; describing your background and expertise relevant to the project and how you can contribute.)

This is a rolling advertisement; applications will be reviewed and shortlisted by the PI every 15 days until a suitable candidate is found.

Selection Process

Applications will be shortlisted based on merit and the project's requirements. Shortlisted candidates will be informed via email.

Interviews will be conducted online.

The selected candidate is expected to join immediately.

Dr. Mayukh Pahari
(Principal Investigator)