



## भारतीय ताराभौतिकी संस्थान INDIAN INSTITUTE OF ASTROPHYSICS

(विज्ञान व प्रौद्योगिकी विभाग, भारत सरकार के अधीन स्वायत्त संस्थान)

(An Autonomous Body under Department of Science & Technology, Government of India)

कोरमंगला Koramangala, बेंगलूर BANGALORE -560034

### **Advt. No. IIA/26/2022 Dated:11.11.2022**

Indian Institute of Astrophysics (IIA) is an autonomous academic national institution under Department of Science & Technology, Govt. of India dedicated to research in Astronomy, Astrophysics and Allied Sciences & Technology. The Institute has its main campus in Koramangala, Bangalore and CREST Campus at Hosakote, Bangalore. It operates field stations at Kavalur & Kodaikanal in Tamilnadu, Gauribidanur in Karnataka, and Leh/Hanle in Union Territory of Ladakh.

IIA is partner in many International projects focused on developing next generation telescopes and instruments for observational astronomy. Notably, India has joined a Thirty Meter Telescope (TMT) Project, which is an international consortium of California Institute of Technology (CalTech), Universities of California, Canada, Japan, China. The India TMT Coordination Centre (ITCC) is hosted at IIA, Bengaluru with participating institutes which include Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune and Aryabhata Research Institute for Observational Sciences (ARIES), Nainital. India is responsible for providing various critical hardware components and software to the telescope/instruments as part of in-kind contribution.

Further, IIA is also collaborating with University of California Santa Cruz (UCSC) and University of California Observatories (UCO) to build a state-of-the-art instrument for the 10m Keck telescope called SCALES: Santa Cruz Array of Lenslets for Exoplanet Spectroscopy. IIA will develop various subsystem for SCALES and also participate in the assembly, integration, and testing.

Online applications are invited from eligible, bright and motivated individuals for the following position to work at Indian Institute of Astrophysics, Bangalore:

<b>Name of the position</b>	<b>: Engineer Trainee (Electronics/Controls)</b>
<b>No. of position</b>	<b>: One</b>
<b>Age limit</b>	<b>: 26 years</b>
<b>Remuneration</b>	<b>: Rs 30,000/- per month (Consolidated)</b>
<b>Place of Posting</b>	<b>: IIA, Bengaluru</b>
<b>Qualification</b>	<b>: B.E/B.Tech in Electronics/Electrical/Instrumentation or equivalent Engineering from a University/Institution recognized by UGC/AICTE with a minimum of 60% marks or equivalent grade.</b>
<b>Experience</b>	<b>: Preference will be given to candidates having working knowledge in Servo control systems /coding for data acquisitions /Electronics fabrication works.</b>
<b>Duration</b>	<b>: The candidates would be assessed after end of every year and would be continued based on their satisfactory performance till the end of the project.</b>

**Details of Experience:** A prior experience of one year or more is desirable. This includes working in industry/public-sector and/or government establishments in area of design and development activities in the field of control systems, servo control, motion control, process control, PLCs, embedded controllers, mechatronics, robotics, power electronics, drives etc. The candidate is required to have knowledge of control system design, mechatronics, servo/motion controllers and related components like industrial drives, encoders, motors, PLCs, implementation, and programming. Must be familiar with Unix/Linux and windows platform along with software development tools like C/C++, Python, QT, Labview, Matlab etc. Preference will be given to candidate familiar in design and implementation of Motion Control Systems.

**Job Description:** The selected candidate will be a member of the ITCC electronics team.

Responsibilities include but not limited to:

- i. Survey of commercial off the shelf control components including motion controllers, precision encoders, BLDC motors, PLCs, real time network for distributed control, cable management system etc.
- ii. End to end design and development of motion control and PLC based prototypes for electromechanical systems by following industrial safety standards. Evaluating their performance, merits and demerits.
- iii. Development of cabling scheme, power budget, bill of material etc.
- iv. Development of software for human machine interface.
- v. Preparation and review of design schematics of CAD software and reports on the above development work.
- vi. Familiar with Quality Assurance Tools and Techniques specific to Electronic/Electrical manufacturing industries.
- vii. Active participation and presentation of the work in meetings involving national and international members.
- viii. Regular interaction with vendors.
- ix. Procurement and shipment related activities.
- x. Training the subordinate team members to handle the above tasks.
- xi. The Candidate may need to work closely with the ITCC/SCALES team members and Indian industries involved in the prototyping, production of SCALES' and TMT instruments hardware systems and their testing. The Job may require frequent travel.

## Terms & Conditions:

1. The appointment is purely temporary on contract basis and does not confer any privilege or benefit applicable to regular employment. No claim whatsoever for regular employment in the Institute shall be entertained.
2. The tenure of traineeship is initially for one year, extendable annually maximum up to Five years (including initial one year) subject to satisfactory performance of the candidate assessed annually and requirement of the Institute.
3. The date of determining the upper age limit, qualifications and experience shall be the closing date prescribed for receipt of completed applications.
4. The remuneration indicated is consolidated and is inclusive of all allowances
5. There will be annual increase of Rs. 2500/- in the remuneration based on satisfactory performance.
6. It is open to the Institute to conduct written test to shortlist the candidates for interview in case the attendance of candidates is more.
7. Age relaxation is permissible to SC, ST & OBC candidates and also to physically handicapped candidate as notified by Government of India from time to time.
8. The candidate selected will be posted to work in IIA, Bengaluru and is liable to be posted anywhere in India as per the requirement of the Institute/Project.
9. Outstation candidates if called for interview will be reimbursed to and from train/bus fare by the shortest route limited to second sleeper class railway fare on production of valid tickets.
10. No correspondence will be entertained with the candidates not selected for interview/appointment. Canvassing in any form will be a disqualification.
11. Candidates of Indian Nationality only can apply for this post.
12. The prescribed educational qualifications are minimum required, and mere possession of the same does not entitle candidates to be called for interview. Where the number of applications received in response to the advertisement is large and it will not be convenient or possible for the Institute to interview all those candidates, the Institute reserves the right to limit number of candidates to be called for interview on the basis of qualifications and experience higher than the minimum prescribed in the advertisement.
13. The Institute reserves the right to cancel the entire recruitment process at any time without assigning any reasons whatsoever.
14. Candidates meeting the above requirements and willing to be considered for the above said position may submit application through online only. Candidates are required to upload their scanned Curriculum Vitae (CV), Date of Birth Proof, Educational Qualification, Experience and Community Certificates in the online application failing which they will not be considered for further stages of scrutiny/recruitment process.
15. Misrepresentation or falsification of facts detected at any stage of the selection process or instances of misconduct/misbehaviour at any stage during selection process shall result in cancellation of candidature without any notice and no correspondence in this regard shall be entertained.
16. The last date for receipt of online application is **16<sup>th</sup> December, 2022** at 17:30 hours.
17. For registration, please visit: [https://www.iiap.res.in/iiap\\_jobs/](https://www.iiap.res.in/iiap_jobs/)

प्रशासनिक अधिकारी/ Administrative Officer