

Mechanical Engineer (Projects)

Qualification & Experience: First Class Degree in B. Tech./B.E. (Mechanical, Optics or related areas).

The candidate is expected to have about three years of experience working on mechanical and thermal design and development of instruments preferably for scientific applications.

The following skill sets are expected for the position:

- Knowledge of conduction and radiation heat transfer, thermo-elastic deformation theory and application
- Designing mechanical and thermal control components preferably for optical systems
- Analysis of mechanical and thermal design with FEM simulation preferably for optics and opto-mechanical systems, with tools like SolidWorks Simulations
- Experience in conducting thermal transient and thermal static simulation studies for dissipation from electronics
- Ability to use other CAD and Simulation tools like AutoCAD, Autodesk Inventor, Ansys etc.

Some basic skills in programming with C, C++, and/or script languages like Python is expected. The candidate should be willing to learn the requisite abilities quickly. Familiarity with integrating and testing optics and optomechanics will be an added advantage. Any experience of working on satellite payload development related activities will be highly valuable.

Job:

1. Mechanical and Optomechanical design, development, integration and testing of SUIT payload and/or WALOP instrument
2. Thermal Control Design and Analysis for SUIT payload and/or WALOP instrument
3. Work with other agencies and vendors responsible for various aspects of design and development
4. Participate in and/or organize reviews, discussions
5. Developing, testing, debugging, characterization and delivery of components
6. Participate in assembly, integration and testing of subsystems and full payload/instrument at the laboratory facilities in IUCAA and elsewhere in the country
7. The candidate should be willing to work beyond regular office hours and for other related tasks in the instrumentation laboratory as well as at collaborating institutions.

Age Limit: 35 years (Including relaxation)

Period of Contract: Co-terminus with the project completion, renewable annually based on performance

Remuneration: Rs.37,000/- per month