Mechanical Designer

UCL Department/Division  Department of Space & Climate Physics

Grade 7

Hours  Full Time

Salary  £31,076 to £38,183

Closing Date:  16th July 2017

Duties and Responsibilities

Applications are invited for the post of Mechanical Designer in the mechanical and thermal engineering group at MSSL to support the Laboratory’s space science instrumentation.

Key Requirements

- Higher national certificate in mechanical engineering or equivalent training
- Good understanding of workshop practices and material capabilities (completion of a recognised apprenticeship would be seen as an advantage)

Further details

A job description and person specification can be accessed at the bottom of this page.

Job Title

Mechanical Designer

Department

Department of Space & Climate Physics, Mullard Space Science Laboratory, University College London

Grade

Research Grade 7. The appointment level will be commensurate with accomplishment and experience.

Reports to

Head of mechanical and thermal engineering

To apply for this post please go to: http://www.ucl.ac.uk/hr/jobs/ and search on 1649791
Summary of Job Function

The post holder will work within project teams to develop and analyse instruments or subsystems of instruments as required for the laboratory’s space projects. The work carried out will support either instrument development during the study phase of space programmes, fulfil instrument design requirements during the build phase or support mechanical test programmes.

Main Duties

- Create design concepts and evolve them
- Work within project teams to gain an understanding of space instrument mechanical interfaces and design requirements
- Assess feasibility of proposed instrument designs by evaluating concepts
- Support instrument testing
- 3D CAD design of the instrument assembly and related 2D drawings
- Manage the interface control document which defines the interface with the spacecraft following the requirements as outlined by the main contractor
- Support instrument mechanical engineer, thermal engineer and project manager
- Work with other engineering disciplines within the lab and within a project to meet the requirements

Knowledge

*Essential*: Ability to come up with design concepts and able to evolve them

*Essential*: Experience in creating and maintaining CAD models and files

*Essential*: Be able to create and interpret engineering drawings

Qualifications

*Essential*: Higher national certificate in Mechanical Engineering Design or equivalent experience

Skills

*Essential*: Being able to create CAD models and evaluate design options to support ongoing design work, as well as being able to advice engineers about ways to improve designs where required

*Essential*: Good written and oral communication skills (working language is English)

*Essential*: Proficiency with common computer operating systems and the use of MS Office applications

*Desirable*: Proficient in the use of CATIA software, ideally several years of experience
Aptitude

*Essential:* Good interpersonal abilities and proven capability to work collaboratively

*Essential:* A positive outlook and a “can do” attitude

*Desirable:* Proven record of ability to manage time and work to deadlines

Previous Experience

*Essential:* Mechanical design experience and proven track record of manufactured designs

*Desirable:* Substantial experience working in the aerospace industry

*Desirable:* Proven track record of instrument or mechanism design, manufactured and completed.