

Thermal and Material Analysis for Satellite Deployers and Unicorn Platforms

Code: 19/40

Company: Alba Orbital

Location: Glasgow

Company Description:

Alba Orbital is the world leader in PocketQube satellites, satellites which can be as small as 5cm x 5cm x 5cm. The company was founded in 2012 by Tom Walkinshaw in his bedroom and now employs 15 people in offices in Glasgow and Berlin.

The team have won 5 major contracts with the European Space Agency and are continuing to innovate in the field of PocketQubes. The company's main products are the Unicorn family of satellites and launch services. Currently the company is preparing for the launch of its first satellites in August when Alba Orbital will launch 7 satellites.

Project Description:

Assist in the development of satellite deployment systems and spacecraft design. Aligned to the successful applicants strengths, the project will focus on one of the following: Simulating and modelling temperature variations across the Unicorn 2 satellite body and PocketQube deployer during both launch and orbit; Investigating and testing the use of new and novel materials for space applications, to reduce mass and costings; Design and simulation of new mechanical mechanisms and sub-systems.

Applicant Specification:

- Knowledge of space technologies and satellite subsystems
- Understanding of mechanical engineering with 3D design, materials, structural and thermal analysis.
- Academic: At least 2 years of Undergraduate Study in Engineering / Physics or Mathematics

Minimum Requirements:

- Curious with a passion to put things into space
- Experience with using 3D CAD software such as AutoCAD
- Experience with finite element analysis and thermal modelling.
- Matriculated Student

Preferred Additional Requirements:

- MATLAB / Octave
- Ability to work independently within a small team environment

Further details:

8 weeks minimum fixed term contract to be agreed with successful candidate but nominally with a start date around 17th June, 2019 to attend the SPIN Induction day at the Satellite Applications Catapult, and completion before 20th September for the Showcase the following week. Salary is £2500 for the term of the internship.

Closing Date for Applications: 5pm on Tuesday 21 May

Applications should be made through the online form attaching a CV, before the closing date. Please note that elements of the form left incomplete will be deemed to render the application ineligible. They will be checked for eligibility and forwarded to the employer.