

## INTERNSHIP OFFER

**Title: Particulate Contamination Analysis**

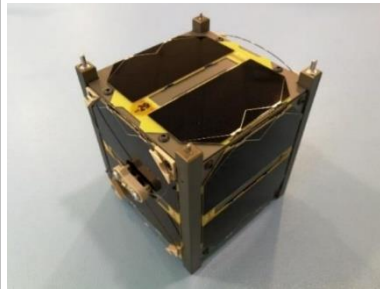
### 1 UNIVERSITY SPACE CENTER OF MONTPELLIER

The University Space Center of Montpellier (CSUM) is the French leader in the development and operation of nanosatellites developed by students. It has acquired in-depth competences in the field of design, manufacturing, testing and operation of nanosatellites and their subsystems, as well as in the area of space project management and product assurance in the framework of university space projects. The CSUM has an AIT (Assembly Integration and Test) Facility, a CDF (Concurrent Design Facility) and both UHF and S-band Ground Stations. The CSUM develops its own 1U and 3U CubeSat nanosatellite platforms with the support of the Van Allen Foundation and both the French and the European space agencies.

### 2 INTERNSHIP DESCRIPTION

Description of the tasks:

As part of this project, the intern will study the relevance of ultrasonic cleaning on mechanical and electronic components intended for CubeSats. For this, the student will have to carry out an analysis (before / after) of the particulate and chemical contamination. The goal of this internship is to identify the effectiveness but also the risks / possible drifts of this cleaning method for the component itself and for the clean room (ISO8). For this, the student will have several types of detergent to analyze, will use a digital binocular as well as a UV lamp allowing to detect particles greater than 25µm. At the end of the internship, the student will have to propose a solution that meets the specifications and also carry out a cleaning procedure which will be used by the operators.



Skills:

- Electronics
- Drafting quality
- Chemistry (optional)

Language: At CSUM, we speak English, but if you speak French, that is a bonus!

Level: IUT/Degree

Location: University of Montpellier - University Space Center - 950 rue St Priest 34090 MONTPELLIER

Preferred starting date: From January 2021

Duration: 2 to 6 months

Remuneration: From the 45th day of presence, minimum 3.9 € / h, in accordance with French law.

Supervisor, Function at CSUM: SEBASTIEN HESSE – ASSISTANT ENGINEER

### 3 CONTACT

Please upload your application at: <https://csu.edu.umontpellier.fr/en/job-offers-internship/>