

OFFER INTERNSHIP

The Carnot de Bourgogne Interdisciplinary Laboratory (ICB), CNRS-UBFC Mixed Research Unit has 300 physicists, chemists, electronic engineers and technicians located in Bourgogne-Franche-Comté, on the sites of Dijon, Le Creusot, Chalon-sur-Saône and Belfort (Sevenans). They are developing new functionalities in sensors, optics and materials of the future, for applications in industry (photonics, metallurgy, industry 4.0, etc.), medicine, high-speed communications, the processing of nanoscale information, energy and quantum technologies.

ICB is seeking for an intern for a collaborative project between the ICB microwave team and the European space agency (ESA). Qualified candidates (**Master2, engineer school**) with microwave skills should be creative, problem solvers with keen attention to detail.

The goal of the internship program is to develop an innovative process dedicated to space applications.

Requirements:

- Understanding of microwave concepts such as frequency domain, transmission lines, inductance/capacitance, and active circuits
- experimental experiences with microwave equipment including VNA, spectrum analyzer...
- strong aptitude with CST or HFSS software

The project team is composed to chemists and electronics scientists and intern from chemistry, material science and electronics.

Responsibilities:

- Analysing problems related to the development of experimental device
- defining a specific design of the microwave sensor with spatial and chemical considerations (with the chemists interns)
- Block level designing and simulation to understand the circuits that are being measure, correlating measurements with simulation
- Tests, Debug with ESA samples
- Tests, debug with the experimental set-up in Dijon

Profile:

Master2, engineer school

The candidate must be a resourceful experiential student, aware of news scientific domains

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You can apply by sending a cover letter and a curriculum vitae.