Master II internship or Master I/Master II break Mineral processing/Mineralogy

Processing and exploitation of data generated by automated mineralogical systems

CASPEO develops and distributes the USIM PAC software, a static process simulator for the design and optimization of mineral processing and hydrometallurgical plants. One of the main features of USIM PAC is its ability to manage mineralogical and chemical data per size class, enabling highly detailed and accurate simulations. Automated mineralogy systems have been democratized in recent years. These systems allow the acquisition of quantitative mineralogy, chemical, granulometric and mineral liberation data, thus generating an enormous amount of data linked to each sample.

CASPEO is offering a 6-month internship, the aim of which will be to contribute to the development of a functionality enabling the import and processing of data acquired with automated systems such as QEMSCAN and/or MLA, and its automatic integration into the USIM PAC phase model.

The main stages of the internship will be:
- Literature review and synthesis on QEMSCAM and MLA systems.
- Analysis of quantitative mineralogy systems data format.
- Development of a tool to import, process and exploit the data in USIM PAC.

This internship will require the following qualities: curiosity, ability to synthesize, basic knowledge of mineral processing and mineralogy, interest for R&D, mathematical modeling and computer programming knowledge, good writing skills, some creativity. English is a must. Work will be carried out on CASPEO's premises in Orleans, France. The internship may start in February 2024 or later, depending on the student's schedule.

Monthly wage: 1200 €

Contact: **recrut@caspeo.net**