Postdoc Position in Liquid Phase Electron Microscopy

Job description

We are seeking a PhD in Physics/Materials Science/Biology with transmission electron microscopy (TEM) experience to develop graphene liquid cells for high-resolution TEM imaging of hydrated samples at room temperature. The project will use the <u>Electron Microscopy Platform at the Institute of Structural Biology</u> (IBS) and the <u>Nano-characterization Platform of the CEA</u>, which house state-of-the-art microscopes and sample preparation equipment. The liquid cells developed will be applied to study a wide range of samples in important research areas, including protein complexes and safer electrolytes in batteries.

The project will be performed at the CEA center (Minatec and IBS) in Grenoble located in the heart of the Alpes. The CEA is a major research institute in France. In partnership with industry, the CEA provides concrete solutions to meet the technological needs of the society. The IBS specifically pursues excellence in science through multidisciplinary approaches and innovative methods for integrated structural biology.

Objectives

- Realize graphene liquid cells in different configurations to optimize sealing properties and liquid volume for various types of samples
- Study effects of electron irradiation on liquid samples
- Perform structural investigations of samples in solution using low-dose technique

Qualifications

- PhD degree in science with at least 3 years of TEM experience
- Good fine motor skills
- Excellent communication (English) and interpersonal skills
- Strong organizational and technical problem-solving skills
- Self-motivation and ability to work independently
- Curiosity in different research subjects (biology and batteries)

Extras

- STEM, EELS, and EDS experience
- Programming skills for data analysis
- Experience imaging organics or radiation sensitive samples
- French

Job Details

- 3 k€/month, with generous vacation days, good benefits, and health insurance.
- Full time fixed term contract of 15 months starting in the beginning of 2024.

To Apply please send your CV, motivation letter, and 2 recommendation letters to Wai Li LING (ORCiD 0000-0002-4264-5750) at wai-li.ling@ibs.fr; +33(0)457428597 before 30th November, 2023.