

# Postdoc Position in Liquid Phase Microscopy

## Job description

We are seeking a PhD in Physics/Materials Science/Biology with atomic force microscopy (AFM) or transmission electron microscopy (TEM) experience to develop graphene liquid cells for high-resolution TEM imaging of hydrated samples at room temperature. This project will be a continuation of our efforts to control graphene surface properties and to hermetically encapsulate hydrated samples.<sup>1</sup> The liquid cells developed will be applied to study protein complexes, specifically, IgM and the complement C1 complex.

The IBS in Grenoble is located in the heart of the Alpes. 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 integrative structural biology.

## Objectives

- Realize graphene liquid cells in different configurations to optimize sealing properties and liquid volume for various types of samples
- Perform structural investigations of samples in solution
- Compare AFM and TEM images in liquid state.

## Qualifications

- PhD degree in science with TEM/AFM experience
- Good fine motor skills
- Excellent communication (English) and interpersonal skills
- Strong organizational and technical problem-solving skills
- Motivation and ability to work independently
- Curiosity in different research subjects

## Extras

- Programming skills for data analysis
- Experience in imaging organics samples
- French

## Job Details

- 3 k€/month
- Fixed term contract of 15 months (possible to extend to 18 months) starting immediately.

**To Apply** please send your CV, motivation letter, and 2 recommendation letters to Jean-Luc PELLEQUER ([jean-luc.pellequer@ibs.fr](mailto:jean-luc.pellequer@ibs.fr)) or Wai Li LING at [wai-li.ling@ibs.fr](mailto:wai-li.ling@ibs.fr).

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<sup>1</sup> ACS Nano 2023 Dec 26;17(24):24802-24813. doi: 10.1021/acsnano.3c05378 ; Nat Commun 14, 5641 (2023). <https://doi.org/10.1038/s41467-023-41266-x>