



**30-months Post-Doctoral position at the Institute for Structural Biology, Grenoble, France.**

**DEVELOPMENT OF CRYOGENIC SUPER-RESOLUTION MICROSCOPY AS A TOOL FOR INTEGRATED STRUCTURAL BIOLOGY**

**The recruited postdoc will establish single-molecule localization microscopy at cryogenic temperature at the IBS and contribute to the development of fluorescent proteins photoactivatable at low temperature.**

A major development in the super-resolution microscopy field is « cryo-nanoscopy », which will offer several key advantages, notably optimal preservation of biological samples and perspectives for correlative studies with cryo EM. To do so, it is necessary to engineer a fluorescent marker being « photoactivatable » at liquid-nitrogen temperature. The project will concentrate on developing such a marker, based on fluorescent proteins of the GFP family. The work will notably involve advanced optical spectroscopy and single-molecule cryo-imaging to investigate the complex photophysics of fluorescent proteins at cryo temperatures. The project will be carried out in collaboration with the group of J. Enderlein (Göttingen, Germany) and with a local team (I. Gutsche) expert in cryo-electron tomography .

Grenoble is situated in the middle of the beautiful French Alps, and the IBS provides a unique environment for state-of-the-art integrated cellular and structural biology (<http://www.ibs.fr/>).

Candidates should have a strong expertise in single-molecule biophysics, preferably in PALM/STORM super-resolution microscopy. Experience in instrumentation optics, fluorescent markers, and molecular biology will be key advantages.

The project is financed by the French “ANR”. The monthly gross salary will amount to ~2500 € depending on the qualification of the candidate.

Applications are open until April 30, 2018. Please send a CV and 2 reference letters to Dominique Bourgeois ([dominique.bourgeois@ibs.fr](mailto:dominique.bourgeois@ibs.fr)).

