The reaction mechanism of proteins studied in nanopores

Post doc position in plasmonics and vibrational spectroscopies

The Bioelectrochemistry and Vibrational Spectroscopy Group in the Complex Chemistry Matter Institute (UMR 7140) of the **University of Strasbourg** in France offers a two years postdoctoral position, fully funded, to work on an exciting, multi-disciplinary project. The group has expertise in a variety of research areas including infrared / THz, Raman spectroscopy and electrochemistry applied on proteins. The group has strong international collaborations with groups based in the US and Europe.

We invite applications from highly motivated individuals who hold a PhD and who are available to start between September and November 2018. Applicants should have excellent communication skills and sufficient command of English. This project is a part of an ambitious research program that aims on the development of plasmonic nanoreactors enabling excitation at specific wavelengths in infrared and THz for the study of the reaction of proteins. Vibrational markers for the signature of protonated acidic residues, the protein backbone and the overall hydrogen bond network of the protein will be monitored in arrayed lipid bilayer chambers, the latter using THz absorption spectroscopy.

We provide a unique opportunity for the successful candidate to engage in inter-disciplinary research using a variety of cutting edge techniques at the interface between physical chemistry and biophysics. A background in physical chemistry with a strong interest in spectroscopy, nanotechnologies and plasmonics is desirable. Knowledge in biochemistry or biophysics is a plus. Applications from physicists or engineers are also welcome.

The laboratory (http://complex-matter.unistra.fr/) is located close to the city center. The University of Strasbourg (http://www.unistra.fr/) is located in the upper Rhine area that includes a number of excellent universities. The project is supported by USIAS (University of Strasbourg, Institute for Advanced Study).

For application and further information, please send a cover letter along with a CV, the results of your master, a summary of your PhD work, short description of your motivation and other research activities and including the contact details of two references to **hellwig@unistra.fr** until the 15.6.2018. The documents send should not exceed 5 MB.

Université de Strasbourg

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USIAS University of Strasbourg Institute for Advanced Study

Chimie de la MATIÈRE COMPLEXE UMR 7140 - CMC