

International PhD project on Advanced Optical Spectroscopies and Biophysics at the University of Strasbourg

The Bioelectrochemistry and Vibrational Spectroscopy Group in the Faculty for Chemistry and the UMR 7140 of the University of Strasbourg offers a PhD position, fully funded, to work on an exciting, multi-disciplinary project. The group has expertise in a variety of research areas including electrochemistry, infrared / THz and Raman spectroscopies and applied on biological molecules. The group has strong international collaborations with laboratories based in Europe and abroad.

We invite applications from highly motivated individuals who hold a master degree (or equivalent) and who are available to start in January or February 2020.

The project addresses today's urgent need to strengthen the understanding of the dynamics of ligand binding to proteins and to find new cellular targets and drugs. We aim at developing new techniques to measure physical properties causally related to changes in low frequency collective structural dynamics in response to ligand binding by proteins and elucidate their atomic-level motions. The thesis is a part of an ambitious research program that includes a partnership with a group specialized in biochemistry and a group specialized in molecular modelling. The project provides an unique opportunity for the successful candidate to engage in inter-disciplinary research using a variety of experimental techniques at the interface between physical chemistry and biophysics. A background in biophysics or physical chemistry with a strong interest in biochemistry is desirable. Knowledge in spectroscopy is a plus. Applicants should have excellent communication skills and sufficient command of English.

The laboratory (<http://complex-matter.unistra.fr/>) is located close to the center of Strasbourg (France) and the university of Strasbourg (<http://www.unistra.fr/>) is located in the upper Rhine area, that includes a number of excellent universities (<https://www.eucor-uni.org/en/>).

For application and further information, please send a cover letter along with a CV, the results of your master (bachelor), a short description of your motivation and other research activities and including the contact details of two references to hellwig@unistra.fr latest the 1st of November 2020. The documents sent should not exceed 5 MB. Please note that incomplete applications will not be considered.