

**JOB DESCRIPTION****Job Title : POSTDOCTORAL FELLOWSHIP - NATIVE MASS SPECTROMETRY****Job Summary :****Development of Structural Mass Spectrometry approaches to monitor protein-protein interface destabilization**

In the present postdoctoral project, we aim at developing innovative native MS-based approaches for the characterization of protein/protein interfaces and their corresponding perturbations upon ligand binding. The project will combine native electrospray ionization mass spectrometry, ion mobility mass spectrometry and size exclusion chromatography to best characterize protein/protein interfaces in presence or absence of modifying ligands.

The BioOrganic Mass Spectrometry Laboratory (LSMBO, <http://www.iphc.cnrs.fr/-Laboratoire-de-Spectrometrie-de-.html>) of the Hubert Curien Pluridisciplinary Institute (IPHC, <http://www.iphc.cnrs.fr>) has a strong experience in native mass spectrometry and structural proteomics. We are seeking a highly motivated Postdoctoral Fellow to join our team developing new native MS-based approaches for the characterization of protein/protein complexes.

**Job Description :**

Research Lab : Bio-Organic Mass Spectrometry Lab (LSMBO) from the Pluridisciplinary Hubert Curien Institute (IPHC)  
Group leader: Dr. Sarah Cianférani  
Supervisor: Sarah Cianférani

This postdoc project aims at developing novel native mass spectrometry (MS) approaches for the characterization of protein/protein interface stability. It consists of developing:

- Develop the online coupling of size exclusion chromatography (SEC) to native MS for the accurate determination of oligomeric forms.
- Develop real-time native MS to determine kinetics of protein subunit exchange
- Implement ion mobility mass spectrometry for screening of conformational changes induced upon ligand binding on protein/protein interfaces.

The proposed postdoctoral project is based on results obtained during the last six years in a strong collaborative network between the group of Dr. S. Cianférani and Prof. G. Klebe (University of Marburg, Germany).

**Qualifications**

We seek a highly motivated, creative, hardworking and enthusiastic candidate, with a completed PhD thesis and a strong drive for a future career in research. The candidate should be interested in working in the fields of native mass spectrometry, ion mobility mass spectrometry, analytical chemistry and biochemistry. The postdoctoral candidate should have good technical skills with and understanding of chromatography, mass spectrometry and ion mobility. Interest and/or skills in modeling are highly appreciated. The candidate must have acquired expertise in the field of mass spectrometry, ion mobility, protein and peptide chemistry. To qualify, the candidate must possess experience within ion mobility coupled to mass spectrometry instrumentation.

You will be part of a team of various experts, so we are looking for individuals who excel at working independently and, at the same time have the interpersonal and communication skills to succeed at working in a multi-disciplinary team. Apart from mass spectrometry analyses, the candidate is expected to take part of presentation and preparation of publications. Personal suitability and scientific expertise is highly valued. The applicant must be proficient in English, both spoken and written.

**Main research field :**

Chemistry  
Biological sciences

Other: Analytical chemistry/ Mass spectrometry/protein

**JOB DETAIL**

Type of contract : Temporary

Status : Full-time

Company / Institute : Université de Strasbourg

Country : France

City : Strasbourg

Postal Code : 67000

Street : 4 rue Blaise Pascal

**APPLICATION DETAILS (mandatory)**

Envisaged job starting date : 01/07/2016

Application deadline : 15/04/2016

Application e-mail : [sarah.cianferani@unistra.fr](mailto:sarah.cianferani@unistra.fr)