

**Post-doctoral Positions in Bioinorganic Chemistry Available on:
*Peptides as biological shuttles for copper ions in the context of
Alzheimer's Disease***

**Institute of Chemistry, Strasbourg (France) in collaboration with
Coordination Chemistry Laboratory, Toulouse (France),
Periode: beginning 2016 for 1.5 years**

Applications are invited for a Postdoctoral position in bioinorganic chemistry. The position is in the framework of a cooperative project about "Peptides as biological shuttles for copper ions in the context of Alzheimer's Disease" between the group of Peter Faller (Institute of Chemistry, Strasbourg) and Christelle Hureau Coordination Chemistry Laboratory, Toulouse) funded by the USIAS (Strasbourg). Working place is in Strasbourg with possible short term stays in Toulouse.

Project: The project aims at designing and investigating peptidic platforms to bind, transfer and deliver copper ions intra-cellularly by exploiting pH or redox changes as stimuli. Peptides have been chosen for their high modularity and their multi-functional ability. The proposed approach is based on the coupling of a cell penetrating moiety and a copper binding sequence. The project will bring fundamental insights about this new type of copper transport, on the importance of copper homeostasis in biological processes and will find applications in several pathologies. Those include Alzheimer Disease, in which an intracellular copper deficiency has been linked to the aetiology of the disease. The project will span from molecular coordination chemistry to cells studies.

Profile of the candidate: The candidates should preferentially have a background in chemistry or biochemistry, preferentially in bioinorganic chemistry or physical inorganic chemistry, and should have a strong interest in interdisciplinary research (chemistry, spectroscopy, biology).

Net salary: ~1800 Euros per month

Application deadline: September 10th

The candidates should contact Peter Faller pfaller@unistra.fr AND Christelle Hureau christelle.hureau@lcc-toulouse.fr (+33 5 61 33 31 62).

Recent relevant reviews and publications from our groups:

- Faller, P., Hureau, C., La Penna G. *Acc. Chem. Res.*, **47**, 2252-9 (2014)

- Faller P, Hureau C. *Chem. Eur. J.* **18**, 15910-20 (2012).

- Hureau C, Eury H, Guillot R, Bijani C, Sayen S, Solari PL, Guillon E, Faller P, Dorlet P. *Chem. Eur. J.* **17**, 10151-60 (2011).