

Postdoctoral Position – macromolecular crystallization

**European Institute of Chemistry and Biology
Univ. Bordeaux/CNRS, CBMN, UMR 5248, Bordeaux, France**

A postdoctoral position in macromolecular crystallography applied to bio-inspired folded architectures (Foldamers) is available, ideally starting Spring 2015 at the European Institute of Chemistry and Biology (IECB), Bordeaux. Offer for 12 months with a possibility for extension. Salary based on experience, starting at 1700 net euros.

The project is aimed at exploring the structural properties of synthetic bio-inspired folded systems, i.e. foldamers, designed to mimic the natural secondary structure elements of proteins. Important objectives are to characterize: (i) tertiary structures obtained by inserting foldamer segments into proteins, (ii) protein-like aqueous quaternary architectures and (iii) complexes formed between such foldamers and proteins. High resolution crystal structures will provide useful insights into fundamental aspects of foldamer chemistry, protein folding and protein surface recognition, and will bring a significant leap forward towards the creation of composite foldamers with rationally designed properties (e.g., resistance to proteolytic degradation, alternative recognition patterns).

The European Institute of Chemistry and Biology (<http://www.iecb.u-bordeaux.fr/>) is a dynamic research institute located on the Bordeaux University Campus in south-west France. State-of-the-art crystallographic equipment available at the IECB include a microfocus rotating anode Rigaku MM07 HF 1.2kW diffractometer and a microfocus rotating anode Rigaku FRX 3kW (equipped with a Dectris Pilatus 200K hybrid pixel detector) as well as crystallization robots. Additional facilities include high-field NMR instruments as well as CD, SPR, ITC, DSC and mass spectrometry instruments.

The candidate must hold a PhD in structural biology, with strong expertise in both experimental and computational aspects of macromolecular crystallography. We are seeking highly motivated candidates with a curiosity for biopolymer mimicry and an interest in applying standard macromolecular crystallographic methods to novel and atypical structural challenges. Additional experience in biochemistry and molecular biology is a plus. Applicants with excellent track records will be given priority. Working language of the laboratory is English.

Contact

Candidates interested in applying should send a letter of motivation and a CV including research experience and a list of publications. They should also arrange for two letters of recommendation to be sent to **Dr Gilles Guichard**. Institut Européen de Chimie et Biologie – Univ Bordeaux - CBMN - 2 rue Robert Escarpit – F-33607 Pessac - France. Tel : +33(0) 5 40 00 30 20 - email: g.guichard@iecb.u-bordeaux.fr ; Web : <http://www.guichard-iecb.fr/>