

## **A three-year Post-doctoral position in Molecular Modelling and Design of enzymes / Toulouse, France**

A Post-doctoral position is available at the Biosystems and Process Engineering Laboratory (**LISBP**) located on the grounds of the INSA-Toulouse, France. The laboratory depends of the French National Centre for Scientific Research (CNRS, UMR INSA-CNRS 5504) and the French National Institute for Agricultural Research (INRA, UMR INSA-INRA 792).

### **Job description**

The successful candidate will be a key member of a research project funded by the **French Environment & Energy Management Agency (ADEME)**, carried out in collaboration with TWB and involving several partners, both academics and industrials. The project aims at developing new enzyme-based technologies to produce biosourced molecules to replace petro-based chemicals widely used in industry.

He/She will be in charge of conducting molecular modelling studies to get a better understanding of molecular determinants involved in function and substrate recognition of several enzymes involved in the targeted synthetic routes. The objective will then be to apply molecular modelling and computational enzyme design tools to redesign these enzymes to achieve the desired catalytic properties and drive experimental construction of enzyme mutant libraries. This work will be carried out in tight interaction with two other Post-doc fellows in charge of enzyme engineering tasks.

We are looking for a highly motivated scientist who has research background and expertise in a number of areas of Computational Biology, including protein modelling, molecular docking, molecular dynamics simulations and experience in computational protein design would be a great plus.

A biology background and a sound understanding of protein modelling and protein-ligand interactions are required. Familiarity with UNIX and Linux is expected.

The candidate will be a key player in the project as He/She will ensure the tight interaction between the different academic and industrial partners. He/She will be based at LISBP, Toulouse (31).

### **Qualifications**

- PhD in Molecular Modelling, Structural biology, Biophysics or related field.
- Strong communication and organizational skills and enjoy working in a team-oriented environment.
- Good English skills are required and notions of French would be a plus.
- The position is available starting in **September 2019 and for a duration of up to three years.**

Applicants should send as soon as possible CV, summary of previous research and contact addresses of two references to:

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