

**VALENCIA, 9 APRIL 2014**

## **POSTDOC IN PROTEIN CHEMISTRY**

A postdoc position is available at the Department of Chemistry, Technical University of Denmark, within the area of physical chemistry and biocatalysis.

### **Responsibilities and tasks**

The proposed project will focus on enzyme-catalyzed esterification reactions in non-aqueous media. The ability of enzymes to work in non-aqueous media is now widely accepted, but the challenge remains to overcome the poor intrinsic enzyme activity in such dehydrated media. One successful route has been the addition of different excipients during enzyme formulation (lyophilization) to increase enzyme activity. To date, the ability to control the interplay between protein-water-excipients remains an elusive goal in protein science. The primary focus will be on lipase and mutants thereof to map the interplay between mutations/activity and water/excipient content.

Both computational and experimental techniques will be applied to identify crucial residues ("hot-spots") that affect enzyme activity. Such detailed information will be critical to design enzymes having high activity and stability in dehydrated media and will also be applicable in the rational design of formulations to stabilize and deliver protein-based therapeutic drugs and vaccines.

### **Qualifications**

Candidates should have a PhD degree in chemistry with a specialization in physical chemistry and biocatalysis. Knowledge on computational methods will be beneficial. The ideal applicant has during his/her PhD shown excellent competencies in both practical



and theoretical chemistry and the capability to carry out research at the highest international level, as demonstrated by papers in high-ranking journals.

In addition, candidates should be:

Excellent in both spoken and written English

Have the ability to work independently towards the research goals

Have the ability to collaborate in a multidisciplinary research environment

### **We offer**

We offer an interesting and challenging job in an international environment focusing on education, research, public-sector consultancy and innovation, which contribute to enhancing the economy and improving social welfare. We strive for academic excellence, collegial respect and freedom tempered by responsibility. The Technical University of Denmark (DTU) is a leading technical university in northern Europe and benchmarks with the best universities in the world.

### **Read the full posting at:**

<http://www.dtu.dk/Job/job?id=e70efbdf-a4cd-4fa1-947d-b3328add232b>

**[View all vacancies at www.dtu.dk/english/career](http://www.dtu.dk/english/career)**

