

# **Postdoctoral Researchers Recruitment for interfacial water (experiment and simulation) at Shanghai Jiao Tong University**

Supervised by Prof. Liang Hong

No. of available position: 2-3

The laboratory of Prof. Hong Liang, Institute of Natural Sciences and School of Physics and Astronomy of Shanghai Jiao Tong University at Shanghai, China, is seeking talented and highly motivated postdoctoral researchers, who love scientific research, critical thinking and teamwork.

## **REQUIREMENTS:**

1. A recent PhD in Physics/Chemistry/Materials science/Biology or related field.  
(Both experiment and simulation positions are available).
2. Evidence for research potential through first author publication(s) in peer-reviewed international journals.
3. Candidates with Neutron, Xray or simulation experience are preferred.

## **BRIEF INTRODUCTION:**

Professor Hong is one of the 12th batch of “Thousands of Young Talents Project” candidates. His team has engaged in the physical research of macromolecule, biological macromolecule and interfacial water (including phase transition, dynamics, structure, and the relationship between these properties and functions).

Prof. Hong has presided over or participated in many key projects funded by the National Natural Science Foundation of China and Shanghai. He and his group published more than 40 papers on the topic of dynamics of polymer, glass, proteins and interfacial water. See more details at <http://ins.sjtu.edu.cn/people/lhong/>.

.

**Research Topics** (using Neutron, Xray scattering and Computer Simulation to study):

1. Structure, dynamics and function of water molecules on the surface of biomaterials, including protein, DNA and membrane.
2. Microscopic mechanism of nano materials (graphene, graphene oxide membranes, carbon nanotubes) as filtration membranes for seawater desalination and ion sieving;
3. Structure, dynamics and function of water in the high salt battery “solvent in salt”.

## **SALARY AND BENEFITS**

1. Successful candidates will get an annual salary in the range of CNY ¥ 200,000–300,000 based on his/her qualification. The initial contract is 2 years and renewable to 4 years.
2. The research team supports candidates to apply for independent Post-Doctoral Fund and Natural Science Fund Youth Projects. The candidates will be

recommended to work in Chinese neutron facilities and other neutron-related institutes after his/her Postdoc contract is finished.

The positions are available immediately and the applications will be evaluated by ongoing basis. Informal inquiries as well as complete applications can be sent to Prof. Hong Liang, E-mail: [hongl3liang@sjtu.edu.cn](mailto:hongl3liang@sjtu.edu.cn)