

### Postdoctoral Fellowships in Theoretical and Computational Chemistry

# **Position Description**

Applications are invited for postdoctoral fellowships in the research group of <u>Prof. Xiang Sun</u>. The selected individuals will play a leading role in developing and applying new computational methods for chemical dynamics in the condensed phase and simulation of ultrafast nonlinear spectroscopies. Specifically, photoinduced charge and energy transfer dynamics as well as structural dynamics of light-harvesting systems such as organic photovoltaic and luminescent molecules in liquid solutions and disordered condensed phases will be investigated. Classical molecular dynamics, mixed quantum-classical, semiclassical, and path integral approaches will be developed for such systems. Novel dynamical methods will be applied to ultrafast spectroscopies to help reveal important molecular information behind them. More details can be found at <a href="https://wp.nyu.edu/xiangsun">https://wp.nyu.edu/xiangsun</a>.

Research at NYU Shanghai is supported by the NYU-ECNU Center for Computational Chemistry, a research institute operated jointly by NYU, NYU Shanghai, and East China Normal University (ECNU). The center has a core group of faculty members who are conducting frontier research in various fields of computational chemistry, biology, and material sciences. The postdoc fellow will be also affiliated with the center.

More details can be found at https://research.shanghai.nyu.edu/chemistry.

Terms of employment at <u>NYU Shanghai</u> are comparable to NYU New York and other U.S. institutions.

#### Qualifications

- Ph.D. in chemistry, physics, material science, computer science, or related fields (or must be completed before the start date of the appointment)
- Experience with statistical mechanics, electronic structure theory, quantum dynamical methods, or theoretical ultrafast spectroscopy
- Experience with coding in C/C++ and Python
- Excellent communication skills (writing and speaking in English)

### **Application Instructions**

There are two postdoctoral fellowship positions which are available immediately and will remain open until filled. The term is initially for one year with the possibility of

extension. The appointment start date for non-Chinese applicants is subject to immigration regulations. To be considered, applicants must submit:

- cover letter with a brief description of research accomplishments and interests
- curriculum vitae with a list of publications
- 3 recommendation letters (referees will be contacted via Interfolio)

To apply, follow this link: <a href="https://apply.interfolio.com/173694">https://apply.interfolio.com/173694</a>.

Please email the NYU Shanghai NY Office of Faculty Recruitment: <a href="mailto:shanghai.faculty.recruitment@nyu.edu">shanghai.faculty.recruitment@nyu.edu</a> with any questions regarding the application process. Further information on the advertised position may be obtained by contacting Professor Xiang Sun (xiang.sun@nyu.edu) directly.

# **About NYU Shanghai**

NYU Shanghai is the third degree-granting campus within New York University's Global Network. It is the first higher education joint venture in China authorized to grant degrees that are accredited in the U.S. as well as in China. All teaching is conducted in English. A research university with liberal arts and science at its core, NYU Shanghai resides in one of the world's great cities with a vibrant intellectual community. NYU Shanghai recruits scholars of the highest caliber who are committed to NYU's global vision of transformative teaching and innovative research and who embody the global society in which we live.

NYU's Global Network includes degree-granting campuses in New York, Shanghai, and Abu Dhabi, complemented by thirteen additional academic centers across the world. Faculty and students may circulate within the Network in pursuit of common research interests and cross-cultural, interdisciplinary endeavors, both local and global.

For people in the EU, click here for information on your privacy rights under GDPR: <a href="https://www.nyu.edu/it/gdpr.">www.nyu.edu/it/gdpr.</a>

<u>NYU Shanghai</u> is an equal opportunity employer and strongly encourages applications from all interested persons. NYU Shanghai affirms the value of differing perspectives on the world as we strive to build the strongest possible university with the widest reach.