



Postdoctoral Researcher Position - Theoretical and Computational Chemistry

Applications are invited for a postdoctoral position in the group of Prof. William Glover at NYU Shanghai to develop Density Functional Theory and QM/MM methods for excited-state dynamics of weakly bound electrons. The methodology will be applied to understand the response of chemical and biological systems to UV and X-ray radiation. Specific systems of interest include solvated electrons, fluorescent proteins, DNA, and photosynthetic complexes (e.g. doi.org/10.1063/5.0067855). An emphasis of this work is in making direct connections to experiment by simulating observables, and we collaborate with leading ultrafast spectroscopists. Other development work in the group includes fragment based excited-state electronic structure (doi.org/10.1021/acs.jctc.0c01231), and enhanced sampling methods for charge-transfer reactions (dx.doi.org/10.1021/ct500661t). Much of the development utilizes Graphical Processing Unit (GPU)-based quantum chemistry code. More details can be found at wp.nyu.edu/glover.

Research at NYU Shanghai is supported by the 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 theoretical/computational chemistry, biology, and materials science. More details can be found at research.shanghai.nyu.edu/chemistry.

Candidates should have the following qualifications:

- Ph.D. in Chemistry or Physics or related fields by the position start date
- Experience with molecular/quantum dynamics
- Experience developing electronic structure code
- Strong command of written and spoken English

The ideal candidate will also have expertise in one or more of the following: excited-state electronic structure methods, analytical gradient theory, non-adiabatic dynamics.

The position is available immediately or upon agreement. Benefits and salary are competitive. The position term is for 12 months initially, with possibility of extension.

Applications will be reviewed until the position is filled. To be considered, applicants should submit a cover letter with a brief description of research accomplishments and interests, a curriculum vitae with a list of publications, and the names and contact information of at least two references by e-mail to william.glover@nyu.edu

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, it 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 eleven additional academic centers across five continents. Faculty and students circulate within the network in pursuit of common research interests and cross-cultural, interdisciplinary endeavors, both local and global.

NYU Shanghai is an equal opportunity employer committed to equity, diversity and social inclusion. We strongly encourage applications from individual who are under-represented in the profession, across color, creed, race, ethnic and national origin, physical ability, and gender and sexual identity. NYU Shanghai affirms the value of differing perspectives on the world as we strive to build the strongest possible university with the widest reach.