

Postdoctoral Fellow Position - Theoretical and Computational Chemistry

Applications are invited for a postdoctoral position in the group of Prof. William Glover at NYU Shanghai. A range of projects are available related to the excited-state dynamics of complex systems, including:

- (i) developing multistate-multiphysics deep learning potentials and polarizable embedding methodology to simulate photoinduced charge-transfer dynamics in multichromophoric systems, such as photosynthetic reaction centers [doi.org/10.1021/acs.jctc.3c01018, doi.org/10.26434/chemrxiv-2022-mkfzd].
- (ii) Applying multiscale excited-state dynamics simulations to unravel the mechanisms of electron-induced damage to biological molecules [doi.org/10.1021/jacs.2c07572, doi.org/10.26434/chemrxiv-2023-5kl9x].
- (iii) Developing GPU-accelerated multireference methods to improve the accuracy and robustness of current state-of-the-art electronic structure for on-the-fly excited-state dynamics, with applications to the photodamage of biologically relevant molecules [doi.org/10.1063/1.5130997, doi.org/10.1063/5.0058673]. 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 [research.shanghai.nyu.edu/chemistry]. Center members conduct frontier research across theoretical/computational chemistry, biology, and materials science. The center fosters academic exchange with regular seminars and annual workshops.

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

Qualifications

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 theoretical chemistry software (quantum chemistry and/or classical/quantum dynamics)
- 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, polarizable embedding, deep learning potentials.

The position is available immediately subject to immigration regulations or upon agreement. The position term is for 12 months initially, with possibility of extension.

Application Process

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 via the Interfolio position linked here: <https://apply.interfolio.com/168615>. Please also email william.glover@nyu.edu to notify him of your application.

Please reach out to shanghai.faculty.recruitment@nyu.edu with any questions regarding the application process.

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 thirteen 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.

For people in the EU, click here for information on your privacy rights under GDPR: www.nyu.edu/it/gdpr.

NYU Shanghai is an equal opportunity employer committed to equity, diversity and social inclusion. We strongly encourage applications from individuals 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.