



Postdoctoral Openings on Geomechanics at Tongji University

The multiscale geomechanics lab at Department of Geotechnical Engineering of Tongji University located at Shanghai, China (ranked 1st for civil engineering by U.S. News and ARWU), is looking for a highly motivated and enthusiastic Postdoctoral Research Fellow. This position will offer a 2-year fixed term contract with possible extensions if needed and can be started immediately. You will perform independent research under the supervision of Dr. Xianda Shen.

RESEARCH FIELDS

This position focuses on the characterization of the inelastic processes of geomaterials under multi-physics processes (i.e., Thermal-Hydra-Chemo-Mechanical coupling in carbon dioxide sequestration and energy storage systems). The project involves experimental characterization of phase transition and fractures in geomaterials, development of constitutive models, and Finite/Discrete Element implementation and modeling. Prior experience in continuum mechanics, lab testing (e.g., X-ray CT, triaxial testing), or numerical modeling and programming is preferred.

More information can be found in the lab website: <https://xiandashen.github.io/>.

SELECTION CRITERIA

- A Ph.D. in Civil Engineering, Mechanical Engineering, or related fields.
- Expertise and/or interest in constitutive modelling of geomaterials and computational methods for Multiphase and Multiphysics coupling such as FEM, MPM, SPH, DEM et al.
- Ability to work independently and collaborate effectively with colleagues and sponsors.
- Excellent communication skills in English (both verbal and written).

BENEFITS

- Competitive annual salary around ¥300,000 (~\$40,000) depending on experience.
- Visiting opportunities to work with our international collaborators in person.
- Financial support for domestic and internationally conferences.
- We will provide a start-up package and help you to apply for Postdoctoral Fellowships and National Natural Science Funds for Young Scientists.
- Full support to your application for any competitive faculty positions.

APPLICATION

Interested applicants can forward a single PDF consisting of a 1-page cover letter, a full CV, and contact details of two references to Dr. Xianda Shen (xshen@tongji.edu.cn). The review of candidates will begin on October 1st, 2023, and applications will be accepted until the position is filled. For any additional information, see the attached pdf, visit the lab website (<https://xiandashen.github.io/>), or please write a message to xshen@tongji.edu.cn.