



## **Postdoc & PhD Positions Open on Civil and Structural Engineering at Tsinghua University, Shenzhen, China**

Multiple postdoc and PhD positions are open at Tsinghua University (2023 QS world rank 14, 2023 US News world rank 23) to investigate structural behaviours related to ocean engineering such as tunnels, bridges, and sea platforms etc. A multiscale approach integrating structural/material experiments, numerical simulations, and theoretical modellings will be exerted in the research. The research will take place at Tsinghua University's Shenzhen International Graduate School (SIGS), located in Shenzhen, China, and is partly sponsored by NSFC, Great Bay Area regional funds, and Tsinghua SIGS's scientific research funds.

Successful applicants will join a team managed by Dr. Yutao Guo, Assistant Professor in the Institute for Ocean Engineering, SIGS, Tsinghua University. The research topic of Guo's group is "Composite Structures and Ocean Engineering". The recent focus is on novel structures in submarine tunnels and sea platforms, novel and green building materials, as well as AI-aided design.

Candidates with excellent civil/structural or relative backgrounds are sought: structural analysis (steel/concrete, material, member, or system level), numerical models (FEM, CFD, Abaqus, Ansys, Marc, Midas, etc.), computational methods (constitutive model, solid mechanics, fluid dynamics, AI-aided method, etc.). The positions are open to any citizenship and all qualified applicants are welcome.

## **POSTDOC POSITIONS (UP TO THREE)**

### **Your Profile**

You have a PhD degree in related fields, specializing in one or more areas listed above. You are usually under the age of 35, and obtained the PhD degree within 3 years.

Chinese is NOT required. You are fluent in English and have excellent academic writing skills. A good track record of publications in field-leading journals is preferred.

### **Our Offer**

You will be appointed fulltime for two years with opportunities of extension. The position is available as soon as possible.

The gross annual income will be between RMB300,000-500,000 (approx. €40,800-68,000), including the municipal allowance, base salary, research subsidy, accommodation subsidy, etc. (according to latest policies).

An extra subsidy of RMB 60,000 per year (approx. €8,500) will be available if successfully selected for “Shuimu Tsinghua Scholar Program”.

A competitive benefits plan will be offered. Additional benefits/subsidies are available if employed fulltime in Shenzhen upon completion of the postdoc research.

## **PHD POSITIONS (UP TO TWO EACH YEAR)**

The PhD program is four years (for candidates with a master's degree) or five years (for candidates with a Bachelor's degree) in duration. The upcoming starting time is Sep 2023. Successful PhD candidate will be awarded with doctor's degree in Civil Engineering, Tsinghua University. (2022 QS world rank 12 in Civil).

You should have a degree in related areas. A range of scholarship opportunities are available (see links below for details) and monthly living allowance will be provided by the PI. Chinese is NOT required if you are fluent in English.

## **PI INFORMATION**

Dr Yutao Guo obtained his PhD degree in Tsinghua Univ. under the supervision of Prof. J.G. Nie (Chinese Academy of Engineering), and had a postdoc period in Imperial College London under the supervision of Prof A.Y. Elghazouli (Royal Academy of Engineering). Guo is now an assistant professor/PhD supervisor/special researcher in Tsinghua SIGS, with more than 20 publications in top journals or conferences and more than 10 main involvements in practical projects. The research interests include: steel-concrete composite structures, tunnels & bridges, underground structures, green materials, repairing & strengthening, computational methods, AI-aided design, etc. For more information, please see links below.

## **APPLICATION & USEFUL LINKS**

Please send a cover letter (including research & career plan), detailed CV, and representative articles ( $\leq 3$ ), to: [guoyutao@sz.tsinghua.edu.cn](mailto:guoyutao@sz.tsinghua.edu.cn). An interview might be raised after initial selection. All positions are open until filled.

**Tsinghua University:** <https://www.tsinghua.edu.cn/en/>

**Tsinghua SIGS:** <https://www.sigs.tsinghua.edu.cn/en/>

**The PI's personal website:** [https://www.sigs.tsinghua.edu.cn/gyt2\\_en/main.htm](https://www.sigs.tsinghua.edu.cn/gyt2_en/main.htm)

**Graduate admissions and financial aids:** <https://yz.tsinghua.edu.cn/en/>