

PhD Position – Joint Supervision (Shandong University and Ghent University)

Title: *Microstructural Evolution and Mechanical Behavior of Frozen Soils Studied via X-ray CT*

Supervisors:

- **Prof. Ji Peng Wang**, School of Civil and Hydraulic Engineering, Shandong University (China)
- **Prof. Mahya Roustaei Hossein Abadi**, Department of Civil Engineering, Ghent University (Belgium)

Program Structure:

The PhD candidate should be an international student. He or she will be jointly supervised by both institutions. The candidate will pursue a PhD degree from Shandong University, and, if specific requirements are met, a double degree from Ghent University is also possible.

During the program, the student will spend **6–18 months at Ghent University** as a joint PhD researcher, conducting experimental testing, CT image analysis, and joint publications under co-supervision.

Funding:

- Fully funded by the **China Scholarship Council (CSC)** or the **Shandong University International PhD Scholarship**.
- Coverage:
 - Full tuition waiver
 - Monthly stipend of RMB 3,500–4,000
 - Health insurance and accommodation support
 - Ghent University will provide the living stipend during the stay at Belgium
 - Full research access and supervision at both universities

Research Topics:

- CT-based investigation of microstructural evolution under freeze–thaw cycles
- Fiber-reinforced and modified frozen soils
- Image-based modeling and DVC analysis
- Data-driven prediction of frost-induced degradation

Qualifications:

- Master's degree (or near completion) in Civil/Geotechnical/Materials Engineering or related fields;
- Experience in CT imaging, laboratory testing, or numerical simulation preferred;
- Good proficiency in English (IELTS/TOEFL recommended).

Application:

Please send your **CV, publication list**, and a **one-page statement of research interest** to:

Prof. Ji Peng Wang – jipeng.wang@sdu.edu.cn

Prof. Mahya Roustaei Hossein Abadi – Mahya.Roustaei@UGent.be

Email subject: "PhD Application – CT Frozen Soil Research – [Your Name]"

Deadline: 1st Feb 2026