Chao, ZHOU
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ACADEMIC QUALIFICATIONS

- August, 2014 Ph.D, HKUST
- July, 2009 B.Eng., Tsinghua University

ACADEMIC POSITION HELD

- September, 2016 – date Research Assistant Professor, HKUST
- November, 2014 – August, 2016 Visiting Assistant Professor, HKUST
- September – October, 2014 Post-doctoral Fellow, HKUST

RESEARCH INTERESTS

- Static and cyclic behavior of unsaturated soil
- Thermal effects on soil behaviour
- Geo-energy engineering, particularly energy pile and methane hydrate
- High-speed railway embankment

SELECTED RESEARCH PROJECTS AS PRINCIPAL INVESTIGATOR

- Hydro-mechanical behaviour of fine-grained soil contaminated by liquid hydrocarbon, funded by the General Research Fund (GRF) of Hong Kong Research Grants Council (RGC), 2018-2020
- Anisotropic stiffness of unsaturated soil under cyclic thermo-hydro-mechanical loads with principal stress rotations, funded by the GRF of Hong Kong RGC, 2017-2019
- Cyclic thermo-mechanical behaviour of clay and sand with reference to energy piles, funded by the GRF of Hong Kong RGC, 2016-2018
- Experimental study and constitutive modelling of monotonic and cyclic behaviour of unsaturated loess at different temperatures, funded by National Natural Science Foundation of China (NSFC), 2016-2018

TEACHING EXPERIENCES

- At undergraduate level: CIVL 3740 Geotechnical analysis and design, HKUST
- At postgraduate level: CIVL 5770 Unsaturated soil mechanics and engineering, HKUST

PUBLICATIONS

- Published 26 papers in reputable geotechnical journals such as *Géotechnique* and *Canadian Geotechnical Journal*, co-authored six keynote papers, and published over 10 conference papers
- Selected five publications

1. Zhou, C. and Ng, C. W. W. (2018). A new thermo-mechanical model for structured soil. *Géotechnique*. Published online, doi: 10.1680/jgeot.17.t.031.
2. Zhou, C. and Ng, C. W. W. (2016). Simulating the cyclic behaviour of unsaturated soil at various temperatures using a bounding surface model. *Géotechnique*, 66(4): 344-350.
3. Ng, C. W. W. and Zhou, C. (2014). Cyclic behaviour of an unsaturated silt at different suctions and temperatures. *Géotechnique*, 64(9): 709 –720.
4. Zhou, C. and Ng, C. W. W. (2014). A new simple stress-dependent water retention model for unsaturated soil. *Computers and Geotechnics*, 62: 216-222.
5. Ng, C. W. W., Zhou, C., Yuan, Q. and Xu, J. (2013). Resilient modulus of unsaturated subgrade soil: experimental and theoretical investigations. *Canadian Geotechnical Journal*, 50(2): 223-232.