

WANG Hao

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EDUCATION

- PhD, Civil Engineering, Tsinghua University, China (2012.08-2018.07)
- BEng, Civil Engineering, Tsinghua University, China (2008.08-2012.07)
- Visiting Student, Massachusetts Institute of Technology, USA (2014.02-2015.02)
- Visiting Student, Polytechnic University of Catalonia, Spain (2016.01-2016.03)

WORKING EXPERIENCES

- Research Fellow, Nanyang Technological University, Singapore (2018.09 - now)
- Code & Approval Engineer, Hilti Corporation, China (2016.06-2016.09)
- Director Assistant of Ningxia Jinji Industry Zone, China (2015.06-2015.08)
- Teaching Assistant, Tsinghua University, China (2012.09-2017.07)

RESEARCH INTERESTS

- Thermo-hydro-mechanical coupled constitutive modeling of geomaterials
- Finite element implementation and simulation of saturated soil behaviors
- Biological and chemical process in geotechnical application
- Numerical limit analysis for the bearing capacity of onshore and offshore wind turbine foundations

List of Publications

Journal Articles

1. **Wang, H.**, Zhang, Z., & Cheng, X. (2018). A thermal-mechanical constitutive model for cement rock based on thermodynamics and its finite element application. *Chinese Journal of Rock Mechanics and Engineering*, 37(1): 67-76.
2. **Wang, H.**, & Cheng, X. (2016). Undrained Bearing Capacity of Suction Caissons for Offshore Wind Turbine Foundations by Numerical Limit Analysis. *Marine Georesources and Geotechnology*, 34(3): 252-264.
3. Cheng, X, **Wang, H.**, & Yuan, Y. (2015). Finite element limit analyses of the undrained bearing capacity of suction caisson foundations under complex loading conditions, *China Civil Engineering Journal*, 48(10): 108 – 118.
4. Cheng, X., **Wang, H.**, & Yang, Z. (2014). Experimental study on performance of high strength microbial mortar. *Material Research Innovations*, 18(suppl2): 90–94.
5. Cheng, X., Yang, Z., Zhang, Z., & **Wang, H.** (2013). Modeling of microbial induced carbonate precipitation in porous media. *Journal of Pure and Applied Microbiology*, 7(1): 449-458.

Conference Submissions

1. **Wang, H.**, & Cheng, X. (2017). A thermodynamic model for rate-dependent geomaterials. *Springer Series in Geomechanics and Geoengineering. Advances in Laboratory Testing and Modelling of Soils and Shales, ATMSS 2017* : 471-478.
2. **Wang, H.**, Chen, Z., & Cheng, X. (2015). A quasi-static and hysteretic constitutive model for sand based on granular solid hydrodynamics: A triaxial compression example. *Geomechanics from Micro to Macro - Proceedings of the TC105 ISSMGE International Symposium on Geomechanics from Micro to Macro, IS-Cambridge 2014* : 639-644.