

CV of Assistant Professor M.M. Hu

1. Academic Qualification

- PhD (2015), in Civil and Environment Engineering, Duke University (USA)
- MSc (2013), in Civil and Environment Engineering, Duke University (USA)
- BEng (2009), in Civil Engineering, Zhejiang University (China)

2. Positions Held (Chronological Order)

- Assistant Professor, Department of Civil Engineering, the University of Hong Kong (HKU), Hong Kong (2019-present)
- Vice-Chancellor's Postdoctoral Fellow (on the Strategic Research Priority of Unconventional Resources), School of Minerals and Energy Resources Engineering, the University of New South Wales (UNSW), Sydney (2016-2019)

3. Research Areas Related to Ocean Science, Technology and/or Policy

Dr. Hu's research has been focused on Energy and Environmental Geotechnics, in particular the fundamental modelling of coupled thermo-hydro-chemo-mechanical processes, for an optimized and safe extraction of unconventional oil/gas and renewable energy (e.g. geothermal) from the subsurface, onshore and offshore.

4. Five Key Publications over the Past 5 Years (*Corresponding author)

- (1) **M.M. Hu***, C. Schrank, K. Regenauer-Lieb. 2020. Cross-diffusion waves in hydro-poro-mechanics. *Journal of the Mechanics and Physics of Solids*. 135: 103632 (doi: 10.1016/j.jmps.2019.05.015).
- (2) **M.M. Hu*** and T. Hueckel. 2019. Modeling of subcritical cracking in acidized carbonate rocks via coupled chemo-elasticity. *Geomechanics for Energy and the Environment*. 19: 100114 (doi: 10.1016/j.gete.2019.01.003).
- (3) **M.M. Hu*** and K. Regenauer-Lieb. 2018. Entropic limit analysis applied to radial cavity expansion problems. *Frontier Materials*. 5: 47 (doi: 10.3389/fmats.2018.00047).
- (4) **M.M. Hu***, M. Veveakis, T. Poulet, K. Regenauer-Lieb. 2017. The role of temperature

in shear instability and bifurcation of internally pressurised deep boreholes. *Rock Mechanics and Rock Engineering*. 1-15 (doi: 10.1007/s00603-017-1291-2).

- (5) **M.M. Hu*** and T. Hueckel. 2013. Environmentally Enhanced Crack Propagation in a Chemically Degrading Soil/Rock Mass. *Géotechnique*. 63(4): 313-321 (doi: 10.1680/geot.SIP13.P.020).