



**Post-doc/Ph.D position in the Department of Earth Sciences at the
University of Hong Kong**

- 1) Development of a 3D Coupled Groundwater-Seawater Model for Simulating Reactive Transport of Chemicals in Aquifers and Oceans**
- 2) Numerical modeling of impact of confined groundwater on slope stability**

1) Discover the Missing Link in Coastal Aquifer Research

Coastal aquifers play a crucial role in the chemical composition of our oceans. While existing numerical models analyze the transport and migration of chemicals within aquifers and the ocean separately, there is a significant gap in understanding the exchange and chemical migrations between groundwater and seawater. That's where our groundbreaking research comes in.

Join the hydrogeology group at the University of Hong Kong's Department of Earth Sciences, and be part of a team dedicated to developing a comprehensive groundwater-seawater model. This cutting-edge model will couple the physical processes of groundwater and seawater, shedding light on the chemical interactions and migrations that occur between these two crucial water bodies. Gain invaluable knowledge and expertise in both groundwater flow and ocean physical modeling, as we bridge the gap and unlock new insights into the delicate solute transporting processes between land and sea.

2) Unveiling the Hidden Triggers of Landslides: Confined Groundwater's Impact on Slope Stability

Groundwater has long been recognized as a key factor in landslides, but previous studies have predominantly focused on unconfined groundwater. Our hydrogeology group at the University of Hong Kong's Department of Earth Sciences is embarking on a groundbreaking journey to investigate the often-overlooked role of confined groundwater in deep-seated landslides.

We are searching for motivated Ph.D. students or post-doctoral candidates to pioneer the development of a comprehensive groundwater flow and slope stability model. By delving into the impact of confined groundwater on slope stability, you will uncover vital insights that have been largely overlooked in the past. Join our dedicated team and contribute to groundbreaking research that has the potential to significantly improve our understanding of landslides and their triggers.

For further details, please contact Prof. Jimmy Jiao at jjiao@hku.hk.