

CV of Professor Jimmy Jiao

1. Academic Qualification

- PhD (1989-1993), in Civil Engineering, The University of Birmingham, U. K.
- MSc (1983-1986), in Hydrogeology, China University of Geosciences (Wuhan), China
- BSc (1979-1983), in Hydrogeology, China University of Geosciences (Wuhan), China

2. Positions Held (Chronological Order)

- July 2010-present *Professor*
- Department of Earth Sciences, University of Hong Kong, Hong Kong
- Jan. 2003-June 2010 *Associate Professor*
- Department of Earth Sciences, University of Hong Kong, Hong Kong
- 1997-Dec. 2002 *Assistant Professor*

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

- Submarine groundwater discharge and its environmental and ecological effects
- Dynamic interaction between seawater and groundwater
- Subsurface airflow induced by sea tides
- Impact of land reclamation on coastal groundwater regimes
- Offshore hydrogeology

4. Funded Research Projects as Principal Investigator:

Professor Jiao has completed a number of externally funded research projects (total value > HK\$20 m) and trained 19 PhD and 5 MPhil students as well as 3 postdoctoral researchers. At present, he is conducting the following projects:

- Lacustrine groundwater discharge-derived nutrients to Taihu and their environmental and ecological implications, HKU-ZIRI Seed Funding, July 2018–December 2019. RMB 3,000,000.
- Impact Study of the Cavern Sewage Treatment System on Regional Groundwater Flow, Drainage Services Department, HKSAR, 3/2018-9/2019. HKD 1,260,000.
- The investigation of carbon cycle and greenhouse gas (CO₂, CH₄) emission from aquifer-aquitard system in Pearl River Delta, National Science Foundation of China (NSFC), January 2019 – December 2022. RMB\$ 610,000
- Groundwater discharge and lake evolution in the Badain Jaran Desert revealed by radium quartet and radon-222, National Science Foundation of China (NSFC), January 2016 – December 2019. RMB\$ 880,000

- Submarine Groundwater Discharge in South China Sea and its Implication on Nutrient Flux, National Science Foundation of China (NSFC), January 2014 – December 2017. RMB\$ 930,000

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

- **Jiao JJ** & V Post, 2019, *Coastal Hydrogeology*, Cambridge University Press.
- Liu, Y., Liang, W., & **Jiao, JJ*** (2018). Seasonality of nutrient flux and biogeochemistry in an intertidal aquifer. *Journal of Geophysical Research: Oceans*.
- Liu, Y., **Jiao, JJ***, Liang, W., & Luo, X. (2018). Using tidal fluctuation - induced dynamics of radium isotopes to trace the hydrodynamics and geochemical reactions in a coastal groundwater mixing zone. *Water Resources Research*, 54(4), 2909-2930.
- Luo, X., **Jiao, JJ***, Liu, Y., Zhang, X., Liang, W., & Tang, D. (2018). Evaluation of water residence time, submarine groundwater discharge, and maximum new production supported by groundwater borne nutrients in a coastal upwelling shelf system. *Journal of Geophysical Research: Oceans*, 123(1), 631-655.
- Luo, Xin, and **Jiao, JJ***. Submarine groundwater discharge and nutrient loadings in Tolo Harbor, Hong Kong using multiple geotracer-based models, and their implications of red tide outbreaks. *Water Research* (2016), 102, 11–31

6. Awards and Recognition

- 2011, Recipient of the John Hem Excellence in Science and Engineering Award (for outstanding scientific or engineering contributions to the understanding of ground water), National Ground Water Association (NGWA) of America.
- 2011-2012, Recipient of Award for Teaching Excellence in the Faculty of Science in the University of Hong Kong.
- Elected: Fellow, American Society of Civil Engineers, since December 2011
- Elected: Fellow, Geological Society of America, since May 2003
- Elected: Fellow, Geological Society of London, since May 1999
- Publications selected as “Journal Highlight” or “Featured Article” in *Geophysical Research Letters* (2004), *Hydrological Sciences Journal* (2016), and *Estuaries and Coasts* (2010).