Xiao-Wei Jiang, PhD

Professor of Hydrogeology

School of Water Resources and Environment,
China University of Geosciences-Beijing (CUGB)

Address: 29 Xueyuan Road, Haidian District, Beijing 100083, China
Email: jxw@cugb.edu.cn; xiaow.jiang@gmail.com
Tel: 86-10-82323401 **Fax:** 86-10-82321081
ResearcherID: http://www.researcherid.com/rid/F-8288-2011
ResearchGate: https://www.researchgate.net/profile/Xiao-Wei_Jiang

Education

- 09/2007 - 06/2011 Ph.D. Degree (Hydrogeology) at CUGB
- 09/2003 - 12/2006 Master of Engineering Degree (Hydrology and Water Resources) at CUGB
- 09/1999 - 06/2003 Bachelor of Engineering Degree (Environmental Engineering) at CUGB

Professional Career

- 01/2016 – Present Professor, CUGB
- 12/2012 - 01/2016 Associate Professor, CUGB
- 07/2011 - 12/2012 Lecturer, CUGB

Research Interests

- Basin-scale Groundwater Flow and Chemistry

Membership in Scientific Associations

- AGU – American Geophysical Union
- IAH– International Association of Hydrogeologists

Public Services

- **Co-Chair:** Regional Groundwater Flow Commission, IAH (2012-Current)
- **Associate Editor:** Hydrogeology Journal (2016-Current)

Awards

- 2016 Youth Chang Jiang Scholars, Ministry of Education, PRC
- 2015 National Natural Science Foundation—Outstanding Youth Foundation
- 2013 National Excellent Doctoral Dissertation of China

Peer-reviewed Papers on Regional Groundwater Flow

1. Wang JZ(*Student*), Jiang XW*, Zhang ZY, Wan L, Wang XS, Li HL. 2017. An analytical study on three-dimensional versus two-dimensional water table-induced flow patterns in a Tóthian basin. *Hydrological Processes*, DOI:10.1002/hyp.11317. (2016 IF 3.014)
2. Jiang XW*, Sun ZC, Zhao KY, Shi FS, Wan L, Wang XS, Shi ZM. 2017. A method for simultaneous estimation of groundwater evapotranspiration and inflow rates in the discharge area using seasonal water table fluctuations. *Journal of Hydrology*, 548：498-507. (2015 IF 3.043)
3. Zhao KY(*Student*), Jiang XW*, Wang XS*, Wan L, Wang JZ, Wang H, Li HL. 2016. An Analytical Study on Nested Flow Systems in a Tóthian Basin with a Periodically Changing Water Table. *Journal of Hydrology*. DOI: 10.1016/j.jhydrol.2016.09.051. (2014 IF 3.053)
4. Wang JZ (*Student*), **Jiang XW***, Wan L, Worman A, Wang H, Wang XS, Li HL. 2015. An analytical study on artesian flow conditions in unconfined-aquifer drainage basins. *Water Resources Research*. 51(10): 8658–8667.
5. Wang H (*Student*), **Jiang XW***, Wan L, Han GL, Guo HM. 2015. Hydrogeochemical characterization of groundwater flow systems in the discharge area of a river basin. *Journal of Hydrology*, 527: 433-441.
6. An R (*Student*), **Jiang XW***, Wang JZ, Wan L, Wang XS, Li HL. 2015. A theoretical analysis of basin-scale groundwater temperature distribution. *Hydrogeology Journal*, 23(2): 397-404.
7. Wang JZ (*Student*), **Jiang XW***, Wan Li*, Wang XS, Li HL. 2014. An analytical study on groundwater flow in drainage basins with horizontal wells. *Hydrogeology Journal*, 22(7): 1625-1638.
8. **Jiang XW***, Wan L, Wang JZ, Yin BX, Fu WX, Lin CH. 2014. Field identification of groundwater flow systems and hydraulic traps in drainage basins using a geophysical method. *Geophysical Research Letters*, 41(8): 2812-2819.
9. **Jiang XW***, Wan L, Ge S, Cao GL, Hou GC, Hu FS, Wang XS, Li HL, Liang SH. 2012. A quantitative study on accumulation of age mass around stagnation points in nested flow systems. *Water Resources Research*, 48, W12502.
10. **Jiang XW***, Wang XS, Wan L, et al. 2011. An analytical study on stagnation points in nested flow systems in basins with depth-decaying hydraulic conductivity. *Water Resources Research*,

47(1), W01512.

11. Wang XS, **Jiang XW***, Wan L, Ge S, Li HL. 2011. A new analytical solution of topography-driven flow in a drainage basin with depth-dependent anisotropy of permeability. *Water Resources Research*, 47(9), W09603.
12. Cardenas MB*, **Jiang XW**. 2010. Groundwater flow, transport and residence times through topography-driven basins with exponentially decreasing permeability and porosity. *Water Resources Research*, 46(11), W11538.
13. **Jiang XW***, Wan L, Cardenas MB, et al. 2010. Simultaneous rejuvenation and aging of groundwater in basins due to depth-decaying hydraulic conductivity and porosity. *Geophysical Research Letters*, 37(5), L05403.
14. **Jiang XW**, Wang XS*, Wan L. 2010. Semi-empirical equations for the systematic decrease in permeability with depth in porous and fractured media. *Hydrogeology Journal*, 18(4): 839-850.
15. **Jiang XW***, Wan L, Wang XS, et al. 2009. Effect of exponential decay in hydraulic conductivity with depth on regional groundwater flow. *Geophysical Research Letters*, 36(24), L24402.

Xiao-Wei Jiang is a Professor of Hydrogeology at China University of Geosciences (Beijing), and an associate editor of Hydrogeology Journal, the official journal of IAH. He has published 15 peer-reviewed papers on the topic of regional groundwater flow in international journals including *Geophysical Research Letters*, *Water Resources Research*, *Journal of Hydrology*, *Hydrological Processes*, and *Hydrogeology Journal*. He also published a Chinese book titled *Advances in The Theory of Regional Groundwater Flow*.

To foster the applications of the theory of regional groundwater flow, he gives a 32-hour course to graduate students in the field of hydrogeology each year since 2015. He has been invited to give talks on regional groundwater flow in more than 10 universities throughout the world, including the University of Arizona, the University

of Alberta, the University of Texas-Austin, the University of Nebraska-Lincoln, Victoria University, University of Colorado at Boulder, the Technical University of Valencia, and several universities and institutions in China. He is currently supervising around 15 graduate students working on different aspects of the theory of regional groundwater.

Due to his innovative research on regional groundwater flow, he won several national awards in China. In the year 2013, his PhD dissertation was selected to be one of the one hundred Outstanding PhD dissertations in China. In the year 2015, he won the National Natural Science Funds for Excellent Young Scholars and National Young Talents Support Program. In the year 2016, he was chosen to be a young ChangJiang Scholar, which is supported by the Ministry of Education of PRC.

Since November 2012, he served on the Committee of Regional Groundwater Flow as one of the co-chairs. In 2013, as one of the main organizers, he co-organized the International Symposium on Regional Groundwater Flow in China. He also co-organized several sessions on regional groundwater flow in IAH conferences and EGU meetings.