

Jiajie He

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EDUCATION

Ph.D. 2009 Civil Engineering (through Biosystems Engineering Department), Auburn University, Alabama.
M.S. 2003 Environmental Engineering, Wuhan University, China.
B.S. 2000 Environmental Engineering, Wuhan University, China.

WORKING EXPERIENCE

2012~present Associate Professor, Huazhong Agricultural University, China.
2010~2011 Application Engineer, Aqua-Aerobic Systems, Inc., USA.

RESEARCH INTERESTS

Reactive transport model application
Wastewater process modeling

SELECTED PUBLICATIONS

- [1] Siqi Chen; Zhongbing Chen; Mark Dougherty; Xingtao Zuo; **Jiajie He***; The role of clogging in intermittent sand filter (ISF) performance in treating rural wastewater retention pond effluent. *Journal of Cleaner Production*, 2021, 294: 126309.
- [2] Siqi Chen; Mark Dougherty; Zhongbing Chen; Xingtao Zuo; **Jiajie He***; Managing biofilm growth and clogging to promote sustainability in an intermittent sand filter (ISF). *Science of the Total Environment*, 2021, 755: 142477.
- [3] **Jiajie He***; Mark Dougherty; Zhongbing Chen; Numerical assessment of a soil moisture controlled wastewater SDI disposal system in Alabama Black Belt Prairie. *Chemosphere*, 2021, 263: 128210.
- [4] **Jiajie He**; Zhongbing Chen*; Mark Dougherty; Shanshan Hu; Xingtao Zuo; Explore the sludge stabilization process in sludge drying bed by modeling study from mesocosm experiments. *Environmental Research*, 2021, 195: 110837.
- [5] Huannan Wang, Dandan Yan, Huan Zeng, **Jiajie He***; Using corncob-based biochar to intercept BTEX in stormwater filtration systems. *Water Science and Technology*, 2020, 82(9):1858-1867.
- [6] Peitao Su; **Jiajie He***; Xingtao Zuo; Zhongbing Chen; Zhenhua Li; Modelling the simultaneous effects of organic carbon and ammonium on two-step nitrification within a downward flow biofilm reactor. *Process Safety and Environmental Protection*, 2019, 125: 251-259.
- [7] Dandan Yan; **Jiajie He***; Xingtao Zuo; Zhenhua Li; Simultaneous effect of organic carbon and ammonium on two-step nitrification within sequential batch reactor (SBR). *International Journal of Environmental Science and Technology*, 2019, 16(5): 2239-2248.
- [8] **Jiajie He***; Mark Dougherty; Francisco Arriaga; John Fulton; Charles Wood; Joey Shaw; Clifford Lange; Short-term soil nutrient impact in a real-time drain field soil moisture-controlled SDI wastewater disposal system. *Irrigation Science*, 2013, 31(1): 59-67.
- [9] **Jiajie He***; Mark Dougherty; Abdelaziz AbdelGadir; Numerical assisted assessment of vadose-zone nitrogen transport under a soil moisture controlled wastewater SDI dispersal system in a Vertisol. *Ecological Engineering*, 2013, 53: 228-234.
- [10] **Jiajie He***; Mark Dougherty; Francisco Arriaga; Abdelaziz AbdelGadir; Impact of a real-time controlled wastewater subsurface drip disposal system on the selected chemical properties of a vertisol. *Environmental Technology*, 2013, 34(10): 1341-1347.
- [11] **Jiajie He***; Mark Dougherty; Joey Shaw; John Fulton; Francisco Arriaga; Hydraulic management of a soil moisture controlled SDI wastewater dispersal system in an Alabama Black Belt soil. *Journal of Environmental Management*, 2011, 92(10): 2479-2485.
- [12] **Jiajie He***; Mark Dougherty; Richard Zellmer; George Martin; Assessing the Status of Onsite Wastewater Treatment Systems in the Alabama Black Belt Soil Area. *Environmental Engineering Science*, 2011, 28(10): 693-699.

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