

个人简历

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副教授，硕士生导师

从事专业：环境工程

主要研究领域：污泥生物处理，有机污染土壤生物修复

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教育背景：

2007-2011，香港浸会大学，生物学系，博士

2004-2007，南京农业大学，环境工程专业，硕士

2000-2004，南京农业大学，生物科学专业，学士

研究工作经历：

2013.02-至今，南京农业大学，资源与环境科学学院，副教授

2011.11-2013.02，香港科技大学，土木与环境工程系，博士后

主持科研项目：

1. 国家自然科学基金面上项目“污泥生物沥浸中多环芳烃的降解:生物成因次生矿物催化的类 Fenton 作用机制及其调控” (21477055)，84 万，2015-2018；
2. 国家自然科学基金青年基金项目“基于丝状真菌和嗜酸性硫杆菌配合作用的污泥生物沥浸法促进污泥脱水的研究” (21307059)，26 万，2014-2016；
3. 江苏省自然科学基金“污泥生物沥浸体系中丝状真菌促进重金属浸出和改善污泥脱水性能的机制研究” (BK20130667)，20 万，2013-2016；
4. 教育部博士学科点专项科研基金新教师类项目 (20130097120008)，4 万，2014-2016；
5. 中央高校基本科研业务费 (KJQN201435)，10 万，2014-2016.

代表性论文 (*通讯作者)：

1. **Zheng, G.**, Wang, Z., Wang, D., Zhou, L., 2016. Enhancement of Sludge Dewaterability by Sequential Inoculation of Filamentous Fungus *Mucor circinelloides* ZG-3 and *Acidithiobacillus ferrooxidans* LX5. *Chemical Engineering Journal*, 284, 216-223.
2. Hu, W., **Zheng, G.**, Fang, D., Cui, C., Liang, J., Zhou, L., 2015. Bioleached sludge composting drastically reducing ammonia volatilization as well as decreasing bulking agent dosage and improving compost quality: A case study. *Waste Management*, 44, 55-62.
3. **Zheng, G.**, Huo, M., Zhou, L., 2015. Extracellular Polymeric Substances Level Decides the

Sludge Dewaterability in Bioleaching Process. Journal of Environmental Engineering-ASCE, DOI: 10.1061/(ASCE)EE.1943-7870.0001008.

4. Wang, Z., **Zheng, G.**,* Zhou, L., 2015. Degradation of Slime Extracellular Polymeric Substances and Inhibited Sludge Floccs Destruction Contribute to Sludge Dewaterability Enhancement during Fungal Treatment of Sludge Using Filamentous Fungus *Mucor* sp. GY-1. Bioresource Technology, 192, 514-521.
5. Zhang, Z., Lo, M.C.I., **Zheng, G.**, Woon, K.S., Rao, P., 2015. Effect of autotrophic denitrification on nitrate migration in sulfide-rich marine sediments. Journal of Soils and Sediments, 15(4): 1019-1028.
6. Zhang, Z., **Zheng, G.**, Lo, M.C.I., 2015. Enhancement of nitrate-induced bioremediation in marine sediments contaminated with petroleum hydrocarbons by using microemulsions. Environmental Science and Pollution Research, 22, 8296-8306.
7. Zhou, J.,[#] **Zheng, G.**,[#] Zhang, X., Zhou, L., 2014. Influences of extracellular polymeric substances on the dewaterability of sewage sludge during bioleaching. PLoS One, 9(7): e102688. ([#]equal contribution by authors).
8. Huo, M.,[#] **Zheng, G.**,[#] Zhou, L., 2014. Enhancement of the dewaterability of sludge during bioleaching mainly controlled by microbial quantity change and the decrease of slime extracellular polymeric substances content. Bioresource Technology, 168: 190-197. ([#]equal contribution by authors).
9. Song, Y., **Zheng, G.**, Huo, M., Zhao, B., Zhou, L., 2014. Extracellular polymeric substances and bound water drastically affect bioleached sludge dewaterability at low temperature. Environmental Technology, 35(20): 2538-2545.
10. Zhou, J., **Zheng, G.**, Zhou, L., Wong, J.W.C., 2013. Degradation of inhibitory substances in sludge by *Galactomyces* sp. Z3 and the role of its extracellular polymeric substances in improving bioleaching. Bioresource Technology, 132: 217-223.
11. Zhou, J., **Zheng, G.**, Zhou, L., Liu, F., Zheng, C., Cui, C., 2013. The role of *Galactomyces* sp. Z3 in improving pig slurry bioleaching. Environmental Technology, 34(1), 35-43, 2013.
12. **Zheng, G.**, Selvam, A., Wong, J.W.C., 2012. Enhanced solubilization and desorption of organochlorine pesticides (OCPs) from soil by oil-swollen micelles formed with a nonionic surfactant. Environmental Science & Technology, 46 (21): 12062-12068.
13. **Zheng, G.**, Selvam, A., Wong, J.W.C., 2012. Oil-in-water microemulsions enhance the biodegradation of DDT by *Phanerochaete chrysosporium*. Bioresource Technology, 126: 397-403.
14. **Zheng, G.**, Zhou, L., 2011. Supplementation of inorganic phosphate enhancing the removal efficiency of tannery sludge-borne Cr through bioleaching. Water Research, 45: 5295-5301.
15. **Zheng, G.**, Selvam, A., Wong, J.W.C., 2011. Rapid degradation of lindane (γ -hexachlorocyclohexanes) at low temperature by *Sphingobium* strains. International Biodeterioration & Biodegradation, 65: 612-618.
16. **Zheng, G.**, Zhao, Z., Wong, J.W.C., 2011. Role of non-ionic surfactants and plant oils on the solubilization of organochlorine pesticides by oil-in-water microemulsions. Environmental Technology, 32(3): 269-279.

17. Wang, D., **Zheng, G.**, Zhou, L., 2011. Isolation and characterization of a nitrobenzene-degrading bacterium *Klebsiella ornithinolytica* NB1 from aerobic granular sludge. *Bioresource Technology*, 110: 91-96.
18. Wang, D., **Zheng, G.**, Wang, S., Zhang, D., Zhou, L., 2011. Biodegradation of aniline by *Candida tropicalis* AN1 isolated from aerobic granular sludge. *Journal of Environmental Sciences*, 23(12): 2063-2068.
19. Wang, S.,* **Zheng, G.**,* Zhou, L., 2010. Heterotrophic microorganism *Rhodotorula mucilaginosa* R30 improves tannery sludge bioleaching through elevating dissolved CO₂ and extracellular polymeric substances levels in bioleach solution as well as scavenging toxic DOM to *Acidithiobacillus* species. *Water Research*, 44: 5423-5431. (*equal contribution by authors).
20. **Zheng, G.**, Zhou, L., Wang, S., 2009. An acid-tolerant heterotrophic microorganism role in improving tannery sludge bioleaching conducted in successive multibatch reaction systems. *Environmental Science & Technology*, 43 (11): 4151-4156.

获奖情况:

2014 年,“简浩然环境微生物基金”优秀环境工程奖

2013 年,南京农业大学“钟山学者”学术新秀