

王玲玲，女，博士，副研究员，研究方向为微生物胞外产物的微观分子构型和其宏观物化性质之间联系的研究、微生物胞外产物和金属离子的相互作用研究。近年来先后获得中国博士后科学基金（一等）、国家自然科学基金青年科学基金项目、国家自然科学基金面上项目资助，参与十项国家级、省级科学基金项目。目前已在 *Environmental Science & Technology*、*Water Research* 等国际期刊上发表 SCI 论文 15 篇。

Biography

Dr. Wang obtained a B.S. and a PhD in chemistry from University of Science and Technology of China. Prior to her appointment at Guangdong Institute of Microbiology, she was a postdoctoral fellow at the Guangzhou Institute of Geochemistry, Chinese Academy of Sciences. She is currently the associate researcher at Guangdong Institute of Microbiology.

Current Research

Dr. Wang's research focuses on the physical chemistry of microbial products. Within this area, she has investigated conformation and molecular interactions of a bacterial exopolymer, poly- γ -glutamic acid (γ -PGA), and related properties, including viscosity, sedimentation coefficient distribution, heavy metal complexation, and flocculation ability.

Honors and Awards

- Frontiers of Environmental Science & Engineering (FESE)'s beat paper of 2012

Publications

- (1) **Lingling Wang**, Yamin Liu, Xiulin Shu, Shunying Lu, Xiaobao Xie*, Qingshan Shi*, Complexation and conformation of lead ion with poly-gamma-glutamic acid in soluble state, *PloS one*, 2019, 14 (9): e0218742
- (2) **Lingling Wang**, Longfei Wang, Qingshan Shi*, Hanqing Yu, Purification and molecular weight distribution of a key exopolysaccharide component of *Bacillus megaterium* TF10, *Journal of Environmental Sciences*, 2018, 63: 9-15
- (3) **Lingling Wang**, Jiantao Chen, Longfei Wang, Sha Wu, Guangzhao Zhang, Hanqing Yu, Xiaodong Ye, Qingshan Shi*, Conformations and molecular interactions of poly-gamma-glutamic acid as a soluble microbial product in aqueous solutions, *Scientific Reports*, 2017, 7
- (4) **Lingling Wang**, Hefa Cheng*, Birnessite (δ -MnO₂) mediated degradation of organoarsenic feed additive p-arsanilic acid, *Environmental Science & Technology*, 2015, 49 (6): 3473-3481
- (5) **Lingling Wang**, Hefa Cheng*, Principles and application of laser light scattering (LLS) in characterization of the spatial configuration of microbial products in aqueous solution, *Trends in Environmental Analytical Chemistry*, 2015, 8: 12-19
- (6) **Lingling Wang**, Longfei Wang, Xiaodong Ye, Hanqing Yu*, Hydration interactions and stability of soluble microbial products in aqueous solutions,

- Water Research, 2013, 47 (15): 5921-5929
- (7) **Lingling Wang**, Longfei Wang, Xiaodong Ye, Wenwei Li, Guoping Sheng, Hanqing Yu*, Spatial configuration of extracellular polymeric substances of *Bacillus megaterium* TF10 in aqueous solution, *Water Research*, 2012, 46 (11): 3490-3496
 - (8) **Lingling Wang**, Longfei Wang, Xuemei Ren, Xiaodong Ye*, Wenwei Li, Shijie Yuan, Min Sun, Guoping Sheng, Hanqing Yu*, XiangKe Wang, pH dependence of structure and surface properties of microbial EPS, *Environmental Science & Technology*, 2012, 46 (2): 737-744
 - (9) **Lingling Wang**, Shan Chen, Haiting Zheng, Guoping Sheng, Zhijun Wang, Wenwei Li, Hanqing Yu*, *Frontiers of Environmental Science & Engineering*, 2012, 6 (1): 131-139
 - (10) Mingjie Chen, Troy Runge, **Lingling Wang**, Ruimin Li, Jing Feng, Xiulin Shu, Qingshan Shi*, Hydrogen bonding impact on chitosan plasticization, *Carbohydrate Polymers*, 2018, 200: 115-121
 - (11) Longfei Wang, Baocheng Huang, **Lingling Wang**, Yuan Min, Hanqing Yu*, Experimental and theoretical analyses on the impacts of ionic surfactants on sludge properties, *Science of the Total Environment*, 2018, 633: 198-205
 - (12) Jin Feng, Qingshan Shi*, Gang Zhou, **Lingling Wang**, Aimei Chen, Xiaobao Xie, Xiaomo Xie, Wenfeng Hu, Improved production of poly- γ -glutamic acid with low molecular weight under high ferric ion concentration stress in *Bacillus licheniformis* ATCC 9945a, *Process Biochemistry*, 2017, 56: 30-36
 - (13) Xueping Liu, Wenfeng Zhang, Yuanan Hu, Erdan Hu, Xiande Xie, **Lingling Wang**, Hefa Cheng*, Arsenic pollution of agricultural soils by concentrated China animal feeding operations (CAFOs), *Chemosphere*, 2015, 119:273-281
 - (14) Longfei Wang, **Lingling Wang**, Wenwei Li, Dongqin He, Hong Jiang, Xiaodong Ye, Haiping Yuan, Nanwen Zhu, Hanqing Yu*, Surfactant-mediated settleability and dewaterability of activated sludge, *Chemical Engineering Science*, 2014, 116: 228-234
 - (15) Longfei Wang, **Lingling Wang**, Xiaodong Ye*, Wenwei Li, Xuemei Ren, Guoping Sheng, Hanqing Yu*, XiangKe Wang, Coagulation kinetics of humic aggregates in mono- and di-valent electrolyte solutions, *Environmental Science & Technology*, 2013, 47 (10): 5042-5049