Lili Liu

Department: School of Resources and Environmental Engineering

Professional field: Environmental Science and Engineering

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Profile

2009~present: Associate Professor
2012-2013: Visiting scholar, The University of Hong Kong
2006~2008: Lecture, Postdoctoral Researcher
2001-2006: Ph.D. Environmental Engineering, Harbin Institute of Technology
1997-2001: B.S. Environmental Science, Wuhan University

Research Field

Biodegradation and ecological effects of persistent organic pollutants;
Risk assessment and control technology of regional environment pollution;
Source tracing of pollutants in complex polluted systems

Research results and selected published papers

Main research projects (in charge):
Biotransformation and Secondary Pollution Control Technology of Perishable Organic Solid Waste in Cities and Towns, National Key R&D Program, 2018-2022
Technical Integration and Comprehensive Demonstration Project of Water Environment Regulation in Heavily Polluted Zone (Wujin), Major Science and Technology Program for Water Pollution Control and Treatment in China, 2017-2020
Researches on the transformation mechanism and responses of microbial community in PBDEs and heavy metals combined pollution sediments at typical polluted regions, National Natural Science Foundation of China, 2018-2021
Research and Development of Core Sensors and Technology Integration for Aquatic Ecosystem Perception System in Three Gorges Reservoir Area, Major Science and Technology Program for Water Pollution Control and Treatment in China, 2014-2017
Research on the mechanisms for the microbial degradation and stabilization of PBDEs and heavy metals in the complex pollution sediment, National Natural Science Foundation of China, 2011-2013
Research on the microbial remediation mechanisms for PBDEs and heavy metals in the complex pollution sediment at Yangtze River Estuary, Shang Natural Science Found, 2009-2011
Research on the mechanism for microbial degrad ation of tetrabromobisphenol A in sediment, the research project of Chen Guang, Shanghai Education Development Foundation, 2007-2009

Representative publications:
1. Liu LL, Dong YC, Kong M, et al. Insights into the long-term pollution trends and sources contributions in Lake Taihu, China using multi-statistic analyses models. Chemosphere 2020, 242: 125272, doi.org/10.1016/j.chemosphere.2019.125272
2. Liu LL, Tang Z, Kong M, C et al. Tracing the potential pollution sources of the coastal water in Hong Kong with statistical models combining APCS-MLR. J. Environ. Manage. 2019, 245: 143-150.
3. Liu LL, Li H, Wang ZP, et al. Insights into spatially and temporally co-occurring polybrominated diphenyl ethers in sediments of the East China Sea. Chemosphere. 2015,123:55-63.
4. Liu LL, Wang ZP, Ju F, et al. Co-occurrence correlations of heavy metals in sediments revealed using network analysis. Chemosphere. 2015,119:1305-1313.
5. Liu LL, Chen X, Wang ZP, et al. The removal mechanism and performance of tetrabromobisphenol A with a novel multi-group activated carbon from recycling long-root Eichhornia crassipes plants. RSC Adv. 2019, 9: 24760-24769.
6. Liu LL, Chen X, Wang ZP, et al. Removal of aqueous fluoroquinolones with multi-functional activated carbon (MFAC) derived from recycled long-root Eichhornia crassipes: Batch and column studies. Environ. Sci. Pollut. Res. 2019, https://doi.org/10.1007/s11356-019-06173-z
7. Liu LL, Wang YP, Lin S, et al. Using network to enhance the insights on correlation and pollution assessment of co-occurring metals in marine sediments, the East China Sea. Environ. Sci. Pollut. Res. 2018,25(12), 11913-11923.
8. Liu LL, Zhang YC, Liu RH, et al. Aerobic debromination of BDE-209 by Rhodococcus sp. coupled with zerovalent iron/activated carbon. Environ. Sci. Pollut. Res. 2016, 23(4): 3925-3933.