# Xunan Yang

ADDRESS: Room 902, Building 58, No. 100, Xianlie Zhong Road, Guangzhou 510070, China

**CONTACT INFORMATION :** E-mail: yangxn@gdim.cn;

Tel: (86)-20-87137654

#### EDUCATION:

Ph.D., Environmental Engineering, Sun Yat-sen University, China, 2011-2014

M.E., Environmental Engineering, Sun Yat-sen University, China, 2009-2011

B.S., Environmental Science, Sun Yat-sen University, China, 2005-2009

#### ACADEMIC POSITIONS:

2019-present Associate Professor of Microbiology, Guangdong Institute of Microbiology

2014-2018 Assistant Professor of Physics, Guangdong Institute of Microbiology

## AREAS OF RESEARCH INTEREST:

Bioremediation of soil and sediment;

Biogeochemical transformation of pollutants in soil and sediment;

Microbial ecology in environment;

Waste reduction and recycling.

## Research Grants (last 5 years):

• Science and Technology Planning Project of Guangdong Province, China, Technical demonstration and application for the remediation of black-odorous river sediment. 2019-2020 (Pl)

• National Natural Science Foundation of China, Nitrate stimulated biodegradation of polycyclic aromatic hydrocarbons in sulfide-rich sediments, 2015-2018 (PI)

• Natural Science Foundation of Guangdong Province, China, Effects of nitrate reduction and sulfide oxidation on PAHs degradation in river sediment, 2014-2017 (PI)

## Awards & Honors

• Award of the Guangdong Scientific and Technological Progress-First Prize, Guangdong Province (15/15).

 Award for Agriculture, Animal Husbandry and Fishery, Ministry of Agriculture and Rural Affairs, PRC (21/25)

· Member of Guangdong Society of Environmental Sciences, 2019-, China

#### **Representative publications**

- Pan, Y., Yang, X.\*, Xu, M., Sun, G., 2019. Functional Response of Sediment Bacterial Community to Iron-reducing Bioaugmentation with *Shewanella decolorationis* S12. *Applied Microbiology and Biotechnology*, 103(12), 4997–5005.
- (2) Huang, J., **Yang, X.\***, Wu, Q., Mai, S., Chi, H., 2019. Application of independent immobilization in benzo[a]pyrene biodegradation by synthetic microbial consortium. *Environmental Science & Pollution Research*, 26(20), 21052–21058.
- (3) Yang, X., Chen, Z., Wu, Q., Xu, M., 2018. Enhanced phenanthrene degradation in river sediments using a combination of biochar and nitrate. *Science of The Total Environment*, 619-620:600-605.
- (4) Pan, Y., **Yang, X.\***, Xu, M., Sun, G., 2017. The Role of Enriched Microbial Consortium on Iron-Reducing Bioaugmentation in Sediments. *Frontiers in Microbiology*, 8, 462.



- (5) **Yang, X.**, Yu, L., Chen, Z., Xu, M., 2016. Bioavailability of Polycyclic Aromatic Hydrocarbons and their Potential Application in Eco-risk Assessment and Source Apportionment in Urban River Sediment. *Scientific Reports*, 6:23134.
- (6) Yang, X., Chen, S., Zhang, R., 2014. Utilization of two invasive free-floating aquatic plants (*Pistia stratiotes* and *Eichhornia crassipes*) as sorbents for oil removal. *Environmental Science & Pollution Research*, 24(1): 781-786.
- (7) **Yang, X.**, Guo, M., Wu, Y., Wu, Q., Zhang, R., 2014. Removal of emulsified oil from water by fruiting bodies of macro-fungus (*Auricularia polytricha*). *PLoS ONE*, 9(4): e95162.
- (8) **Yang, X.,** Ye, J., Lyu, L., Wu, Q., Zhang, R., 2013. Anaerobic biodegradation of pyrene by *Paracoccus denitrificans* under various nitrate/nitrite reducing conditions. *Water, Air, & Soil Pollution*, 224(5): 1578.
- (9) Yang, X., Huang, S., Wu, Q., Zhang, R., 2013. Diversity and vertical distributions of sediment bacteria in an urban river contaminated by nutrients and heavy metals. *Frontiers of Environmental Science & Engineering*, 7(6): 851-859.
- (10) **Yang, X.,** Huang, S., Wu, Q., Zhang, R., 2012. Nitrate reduction coupling with microbial oxidation of sulfide in river sediment. *Journal of Soils and Sediments*, 12(9): 1435-1444.