

Shanshan Hu

Date of birth: 3rd March 1992

Place of birth: Anhui Province, China

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Education

- 2017 – present: Ph.D. studies
Applied Ecology Department, Faculty of Environmental
Sciences
**Czech University of Life Sciences Prague, Czech
Republic**
Thesis: *Heavy metals transformation in arbuscular
mycorrhizal assistant constructed wetlands*
- 2014 – 2017: Master programme
Ecology Department, Faculty of Resources and
Environment
Huazhong Agricultural University, Wuhan, China
Thesis: *Efficiency studies on the treatment of sludge and
leachate in constructed wetlands with different combinations*
- 2010 – 2014: Bachelor programme
Environmental Engineering Department, Faculty of
Resources and Environment
Anhui Agricultural University, Anhui, China
Thesis: *Study on removal characteristics of fluorine in
drinking water by adsorption - membrane separation technology*

Publications

Bo Hu, **Shanshan Hu**, Zhongbing Chen*, Jan Vymazal. 2021. Employ of arbuscular mycorrhizal fungi for pharmaceuticals ibuprofen and diclofenac removal in mesocosm-scale constructed wetlands. *J. Hazard. Mater.* 409, 124524. <https://doi.org/10.1016/j.jhazmat.2020.124524>

Jiajie He, Zhongbing Chen*, Mark Dougherty, **Shanshan Hu**, Xingtao Zuo, 2021. Explore the sludge stabilization process in sludge drying bed by modeling study from mesocosm experiments. *Environ. Res.* 195, 110837. <https://doi.org/10.1016/j.envres.2021.110837>

Shanshan Hu, Huilun Chen*, Zhongbing Chen*, 2020a. Performance of sludge drying reed beds for the leachate purification: Effects of sludge loading frequencies and plant species. *Environ. Res.* 194, 110452. <https://doi.org/10.1016/j.envres.2020.110452>

Shanshan Hu, Zhongbing Chen*, Miroslav Vosátka, Jan Vymazal. 2020b. Arbuscular mycorrhizal fungi colonization and physiological functions toward wetland plants under different water regimes. *Sci. Total Environ.* 716, 137040. <https://doi.org/10.1016/j.scitotenv.2020.137040>

Shanshan Hu, Bo Hu, Zhongbing Chen*, Miroslav Vosátka, Jan Vymazal. 2020c. Antioxidant response in arbuscular mycorrhizal fungi inoculated wetland plant under Cr stress. *Environ. Res.* 191. <https://doi.org/10.1016/j.envres.2020.110203>

Shanshan Hu, Zuopeng Lv, Xingtao Zuo, Hongbo Liu, Jan Vymazal, Zhongbing Chen*. 2020d. Effects of loading rates and plant species on sludge characteristics in earthworm assistant sludge treatment wetlands. *Sci. Total Environ.* 730. <https://doi.org/10.1016/j.scitotenv.2020.139142>

Shanshan Hu, Xingtao Zuo, Zuopeng Lv, Jiajie He, Yupeng Wu, Hongbo Liu, Zhongbing Chen*. 2020e. Drained water quality in sludge treatment wetlands: Effects of earthworm densities and plant species. *J. Clean. Prod.* 247. <https://doi.org/10.1016/j.jclepro.2019.119128>

Shanshan Hu, Zhongbing Chen*, Zuopeng Lv, Ke Chen, Liangliang Huang, Xingtao Zuo, Jiajie He, Yi Chen*. 2019. Purification of leachate from sludge treatment beds by subsurface flow constructed wetlands: effects of plants and hydraulic retention time. *Environ. Sci. Pollut. Res.* 26, 5769–5781. <https://doi.org/10.1007/s11356-018-4006-7>

Zhongbing Chen*, **Shanshan Hu**. 2019. Heavy metals distribution and their bioavailability in earthworm assistant sludge treatment wetland. *J. Hazard. Mater.* 366, 615–623. <https://doi.org/10.1016/j.jhazmat.2018.12.039>

Shanshan Hu, Zhongbing Chen*. 2018. Earthworm effects on biosolids characteristics in sludge treatment wetlands. *Ecol. Eng.* 118, 12–18. <https://doi.org/10.1016/j.ecoleng.2018.04.016>

Shanshan Hu, Xuanlou She, Xiandong Wei, Bo Hu, Chengxiao Hu*, Yunqiu Qian, Yinghong Fang, Xirui Zhang, Safdar Bashir, Zhongbing Chen*. 2017. Surplus sludge treatment in two sludge treatment beds under subtropical condition in China. *Int. Biodeterior. Biodegrad.* 119, 377–386. <https://doi.org/10.1016/j.ibiod.2016.11.005>

Zhongbing Chen, **Shanshan Hu**, Chengxiao Hu*, Liangliang Huang, Hongbo Liu, Jan Vymazal. 2016. Preliminary investigation on the effect of earthworm and vegetation for sludge treatment in sludge treatment reed beds system. *Environ. Sci. Pollut. Res.* 23, 11957–11963. <https://doi.org/10.1007/s11356-016-6399-5>

Shanshan Hu, Bo Hu, Zhongbing Chen*, Miroslav Vosátka, Jan Vymazal. 2021. Arbuscular mycorrhizal fungi modulate the chromium distribution and bioavailability in semi-aquatic habitats. *Chem. Eng. J.* (Minor revised manuscript).

Grants and projects

IGA 20184235 (Internal Grant Agency of the Faculty of Environmental Sciences, CULS Prague).

IGA 2020B0031 (Internal Grant Agency of the Faculty of Environmental Sciences, CULS Prague).

Participation in Conferences

- 2018.11 Kostelecké inspirování, Prague.
- 2019.06 8th International Symposium on Wetland Pollutant Dynamics and Control, Denmark.
- 2020.11 Kostelecké inspirování, Prague. Online conference.
- 2021.03 12th International Conference on Environmental Science and Development. Online conference.