

Dr. He Wang

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RESEARCH EXPERIENCES

- 09/2022 -* **Postdoc**
The Friedrich Schiller University Jena/Faculty of Biological Sciences
- 10/2019 - 05/2022* **Scientist**
University of Vienna/ Department of functional and evolutionary ecology
- 07/2017 - 09/2019* **Scientist**
HelmholtzZentrum-muenchen/ Ground water ecology institute
- 10/2016 - 05/2017* **Master Thesis**
Degradation of PAHs by aerobic and/or anaerobic bacteria in the presence and absence of biosurfactants
Institute of Groundwater Ecology, HelmholtzZentrum münchen (Germany)
- 08/2016-10/2016* **Internship**
The solubility of 2-methylnaphthalene in the presence of biosurfactants, cultivation of anaerobes and aerobes and other lab work (Kill-Spill project).
Institute of Groundwater Ecology, HelmholtzZentrum München
- 06/2016 – 08/2016* **Microbiology Practice**
Optimizing growth conditions of aerobic polycyclic aromatic hydrocarbon degrading bacteria
Institute of Groundwater Ecology, HelmholtzZentrum münchen (Germany)
- 11/2015 – 01/2016* **Analytical Chemistry Practice**
Ultra-Fast Separation in LC × LC and The Application
Department of Applied Analytical Chemistry, Universität Duisburg-Essen (Germany)
- 09/2012 – 02/2013* **Molecular Biology Practice (PCR, gel electrophoresis, Northern Blotting, etc.)**
School of life science, Northeast Forestry University (China)

EDUCATION

- 07/2017 – 11/2022* **PhD candidate (DR. RER. NAT.)**
Technische Universität München

Topic: Fate of pathogenic virus during riverbank filtration

10/2014 – 05/2017 **Water science (M.Sc.)**

Faculty of chemistry

Universität Duisburg-Essen, Essen (Germany)

Main courses: Environmental Microbiology, Water Chemistry, Chemometrics and Statistics, Environmental Chemistry: Pollutants, Environmental Chemistry: Soil/Waste, Membrane Technologies, Waste Water Treatment, Applied Analytical Chemistry, Biofouling and Biocorrosion, etc.

Weighted average of all examinations: 1.7

Thesis title: Degradation of PAHs by aerobic and/or anaerobic bacteria in the presence or absence of biosurfactants (Dr. Sviatlana Marozava, Dr. Martin Elsner).

09/2010 – 06/2014 **Biological Science (B.Sc.)**

School of life science

Northeast Forestry University, Harbin (China)

Main courses: Inorganic and Analytical Chemistry, Zoology, Phytology, Organic Chemistry, Microbiology, Biochemistry, Cytobiology, Phytophysiology, Genetics, Molecular Biology, Ecology, Developmental Biology, Immunology, and their practices, etc.

Weighted average of all examinations: 1.9

Thesis title: Responses of Chlorophyll Fluorescence Characteristics in Leaves of Sorghum Hybrid Sudan grass to Different Concentration Alkaline Salt Stress (Prof. Guangyu Sun)

PUBLICATIONS

Wang, H., 2022. The fate of pathogens during bank filtration with emphasis on hydrological extremes and the application of microbial data in ecological groundwater monitoring. *Universität München*.

Wang, H., Knabe, D., Engelhardt, I., Droste, B., Rohns, H.P., Stumpp, C., Ho, J. and Griebler, C., 2022. Dynamics of pathogens and fecal indicators during riverbank filtration in times of high and low river levels. *Water Research*, 209, 117961.

Wang, H., Kaletta, J., Kaschuba, S., Klitzke, S., Chorus, I., Griebler, C., 2022. Attachment, re-mobilization, and inactivation of bacteriophage MS2 during bank filtration following simulation of a high virus load and an extreme rain event. *Journal of Contaminant Hydrology*, 103960.

Knabe, D., Dwivedi, D., **Wang, H.**, Griebler, C., Engelhardt, 2023. Numerical Investigations to identify environmental factors for field-scale reactive transport of pathogens at riverbank filtration sites. *Advances in Water Resources*, 104389.

Fillinger, L., Hug, K., Trimbach, A., **Wang, H.**, Kellermann, C., Meyer, A., Bendinger, B., and Griebler, C., 2019. The D-A-(C) index: a practical approach towards the microbiological-ecological monitoring of groundwater ecosystems. *Water Research*, 163, 114902.

Marozava, S., Meyer, A. H., Pérez-de-Mora, A., Gharasoo, M., Zhuo, L., **Wang, H.**, ... & Elsner, M., 2019. Mass transfer limitation during slow anaerobic biodegradation of 2-methylnaphthalene. *Environmental science & technology*, 53(16), 9481-9490.

Wang, H., Griebler, C. Spatio-temporal dynamics in natural attenuation of pathogens during river bank filtration. Poster presentation at 17th International Symposium on Microbial Ecology (ISME 17), Leipzig, Germany, August 12-17, 2018.

Wang, H., Knabe, D., Engelhardt, I., Droste, B., Rohns, H., Stumpp, C., Ho, J., Griebler, C. Dynamics of pathogens and fecal indicators during riverbank filtration in times of high and low river levels. Talk presentation at EGU22 (European Geosciences Union), Wien, Austria, May 23-27, 2022

AWARDS AND GRANTS

06/2014 **Outstanding Dissertation of Bachelor of Northeast Forestry University**

04/2017 **Graduation grant for 2017**

02/2023 **Funding of Integrated Research Training group (IRTG) AquaDiva**

05/2023 **“Begegnungszonen” der Joachim-Herz-Stiftung**

07/2023 **Funding of Interdisciplinary Networking Events (Carl Zeiss Stiftung)**