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Current position

2023-present **Assistant Professor** **Aarhus University, Denmark**

Previous positions

2020-2023 **Postdoctoral fellow** **Aarhus University, Denmark**
2019-2020 **Postdoctoral fellow** **Paul Scherrer Institute, Switzerland**
2018-2019 **Postdoctoral fellow and lab manager** **University of Maryland, USA**

Education

2012-2017 **Ph.D (Dr. rer. nat.), Environmental Science** **Aachen, Germany**
Department of Analytical Chemistry, Forschungszentrum Jülich; Advisor: Dr. Stephan Küppers
Institute for Environmental Research (BioV), RWTH-Aachen University; Advisor: Prof. Henner Hollert

2008-2011 **Master (M. Eng.), Environmental Science** **Shanghai, China**
Department of Environmental Science and Engineering, Tongji University

2004-2008 **Bachelor (B. Eng.), Environmental Engineering** **Nanjing, China**
Department of Energy and Environment, Southeast University

Participated Projects

- Chemical additives in weathered microplastic in the marine environment – occurrence and risk
- Non-target screening – a new approach to identify Arctic pollutants
- Non-target screening - identifikation af nye kemikalier i indemiljøet (identification of new chemicals in the indoor environment)
- POP, PBT, PMT – muligheder og begrænsninger for en risikovurdering af nye kontaminanter i Arktis (opportunities and limitations for a risk assessment of new contaminants in the Arctic)
- Multisource: Modular tools for integrated enhanced natural treatment solutions in urban water cycles
- PARC project (Partnership for the Assessment of Risks from Chemicals)
- InChildHealth project: identify determinants for Indoor Air Quality (IAQ) and evaluate their impact in environments occupied by school children

Aarhus University, Denmark

- Conserve Project: Non-traditional Irrigation Water Sources **University of Maryland, USA**
- SIGN Project: Assuring water quality from the source to the tap in Taihu area
- Yangtze-Hydro Project: Water quality in the Three Gorges Dam, China

Research Centre Jülich and RWTH-Aachen University, Germany

- National Natural Science Foundation of China **Tongji University, China**

Research supervision

- Master student (Main supervisor): Allison Jimenez Nieto, 2024, Department of Environmental Science, Aarhus University
- Visiting PhD (co-supervision): Nicolas Pala, 2022, Department of Environmental Science, Aarhus University
- Visiting student (co-supervision): Christina Hopf, 2022, Department of Environmental Science, Aarhus University
- Master student (co-supervisor): Maohua Pan, 2011, Department of Environmental Science and Engineering, Tongji University

Publications

1. Zhu, L.; Bossi, R.; Carvalho, P. N.; Rigét, F. F.; Christensen, J. H.; Weihe, P.; Bonefeld-Jørgensen, E. C.; Vorkamp, K. Suspect and Non-Target Screening of Chemicals of Emerging Arctic Concern in Biota, Air and Human Serum. Environ. Pollut. 2024, 360, 124605.
2. Zhu, L., Fauser, P., Mikkelsen, L, Sanderson, H. & Vorkamp, K, 2023. Suspect and non-target screening of semi-volatile emerging contaminants in indoor dust from Danish kindergartens, Chemosphere 345, 140451.
3. Dürig, D et al., 2023. What is in the fish? Collaborative trial in suspect and non-target screening of organic micropollutants using LC- and GC-HRMS, submitted to Environmental International.
4. Hollender, J. et al., 2023. NORMAN Guidance on Suspect and Non-Target Screening in Environmental Monitoring, Environmental Sciences Europe, 35, 75.
5. Zhu, L., Chattopadhyay, S., Akanbi, O.E., Panthi, C., Chiu, P. Sapkota, A., and Sapkota, A.R., 2023. Biochar-based columns to simultaneously remove organic micropollutants and Escherichia coli in wastewater effluents for agricultural use. Biochar, 5 (1), 41.
6. Zhu, L., Hajeb, P., Fauser, P. & Vorkamp, K, 2023. Endocrine disrupting chemicals in indoor dust: A review of temporal and spatial trends, and human exposure. Science of The Total Environment, 874, 162374.
7. Hajeb, P., Zhu, L., Bossi, R. & Vorkamp, K., 2022. Sample preparation techniques for suspect and non-target screening of emerging contaminants. Chemosphere 287, 132306.
8. Zhu, L., Jiang, C., Panthi, C., Sapkota, A.R. and Sapkota, A., 2021. Impact of high precipitation and temperature events on the distribution of emerging contaminants in surface water in the Mid-Atlantic, USA. Science of the Total Environment, 755, 2, 142552.
9. Boyle, M.D., Kavi, L.K., Louis, L.M., Pool, W., Sapkota, A., Zhu, L., Pollack, A.Z., Thomas, S., Rule, A.M., Quirós-Alcalá, L., 2021. Occupational Exposures to Phthalates among Black and Latina U.S. Hairdressers Serving an Ethnically Diverse Clientele: A Pilot Study. Environ. Sci. Technol. 55, 8128–8138.
10. Allotey, J.A., Boyle, M., Sapkota, A., Zhu, L., Peng, R.D., Garza, M.A., Quirós-Alcalá, L., 2021. Determinants of phthalate exposure among a U.S.-based group of Latino workers, International Journal of Hygiene and Environmental Health, 234, 113739.
11. Shao, Y., Zhu, L., Thalmann, B., Hollert, H. Zhou, S. and Seiler, T.-B., 2021. Evidence of increased estrogenicity upon metabolism of Bisphenol F - Elucidation of the key metabolites, Science of The Total Environment, 787, 147669.
12. Zhu, L., Shao, Y., Alert, H., Xiao, H., Santiago-Schübel, B., Hollert, H. and Küppers, S., 2018. Electrochemical simulation of triclosan metabolism and toxicological evaluation. Science of the Total Environment, 622-623: 1193-1201.
13. Zhu, L., Santiago-Schübel, B., Xiao, H., Hollert, H., Küppers S., 2016. Electrochemical oxidation of fluoroquinolone antibiotics: mechanism, residual antibacterial activity and toxicity change. Water research. 102: 52-62.
14. Zhu, L., Santiago-Schübel, B., Xiao, H., Thiele, B., Zhu, Z., Qiu Y., Hollert, H., Küppers S., 2015. An efficient laboratory workflow for environmental risk assessment of organic chemicals. Chemosphere. 131: 34-40.
15. Zhu, L., Zhu, Z., Qiu, Y., Zhang, R., 2014. Synthesis of As(V)-Cr(III) Co-Imprinted Polymer and Its Adsorption Performance for Arsenate Species. Separation Science and Technology. 49(10): 1584-1591.

16. Zhu, L., Zhu, Z., Zhang, R., Jun, H., Qiu, Y., 2011. Synthesis and adsorption performance of lead ion-imprinted micro-beads with combination of two functional monomers. Journal of Environmental Sciences. 23(12): 1955-1961.
17. Jianyao Zhu, J., Zhu, Z., Zhang, H., Lu, H., Zhang, W., Qiu, Y., Zhu, L. and Küppers., S., 2018. Calcined layered double hydroxides/reduced graphene oxide composites with improved photocatalytic degradation of paracetamol and efficient oxidation-adsorption of As(III). Applied Catalysis B: Environmental, 225:50-562.
18. Di, G., Zhu, Z., Zhang, H., Zhu, J., Lu, H., Zhang, W., Qiu, Y., Zhu, L. and Küppers, S., 2017. Simultaneous removal of several pharmaceuticals and arsenic on Zn-Fe mixed metal oxides: Combination of photocatalysis and adsorption. Chemical Engineering Journal 328, 141-151.
19. Lu, H., Zhu, Z., Zhang, H., Zhu, J., Qiu, Y., Zhu, L., Küppers, S., 2016. Fenton Like Catalysis and Oxidation/Adsorption Performances of Acetaminophen and Arsenic Pollutants in Water on a Multi-metal Cu-Zn-Fe-LDH. ACS Applied Materials & Interfaces. 8 (38): 25343–25352.
20. Zhu, J., Zhu, Z., Zhang, H., Lu, H., Qiu, Y., Zhu, L., Küppers, S.. Enhanced photocatalytic activity of Ce-doped Zn-Al multi-metal oxide composites derived from layered double hydroxide precursors. Journal of Colloid and Interface Science, 2016. 481: 144-157.
21. Pan, M., Zhu, Z., Zhu, L., Qiu, Y., Zhang, R., 2014. Synthesis of magnetic As(V)-imprinted polymers and their adsorption performances for arsenate in water solutions. Fresenius Environmental Bulletin. 23: 122-129.

■ Books and reports

1. Fauser, P., Zhu, L., Sanderson, H., Jensen, S., Bogevik, A., & Vorkamp, K. (2022). Chemical additives in weathered microplastic in the marine environment: occurrence and risk. Nordic Council of Ministers
2. Küppers, S., et al. (2019). Fostering Water Treatment in Eutrophic Areas: Innovative Water Quality Monitoring, and Technologies Mitigating Taste & Odor Problems Demonstrated at Tai Hu. Urban Water Management for Future Cities: Technical and Institutional Aspects from Chinese and German Perspective. S. Köster, M. Reese and J. e. Zuo. Cham, Springer International Publishing: 91-110.
3. Müller, Y. & Zhu, L. & Crawford, S.E. (Shared first author), Küppers, S., Schiwy, S., Hollert, H., 2016. The Utility of Exposure and Effect-Based Analysis in the Ecotoxicological Assessment of Transformation Products. In: Drewes J.E. and Letzel T., Assessing Transformation Products of Chemicals by Non-Target and Suspect Screening − Strategies and Workflows Volume 2, American Chemical Society, ACS book Chapter 5, pp 89-109, DOI: 10.1021/bk-2016-1242.ch005