

## Qualifications

Environmental Science, PhD (Dr. rer. nat.), A Laboratory Workflow to Study Transformation and Ecotoxicity of Emerging Pharmaceuticals and Personal Care Products in Water- Integrating Electrochemistry-mass spectrometry and Bioassays, RWTH Aachen University  
Award Date: 10 May 2017

## Employment

### Assistant Professor

Department of Environmental Science - Environmental chemistry & toxicology  
Aarhus University  
Roskilde, Denmark  
1 Apr 2023 → present

## Research outputs

Biochar and zero-valent iron sand filtration simultaneously removes contaminants of emerging concern and *Escherichia coli* from wastewater effluent

Zhu, L., Chattopadhyay, S., Elijah Akanbi, O., Lobo, S., Panthi, S., Malayil, L., Craddock, H. A., Allard, S. M., Sharma, M., Kniel, K. E., Mongodin, E. F., Chiu, P. C., Sapkota, A. & Sapkota, A. R., Dec 2023, In: *Biochar*. 5, 1, 41.

### Suspect and non-target screening of semi-volatile emerging contaminants in indoor dust from Danish kindergartens

Zhu, L., Fauser, P., Mikkelsen, L., Sanderson, H. & Vorkamp, K., Dec 2023, In: *Chemosphere*. 345, 9 p., 140451.

### What is in the fish? Collaborative trial in suspect and non-target screening of organic micropollutants using LC- and GC-HRMS

Dürig, W., Lindblad, S., Golovko, O., Gkotsis, G., Aalizadeh, R., Nika, M. C., Thomaidis, N., Alygizakis, N. A., Plassmann, M., Haglund, P., Fu, Q., Hollender, J., Chaker, J., David, A., Kunkel, U., Macherius, A., Belova, L., Poma, G., Preud'Homme, H. & Munsch, C. & 24 others, Aminot, Y., Jaeger, C., Lisek, J., Hansen, M., Vorkamp, K., Zhu, L., Cappelli, F., Roscioli, C., Valsecchi, S., Bagnati, R., González, B., Prieto, A., Zuloaga, O., Gil-Solsona, R., Gago-Ferrero, P., Rodriguez-Mozaz, S., Budzinski, H., Devier, M. H., Dierkes, G., Boulard, L., Jacobs, G., Voorspoels, S., Rüdell, H. & Ahrens, L., Nov 2023, In: *Environment International*. 181, 11 p., 108288.

### NORMAN guidance on suspect and non-target screening in environmental monitoring

Hollender, J., Schymanski, E. L., Ahrens, L., Alygizakis, N., Béen, F., Bijlsma, L., Brunner, A. M., Celma, A., Fildier, A., Fu, Q., Gago-Ferrero, P., Gil-Solsona, R., Haglund, P., Hansen, M., Kaserzon, S., Krueve, A., Lamoree, M., Margoum, C., Meijer, J. & Merel, S. & 14 others, Rauert, C., Rostkowski, P., Samanipour, S., Schulze, B., Schulze, T., Singh, R. R., Slobodnik, J., Steininger-Mairinger, T., Thomaidis, N. S., Togola, A., Vorkamp, K., Vulliet, E., Zhu, L. & Krauss, M., Sept 2023, In: *Environmental Sciences Europe*. 35, 1, 61 p., 75.

### Endocrine disrupting chemicals in indoor dust: A review of temporal and spatial trends, and human exposure

Zhu, L., Hajeb, P., Fauser, P. & Vorkamp, K., May 2023, In: *Science of the Total Environment*. 874, 162374.

### Pesticides and Biocides in the Danish Population of European Hedgehogs (*Erinaceus europaeus*)

Rasmussen, S. L., Vorkamp, K., Zhu, L., Roslev, P., Pertoldi, C. & Nielsen, J. L., Apr 2023, p. 213-213.

### Chemical additives in weathered microplastic in the marine environment occurrence and risk: occurrence and risk

Fauser, P., Zhu, L., Sanderson, H., Jensen, S., Bogevik, A. S. & Vorkamp, K., Apr 2022, Nordisk Ministerråd. (TemaNord; No. 520, Vol. 2022).

### Non-target screening - identifikation af nye kemikalier i indemiljøet

Fauser, P., Zhu, L., Sanderson, H., Mikkelsen, L. & Vorkamp, K., Mar 2022, Aarhus University, DCE - Danish Centre for Environment and Energy. 85 p. (Videnskabelig rapport fra DCE - Nationalt Center for Miljø og Energi; No. 493).

### **Sample preparation techniques for suspect and non-target screening of emerging contaminants**

Hajeb, P., Zhu, L., Bossi, R. & Vorkamp, K., Jan 2022, In: *Chemosphere*. 287, Part 3, 17 p., 132306.

### **Evidence of increased estrogenicity upon metabolism of Bisphenol F - Elucidation of the key metabolites**

Shao, Y., Zhu, L., Chen, Z., Thalmann, B., Zhou, S., Hollert, H. & Seiler, T. B., 15 Sept 2021, In: *Science of the Total Environment*. 787, 147669.

Occupational exposures to phthalates among black and Latina U.S. Hairdressers serving an ethnically diverse clientele: A pilot study

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., Jun 2021, In: *Environmental Science and Technology*. 55, 12, p. 8128-8138 11 p.

### **Determinants of phthalate exposure among a U.S.-based group of Latino workers**

Allotey, J. A., Boyle, M., MARYLAND, U., MARYLAND, U., Peng, R. D., Garza, M. A. & Quirós-Alcalá, L., May 2021, In: *International Journal of Hygiene and Environmental Health*. 234, 113739.

### **Impact of high precipitation and temperature events on the distribution of emerging contaminants in surface water in the Mid-Atlantic, United States**

Zhu, L., Jiang, C., Panthi, S., Allard, S. M., Sapkota, A. R. & Sapkota, A., 10 Feb 2021, In: *Science of the Total Environment*. 755, 142552.

### **Fostering Water Treatment in Eutrophic Areas: Innovative Water Quality Monitoring, and Technologies Mitigating Taste & Odor Problems Demonstrated at Tai Hu**

Küppers, S., der Beek, T. A., Chu, W., Dong, B., Dahlhaus, A., Hollert, H., Hua, J., Hua, W., Jia, Y., Li, L., Lutze, H., Moldaenke, C., Qin, Y., Schmidt, W., Staaks, C., Stange, C., Yin, D., Zhao, J., Zheng, B. & Zhu, L. & 2 others, Zou, H. & Tiehm, A., 2019, *Urban Water Management for Future Cities: Technical and Institutional Aspects from Chinese and German Perspective*. Köster, S., Reese, M. & Zuo, J. (eds.). Cham: Springer International Publishing, p. 91-110 20 p.

### **Calcined layered double hydroxides/reduced graphene oxide composites with improved photocatalytic degradation of paracetamol and efficient oxidation-adsorption of As(III)**

Zhu, J., Zhu, Z., Zhang, H., Lu, H., Zhang, W., Qiu, Y., Zhu, L. & Küppers, S., 5 Jun 2018, In: *Applied Catalysis B: Environmental*. 225, p. 550-562 13 p.

### **Electrochemical simulation of triclosan metabolism and toxicological evaluation**

Zhu, L., Shao, Y., Xiao, H., Santiago-Schübel, B., Meyer-Alert, H., Schiwy, S., Yin, D., Hollert, H. & Küppers, S., 1 May 2018, In: *Science of the Total Environment*. 622-623, p. 1193-1201 9 p.

### **Simultaneous removal of several pharmaceuticals and arsenic on Zn-Fe mixed metal oxides: Combination of photocatalysis and adsorption**

Di, G., Zhu, Z., Zhang, H., Zhu, J., Lu, H., Zhang, W., Qiu, Y., Zhu, L. & Küppers, S., 2017, In: *Chemical Engineering Journal*. 328, p. 141-151 11 p.

### **Enhanced photocatalytic activity of Ce-doped Zn-Al multi-metal oxide composites derived from layered double hydroxide precursors**

Zhu, J., Zhu, Z., Zhang, H., Lu, H., Qiu, Y., Zhu, L. & Küppers, S., 1 Nov 2016, In: *Journal of Colloid and Interface Science*. 481, p. 144-157 14 p.

### **Electrochemical oxidation of fluoroquinolone antibiotics: Mechanism, residual antibacterial activity and toxicity change**

Zhu, L., Santiago-Schübel, B., Xiao, H., Hollert, H. & Kueppers, S., 1 Oct 2016, In: *Water Research*. 102, p. 52-62 11 p.

### **Fenton-Like Catalysis and Oxidation/Adsorption Performances of Acetaminophen and Arsenic Pollutants in Water on a Multimetal Cu-Zn-Fe-LDH**

Lu, H., Zhu, Z., Zhang, H., Zhu, J., Qiu, Y., Zhu, L. & Küppers, S., 28 Sept 2016, In: *ACS Applied Materials and Interfaces*. 8, 38, p. 25343-25352 10 p.

**The Utility of Exposure and Effect-Based Analysis in the Ecotoxicological Assessment of Transformation Products**  
Müller, Y., Zhu, L., Crawford, S. E., Küppers, S., Schiwy, S. & Hollert, H., 2016, 21 p. (ACS Symposium Series).

**An efficient laboratory workflow for environmental risk assessment of organic chemicals**

Zhu, L., Santiago-Schübel, B., Xiao, H., Thiele, B., Zhu, Z., Qiu, Y., Hollert, H. & Küppers, S., 1 Jul 2015, In: Chemosphere. 131, p. 34-40 7 p.

**Synthesis and adsorption performance of lead ion-imprinted micro-beads with combination of two functional monomers**

Zhu, L., Zhu, Z., Zhang, R., Hong, J. & Qiu, Y., Dec 2011, In: Journal of Environmental Sciences. 23, 12, p. 1955-1961 7 p.