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Florian Zindler, Ph.D., MSc

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Professional Profile

Dr. Florian Zindler has devoted his academic career to the scientific field of aquatic toxicology and specializes in the registration of chemical and biological plant protection products. He is responsible for diverse tasks in the course of active substance submissions and product dossiers under Regulation (EC) No 1107/2009 such as environmental risk assessments, data gap analyses, interpretation of guidance documents and test guidelines, study monitoring, statistical analyses, expert statements, evaluation reports, literature reviews. His particular interests include environmental risk assessments for microbial plant protection products and the evaluation of endocrine disrupting properties of chemicals according to evolving assessment strategies.

Dr. Florian Zindler holds a M.Sc. in Environmental Toxicology and a Ph.D. in Aquatic Toxicology. During his training to become a certified Ecotoxicologist (SETAC GLB & GDCh) he gained valuable knowledge in key areas of the field of ecotoxicology. His research experience includes investigations into the multifaceted effects of chemical substances on fish and aquatic invertebrates. In this context, he conducted toxicity tests according to OECD test guidelines, investigated the effects of chemical substances on lethal and sublethal endpoints (e.g., morphological development, enzyme activities, and locomotor/swimming activity), and characterized the behaviour of test substances in test media and aquatic organisms. His technical training enables him to bridge between experimental and regulatory ecotoxicology, e.g. for advice on data generation and evaluation as well as for study design and monitoring, and to evaluate complex data packages against regulatory requirements.

Academic Credentials & Professional Honors

Ph.D., Natural Sciences, Heidelberg University, 2020

Prior Experience

Regulatory Expert in Ecotoxicology, Eurofins Agroscience Services Regulatory, 2020 – 2022

Research Associate, Aquatic Ecology & Toxicology Group, Heidelberg University, 2016 – 2019

Languages

German

English

Publications

Zindler F, Stoll S, Baumann L, Knoll S, Huhn C, Braunbeck T. Do environmentally relevant concentrations of fluoxetine and citalopram impair stress-related behavior in zebrafish (Danio rerio) embryos? Chemosphere. 2020; 261:127753.

Zindler F, Tisler S, Loerracher AK, Zwiener C, Braunbeck T. Norfluoxetine is the only metabolite of fluoxetine in zebrafish (Danio rerio) embryos that accumulates at environmentally relevant exposure scenarios. Environ Sci Technol. 2020; 54(7):4200-4209.

Zindler F, Beedgen F, Braunbeck T. Time-course of coiling activity in zebrafish (Danio rerio) embryos exposed to ethanol as an endpoint for developmental neurotoxicity (DNT) – Hidden potential and underestimated challenges. Chemosphere. 2019; 235:12-20.

Zindler F, Beedgen F, Brandt D, Steiner M, Stengel D, Baumann L, Braunbeck T. Analysis of tail coiling activity of zebrafish (Danio rerio) embryos allows for the differentiation of neurotoxicants with different modes of action. Ecotoxicol Environ Saf. 2019; 186:109754.

Zindler F, Glomstad B, Altin D, Liu J, Jenssen BM, Booth AM. Phenanthrene bioavailability and toxicity to Daphnia magna in the presence of carbon nanotubes with different physicochemical properties. Environ Sci Technol. 2016; 50(22):12446-12454.

Tisler S, Zindler F, Freeling F, Nödler K, Toelgyesi L, Braunbeck T, Zwiener C. Transformation products of fluoxetine formed by photodegradation in water and biodegradation in zebrafish embryos (Danio rerio). Environ Sci Technol. 2019 Jul 2;53(13):7400-7409.

Glomstad B, Zindler F, Jenssen BM, Booth AM. Dispersibility and dispersion stability of carbon nanotubes in synthetic aquatic growth media and natural freshwater. Chemosphere. 2018; 201:269-277.

Glomstad B, Sørensen L, Liu J, Shen M, Zindler F, Jenssen BM, Booth AM. Evaluation of methods to determine adsorption of polycyclic aromatic hydrocarbons to dispersed carbon nanotubes. Environ Sci Pollut Res Int. 2017; 24(29):23015-23025.

Stengel D, Zindler F, Braunbeck T. An optimized method to assess ototoxic effects in the lateral line of zebrafish (Danio rerio) embryos. Comp Biochem Physiol C Toxicol Pharmacol. 2017; 193:18-29.

Project Experience

Provided technical support to EU and national level applications e.g. with data gap analyses, environmental risk assessments, and expert statements.

Monitored study packages with aquatic and terrestrial organisms for EU and US applications.

Additional Education & Training

German Postgraduate Degree Program in Ecotoxicology (SETAC GLB and GDCh); incl. courses in Environmental Chemistry, Alternative Methods, Regulatory Ecotoxicology, Biomonitoring and Strategies for Retrospective Assessment, Molecular Mechanisms of Action and Impacts on the Cell, Aquatic Ecotoxicology, Terrestrial Ecotoxicology, Statistics in Ecotoxicology.