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Judith Neuwöhner, Ph.D.

Managing Scientist | Chemical Regulation and Food Safety
Mannheim
+44-1423-853-206 | jneuwoehner@exponent.com

Professional Profile

Dr. Judith Neuwöhner is a senior regulatory scientist with over 15 years of experience in ecotoxicology and crop protection. She is highly competent in environmental risk assessment and regulatory strategy for plant protection products (PPPs) under EU and global frameworks.

She previously worked in industry and consultancy. She managed the ecotoxicology portion of complex registration projects and coordinated work with CROs, consultants, internal teams, and regulatory authorities throughout all stages of the approval process, including early development, strategy setting, dossier submission, and post-submission activities.

Dr. Neuwöhner advises on and implements regulatory strategies for active substances and formulated products. She conducts data gap analyses and preliminary risk assessments and designs and monitors laboratory and higher-tier field studies across all ecotoxicological areas. She engages with EU authorities, prepares technical statements, and contributes to industry task forces on substance renewals. She also focuses on regulatory intelligence, monitoring new guidance, assessing portfolio impacts, and advising on strategies to maximize registration success.

She earned her Ph.D. in environmental sciences from ETH Zurich and has published research on mixture toxicity and pollutant transformation products.

Academic Credentials & Professional Honors

Ph.D., Environmental Sciences, ETH Zurich, Switzerland, 2010

Prior Experience

Global Regulatory Scientist Ecotoxicology – Nufarm Europe GmbH, Germany, October 2024 – June 2025

Regulatory Scientist Ecotoxicology - Nufarm Europe GmbH, Germany, January 2019 – September 2024

Regulatory Affairs (Ecotoxicology) – Rifcon GmbH, Germany, January 2011 – December 2018

Postdoctoral Researcher – Eawag, Department of Environmental Toxicology, Switzerland, July 2010 – October 2010

PhD – Eawag, Department of Environmental Toxicology and ETH Zürich, Department of Biogeochemistry, Switzerland, March 2007 – June 2010

Visiting Scientist, National Research Centre for Environmental Toxicology (entox), Brisbane, Australia, August 2009 – December 2009

Publications

Ernst G, Bottoms M, Marx M, Neuwoehner J, Preuss T, Schimera A, Sharples A, Staab F. Analytics in laboratory effect studies with soil invertebrates-technical challenges and implications for soil risk assessment of plant protection products. Integrated environmental assessment and management (2025) 10.1093/inteam/vjaf057.

Fenner K, Kern S, Neuwöhner J, Hollender J, Singer H, Schärer M, Reinhardt M, Escher BI. Transformationsprodukte von organischen Mikroverunreinigungen – Untersuchung von Auftreten und Wirkung im Gewässer. gwa (Gas Wasser Abwasser) 5/2011: 335-345

Neuwoehner J, Escher BI. The pH-dependent toxicity of basic pharmaceuticals in the green algae Scenedesmus vacuolatus can be explained with a toxicokinetic ion-trapping model. Aquat Toxicol (2011) 101: 266-275

Neuwoehner J, Zilberman T, Fenner K, Escher BI. QSAR-analysis and mixture toxicity as diagnostic tools: influence of degradation on the toxicity and mode of action of diuron in algae and daphnids. Aquat Toxicol (2010) 97: 58-67

Escher BI, Bramaz N, Lienert J, Neuwoehner J, Straub JO. Mixture toxicity of the anti-viral drug Tamiflu□ (oseltamivir ethylester) and its active metabolite oseltamivir acid. Aquat Toxicol (2010) 96: 194-202

Neuwoehner J, Fenner K, Escher BI. Physiological modes of action of fluoxetine and its human metabolites in algae. Environ Sci Technol (2009) 43: 6830-6837

Neuwoehner J, Reineke AK, Hollender J, Eisentraeger A. Ecotoxicity of quinoline and hydroxylated derivatives and their occurrence in groundwater of a tar-contaminated field site. Ecotox Environ Saf (2009) 72: 819-827

Neuwoehner J, Junghans M, Koller M, Escher BI. QSAR analysis and specific endpoints for classifying the physiological modes of action of biocides in synchronous green algae. Aquat Toxicol (2008) 90: 8-18

Eisentraeger A, Brinkmann C, Hollert H, Sagner A, Tiehm A, Neuwoehner J. Hetero-cyclic compounds: Toxic effects using algae, daphnids and the Salmonella/ Microsome test taking methodical quantitative aspects into account. Environ Toxicol Chem (2008) 27: 1590-1596

Neuwoehner J, Schofer A, Erlenkaemper B, Steinbach K, Hund-Rinke K, Eisentraeger A. Toxicological characterisation of 2,4,6-TNT, its transformation products and two nitramine explosives. Environ Toxicol Chem 26: 1090-1099

Presentations

Neuwoehner J. German Surface Water Monitoring (Kleingewässer-Monitoring): Setting the Scene on Public Discourse and Data Assessment, 24th International Akademie Fresenius ECOTOX Conference, 28 – 29 November 2024, Düsseldorf, Germany (Talk)

Neuwoehner et al. Chances and challenges in regulatory ecotoxicological mixture toxicity assessment for plant protection products. SETAC-Europe 27th Annual Meeting: 07-11 May 2017, Brussels, Belgium, p.395 (Poster with spotlight presentation)

Neuwoehner J, Fenner K, Escher BI. Algal toxicity and mode of action analysis of the antidepressant fluoxetine and its human metabolites. TransCon2010: Environmental transformation of organic compounds. 12-17 September 2010, Monte Verità, Ascona, Switzerland (supported by a travel grant; Poster, awarded)

Neuwoehner J, Escher BI. Physiological modes of action of fluoxetine and its human metabolites in algae.

SETAC-Europe 19th Annual Meeting: 31 May – 04 June 2009, Göteborg, Sweden, p. 100 and 1st SETAC-Young Environmental Scientists Meeting: 16-18 March 2009, Koblenz-Landau, Germany (supported by a travel grant of SETAC, talks)

Neuwoehner J, Zilberman T, Escher BI. Effect specificity of the herbicide diuron and its degradation products in algae and Daphnia magna. SETAC-Europe 19th Annual Meeting: 31 May - 04 April 2009, Göteborg, Sweden, p. 118 (Poster)

Neuwöhner J, Steinbach K, Erlenkämper B, Eisenträger A. Toxikologische Bewertung polarer Nitroaromaten anhand biologischer Testverfahren. Jahrestagung der Fachgruppe Umweltchemie und Ökotoxikologie der GDCh: 04-06 October 2006, Halle (Saale), Germany, p. 198 (Poster, awarded)