Exponent®
Engineering & Scientific Consulting

Marco Herrmann

Managing Scientist | Chemical Regulation and Food Safety
Mannheim

Professional Profile

Mr. Herrmann is a Managing Scientist and has over 13 years of experience in environmental fate and exposure modelling, higher-tier risk assessments, and regulatory consultancy for plant protection products. He is supporting clients with complex exposure modelling, kinetic evaluation, and dossier preparation to ensure compliance with EU regulatory frameworks.

Before joining Exponent, he worked in environmental consulting, where he managed projects on environmental fate and modelling, led the preparation of zonal and national registration reports and dossiers, and provided strategic advice on exposure assessments and modelling approaches. He has authored peer-reviewed research on pesticide behavior in environmental systems and is experienced in developing modelling solutions for challenging regulatory scenarios.

His expertise encompasses simulation of exposure to groundwater, surface water and soil, scientific data evaluation, project management, and regulatory strategy, enabling clients to effectively address environmental safety and compliance requirements across Europe.

He combines technical skills in using European and national regulatory models (FOCUS models, GeoPEARL, EVA, EXPOSIT, ESCAPE, UK HT Drainage, HardSPEC), and kinetic evaluation tools with proven project leadership in higher-tier solution development, providing clients with scientifically robust and efficient regulatory strategies.

Academic Credentials & Professional Honors

Diploma, Geography, Leipzig University, 2011

Publications

Herrmann, M., Sur, R. (2021). Natural attenuation along subsurface flow paths based on modeling and monitoring of a pesticide metabolite from three case studies. Environ Sci Eur 33, 59. https://doi.org/10.1186/s12302-021-00490-2

Hörold-Willkomm, C., Herrmann, M., Baets, D., Sur, R. (2024). Comparison of measured and predicted herbicide concentrations in surface water catchments in Belgium. Integr Environ Assess Manag 20(5):1447-1462. https://doi.org/10.1002/ieam.4921

Sur, R., Herrmann, M., Ganbaatar, N., et al. (2024). A heuristic approach to attenuation of non-relevant metabolites in groundwater and drinking water in Germany. J Consum Prot Food Saf 19, 393–409. https://doi.org/10.1007/s00003-024-01512-w

Project Experience

- Led and executed regulatory environmental exposure assessments for a wide range of agrochemical active ingredients using FOCUS, national models, prepared data packages for EU regulatory submissions.
- Kinetic evaluation of degradation and dissipation studies of plant protection products and their metabolites in water/sediment systems as well as soil systems under laboratory and field conditions.
- Dossier Preparation and Submission: Led preparation and review of full dRR dossiers, managed submission and post-submission correspondence with authorities, ensuring compliance and quality assurance.