

Engineering & Scientific Consulting

Gero Eck, Ph.D.

Senior Managing Scientist | Chemical Regulation and Food Safety

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Professional Profile

Dr. Gero Eck holds a Diploma in Biology and a PhD in Pharmaceutical Biology. He has acquired more than 11 years of experience working in the field of regulatory ecotoxicology in industry and consultancies.

Gero Eck provides advanced knowledge in the process of agrochemical registrations for Plant Protection Products in the EU. Apart from the in-depth expertise in regulatory ecotoxicology, Gero Eck brings along bridging expertise related to environmental fate modelling, residues and toxicology making him a strong partner for non-standard solutions as revised exposure testing, probabilistic risk assessment approaches and data interpretation.

Within the context of active substance and product registrations in accordance with the EU Regulation 1107/2009, Dr. Eck provides strategic advice on data generation including study design and monitoring of standard and higher tier studies as well as risk characterization for all non-target groups. Dr. Eck is providing assistance within the entire life cycle of substance and product registrations including the scoping of pesticides with feasibility checks, data gap analyses, preliminary risk assessments, dossier writing and post-submission support. He has generated many expert statements in support of pesticide registrations and is experienced to represent clients dealing with Regulatory bodies in the European Union. He is trained and experienced in national requirements and risk mitigation specifics of Member States across the EU.

Academic Credentials & Professional Honors

Ph.D., Natural Sciences, Heinrich-Heine-University Düsseldorf, Germany, 2005

Academic Appointments

Scientific Assistant - PhD, Department of Pharmaceutical Biology, Heinrich-Heine University, 2000 - 2004

Collegiate Assistant at the Institute for Animal Ecology and Tropical Biology, Julius-Maximilians-University Würzburg, 1996 -1998

Prior Experience

Senior Product Safety Expert/Technical Lead Regulatory Ecotoxicology – Eurofins Regulatory AG (Rheinfelden, Switzerland); March 2012 - December 2019

Product Safety Expert/Manager - Ecotoxicology - Harlan Laboratories Ltd. (Itingen, Switzerland); August 2009 - February 2012

Regulatory Ecotoxicologist - BASF Johmarkt GmbH, AP Agricultural Products Division (Limburgerhof, Germany); February 2008 – July 2009

Scientist, Natural Products Research - Bio-Mar (Düsseldorf); July 2005 - September 2007

PhD - Heinrich-Heine Univesity, Düsseldorf, Germany (June 2000 - January 2005)

Publications

Eck, G., Eschenbach, E. (2019): The problem with mixtures. Agrow Agribusiness. 03 Dec. 2019

Eschenbach, E., Eck, G. (2018): Environmental modelling for risk assessment – Current state of the art and future challenges. Agrow Biologicals report 2018

Eck, G, Wais, A. (2015): Aquatic Risk Assessments for Pesticide Combination Products Agrow Biologicals report 2015

Wais, A., Eck, G. (2012): Ecotoxicological Data Requirements for European Registration. Agrow Biological Report 2012.

Esimone, C.O., Eck, G., Nworu, C.S., Hoffmann, D. Überla, K., Proksch. P. (2010): Dammarenolic acid, a secodammarane triterpenoid from Aglaia sp. Shows potent anti-retroviral activity in vitro. Planta Medica Conference Paper

Esimone, C.O., Eck, G., Duong, T.N., Überla, K., Proksch, P., Grunwald, T. (2009): Potential anti-respiratory syncytial virus lead compounds from Aglaia species. ChemiInform 40(1)

Esimone, C.O., Eck, G., Nworu, C.S., Hoffmann, D., Überla, K., Chaidir, C., Proksch, P. (2009): Dammarenolic acid, a secodammarane triterpenoid from Aglaia sp. Shows potent anti-retroviral activity in vitro. Journal of phytotherapy and phytopharmacology 17(7): 540-7

Eck, G. (2008): Kopfläuse. Pharmazeutische Zeitung. Storck Verlag. Januar 2008

Eck, G. (2007): Ektoparasiten des Menschen. Pharmazeutische Zeitung. Storck Verlag. Juli 2007

G. Eck, B Fiala, Linsenmair, K.E., Hashim, R., Proksch, P. (2001): Trade-off between chemical and biotic anti-herbivore defense in the South East Asian Plant Genus Macaranga. Journal of Chemical Ecology. Vol. 27, No. 10

Presentations

Eck, G. Approaches for mixture toxicity assessments for aquatic organisms. Crop Innovations and Regulations Conference in Nice 2016

Eck, G. Approaches for mixture toxicity assessments for aquatic organisms (Webinar at Eurofins Regulatory AG) 2016

Poster

Eck, G., Brauer, M., Eschenbach, E. (2018): Aquatic higher tier exposure testing of pesticides – from complexity to simplicity (SETAC Rome 2018)

Memmert, U., Eck, G. (2018): Data mining: Making use of lower-tier ecotoxicity data for higher-tier testing of agrochemicals (SETAC Rome 2018)

Brauer, M., Weber, D., Eck, G., Bolekhan, A., Spickermann, G., Schäfer, D. (2018): Multi-year evaluations

in the FOCUS Surface Water assessment – results of beta testing (SETAC Rome 2018)

Gonsior, G., Memmert, U., Eck, G., Eschenbach, E., Hafner, C. (2018): Critical aspects of higher-tier laboratory exposure testing with different aquatic organisms (SETAC Rome 2018)

Weber, D., Eck, G. (2015): Mixture-toxicity exposure assessment in FOCUS surface water scenarios -Development of a software tool and implementation of a promising risk assessment approach into a userfriendly interface (SETAC Spain 2015)

Weber, D., Eck, G. (2015): MixTox SW – A software tool for Mixture-Toxicity exposure assessments in FOCUS surface water scenarios (SETAC Orlando 2015)

Eck, G., Spickermann, G., Weber, D. (2014): Time-dependent Mixture Toxicity Assessment for Aquatic Organisms (SETAC Basel, CH)

Weber, D., Eck, G., Wais, A. (2012): Higher-tier assessment of exposure and effects of pesticides on aquatic non-target organisms (SETAC Berlin 2012)

Additional Education & Training

Postgraduate Studies SETAC/GDCh 'Fachökotoxikologie'

Environmental Exposure Modelling; University Osnabrück (February 2014)

Terrestrial Ecotoxicology; Forschungszentrum Neu-Ulrichstein, Homberg (Ohm) (July/August 2013)

Landscape Scale – integrative aspects; University Landau (March 2012)

Molecular modes of action in cells; University Heidelberg (September 2011)

Basics in Toxicology; University Halle (July 2010)

Aquatic Ecotoxicology; RWTH Aachen (August 2009)

Ecological Chemistry; RWTH Aachen (November 2007)

Regulatory Ecotoxicology; UBA Dessau/Berlin (October/November 2007)

Other Trainings

Introduction to Management Course (RiverRhee Consulting) – 3-day course in Chesterford (UK) (January 2019)

Ctqb Workshop – Plant Protection Products – NL National Addendum (May 2018)

2-day Ecotoxicology Higher Tier Risk Assessment Workshop at CRD (UK) (May 2017)

Course 'Mischungstoxizität' at Eawag in Dübendorf/Switzerland (October 2016)

QSAR user course at Eawag in Dübendorf/Switzerland (November 2009)