

Exponent®
Engineering & Scientific Consulting

Elvira Keller, Ph.D.

Senior Managing Scientist | Chemical Regulation and Food Safety
Mannheim
+49 (0)175 9498301 | kellere@exponent.com

Professional Profile

Dr. Keller worked for the last 16 years as a consultant for clients of various agrochemical companies in the areas of consumer safety, Maximum Residue Levels (MRLs) and Import Tolerances (ITs). During this period she developed in depth background knowledge of pesticides, including physical and chemical properties, methods of analysis, metabolism, residues, and consumer risk assessment particularly relating to Regulation (EU) 1107/2009 and Regulation (EU) 396/2005.

From 2016-2022 Dr. Keller built and headed the Import Tolerance Program to set Import Tolerances in a wide range of countries with a national MRL lists including the EU, Korea, Taiwan, Singapore, Hong Kong, Australia and Russia. During this time she also coordinated a team working on the compilation, submission and the post-submission support for import tolerance and JMPR (Joint Meeting of Pesticide Residues) dossiers.

Prior to this, she coordinated the 'Technical Forum Human Health & Exposure' at an international consulting company. This group of toxicologists, chemists, food chemists, biologists and agronomists were responsible for exchanging information and regularly documenting the latest scientific and regulatory and guideline developments with relevance to active substance and plant protection product registration.

She also had client on-site pesticide related working experience including compilation of safety data sheets and coordination of the residue dossier work of the consultant team.

Dr. Keller analysed phenotypic as well as metabolic pathway differences of Arabidopsis mutant plants using data mining and clustering tools for 3 years at Metanomics in Berlin, Germany (Member of BASF Plant Science Plattform). Furthermore she worked for 3 years as a research associate for Phytowelt Green Technologies (Germany) writing reports of scientific literature on plant biotechnology topics and organizing the 2004 Agricultural Biotechnology International Conference in Cologne.

Academic Credentials & Professional Honors

Ph.D., Plant Physiology, Pennsylvania State University, 1996

Industriekauffrau (IHK), Calw, Germany, 1981

Academic Appointments

Research Assistant, Department of Horticulture, Pennsylvania State University, 1992-1996

© 2026 Exponent, Inc. All Rights Reserved

Prior Experience

Lead Import Tolerance Program, Sen. Expert Dietary Safety, knoell Germany (Mannheim), 2016-2022

Dietary Safety & Residues Expert, knoell Germany (Mannheim), 2014-2016

Coordinator Onsite Residue Dossier Work BASF, knoell Germany (Limburgerhof), 2008-2014

Project Manager Dietary Safety, knoell Germany (Leverkusen), 2006-2008

Research Associate (freelance), Phytowelt Green Technologies, Germany, 2003-2006

Project Manager Bioinformatics, Metanomics, Germany, 1999-2002

Languages

German

English

Publications

Keller E. and Cosgrove DJ. Expansins in growing tomato leaves. The Plant Journal 1995; 8(6):795-802

Keller E. and Steffen KL. Increased chilling tolerance and altered carbon metabolism in tomato leaves following application of mechanical stress. Physiologia Plantarum 1995; 93:519-525

Abstract/Poster presentation
Keller E and Steffen KL. Chilling tolerance in tomato plants with increased sucrose phosphate synthase activity. Suppl. Plant Physiology 1994; 108(2): 105

Abstract/Poster presentation
Keller E. and Steffen KL. Chilling susceptibility and carbohydrate content of tomato leaves following application of mechanically-induced stress. Suppl. Plant Physiol. 1993; 102(1): 81

Presentations

Oral presentation for authority representatives of the Institute for the Control of Agrochemicals of Ministry of Agriculture and Rural Affairs (ICAMA), Peking, China, 2015. Training on guidelines and regulations for residues and dietary safety in the European Union.

Oral presentation, 14TH IUPAC International Congress of Crop Protection Chemistry, Ghent, Belgium. Can Import Tolerances Promote Harmonising MRLs and Global Trade?

Project Experience

Coordinated a team of residue scientists

Prepared project proposals for clients and managed dossier projects

Communicated with clients, authorities and participated in authority meetings (post-submission support)

Wrote and peer-reviewed pesticide active substance, product, MRL & JMPR dossiers (for several new substances and periodic review)

Compiled, submitted and defended import tolerance petitions for the EU, Korea, Taiwan, Singapore, Hong Kong, Australia and Russia

Managed EU and GB import tolerance application for a substance not authorized in the EU (in IUCLID format) and contributed the technical section residues and dietary risk assessment

Conducted data gap analyses for residue dossiers

Conducted dietary exposure assessments with the EU, WHO, German

Trained new colleagues in the field of residues

Compliled pesticide residue monitoring reports for clients

Assembled safety data sheets for pesticide industrial chemicals

Conducted searches for scientific literature and wrote summary reports

Analysed metabolic data with data mining/clustering tool

Managed a EU and GB import tolerance application for a substance not authorized in the EU (in IUCLID format) and contributed the technical section residues and dietary risk assessment

Monitored residue study on pineapples in the Philippines