



8<sup>th</sup> International Akademie Fresenius Conference

# Worker, Operator, Bystander and Resident Exposure and Risk Assessment

+++ HYBRID EDITION +++

11 and 12 February 2025  
in Dusseldorf/Germany

## Highlights

### EFSA OPEX Guidance and Calculator

- EU Member State experience
- Industry feedback

### Bystander and resident safety

- Drift exposure study for drone applications in soil, field, and orchard crops
- Exposure from unmanned aerial spraying in orchards
- French CAPRIV project results

### DFR, TC, DT50, and worker safety

- Method for dislodgeable foliar residues (DFR) in vineyards
- DFR method for re-entry in hops
- In-silico DFR prediction and regulatory impact

### Ongoing activities outside Europe

- Brazilian pesticide risk assessment update
- ProHuma's occupational exposure projects

### Operator safety

- ICPPE 2024 Symposium outcomes and Risk Assessment Tool update
- Bystander/resident spray drift exposure data update
- Comparison of drift reduction with different nozzles and equipment

### Dermal absorption in PPP

- New ICPPE approach for dose-based dermal absorption prediction in pesticide risk assessment



## The Experts

**Despina Bournele** Benaki Phytopathological Institut | **Emily Bryson** California Department of Pesticide Regulation (DPR) | **Neil A. Byron** Exponent | **Agathi Charistou** Benaki Phytopathological Institut | **Edward Chikwana** Corteva Agriscience | **Fabiana Cremaschi Palma** Instituto ProHuma de Estudos Científicos | **Jean-Paul Douzals** National Research Institute for Agriculture, Food and Environment (INRAE) | **Simon Euringer** Bavarian State Institution for Agriculture (LFL) | **Edgars Felkers** Bayer Crop Science Division | **Gunnar Fent** German State Education and Research Center of Viticulture, Horticulture and Rural Development (DLR) | **Felix M. Kluxen** BASF | **Sebastian König** Swiss Federal Food Safety and Veterinary Office | **Alistair Morriss** Corteva Agriscience | **Enrico Peter** German Federal Institute for Risk Assessment (BfR) | **Piotr Ogródowczyk** European Commission | **Anugrah Shaw** University of Maryland Eastern Shore | **Adriana Torres de Sousa Pottier** Brazilian National Health Regulatory Agency (ANVISA) | **Jens Karl Wegener** Julius Kühn-Institute (JKI) – German Federal Research Centre for Cultivated Plants | **Christiane Wiemann** BASF

# Tuesday, 11 February 2025

## Morning Session 09:50 – 13:55 CET

09:20 On-site registration & opening of the virtual meeting room

09:50 Welcoming speech by the organisers and the Chair  
Alistair Morriss, Corteva Agriscience, UK

The presentation slots include sufficient time for questions and answers.

## Considerations of risk mitigation measures

10:00 Risk mitigation measures and conditions of use that reduce the risk in humans (workers, operators, bystanders and residents)

Piotr Ogrodowczyk, European Commission, Belgium (virtual presence)

## EFSA OPEX Guidance/Calculator

10:30 EU Member State experience with the implementation of the EFSA OPEX Guidance and Calculator

Agathi Charistou, Benaki Phytopathological Institute, Greece  
Despina Bournele, Benaki Phytopathological Institute, Greece

11:05 Industry perspective on the implementation of the EFSA OPEX Guidance and Calculator

- Industry's effort to create an offline calculator to address end-user needs
- Guidance and calculator updates – an uncertain road ahead

Edgars Felkers, Bayer Crop Science Division, Germany and CropLife Europe, Belgium

## Bystander and resident safety

11:40 Environmental, bystander and resident exposure from orchard applications using an unmanned aerial spraying system

- Field trials to quantify horizontal and vertical drift as well as direct bystander/resident exposure
- Comparison of the results with EU and US regulatory reference datasets for ground and aerial applications

Sebastian König, Federal Food Safety and Veterinary Office (FSVO), Switzerland

12:15 Coffee break

12:45 Quantitative effects of spray drift mitigation measures and bystanders exposure: The example of the CAPRIV "Concilier l'application des PPP et la protection des riverains" Project

Jean-Paul Douzals, National Research Institute for Agriculture, Food and Environment (INRAE), France

Timings are in  
Central European Time [CET](#).

13:20 Exposure study comparing drift exposure to bystanders at different distances during soil, field crop and orchard crop drone application

- Results and comparison to current exposure model predictions for conventional sprayers
- Differences in exposure risks between drone and conventional application methods

Christiane Wiemann, BASF, Austria

13:55 Lunch break

## Afternoon Session 15:00 – 17:50 CET

## Ongoing activities outside Europe

15:00 Update on the Brazilian perspective on pesticide occupational risk assessment

Adriana Torres de Sousa Pottier, Brazilian Health Regulatory Agency (ANVISA), Brazil

15:35 ProHuma's technical projects to support the occupational exposure risk assessment

Fabiana Cremaschi Palma, Instituto ProHuma de Estudos Cientificos, Brazil

16:10 Coffee break

16:40 California DPR's emerging application technologies efforts

- Study to quantify occupational exposure to crews applying pesticides by drone
- DPR's Emerging Technologies Workgroup

Emily Bryson, California Department of Pesticide Regulation (DPR), USA (virtual presence)

## Dermal absorption of active substances in PPP

17:15 Non-dietary risk assessment of pesticides using dose-based dermal absorption prediction – a new conceptual approach from the ICPPE initiative

- How absorption studies or models can incorporate dose into dermal absorption predictions for pesticide exposure
- Focusing shifts from concentration to exposure doses, aligning US and EU approaches

Felix M. Kluxen, BASF, Germany

17:50 End of the first conference day

19:00 Joint evening event

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# Wednesday, 12 February 2025

Timings are in  
Central European Time [CET](#).

## Morning Session 10:00 – 14:10 CET

10:00 Welcoming address and opening remarks by the Chair  
Neil A. Byron, Exponent, UK

### DFR, TC, DT50 and worker safety

10:10 **Experimental determination of DFR (Dislodgeable Foliar Residues) of copper applied in viticulture at different rates and spraying intervals**

Gunnar Fent, State Education and Research Center of Viticulture, Horticulture and Rural Development (DLR-Rheinpfalz), Germany

10:45 **Development of a method to determine dislodgeable foliar residues (DFR) for re-entry in hops**

Simon Euringer, Bavarian State Institution for Agriculture LFL, Germany

11:20 **Coffee break**

11:50 **In-silico prediction of dislodgeable foliar residues (DFR) and regulatory implications for plant protection products**

- Default DFR values
- Machine learning model
- Predicted DFR values
- Expanded dataset

Edward Chikwana, Corteva Agriscience, USA

## Operator safety

12:25 **Update on field data for exposure of bystanders/residents towards spray drift during application of PPP in orchards**

Enrico Peter, German Federal Institute for Risk Assessment (BfR), Germany

13:00 **A comparison of the different approaches for drift reduction level provided by different nozzles and equipment in Europe (with mainly focus on field crop spraying)**

Jens Karl Wegener, Julius Kühn-Institute (JKI) – Federal Research Centre for Cultivated Plants, Germany

13:35 **ICPPE Initiative: An update of the ICPPE Risk Assessment and Mitigation Tool and highlights of the 2024 International Symposium on Operator Safety**

- Update on the ICPPE activities, including overview of the sessions on risk assessment, mitigation and labeling at the 2024 International Symposium on Operator Safety held in Brazil
- Demonstration of the ICPPE tool
- Pilot testing and inclusion in the FAO Pesticide Registration Toolkit

Anugrah Shaw, University of Maryland Eastern Shore, USA

14:10 **Lunch and end of the conference**

### On-site and in person or digitally via our Live Stream – the choice is yours!

Connect with your clients and partners, network with old and new acquaintances – and just enjoy the on-site event in Dusseldorf.

Should you have missed the opportunity to secure one of our on-site places or prefer not to travel, you can follow the contributions and discussions from the location of your choice: Via our Live Stream!

3<sup>rd</sup> International Online Conference

### Genotoxic Compounds

13 and 14 February 2025

[www.akademie-fresenius.com/3643](http://www.akademie-fresenius.com/3643)

International Online Training

### A Practical Guide for Fertilisers and Plant Biostimulants

13 and 14 March 2025

[www.akademie-fresenius.com/3660](http://www.akademie-fresenius.com/3660)

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# Registration

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By email [registration@akademie-fresenius.com](mailto:registration@akademie-fresenius.com)

## Participation Fee:

**€ 1,995.00 plus VAT** on-site in Dusseldorf

Representatives of an authority or a public university are eligible for a reduced fee of **€ 895.00 plus VAT** per person (please provide evidence). The reduced fee cannot be combined with other rebates.

**€ 1,195.00 plus VAT** Live Stream

Representatives of an authority or a public university are eligible for a reduced fee of **€ 695.00 plus VAT** per person (please provide evidence). The reduced fee cannot be combined with other rebates.

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DIE AKADEMIE  
FRESENIUS

Hotline +49 231 75896-50  
Die Akademie Fresenius GmbH  
Alter Hellweg 46, 44379 Dortmund

## Do you have any questions?



**Sabine Mummenbrauer**  
Phone: +49 231 75896-82  
[smummenbrauer@akademie-fresenius.de](mailto:smummenbrauer@akademie-fresenius.de)

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**Group Reductions:** For joint bookings received from one company we grant a 15% discount from the third participant onwards.

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## Who should attend this conference?

Professionals of the following sectors:

- Agrochemical industry
- Research institutes
- Authorities (agricultural inspection offices, registration and control authorities)
- Professional associations
- Contract laboratories

## Conference Venue

**Novotel Düsseldorf City West**  
Niederkasseler Lohweg 179  
40547 Düsseldorf  
Phone : +49 211 52060-0  
Email: [h3279@accor.com](mailto:h3279@accor.com)  
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We have reserved a limited number of rooms for our participants at reduced rates at the hotel. These rooms can be booked up to four weeks prior to the start of the event. Please book early and directly through the hotel quoting "Akademie Fresenius" as reference.

Of course, participation via our Live Stream is also possible.

case, however, you will receive access to the documentation download after the event. Please note that you can name a substitute participant free of charge at any time.

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