



20<sup>th</sup> International Fresenius AGRO Conference

# Behaviour of Pesticides in Air, Soil and Water

18 and 19 June 2018  
in Mainz/Germany

## Highlights

### Regulatory issues

- European Commission update on Regulation (EC) No 1107/2009
- EFSA update on developments in the fate area
- Updates in the Northern, Central and Southern zones
- Guidance of FOCUS Degradation Kinetics
- Surface water, national assessment and harmonisation

### Environmental fate

- Glyphosate adsorption in soils
- Plant uptake for regulatory environmental fate modelling
- Application of knowledge on plant uptake including modelling
- The Triazole-Story: Clarification of sources, fate and footprint
- Landscape study into pesticide fate: Pesticide losses to surface water

### Exposure, risk assessment and mitigation

- Aquatic exposure assessment in Latin America
- EFSA OECD 106 evaluators checklist
- SETAC EMAG-Pest groundwater group
- Health Canada's drift mitigation strategies
- SETAC DRAW and BUVARD: Practical measures on drift and runoff



## The Experts

**Mats Allmyr** Swedish Chemicals Agency (KEMI) | **Nicole Baran** French Geological Survey (BRGM) | **Martin Blank** Bayer Crop Science Division | **Jos Boesten** Wageningen UR | **Arnaud Boivin** French Agency for Food, Environmental and Occupational Health and Safety (ANSES) | **Colin Brown** University of York | **Nadia Carluer** Irstea – French National Research Institute of Science and Technology for Environment and Agriculture | **Simon Compton** UK Health and Safety Executive, Chemicals Regulation Division (CRD) | **Joachim Dayteg** Austrian Agency for Health and Food Safety (AGES) | **Klaus Hammel** Bayer Crop Science Division | **Mari Haugene** The Norwegian Food Safety Authority (Mattilsynet) | **James Hingston** UK Health and Safety Executive, Chemicals Regulation Division (CRD) | **Bernhard Jene** BASF | **Dirk Liss** SGS Institut Fresenius | **Maarten Klunder** Dutch Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) | **Jenny Kreuger** Swedish University of Agricultural Science (SLU) | **Christopher Leake** Bayer Crop Science Division | **Neil Mackay** FMC Agricultural Solutions | **Wolfgang Reinert** European Commission | **Carola Schriever** BASF | **Michael Stemmer** Austrian Agency for Health and Food Safety (AGES) | **Harry Vereecken** Forschungszentrum Jülich | **John David Whall** Health Canada's Pest Management Regulatory | **Junying Zhou** Nanjing Institute of Environmental Sciences

# The Programme

## Get-Together on Sunday, 17 June 2018

Will you arrive on Sunday? Come to the hotel bar at 8 p.m. and meet other participants and speakers in a relaxed atmosphere.



## Monday, 18 June 2018

**9.00 Registration and coffee**

**9.30 Welcoming speech by Akademie Fresenius and the Chair**

**Christopher Leake**, Bayer Crop Science Division, Germany

## Regulatory issues

**9.40 Risk assessment in the Southern zone – an update view from France**

**Arnaud Boivin**, French Agency for Food, Environmental and Occupational Health and Safety (ANSES), France

**10.00 View from the Central zone – status quo and still open points**

**Joachim Dayteg**, Austrian Agency for Health and Food Safety (AGES), Austria

**10.10 Updates in the Northern zone Guidance Document – 2018**

- Current harmonisation status
- Future work

**Mari Haugene**, The Norwegian Food Safety Authority (Mattilsynet), Norway

**10.30 Panel discussion**

**11.00 Coffee break**

**11.30 Current vs. new soil exposure assessment and ongoing EFSA e-fate working groups**

- Impact assessment of the new EFSA PEC soil guidance
- EFSA working group on aged sorption
- EFSA working group on the FOCUS surface water repair action

**Michael Stemmer**, Austrian Agency for Health and Food Safety (AGES), Austria

**11.50 Development of the FOCUS Degradation Kinetics Guidance Document**

- Project initiation
- Aims and scope
- Key issues and examples

**James Hingston**, Health and Safety Executive, Chemicals Regulation Division (CRD), UK

**12.10 Towards harmonisation: Critical look on the national aspects based on data**

- Comparison of results of national assessment and EU assessment for surface water
- Insight when a national assessment is necessary for safe use and when not
- The procedure for Non Target Arthropods and Non Target Plants

**Maarten Klunder**, Dutch Board for the Authorisation of Plant Protection Products and Biocides (Ctgb), The Netherlands

**12.30 Panel discussion**

**13.00 Lunch**

## Environmental fate

**Chair:**

**Harry Vereecken**, Forschungszentrum Jülich, Germany

**14.30 Glyphosate and AMPA adsorption in soils and geological materials: Laboratory experiments and pedotransfer rules**

- Sorption and columns experiments
- Fluvio glacial materials
- Unsaturated zone

**Nicole Baran**, French Geological Survey (BRGM), France

**14.50 Study design to determine plant uptake for regulatory environmental fate modelling – update on current activities**

- Comparison of experimental results with other data on plant uptake
- OECD project proposal

**Carola Schriever**, BASF, Germany

**15.10 Coupled root water and solute uptake – first applications of RoSI model to real-world scenarios**

- Detailed mechanistic description of root uptake processes coupled with 3-D soil model
- Discrete representation of plant root
- Application to regulatory exposure scenarios representing real-world conditions

**Klaus Hammel**, Bayer Crop Science Division, Germany

**15.30 Panel discussion**

**16.00 Coffee break**

**16.30 The Triazole-Story: Clarification of sources, fate and footprint in the environment of the molecule 1,2,4-triazole (fertiliser additive, metabolite from fungicidal active substances, commodity chemical and natural formation)**

- Different sources
- Different regulations
- Different risk assessment

**Martin Blank**, Bayer Crop Science Division, Germany

**16.50 Spatial and temporal patterns of pesticide losses to surface water in a small agricultural catchment**

**Jenny Kreuger**, Swedish University of Agricultural Sciences (SLU), Sweden

### 17.10 Development of groundwater exposure simulation tool for pesticides used in rice paddy in China

- Establishment of exposure scenarios
- Construction of exposure simulation tool
- Application of simulation tool

**Junying Zhou**, Nanjing Institute of Environmental Sciences, China

### 17.30 Panel discussion

### 18.00 End of the first conference day

### 19.00 Departure time for the evening event



After the first conference day Akademie Fresenius would like to invite you to a leisurely evening at the vineyard of Joachim Flick in the wine-growing region Rheingau. You have the opportunity of better getting to know other participants you met during the day over a relaxed wine tasting and meal.

 **Tuesday, 19 June 2018**

## Exposure, risk assessment and risk mitigation

### Chair:

**Colin Brown**, University of York, UK

### 8.30 Aquatic exposure assessment in Latin America

- Basic approaches
- Country specific scenarios
- Models

**Bernhard Jene**, BASF, Germany

### 8.50 EFSA OECD 106 evaluators checklist

- Background, aims and objectives
- Quality checks
- Decision making
- Further work

**Simon Compton**, Health and Safety Executive, Chemicals Regulation Division (CRD), UK

### 9.10 Work of the SETAC EMAG-Pest groundwater group to develop the scientific basis for guidance for regulatory groundwater monitoring

- Representative study designs as a function of exposure assessment option
- Data quality considerations (well installation, sampling, sample analysis, etc.)
- Reporting of study results

**Dirk Liss**, SGS Institut Fresenius, Germany

### 9.30 Panel discussion

### 10.00 Coffee break

### 10.30 Regulation (EC) No 1107/2009 update

**Wolfgang Reinert**, European Commission, Belgium

### 11.00 Questions and answers

### 11.10 An overview of current challenges in pesticide risk assessment

- Definition of exposure assessment goals
- Coherent effect and exposure assessment goals
- Overcoming regulatory resistance to scientific improvements

**Jos Boesten**, Wageningen UR, The Netherlands

### 11.30 Involving informed choice of farmers to tackle trending plant protection products in surface waters – exploring new risk management

**Mats Allmyr**, Swedish Chemicals Agency (KEMI), Sweden

### 11.50 Panel discussion

### 12.10 Lunch

### 13.10 Health Canada's Pest Management Regulatory Agency drift mitigation strategies: Buffer zone calculation tool

- Methods employed to calculate spray drift buffer zones in Canada
- Overview of tool developed to help growers minimise off target pesticide drift
- Future planned work

**John David Whall**, Health Canada's Pest Management Regulatory Agency (PMRA), Canada

### 13.30 Challenges and options for addressing spray drift in environmental risk assessments

- Current regulatory constraints
- Background on framework for current regulatory assessments
- SETAC DRAW: Introduction of further options and options for more effective management / mitigation of spray drift

**Neil Mackay**, FMC Agricultural Solutions, UK

### 13.50 BUVARD: An on-line tool to design vegetative buffer zones in a French context

- Method to design vegetative buffer zones considering the characteristics of the implantation site
- Towards a model at the catchment scale, taking into account landscape features

**Nadia Carluer**, Irstea – French National Research Institute of Science and Technology for Environment and Agriculture, France

### 14.10 Panel discussion

### 14.40 End of the conference



Information available online at:  
[www.akademie-fresenius.com/2502](http://www.akademie-fresenius.com/2502)

# The Experts

**Mats Allmyr** is the KEMI representative of the Plant Protection Council Secretariat in Sweden and involved in facilitating the dialogue and exchange of information between stakeholders and authorities in Sweden. Previously he was involved in the regulatory process and the evaluation of environmental fate assessments.

**Nicole Baran** is a Hydrogeologist and an expert in groundwater contamination. She has been a Research Scientist and a Project Manager at BRGM (French Geological Survey) since 1999. Nicole is implied in French and European projects.

**Martin Blank** is an Ecologist. He has been assessing the impact of projects and chemicals in all compartments of the environment for 30 years. He has worked for more than 18 years in a consulting engineering company and joined Bayer in 2009.

**Jos Boesten** is a Senior Researcher at Wageningen University & Research. He works currently on leaching to groundwater, exposure assessment of soil and aquatic organisms and bees, and on emissions from covered crops.

**Arnaud Boivin** is the Head of the Ecotoxicology and E-Fate Risk Assessment Unit for pesticides and fertilisers at ANSES. He joined ANSES in 2007 and he also used to work for INRA and USDA/ARS.

**Colin Brown** is a Professor in Environmental Science at the University of York. He has more than 20 years of experience of research into the fate and effects of organic contaminants in the environment.

**Nadia Carluer** works in the non-point pollution team, at Irstea Lyon. She is involved in the development of modelling tools, at the local (buffer zones) and catchment scales.

**Simon Compton** is an experienced Fate Specialist working at the UK's Chemicals Regulation Division, responsible for assessing submissions in support of new and existing active substances and products. He is the Environmental Fate Technical Lead for all mutual recognition applications.

**Joachim Dayteg** joined the Institute for Plant Protection Products of AGES, Vienna in 2008 as an Environmental Fate and Behaviour Risk Assessor. He is initiator of the harmonisation efforts in fate and behaviour in the Central zone.

**Klaus Hammel** is an Environmental Modelling Expert at Bayer Crop Science Division with more than 20 years of experience in modelling of soil water flow and transport processes including environmental fate and exposure modelling of pesticides.

**Mari Haugene** is a Pesticide Risk Assessor at the Norwegian Food Safety Authority in the National Registrations Department. She is part of the environmental fate and behaviour group.

**James Hingston** leads a team of 22 regulatory environmental fate specialists at the UK competent authority with responsibility for pesticides, biocides, detergents and general chemicals under REACH (Chemicals Regulation Division, part of the UK Health and Safety Executive).

**Bernhard Jene** is an Environmental Scientist at BASF in Limburgerhof with a PhD in soil physics. He has more than 20 years of experience in the area of environmental fate and exposure modelling of pesticides.

**Maarten Klunder** is working as a Regulatory Assessor (fate and behaviour) at the plant protection product authorisation authority in the Netherlands (Ctgb). He has worked for seven years in the field of fate and behaviour of pesticides of which two years in the industry and five years at Ctgb.

**Jenny Kreuger** is an Environmental Scientist in the Department of Aquatic Sciences and Assessment and the Director of the Centre for Chemical Pesticides at the Swedish University of Agricultural Sciences in Uppsala.

**Dirk Liss** is a Hydrogeologist at SGS Institut Fresenius leading a team of specialists for environmental fate laboratory and field studies. He has 15 years of professional experience in groundwater resource management.

**Christopher Leake** is an Environmental Safety Manager at Bayer Crop Science Division responsible for the areas of environmental fate, ecotoxicology and risk assessment. He has over 30 years of experience in this area.

**Neil Mackay** is an Environmental Fate Modelling Specialist in FMC Agricultural Solutions. He is active in strategic product development and regulatory exposure and risk assessment activities.

**Wolfgang Reinert** is a Biologist and joined the European Commission in 2002. Since then, he is working with the unit in charge of approval of active substances and placing of plant protection products on the market. Since 2014, he is heading the sector for placing on the market of pesticides within the unit on pesticides and biocides.

**Carola Schriever** is a Geoecologist working as Environmental Fate Modeller at BASF since 2007. She has more than 10 years of expertise in the area of environmental exposure and risk assessment of pesticides.

**Michael Stemmer** started to work at the Austrian AGES in 2005 as an Environmental Risk Evaluator for the use of pesticides. He is a member of the EFSA PPR Panel.

**Harry Vereecken** is a Professor and the Director of the Institute Agrosphere within the Department of Biogeosciences at the Forschungszentrum Jülich, Germany.

**John David Whall** is a Senior Evaluation Officer at Health Canada's Pest Management Regulatory Agency in the Environmental Assessment Directorate. He has 16 years of experience in the environmental risk assessment of pesticides.

**Junying Zhou** has been a Professor at the Nanjing Institute of Environmental Sciences of the Ministry of Environmental Protection of China.

# About

## Who do you meet?

### Groups that should take part:

Managing directors, boards of directors, members of supervisory boards, managers and scientists in the fields of:

- Environmental behaviour
- Field inspection
- Research & development
- Legal & regulatory affairs
- Registration
- Ecotoxicology
- Exposure & risk assessment
- Monitoring & computer modelling

### Sectors that should take part:

- Agrochemical industry
- Research institutes from the area of agriculture, soil, hydrology and air
- Authorities (agricultural inspection offices, registration and control authorities)
- Water supply enterprises
- Professional associations

## Trade Exhibition

Our conference provides you with the opportunity of presenting your company in a trade display. Present your products and services and reach out to your specific target groups. We would be happy to provide you with information on all the various options available – from displaying product information to an exhibition stand – with no further obligation on your part.

Use the attached fax reply sheet to request our information material. Or simply call us. We would be more than pleased to assist you personally.

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## The Organiser

For over 20 years, Akademie Fresenius has been your partner for practice-orientated training on all the latest topics surrounding the safety and quality of food, consumer goods and chemical products along the whole production chain. Our portfolio not only includes international conferences but also offers national trade meetings, intensive practical seminars and training in small work groups.

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5 and 6 June 2018 in Mainz/Germany

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## Do you have any questions?

# Registration

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

- I would like to take part in the 20<sup>th</sup> International Fresenius AGRO Conference "Behaviour of Pesticides in Air, Soil and Water", 18 and 19 June 2018 in Mainz/Germany.  
Fee: € 1,895.00 plus VAT.
- I am a representative of an authority or a public university and therefore eligible for a reduced fee of € 795.00 plus VAT (please provide evidence).  
The reduced fee cannot be combined with other rebates.
- I would like to take part in the evening event on 18 June 2018 (included in the above price).

## Event Documentation

- Unfortunately, I am unable to attend. Please send me the complete documentation for € 295.00 plus VAT.

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- Please send me information on available options for trade exhibition and presenting product information.

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### Terms of Participation and Purchase

The registration fee includes the event participation, event documentation, lunch, coffee breaks, beverages as well as the evening event. You will receive written confirmation of your registration. Upon receiving our invoice, please transfer the amount due without further deductions before the event begins.

The price of the event documentation includes a hard copy of the documentation as well as an access code to the secure Akademie Fresenius download area. Both the documents and the secure access code will be dispatched around two weeks after the event and as soon as advance payment has been received.

### Group Reductions

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

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## Venue

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