

# **Workshop programme**

# **Environmental monitoring of biocides in Europe - compartment-specific strategies**

25 / 26 June 2015 in Berlin



**Venue: Landesvertretung Sachsen-Anhalt, Luisenstraße 18, 10117 Berlin-Mitte**

## Workshop programme

### Day 1 25.06.2015

09:00 - 09:30	<b>Registration / coffee</b>
09:30	<b>Introduction</b> Chair: Jutta Klasen / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)
09:30 - 09:45	Welcome address by Eva Dressler / Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), Bonn/Berlin (DE)
09:45 - 10:05	The NORMAN network - Special view on biocides as emerging substances // Valeria Dulio et al. / NORMAN, Verneuil-en-Halatte (FR)
10:05 - 10:35	<b>Keynote presentation</b> Biocide monitoring in Swiss surface waters // Juliane Hollender / Eawag, Swiss Federal Institute of Aquatic Science and Technology, Dübendorf (CH)
10:35 - 11:05	<b>Coffee break</b>
11:05	<b>Session I - General aspects of biocide monitoring</b> Chair: Jutta Klasen / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)
11:05 - 11:25	Results from the prioritisation of biocides for environmental monitoring in Germany // Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE), Stefanie Jäger / Federal Institute for Occupational Safety and Health (BAuA), Dortmund (DE), Ingrid Nöh / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)
11:25 - 11:45	Prioritisation of biocides from the perspective of the drinking water supply // Frank Sacher, Astrid Thoma, DVGW-Technologiezentrum Wasser, Karlsruhe (DE)
11:45 - 12:05	<b>Discussion</b>
12:05 - 13:30	<b>Lunch break and poster session</b>
13:30	<b>Session II - biocide monitoring in urban environments (indirect release via wastewater treatment)</b> Chair: Jutta Klasen / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)
13:30 - 13:50	Fate of Triclosan and azole fungicides during wastewater treatment // Ann-Kathrin Wluka, Jan Schwarzbauer / EMR RWTH Aachen University, Aachen (DE)
13:50 - 14:10	Occurrence, elimination, and risk of anticoagulant rodenticides in wastewater and sludge // Silvia Lacorte, Cristian Gómez-Canela / Department of Environmental Chemistry, IDAEA-CSIC, 08034 Barcelona (ES)
14:10 - 14:30	<b>Discussion</b>
14:30	<b>Session III - biocide monitoring in urban environments (direct release or via stormwater)</b> Chair: Ingrid Nöh / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau
14:30 - 14:50	Benzalkonium runoff from roofs treated with biocide products // Marie-Christine Gromaire, Antoine Van de Voorde, Catherine Lorgeoux, Ghassan Chebbo / Université Paris Est, LEESU, Champs sur Marne (FR)
14:50 - 15:10	Biocides in urban stormwater - catchment-specific differences and city-wide loads // Daniel Wicke, Andreas Matzinger, Pascale Rouault / Kompetenzzentrum Wasser, Berlin (DE)
15:10 - 15:40	<b>Coffee break and poster session</b>
15:40 - 16:00	Dynamics of biocide emissions from buildings in a suburban stormwater catchment // Ulla E. Bollmann, Kai Bester / Aarhus University, Department of Environmental Science, Roskilde (DK)

16:00 - 16:20	Antifouling biocides in German marinas - Studies to support exposure prognoses for risk assessment // Michael Feibicke, Federal Environment Agency (Umweltbundesamt), Berlin (DE), Burkard Watermann, LimnoMar, Hamburg (DE)
16:20 - 16:40	<b>Discussion</b>
16:40 - 16:50	<b>Summary of day 1</b> Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE)
19:30	<b>Workshop dinner</b>

## Day 2 26.06.2015

09:00	<b>Session IV - biocide monitoring in the terrestrial environment</b> Chair: Valeria Dulio, NORMAN, Verneuil-en-Halatte (FR)
09:00 - 09:20	Residues of anticoagulant rodenticides in biota in Germany: Pathway of anticoagulants in the food-web // Anke Geduhn, Alexandra Esther, Detlef Schenke, Jens Jacob, Julius Kühn-Institut, Münster/Berlin (DE)
09:20 - 09:40	The occurrence of second generation anticoagulant rodenticides in non-target raptor species in Norway // Katherine H. Langford, Malcolm Reid, Kevin V. Thomas / Norwegian Institute for Water Research (NIVA), Oslo (NO)
09:40 - 10:00	<b>Discussion</b>
10:00	<b>Introduction to break-out groups</b>
10:00 - 10:20	How to implement a compartment-specific biocide monitoring under consideration of existing monitoring programmes // Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE), Katja Michaelis, Korinna Pohl / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)
10:20 - 10:50	<b>Coffee break and poster session</b>
10:50 - 12:30	<b>Parallel break-out groups (topics are based on previous sessions)</b> (A) Monitoring of biocides in urban environments (indirect release via wastewater treatment) // facilitator/rapporteur: Manfred Sengl / LfU Bayern, Augsburg (DE) and Jan Schwarzbauer / EMR RWTH, Aachen (DE) (B) Monitoring of biocides in urban environments (direct release or via storm-water) // facilitator/rapporteur: Kai Bester / Aarhus University, Department of Environmental Science, Roskilde (DK) and Fabrizio Botta / INERIS, Verneuil-en-Halatte (FR) (C) Monitoring of biocides in the terrestrial environment (incl. ground water) // facilitator/rapporteur: Valeria Dulio, NORMAN / Verneuil-en-Halatte (FR) and Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE)
12:30 - 13:30	<b>Lunch break and poster session</b>
13:30 - 14:00	<b>Reports from break-out groups in the plenary and discussion</b> Chair: Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE)
14:00 - 14:30	<b>Conclusions and closure of the workshop</b> Petra Greiner / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau (DE)

## Scientific and organising committee

Katja Michaelis / Federal Environment Agency (Umweltbundesamt), Dessau-Rosslau  
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Heinz Rüdel / Fraunhofer IME, Schmallenberg (e-mail [heinz.ruedel@ime.fraunhofer.de](mailto:heinz.ruedel@ime.fraunhofer.de))

## Posters

- 1 Biocides in combined sewer systems: Dry and wet weather occurrence and sources**  
Ulla E. Bollmann, Camilla Tang, Eva Eriksson, Karin Jönsson, Jes Vollertsen, Kai Bester / Aarhus University, Department of Environmental Science, Roskilde, Denmark (DK)
- 2 Determination of Rodenticides in Fish Samples of the German Environmental Specimen Bank**  
Matthias Kotthoff, Heinrich Jürling, Mark Bücking / Fraunhofer IME, Schmallenberg (DE)
- 3 Authorisation of Anticoagulant Rodenticides in Germany**  
Anton Friesen, Barbara Jahn, Anja Kehrer, Eleonora Petersohn, Caroline Riedhammer, Kristina Wege, Stefanie Wieck, Beatrice Schwarz-Schulz, Ingrid Nöh / Federal Environment Agency (UBA), 06844 Dessau-Roßlau (DE)
- 4 Triclosan emissions and transformations through wastewater treatment plants**  
Kai Bester, Xijuan Chen, Haitham el-Taliawy / Aarhus University, Department of Environmental Science, Roskilde, Denmark (DK), Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang (CN)
- 5 Determination of triclosan and methyl-triclosan in soil and earthworm samples from sewage sludge-treated agricultural sites**  
Suman Kharel, Matthias Kotthoff, Heinz Rüdel / Fraunhofer IME, Schmallenberg (DE)
- 6 Occurrence of N,N-dimethylsulfamide, the degradation product of the fungicides tolylfluanid and dichlofluanid, in the aquatic environment**  
Katherine H. Langford, K. Bæk / Norwegian Institute for Water Research (NIVA), Oslo (NO)
- 7 Passive samplers as a means to monitor urban biocide emissions**  
Tom Gallé, Michael Bayerle, Denis Pittois / Luxembourg Institute of Science and Technology, ERIN Dept. – Pollution control and impact assessment group, Belvaux (LU)
- 8 Sampling, sample treatment and analyses of selected biocides as candidates for monitoring measurements**  
Ann-Kathrin Wluka, Jan Schwarzbauer / EMR RWTH Aachen University, Aachen (DE)
- 9 Transformations of triazole fungicides**  
Ulrike Mülow, Petra Lehnik-Habrink, Christian Piechotta / Federal Institute for Materials Research and Testing (BAM), Berlin (DE)
- 10 Environmental Monitoring of Biocides - Cybutryne and Azole Fungicides in Suspended Particulate Matter Samples**  
Korinna Pohl, Katja Michaelis, Andrea Körner, Ingrid Noeh / Federal Environment Agency (Umweltbundesamt), Dessau-Roßlau / Berlin (DE)
- 11 Behaviour of tributyltin under the influence of suspended particulate matter**  
Janine Richter, Ina Fettig, Rosemarie Philipp, Christian Piechotta, Norbert Jakubowski, Ulrich Panne / Federal Institute for Materials Research and Testing (BAM), Berlin (DE)
- 12 Households as emission source for biocidal active substances in urban environments**  
Stefanie Wieck, Oliver Olsson, Klaus Kümmeler / Institute for Sustainable and Environmental Chemistry, Leuphana University, Lüneburg (DE)
- 13 Antifouling biocides in German marinas - Studies to support exposure prognoses for risk assessment**  
Michael Feibicke / Federal Environment Agency (Umweltbundesamt), Berlin (DE), Burkard Watermann / LimnoMar, Hamburg (DE)