



# Aquatic Toxins Symposium

10–11 June 2024, Berlin

## Symposium on Aquatic Toxins

The German Federal Institute for Risk Assessment is looking forward to welcoming the scientific community to the symposium on Aquatic Toxins to be held June 10<sup>th</sup> and 11<sup>th</sup> 2024 in Berlin. Aquatic Toxins are derived from many sources and exist in different forms, presenting invisible dangers to human health. The goal is to exchange relevant scientific information towards a better understanding of aquatic toxins, through their formation, impacts, analytics, toxicology, and case studies. Join us in Berlin for an eye-opening journey into the fascinating world of aquatic toxins with far-reaching consequences.

## Programme

### Monday, 10 June 2024

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| 13:00–13:10 | <b>Welcome</b><br>Andreas Hensel<br>President of the German Federal Institute for Risk Assessment (BfR),<br>Berlin, Germany                               |
| 13:10–14:00 | <b>Plenary talk: Effects in humans and animals from exposure to palytoxins</b><br>Jonathan R. Deeds, U.S. Food and Drug Administration, College Park, USA |

### Session I: Toxin producers and vectors

Session Chair: Elisabeth Varga, University of Veterinary Medicine Vienna, Austria

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| 14:00–14:20 | <b>Sampling of toxic harmful microalgae in the South Pacific basin</b><br>Sam Murray, Cawthron Institute, Nelson, New Zealand                                      |
| 14:20–14:40 | <b>Cyanobacteria and antibiotic resistance</b><br>Maura Manganelli, Istituto Superiore di Sanità, Rome, Italy  |
| 14:40–15:00 | <b>Mechanisms underlying <i>Microcystis spp.</i> toxigenic fraction and microcystin production</b><br>Charlotte Schampera, Technical University of Berlin, Germany |
| 15:00–15:30 | Coffee break   |

### Session II: Impacts

Session Chair: Jorge Diogène, Institute of Agrifood Research and Technology IRTA, La Ràpita, Spain

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| 15:30–15:50 | <b>The efficiency of chlorine-based treatments on <i>Microcystis aeruginosa</i> cultures by untargeted LC-HRMS</b><br>Luciana Tartaglione, University of Naples Federico II, Italy |
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| 15:50–16:10 | <b>What do we know about ichthyotoxic microalgal species and their toxins?</b><br>Bernd Krock, Alfred Wegener institute Helmholtz centre for polar and marine research, Bremerhaven, Germany |
| 16:10–16:30 | <b>Suppression of cyanobacterial blooms using hydrogen peroxide</b><br>Petra Visser, University of Amsterdam, The Netherlands  |

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## Tuesday, 11 June 2024

09:00–09:10 **Welcome and short review of day 1**  
Christopher R. Loeffler, BfR, Berlin, Germany

### Session III: Analytics

Session Chair: Petra Visser, University of Amsterdam, The Netherlands

09:10–09:30 **Bioanalytical tools for the challenging screening and quantification of marine toxins**  
Mònica Campas, Institute of Agrifood Research and Technology IRTA, La Ràpita, Spain

09:30–09:50 **Advances in reference materials for marine and freshwater toxins**  
Pearse McCarron, National Research Council, Canada

09:50–10:10 **Implementation of analytical approaches for a first evaluation of risk associated to biotoxins in New Caledonia waters**  
Manoëlla Sibat, French Institute for Ocean Science, Nantes, France

10:10–10:30 **A generic LC-HRMS screening method for marine and freshwater phycotoxins**  
Mirjam Klijnstra, Wageningen Food Safety Research, The Netherlands

10:30–11:00 Coffee break

### Session IV: Toxicology and risk assessment

Session Chair: Pearse McCarron, National Research Council, Canada

11:00–11:20 **Toward hazard characterisation and risk management of ovatoxin-a: an improved isolation procedure from *Ostreopsis cf. ovata***  
Michela Varra, University of Naples Federico II, Italy

11:20–11:40 **Linking research and surveillance for the risk assessment of emerging marine toxins – present and future**  
Jorge Diogène, Institute of Agrifood Research and Technology IRTA, La Ràpita, Spain

11:40–12:00 **Discovery and mode of action of a novel cyclic imine toxin active on nicotinic acetylcholine receptors**  
Rómulo Aráoz, University of Paris-Saclay, France

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| 12:00–12:20  | <b>ANSES recommendations to prevent human poisoning linked to the proliferation of <i>Ostreopsis</i> on the south-west French Atlantic coast</b><br>Ronel Biré, French Agency for Food, Environmental and Occupational Health & Safety, Maisons-Alfort, France |
| 12:20–13:30  | Lunch break  |
| 13:30–13:50  | <b>Insights into the toxicity of <i>Prymnesium parvum</i> toxins</b><br>Elisabeth Varga, University of Veterinary Medicine Vienna, Austria   |
| <b>Session V: Case examples/exposures</b>  |  |
| Session Chair: Mònica Campas, Institute of Agrifood Research and Technology IRTA, La Ràpita, Spain |  |
| 13:50–14:10  | <b>Ciguatera-outbreaks in Germany due to imported tropical fish</b><br>Miriam Friedemann, BfR, Berlin, Germany   |
| 14:10–14:30  | <b>Current CTX occurrence and official monitoring on the Canary Islands</b><br>Fernando Real Valcárcel, University of Las Palmas de Gran Canaria, Spain  |
| 14:30–14:45  | <b>Final discussion</b>  |
| 14:45–15:00  | <b>Closing remarks</b><br>Christopher R. Loeffler, BfR, Berlin, Germany  |

# Organisational information

## Venue

Kaiserin-Friedrich-Hörsaal  
Robert-Koch-Platz 7  
10115 Berlin  
Germany

## Organiser

German Federal Institute for Risk Assessment  
Max-Dohrn-Straße 8–10  
10589 Berlin, Germany  
[bfr.bund.de/en](https://bfr.bund.de/en)

## Directions

Destination stop ([www.bahn.de](https://www.bahn.de), [www.bvg.de](https://www.bvg.de)):  
“Robert-Koch-Platz (Berlin)”

## Registration

Standard rate: 210.00 €  
Students: 70.00 €  
employee of an institution within the BMEL's portfolio  
(incl. BfR): 0.00 €  
Please register online by 26.05.2024 on  
[www.bfr-akademie.de/english/aquatic-toxins-2024.html](https://www.bfr-akademie.de/english/aquatic-toxins-2024.html)

## General contact

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### About the BfR

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the German Federal Ministry of Food and Agriculture (BMEL). It advises the Federal Government and the federal states (“Laender”) on questions of food, chemicals and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.

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