



PRE-CONFERENCE on ANALYSIS

Developments and trends in (multi)mycotoxin detection

1 February 2022

ANALYSIS, the third and final in the series of virtual pre-conferences, takes place on a highly interactive platform. Topics to be covered range from advanced instrumental techniques to rapid on-site tests for (multi)mycotoxin detection.

PROGRAMME

All times are in Central European Time (CET)

- 12:00 **The World Mycotoxin Forum® Connects**
General conference chairs: Prof. Rudolf Krska, Department IFA-Tulln, BOKU Vienna, Austria and Prof. Chris Elliott, Institute for Global Food Security, Queen's University of Belfast, UK
- 12:15 *Mycotoxin analysis – ranging from rapid methods to advanced instrumental techniques*
Pre-conference chair: Prof. Rudolf Krska
- 12:25 *Begin with the end in mind: a focus on pre-analytical and post-analytical challenges in mycotoxin testing*
Ronald Niemeijer, R-Biopharm, Germany
- 12:50 *Validation of LC-MS/MS based multi-analyte methods – the issue of replicates*
Dr Michael Sulyok, Department IFA-Tulln, BOKU Vienna, Austria
- 13:15 *Multi-residue analysis of mycotoxins in freshwater and occurrence in amphibian breeding ponds*
Dr Tess Goessens, Department of Pathology, Pharmacology & Zoological Medicine, Ghent University, Belgium
- 13:40 *Potential of ion mobility-mass spectrometry to improve analytical performance in the determination of ergot alkaloids in cereal samples*
Laura Carbonell-Rozas, Department of Analytical Chemistry, University of Granada, Spain
- 14:05 Company pitches
- *Removing the fear: Simple tools offering precise results*
Lanny Smith, VICAM, USA
 - *Rapid test methods and automation: flexible and cost-effective mycotoxin screening solutions from Eurofins Technologies*
Giulia Rosar, Eurofins Technologies, Italy
 - *Advantages of the use of ¹³C fully labelled internal standards to improve your mycotoxins analysis by LC-MS/MS*
Boutros Kerbaje, Libios, France
 - *Testing on-site does not need to be slow or complicated*
Nora Kogelnik, Romer Labs, Austria
- 14:30 **EXHIBITION:** Visit the booths and live chat with our sponsors.
PIAZZA CONNECTS: Meet & Greet the chairs, the speakers and the WMF community.
- 15:00 *Bridging the gap between massive on-site mycotoxin testing and confirmatory instrumental analysis*
Ariadni Geballa-Koukoulou, Wageningen Food Safety Research, the Netherlands
- 15:25 *Mycotoxin monitoring solutions for prevention, management, and compliance*
Nicola Dreolin, Waters Corporation, USA
- 15:50 *Rapid methods to screen for T-2 and HT-2 toxins*
Dr Natasha Logan, School of Biological Sciences, Queen's University Belfast, Northern Ireland
- 16:15 *Single kernel mycotoxin analysis in commercial maize: Spectral identification, distributions, and sorting*
Dr Matthew J. Stasiewicz, Department of Food Science and Human Nutrition, University of Illinois at Urbana-Champaign, USA

- 16:40 *Mycotoxin detection in grains and nuts using optical imaging and spectroscopic techniques*
Prof. Chandra B. Singh, Advanced Postharvest Technology Centre, Lethbridge College,
Canada
- 17:05 *Can photonics hunt the cereal killer?*
Prof. Boris Mizaikoff, Institute of Analytical and Bioanalytical Chemistry, Ulm University and
Hahn-Schickard, Institute for Microanalysis Systems, Germany
- 17:30 Closing remarks by Prof. Rudolf Krska and Prof. Chris Elliott
- 17:45 Outlook for WMF *meets* ITALY, 16-18 May 2022, Parma, Italy
Prof. Michele Suman and Prof. Chiara Dall'Asta
- 18:00 End of pre-conference

ABOUT THE SPEAKERS

Ronald Niemeijer

Ronald Niemeijer is director global marketing at R-Biopharm AG in Darmstadt, Germany. He is also a member of the MicroVal General Committee and the Board of AOAC Europe. Before joining R-Biopharm, he held positions in sales and product development at companies, such as ALControl Laboratories and Unilever.

Michael Syulyok

Dr Sulyok specialises on LC-MS/MS based methods for the simultaneous determination of mycotoxins and fungal metabolites with a strong focus on method validation to characterise their performance with minimal or even no sample clean-up. His research has resulted in numerous international cooperations, more than 290 papers and the award of the Clarivate Highly Cited Researcher in 2018 and 2019.

Tess Goessens

Dr Goessens is a scientific researcher at Ghent University. Her PhD thesis dealt with 'Screening of agrochemicals in fresh water ecosystems and organ-specific bioaccumulation and elimination of fungicides in the Japanese red-bellied newt, *Cynops pyrrhogaster*'.

Laura Carbonell-Rozas

Dr Carbonell-Rozas holds a PhD in Chemistry at the University of Granada. She has collaborated with different high quality R&D centers during several international stays. Currently, she is part of the Food and Drug Department at the University of Parma as a Post-Doctoral research scientist.

Ariadni Geballa-Koukoura

Ariadni Geballa-Koukoura a licensed pharmacist with an MSc in Pharmaceutical Analysis from the University of Athens. Currently, she is a PhD candidate at Wageningen University. Her thesis objective is method development for coupling bioassays and biosensing alternatives with direct mass spectrometry.

Nicola Dreolin

Nicola Dreolin is a senior scientist and natural toxins subject matter expert at Waters. Nicola is specialised in method development for a variety of food and environmental applications. He is currently involved in different research projects regarding metabolomics, ion mobility, and direct-mass spectrometry for food testing and authenticity.

Natasha Logan

Dr Logan is an active member of Prof. Chris Elliott's research team at the Institute for Global Food Security and involved in numerous food safety and food fraud related projects, grant applications, publications and patents. Her research interests focus on food safety applications and the development of novel and portable spectroscopy techniques to detect food contaminants in-field.

Matthew Stasiewicz

Dr Stasiewicz is an assistant professor of Applied Food Safety in the Department of Food Science and Human Nutrition at the University of Illinois at Urbana-Champaign. His work focuses applying engineering and data analytic approaches to advance food safety microbiology.

Chandra B. Singh

Dr Singh is Senior Research Chair in Agricultural Engineering and Technology at the Lethbridge College in Alberta, Canada. He is developing the Advanced Postharvest Technology Centre at the college. He conducts research on postharvest storage and handling of grains, sugar beets and potatoes, natural air drying, aeration, mathematical modelling, sensing, automation, machine learning, and non-destructive quality evaluation of agri-food products using NIR hyperspectral imaging.

Boris Mizaikoff

Dr Mizaikoff is a Chaired Professor and Director of the Institute of Analytical and Bioanalytical Chemistry, Ulm University, Germany. Since 2021, he is also a Director at the Hahn-Schickard Institute for Microanalysis Systems in Ulm. His research interests focus on optical sensors, biosensors, and biomimetic sensors in the mid-infrared spectral range, among others.