

44th Mycotoxin Workshop 2023

5 - 7 June 2023 | Celle (at Hannover), Germany

Conference Agenda

Overview and details of the sessions of this conference. Please select a date or location to show only sessions at that day or location. Please select a single session for detailed view (with abstracts and downloads if available).

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Session Overview

Date: Monday, 05/June/2023

8:00am Registration I 9:30am Welcome

9:45am

9:45am Occurrence

10:15am 9:45am - 10:00am

Mycotoxin occurrence: a survey among major and minor winter cereals

Marco Gozzi¹, Massimo Blandino², Chiara Dall'Asta¹, Renato Bruni¹, Laura Righetti^{1,3,4}

1: Department of Food and Drug, University of Parma, Italy; 2: Department of Agricultural Forest and Food Sciences, University of Turin, Italy; 3: Laboratory of Organic Chemistry, Wageningen University, The Netherlands; 4: Wageningen Food Safety Research, Wageningen University & Research, The Netherlands

10:00am - 10:15am

Putative tremorgenic mycotoxicosis in a dog - case report

<u>Leon Hart</u>¹, Christina Rehagel¹, Michael Kuhn², Lukas Jozefowitz³, Esther Haßdenteufel³, Benedikt Cramer², Ewald Usleber¹

1: Chair of Dairy Sciences, Institute of Veterinary Food Science, Justus-Liebig-University, Giessen, Germany; 2: Institute of Food Chemistry, University of Münster, Münster, Germany; 3: Clinic for Small Animals, Department of Veterinary Clinical Sciences, Justus-Liebig-University, Giessen, Germany

10:15am Coffee break I

11:00am

11:00am Food Safety I

12:00pm 11:00am - 11:15am

Fusarium Growth and Production of Toxins during Malting

Eva Maria Biehl, Sarah Schneidemann-Bostelmann, Ibrahim-Can Akpak, Michael Rychlik

Chair of Analytical Food Chemistry, Technical University of Munich (TUM), Maximus-von Imhof-Forum 2, 85354 Freising, Germany

11:15am - 11:30am

Mycotoxins as agricultural & livestock biosecurity threats: from maize seeds to raw milk contamination

Marta Sofia Carvalho Ferreira Malheiro Leite^{1,2,3}, Andreia Freitas^{2,3}, Jorge Barbosa³, Fernando Ramos^{1,3}

1: University of Coimbra, Faculty of Pharmacy, Health Science Campus; 2: National Institute for Agricultural and Veterinary Research, I.P. (INIAV, I.P.); 3: Associated Laboratory for Green Chemistry (LAQV) of the Network of Chemistry and Technology (REQUIMTE) 11:30am - 11:45am Investigations into the mycotoxin-producing capacity of moulds isolated from cheese Daniela Schale¹, Bettina Seeger¹, Nadja Jeßberger¹, Sophie Kittler¹, Christina Rehagel², Leon Hart², Ewald Usleber², Madeleine Plötz¹ 1: Institute of Food Quality and Food Safety, University of Veterinary Medicine Hannover; 2: Chair of Dairy Sciences, Institute of Veterinary Food Science, Justus-Liebig-University Giessen 11:45am - 12:00pm Thermal stability of the mycotoxin citrinin Lea Brückner, Benedikt Cramer, Hans-Ulrich Humpf University of Muenster, Germany 12:00pm Lunch I 1:30pm 1:30pm 1:30pm - 1:45pm 2:30pm Development and evaluation of sample preparation methods for mycotoxin analysis in plant-based milk alternatives by enzyme immunoassays Christina Rehagel¹, Ronald Maul², Kim Lara Gützkow², Ömer Akineden¹, Ewald Usleber¹ 1: Dairy Sciences, Institute of Veterinary Food Science, Justus-Liebig-University Giessen, Ludwigstrasse 21, 35390 Giessen, Germany; 2: Department Safety and Quality of Milk and Fish Products, Max Rubner-Institut, Federal Research Institute of Nutrition and Food, Hermann-Weigmann-Strasse 1, 24103 Kiel, Germany Toxicology I 1:45pm - 2:00pm Combined toxicity of aflatoxin B1 and deoxynivalenol: roles of ribotoxicity and cytochrome P450 enzymes Bernadette Willoquet, Gladys Mirey, Delphine Payros, Isabelle Oswald Toxalim, Research center in Food Toxicology, Université de Toulouse, INRA, ENVT, INP-PURPAN, UPS, Toulouse, France 2:00pm - 2:15pm Toxicity of enniatins A, A1, B, B1 and beauvericin on innovative in vitro Human cell models and their impacts on cellular gene expression. France COULET, Monika COTON, Emmanuel COTON, Nolwenn HYMERY Univ Brest, INRAE, Laboratoire Universitaire de Biodiversité et Écologie Microbienne, F-29280 Plouzané, France 2:15pm - 2:30pm Computer-empowered digging of big data to tackle toxicity assessment and bioremediation of emerging mycotoxins - a 4-year long romance with fusaric acid Lorenzo Pedroni, Chiara Dall'Asta, Gianni Galaverna, Luca Dellafiora Department of Food and Drug, University of Parma, Italy 2:30pm Coffee break II 3:00pm 3:00pm Meeting of the Society 4:30pm 5:00pm **Activities** 6:00pm 6:30pm BBQ

Date: Tuesday, 06/June/2023

8:00am Registration II 9:00am Food Safety II

10:00am 9:00am - 9:15am

Mycotoxin contamination in the Arab world: Highlighting the main knowledge gaps and discussing the current legislations

Mohamed Fathi Abdallah¹, Muhammad Gado², Doha Abdelsadek³, Fatma Zahran⁴, Nada N. El-Salhey⁵, Ohaila Mehrez⁶, Sara Abdel-Hay⁷, Sahar Mahrous⁸, Karl De Ruyck⁹, Elisabeth Varga¹

1: Department of Veterinary Toxicology and Forensic Medicine, Assiut University, Assiut 71515, Egypt; 2: Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt; 3: Faculty of Pharmacy, Cairo University, Cairo 12613, Egypt; 4: Faculty of Pharmacy, Menoufia University, Menoufia 6131567, Egypt; 5: Faculty of Pharmacy, Kafrelsheikh University, Kafrelsheikh 33516, Egypt; 6: Faculty of Pharmacy, Ain Shams University 11566, Cairo, Egypt; 7: Faculty of Pharmacy, Tanta University, Tanta 31527, Egypt; 8: Department of Chemistry, Faculty of Science, Sohag University, Sohag 82524, Egypt; 9: Teagasc Food Research Centre, Ashtown, Dublin 15 D15 KN3K, Ireland; 10: Department of Food Chemistry and Toxicology, Faculty of Chemistry, University of Vienna, 1090 Vienna, Austria

9:15am - 9:30am

T-2 and HT-2 toxins in milling oats and oat milling products

Jens Chr. Meyer, Inga Hennies H. & J. Brüggen KG, Germany

9:30am - 9:45am

Mycotoxins in insects for food and feed

Ronald Maul¹, Kim Lara Gützkow¹, Nina Kröncke², Johanna Ebmeyer³, Nadja Kampschulte⁴, Linda Böhmert³, Cindy Schöne⁵, Nils Helge Schebb⁴, Albert Braeuning³, Rainer Benning²

1: Max Rubner-Institut Federal Research Institute of Nutrition and Food, Germany; 2: University of Applied Sciences Bremerhaven, Germany; 3: German Federal Institute for Risk Assessment, Department Food Safety, Germany; 4: University of Wuppertal, Faculty of Mathematics and Natural Sciences, Chair of Food Chemistry, Germany; 5: German Federal Institute for Risk Assessment, Department Safety in the Food Chain, Germany

9:45am - 10:00am

Cyclodextrins as potential mycotoxin binders: the summary of earlier and recent studies

Miklós Poór, Eszter Fliszár-Nyúl

Department of Pharmacology, Faculty of Pharmacy, University of Pécs, Pécs, Hungary

10:00am

Coffee break III

10:30am

10:30am Health / Exposure

11:45am 10:30am - 10:45am

Ochratoxin A and Parkinson disease: is there a link?

Ariane Vettorazzi^{1,4}. Maria Serrano¹. Elba Beraza¹. Maria Izco². Amaya Azqueta^{1,4}. Elena Gonzalez-Peñas³. Adela Lopez de Cerain^{1,4}, Lydia Alvarez-Erviti²

1: Department of Pharmacology and Toxicology, MITOX Research Group, School of Pharmacy and Nutrition, University of Navarra, Pamplona, Spain; 2: Laboratory of Molecular Neurobiology, Center for Biomedical Research of La Rioja (CIBIR), Logroño, Spain; 3: Department of Pharmaceutical Technology and Chemistry MITOX Research Group, School of Pharmacy and Nutrition, University of Navarra, Pamplona Spain; 4: IdiSNA, Navarra Institute for Health Research, Pamplona, Spain

10:45am - 11:00am

The epigenetic interplay of mycotoxins & Epstein Barr virus towards childhood cancer

<u>Thanos Mouchtaris Michailidis</u>^{1,2,4}, Sarah De Saeger^{1,2,3}, Rita Khoueiry⁴, Grace Akinyi Odongo⁴, Laura Corveleyn^{2,5}, Maarten Dhaenens^{2,5}, Zdenko Herceg⁴, Marthe De Boevre^{1,2}

1: Ghent University, Ghent, Belgium; 2: CRIG, Cancer Research Institute Ghent, Ghent, Belgium; 3: Department of Biotechnology and Food Technology, Faculty of Science, University of Johannesburg, Doornfontein Campus, Gauteng, South Africa; 4: Epigenomics and Mechanisms Branch, International Agency for Research on Cancer/World Health Organization, Lyon, France; 5: Laboratory of Pharmaceutical Biotechnology, Faculty of Pharmaceutical Sciences, Ghent University, Gent, Belgium

11:00am - 11:15am

Short-time exposure to the Fusarium mycotoxins deoxynivalenol and zearalenone in cows fed a diet inducing rumen acidosis

Lydia Kroon¹, Ant Koopmans¹, Antonio Gallo², Janine Saltzmann³, Sven Dänicke³, Ermino Trevisi², Regiane R Santos¹

1: Schothorst Feed Research, P.O. Box 533, 8200 AM Lelystad, The Netherlands; 2: Department of Animal Science, Food and Nutrition (DIANA), Faculty of Agricultural, Food and Environmental Sciences, Università Cattolica del Sacro Cuore, 29122 Piacenza, Italy; 3: Institute of Animal Nutrition, Friedrich-Loeffler-Institute (FLI), Federal Research Institute for Animal Health, D-38116 Brunswick, Germany

11:15am - 11:30am

New insights on Citrinin exposure in German children and adults from a urine biomarker study

<u>Gisela H. Degen</u>¹, Jörg Reinders¹, Martin Kraft², Yvonni Chovolou², Wolfgang Völkel³, Felicia Gerull⁴, Jan G. Hengstler¹, Hermann Fromme⁵

1: Leibniz Research Centre for Working Environment and Human Factors, Germany; 2: Landesamt für Natur, Umwelt und Verbraucherschutz NRW; D-45133 Essen, Germany; 3: Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, D-80538 München; 4: Landeslabor Berlin-Brandenburg, Fachbereich IV-4, D-12489 Berlin; 5: Institut und Poliklinik für Arbeits-, Sozial- und Umweltmedizin, D-80336 München

11:30am - 11:45am

Walls in Camouflage: Searching for Molds and Mycotoxins in Military Settings

Wiebke Derz¹, Paul Elsinghorst^{1,2}

1: Central Institute of the Bundeswehr Medical Service Munich, 85748 Garching, Germany; 2: Institute of Nutrition and Food Sciences, University of Bonn, 53121 Bonn, Germany

11:45am Lunch II

1:45pm

1:45pm Toxicology II

3:00pm

1:45pm - 2:00pm

Analysing epigenetic toxicity caused by multi-mycotoxin exposure using an intestinal and hepatic cell culture model

<u>Yasmine Bader</u>¹, Tess Goessens¹, Ruben Almey², Thanos M. Michailidis¹, Maarten Dhaenens², Sarah De Saeger^{1,3}, Marthe De Boevre¹

1: Centre of Excellence in Mycotoxicology and Public Health, University Ghent, Belgium; 2: ProGenTomics, Laboratory of Pharmaceutical Biotechnology, Ghent University, Ghent, Belgium; 3: Faculty of Science, University of Johannesburg, Johannesburg, South Africa

2:00pm - 2:15pm

New challenges in genotoxicity testing: the case of the Alternaria mycotoxins alternariol and altertoxin II

<u>Francesco Crudo</u>¹, Chenyifan Hong¹, Vanessa Partsch¹, Giorgia Del Favero¹, Luca Dellafiora², Doris Marko¹

1: Department of Food Chemistry and Toxicology, Faculty of Chemistry, University of Vienna, Vienna, Austria; 2: Department of Food and Drug, University of Parma, Parma, Italy

2:15pm - 2:30pm

Does replication stress play a role in Ochratoxin A genotoxicity?

<u>Christina Klotz</u>, Julian Brode, Johannes Borchers, Angela Mally University Würzburg, Germany

2:30pm - 2:45pm

Pitfalls and challenges when evaluating combinatory effects – a case study on zearalenone and isoflavones

Dino Grgic^{1,2}, Barbara Novak³, Elisabeth Varga¹, Doris Marko¹

1: University of Vienna, Faculty of Chemistry, Department of Food Chemistry and Toxicology, Vienna, Austria; 2: University of Vienna, Doctoral School in Chemistry, Vienna, Austria; 3: DSM-Biomin Reserach Center, Tulln, Austria

2:45pm - 3:00pm

Alternariol-sulfates as neglected conjugation products with toxicological potential

Eszter Borsos^{1,2}, Luca Dellafiora³, Chiara Dall'Asta³, Giorgia Del Favero^{1,4}, Elisabeth Varga¹, Doris Marko¹
1: Department of Food Chemistry and Toxicology, University of Vienna, Vienna, Austria; 2: Doctoral School in Chemistry, University of Vienna, Vienna, Austria; 3: Department of Food and Drug, University of Parma, Parma, Italy; 4: Core Facility Multimodal Imaging, Faculty of Chemistry, University of Vienna, Vienna, Austria

3:00pm Coffee break IV

3:30pm

3:30pm Toxicology III

4:15pm

3:30pm - 3:45pm

New possibilities in mycotoxin research by functional intravital imaging

Ahmed Ghallab^{1,2}, Reham Hassan^{1,2}, Maiju Myllys¹, Daniela González¹, Abdellatif Seddek², Andrea Gerdemann³, Michael Kuhn³, Benedikt Cramer³, Hans Ulrich Humpf³, Gisela H. Degen¹, Jan G. Hengstler¹
1: Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund, Ardeystr. 67, 44139 Dortmund, Germany; 2: Department of Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, South Valley University, Qena 83523, Egypt; 3: Institute of Food Chemistry, University of Muenster, Corrensstr. 45, 48149 Münster, Germany

3:45pm - 4:00pm

Insights into the metabolism, kinetics and related toxicity of ochratoxin A in mice models

<u>Michael Kuhn</u>¹, Reham Hassan², Benedikt Cramer¹, Ahmed Ghallab², Gisela H. Degen², Jan G. Hengstler², Hans-Ulrich Humpf¹

1: Institute of Food Chemistry, University of Muenster; 2: Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund

4:00pm - 4:15pm

Species differences of aflatoxin B1 metabolism in primary mouse, rat and human hepatocytes and in vivo in rodents

Andrea Gerdemann¹, Benedikt Cramer¹, Matthias Behrens¹, Ahmed Ghallab², Reham Hassan², Gisela H. Degen², Jan G. Hengstler², Melanie Esselen¹, Hans-Ulrich Humpf¹

1: Institute of Food Chemistry, University of Münster, Münster, Germany; 2: Leibniz Research Centre for Working Environment and Human Factors (IfADo), Dortmund, Germany

4:30pm Activities II

5:30pm

6:30pm | Conference Dinner

Date: Wednesday, 07/June/2023

9:00am Registration III 9:15am <u>Analysis / Fungi I</u>

10:30am 9:15am - 9:30am

LC-QToF-HRMS as an Effective Tool for Detecting of Co-Contamination of Mycotoxins and Transformation Products

Marcus Trentzsch, Stefan Weigel, Christoph Hutzler

German Federal Institute for Risk Assessment (BfR), Germany

9:30am - 9:45am

Acceleration of an HPLC-MS / MS multi-class method for the analysis of >1200 biotoxins, pesticides, and veterinary drugs

Lidija Kenjeric¹, Michael Sulyok², Rudolf Krska^{2,3}, Kristyna Pavelicova⁴, Alexandra Malachova¹

1: Austrian Competence Centre for Feed and Food Quality, Safety & Innovation, Austria; 2: 2. University of Natural Resources and Life Sciences Vienna (BOKU), Department of Agrobiotechnology (IFA-Tulln), Institute of Bioanalytics and Agro-Metabolomics, Konrad-Lorenz-Straße 20, 3430 Tulln an der Donau, Austria; 3: Institute for Global Food Security, School of Biological Sciences, Queens University Belfast, University Road, Belfast, BT7

1NN, Northern Ireland, United Kingdom; 4: Department of Chemistry and Biochemistry, Faculty of Forestry and Wood Technology, Mendel University in Brno, Zemedelska 1, Brno, Czech Republic

9:45am - 10:00am

IR spectroscopy combined with LC-MS/MS analysis for rapid mycotoxin screening

Stephan Freitag, Michael Sulyok, Rudolf Krska

Institute of Bioanalytics and Agro-Metabolomics, Department of Agrobiotechnology, IFA Tulln, University of Natural Resources and Life Sciences, Vienna

10:00am - 10:15am

Disarmed mycotoxins from Stachybotrys chartarum: insights into metabolism and biological activity of phenylspirodrimanes

<u>Alica Fischle</u>, Katharina Steinert, Viola Haupt, Felix Schimang, Hans-Ulrich Humpf, Svetlana A. Kalinina Institute of Food Chemistry, University of Muenster, Muenster, Germany

10:15am - 10:30am

Effect of Deoxynivalenol on soil nitrification

Sven Korz, Katherine Munoz

RPTU, Institute for Environmental Sciences, Landau, Germany

10:30am Coffee break V

11:00am

11:00am Fungi II

11:45am 11:00am - 11:15am

Influence of the velvet complex on development, secondary metabolism, aggressiveness and defense of Penicillium expansum

<u>Chrystian Zetina Serrano</u>, Nadia Tahtah, Ophélie Rocher, Selma Snini, Yannick Lippi, Emilien L. Jamin, Isabelle P. Oswald, Olivier Puel, Sophie Lorber

INRAE, ToxAlim (Research Centre in Food Toxicology), Toulouse, France

11:15am - 11:30am

Linking distinct extrolite profiles to the different genetic populations within Penicillium roqueforti

Ewen Crequer^{1,2}, Jean-Luc Jany¹, Gwennina Cueff¹, Jeanne Ropars², Thibault Caron², Jens Frisvad³, Johan Christiansen³, Antoine Branca², Tatiana Giraud², Emmanuel Coton¹, <u>Monika Coton</u>¹

1: Univ. Brest INRAE, Laboratoire Universitaire de Biodiversité et Ecologie Microbienne, F-29280 Plouzané, France; 2: Université Paris-Saclay, CNRS, AgroParisTech, Laboratoire Ecologie Systématique et Evolution, UMR 8079, France; 3: Department of Biotechnology and Biomedecine, Technical University of Denmark, DK-2800 Kgs. Lyngby, Denmark

11:30am - 11:45am

Environmental influences on the production of Alternariol-Sulfate by Alternaria alternata

Adetoye Adeyemo, Markus Schmidt-Heydt

Max Rubner-Institute, Germany

11:45am Closing

12:00pm

12:30pm Bus departure for a visit Bruker Daltonics in Bremen (free, limited, registration required).

Free bus tour to the factory of Bruker Daltonics in Bremen. After the event no transfer back to Celle but to Bremen main station and airport.

2:30pm Visit of the Bruker Daltonics factory of mass spectrometers (free, limited, registration required)

4:15pm Guided tour throught the production factory and visit of the demo labs showing the latest developments of Bruker Daltonics.

For individual arrival: Meeting point in front of the main building, Fahrenheitstraße 4, 28359 Bremen

4:15pm Snacks, drinks and discussions / Shuttle transfer to Bremen station and airport

Free drinks and snacks. Opportunity to disuss with experts from Bruker. Flights at 17:30 from Bremen to Munich or 19:10 to Frankfurt will be reached.