

CONFERENCE PROGRAMME



THE RME CONFERENCE SERIES
Rapid Methods
9TH CONFERENCE **RME**2014
EUROPE

Food Feed Water Analysis
innovations and breakthroughs!

31 MARCH – 2 APRIL 2014 THE NETHERLANDS

FEATURING
THE SPECIAL SESSION
“RME2014 MEETS MONIQA”

SUPPORTED BY



ON WEDNESDAY 2 APRIL 2014

MONDAY 31 MARCH 2014

12:45 **Opening of RME2014**

Dr. Aart van Amerongen, Food & Biobased Research, Wageningen UR, the Netherlands

13:00 **Plenary Keynote Lecture**

Reducing the phytosanitary risks in production systems and global trade of plant material: how rapid and reliable methods can help both business and inspection agencies

John van Ruiten, Director, Naktuinbouw, the Netherlands

Plenary meeting

Challenges for rapid methods: an industry point of view

The advent of rapid measurement devices provides exciting opportunities to access simple tools to support verification and quality control processes. However, before selecting and approving these technologies, the capabilities of each system must be examined carefully, separating the facts from the marketing claims. Some of the requirements that would be expected from a rapid measurement device to be accepted for use in a global market place will be explored.

Chair: Dr. Aart van Amerongen, Food & Biobased Research, Wageningen UR, the Netherlands

13:30 *The search for Spock's tricorder: a perspective from a major FMCG company on the technical requirements for the adoption of a rapid procedure*

Dr. Ashley Scribbins, Corporate Quality & Food Safety, Mars Incorporated, UK

13:55 *Rapid microbiological methods: a food industry perspective*

Dr. Balamurugan Jagadeesan, Nestlé Research Center, Switzerland

14:20 *Rapid microbiology methods and The Coca-Cola Company*

Dr. Colm Scully, Coca-Cola Services, Belgium

14:45 *Rapid methods for the quality control of drinking water*

Dr. Vicente Catalán, Labaqua, Aqualogy Environment, Spain

15:15 Networking break & exhibition

15:45 – 16:45 **Workshops & vendor demonstrations – Round I**

R-Biopharm: *Innovative sample clean-up methods for mycotoxin analysis*

Qiagen: *Viability PCR – the next level in using PCR as a detection technology for microorganisms*

BioDot: *Dispensing technology impact on test line intensity and width*

17:00 – 19:00 **Excursion to the keukenhof: get inspired!**

The Keukenhof is an open air flower exhibition organised for the first time in 1949. This has expanded to an annually recurring event that has always drawn great numbers of visitors from all over the world. The park is 32 hectares wide and filled with blooming tulips, hyacinths, daffodils and other spring bulbs. Be sure to bring your camera along on this unique experience.

19:30 – 21:00 **RME's Lounge Party**

TUESDAY 1 APRIL 2014

08:30 **Plenary Keynote Lecture**

Proficiency testing: ticking the box for my accreditation or educational tool?

Dr. Kate Wilkinson, FAPAS, The Food and Environment Research Agency, UK

09:00 **Lightning talks**

Short presentations by exhibitors

Parallel session 1

Advances in microbial sampling and analysis

The future of rapid methods in microbiology is very bright with many new developments and applications, but sampling is often the forgotten beginning.

Chair: Dr. Gerrit Keizer, Prionics Lelystad, the Netherlands

09:30 *Implications of bacterial clustering for sampling plans*

Dr. Ursula Gonzales-Barron, Centro de Investigação de Montanha, Escola Superior Agrária – Instituto Politécnico de Bragança, Portugal

09:55 *Sampling and detection technologies of pathogens for safe drinking water: a review*

Prof.dr. Marc Desmulliez, Institute of Signals, Sensors and Systems, Heriot Watt University, UK

10:20 **Contributed paper:** *Remote-controlled microbiological auto-sampling and on-line monitoring of chemo-physical parameters and enzymatic activities at drinking water resources: event & time series analysis*

Dr. Hermann Stadler, Joanneum Research, Department for Water Resources Management, Austria

10:45 Networking break & exhibition

11:15 *Viability PCR – a toolbox for live/dead differentiation of microorganisms*

Dr. Marcia Armstrong, Qiagen, USA

11:40 *Advances in DNA-based biosensors for rapid microbes detection in food and water: looking for highly specific probes*

Dr. Lise Barthelmebs, Institut de Modélisation et d'Analyse en Géo-Environnement et Santé, Université de Perpignan Via Domitia, France

12:05 *Simple field tests for the diagnosis of livestock diseases: is this an achievable goal?*

Dr. Donald King, Molecular Characterisation and Diagnostics Group, The Pirbright Institute, UK

12:30 Networking break & exhibition

Poster viewing

Workshops & vendor demonstrations – Round II

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Parallel session 2

Advances in contaminant analysis

Advanced technologies provide many opportunities for improved detection. Novel technologies aside, a closer look needs to be taken at upstream sample preparation steps, even as they are applied to traditional detection technologies.

Chair: Dr. Michele Suman, Barilla, Italy

09:30 *Less is more – generic sample preparation in residue analysis*

Dr. Bjorn Berendsen, RIKILT Wageningen UR, the Netherlands

09:55 *Speeding up sample preparation in food analysis*

Dr. Lourdes Ramos, Department of Instrumental Analysis and Environmental Chemistry, Institute of General Organic Chemistry of the Spanish National Research Council, Spain

10:20 *Current GMO sample preparation and analysis approaches by the EU Reference Laboratory for GM Food & Feed*

Dr. Maddalena Querci, Institute for Health and Consumer Protection, Joint Research Centre, European Commission, Italy

10:45 Networking break & exhibition

11:15 *Single extraction method for multimycotoxin analysis*

Julie Brunkhorst, Trilogy Analytical Laboratory, USA

11:40 **Contributed paper:** *Potential of front-face fluorescence to monitor acrylamide and colour of potato crisps*

Dr. Pierre Lacotte, Spectralys Innovation, France

12:05 *The potential of “omics” in chemical analyses of food, feed and water*

Prof.dr. Hanspeter Nägeli, Institute of Pharmacology and Toxicology, University of Zurich, Switzerland

12:30 Networking break & exhibition

Poster viewing

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TUESDAY 1 APRIL 2014

Parallel session 3

Advances in microbial analysis

This session provides an insight into selected areas of microbial analysis where there have been recent advances or where the pathogen itself has some topicality.

Chair: Dr. Kitty Maassen, National Institute for Public Health and the Environment, the Netherlands

- 13:30 *Laser optical sensor, a label-free rapid on-plate pathogen screening tool*
Prof.dr. Arun Bhunia, Department of Food Science, Purdue University, USA
- 13:55 *Rapid methods for detection of botulinum toxin-producing clostridia and their toxins: the taste of the art in Europe and in the world*
Dr. Fabrizio Anniballi, Department of Veterinary Public Health and Food Safety, Istituto Superiore di Sanità, Italy
- 14:20 *An integrated and ultrasensitive biosensor for the detection of pathogens and toxins*
Dr. Mohammed Zourob, Cranfield Health, Cranfield University, UK
- 14:45 *DNA microarrays as versatile tools for freshwater quality testing*
Dr. Holger Eickhoff, Scienion AG, Germany
- 15:15 Networking break & exhibition
- 15:45 **Contributed paper:** *Rapid lateral flow detection of Legionella-specific RNA and DNA amplicons*
Dr. Heleen de Vogel-van den Bosch, Food & Biobased Research, Wageningen UR, the Netherlands
- 16:10 *Characterization of movement at the nanoscale: a fast determination of bacterial resistance to antibiotics*
Dr. Giovanni Longo, Laboratory of the Physics of Living Matter, École polytechnique fédérale de Lausanne, Switzerland

16:35 – 17:00

Speed presentations (selected posters)

17:00 – 18:30

Poster viewing & drinks

TUESDAY 1 APRIL 2014

Parallel session 4

Advances in contaminant analysis

Selected areas of contaminant analysis where there have been recent advances or where the contaminant itself has some topicality are highlighted.

Chair: Prof.dr. Sarah De Saeger, Ghent University, Belgium

13:30 *Mycohunt: a rapid biosensor for the detection of deoxynivalenol in wheat dust*
Melanie Sanders, Department of Bio-analysis, Ghent University, Belgium

13:55 *Droplet digital PCR, a cutting edge technology for quantitative analysis of food and feed samples*
Dr. Dany Morisset, Department of Biotechnology and Systems Biology, National Institute of Biology, Slovenia

14:20 *Analysis and risk of fullerenes and other carbon-based nanomaterials in the total environment*
Dr. Marinella Farré, Department of Environmental Chemistry, Institute of Environmental Assessment and Water Research of the Spanish National Research Council, Spain

14:45 **Contributed paper:** *A simple and sensitive screening assay for antiviral neuraminidase inhibitors in poultry*
Dr. Mariel Pikkemaat, RIKILT Wageningen UR, the Netherlands

15:15 Networking break & exhibition

15:45 *Quantitative targeted residue and retrospective data analysis of relevant pesticides, antibiotics and mycotoxins in bakery raw materials and food commodities by LC-HRMS Exactive™ (Orbitrap Technology)*
Dr. Michele Suman, Food Research Labs, Barilla, Italy

16:10 *Collect data, not samples: application of field portable GC-MS for on-site food sampling and analysis*
Dr. Joeri Vercammen, IS-X, Interscience, Belgium

16:35 – 17:00

Speed presentations (selected posters)

17:00 – 18:30

Poster viewing & drinks

WEDNESDAY 2 APRIL 2014

Parallel session 5

Future developments in the area of food and environmental analysis

Coming soon?

Chair: Bram van der Gaag, INCAS3, the Netherlands

08:30 *Point of care device for detection of microorganisms in food*

Dr. Maria Carmen Morant-Miñana, Microsensors Unit, CIC microGUNE, Spain

08:50 *Airborne bacteria: from microbial physics to rapid identification*

Prof.dr. Paul D. Maguire, Engineering Research Institute, University of Ulster, UK

09:10 **Contributed paper:** *Hydrochip Life+, development of a molecular chip for rapid determination of the quality of surface water by using diatoms as indicator organisms*

Marije IJszenga, Vitens Laboratory, the Netherlands

09:30 *Fiber optic biosensing for allergen and pathogen screening in food*

Dr. Steven Vermeir, Department of Biosystems, KU Leuven, Belgium

09:50 *Using nature's genius for pollutant detection*

Dr. Johannes Raff, Helmholtz Institute Freiburg for Resource Technology, Helmholtz-Zentrum Dresden-Rossendorf, Germany

10:10 *Ultrasensitive surface enhanced Raman spectroscopy sensor and potential applications in environmental monitoring*

Ali Özhan Altun, Department of Mechanical and Process Engineering, ETH Zurich, Switzerland

10:30 *The single cell future of MALDI-TOF mass spectrometry*

Dr. Gerold de Valk, BiosparQ, the Netherlands

10:45 Networking break & exhibition

Final plenary meeting

Food authenticity – after Burgergate and Fishgate...what is next?

Authenticity yesterday, today and tomorrow!

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WEDNESDAY 2 APRIL 2014

Parallel session 6

RME2014 meets MoniQA

MoniQA is an international and interdisciplinary network of professionals from institutions working in food research, regulatory bodies and trade, providing solutions to promote a safer and secure food supply worldwide.

Chairs: Dr. Roland Poms, MoniQA Association / International Association for Cereal Science and Technology, Austria
Hans P. van Egmond, M.Sc., RIKILT Wageningen UR, the Netherlands

08:30 *Looking for the best compromise in rapid mycotoxins tests: speed, sensitivity, precision, accuracy*

Dr. Anton J. Alldrick, Science Division, Campden BRI, UK

08:50 *Performance criteria for rapid screening methods to detect mycotoxins*

Dr. Jörg Stroka, Institute for Reference Materials and Measurements, Joint Research Centre, European Commission, Belgium

09:10 *Isothermal amplification of DNA as a novel approach for the rapid detection of DNA in food samples: a simple test for the food allergen celery*

Dr. Kurt Brunner, Department IFA-Tulln, BOKU Vienna, Austria

09:30 *Towards the production of reference materials for food allergen and gluten-free analysis for improved food safety*

Dr. Roland Poms, MoniQA Association / International Association for Cereal Science and Technology, Austria

09:50 *Rocket fuel and media headlines: the perchlorate story*

Dr. Bert Popping, Eurofins Scientific Group, UK

10:10 *Validation of binary methods – challenges and models*

Dr. Christoph von Holst, Institute for Reference Materials and Measurements, Joint Research Centre, European Commission, Belgium

10:30 *Novel quantitative real-time and multiplex PCR for allergen detection*

Ronald Niemeijer, R-Biopharm, Germany

10:45 Networking break & exhibition

Final plenary meeting

Food authenticity – after Burgergate and Fishgate...what is next?

Authenticity yesterday, today and tomorrow!
see page 9

WEDNESDAY 2 APRIL 2014

Final plenary meeting

Food authenticity – after Burgergate and Fishgate...what is next?

Authenticity yesterday, today and tomorrow!

Chair: Dr. Bert Popping, Eurofins Scientific Group, UK

11:15 *Introduction to the topic: Authenticity issues in the food industry*
Dr. Bert Popping, Eurofins Scientific Group, UK

11:35 *Faith in food: fraud detection by novel analytical techniques*
Prof.dr. Saskia van Ruth, RIKILT Wageningen UR, the Netherlands

11:55 *Authenticity of seafood products – focusing on premium products like scallops*
Dr. Gabriele Näumann, Institut für Hygiene und Umwelt, Germany

12:15 *Labelfish – a European project to combat fraud in the fish industry*
Dr. Carmen González Sotelo, Instituto de Investigaciones Marinas, Consejo Superior de Investigaciones Científicas, Spain

12:45 **Closing of RME2014**

13:00 – 15:00

MoniQA Association General Assembly (by invitation only)

