INTERNATIONAL MEASUREMENT CONFEDERATION
TC23 "Metrology in Food and Nutrition"

4th IMEKO FOODS

4th International Conference on Metrology in Food and Nutrition

Metrology supporting emerging food topics

http://www.imekofoods4.be

sciensano

4th international conference on metrology in food and nutrition
IMEKOFOODS4: Tervuren Belgium 16-18 September 2019

	Monday, September 16th	
7:30	Bus Brussels-Tervuren	
8:00	Registration	
9:00	Opening	
9:30	PLENARY LECTURE Dr. Urska Vrhovsek - Research and Innovation Centre, Edmund Mach Foundation (Italy) Foodomics: a milestone in food and nutritional studies	
10:10	Coffee Break & Poster exhibition	
11:10	Food Safety, Trace Elements, Contaminants *KN: Jens J. Sloth*	Food Integrity and Quality
12:25	LUNCH	
13:45	Food Safety, Allergens	Food Integrity and Quality *KN: Jana Hajslova*
14:45	Coffee Break & Poster exhibition (14:45-15:50)	
15:10	Waters (15:10-15:50)	
15:10	Workshop QualiT (15:10-17:00)	
16:00	Food Safety, Contaminants & Pesticides *KN: Frans Verstraete*	Food Safety / Food Hygiene
17:00	GET-TOGETHER PARTY	
19:30	Bus Tervuren-Brussels	

KN: Key Note Presentation

	Tuesday, September 17th	
7:45	Bus Brussels-Tervuren	
9:00	PLENARY LECTURE Prof. Sarah De Saeger - Ghent University (Belgium) Recent technologies in the (bio)analysis of mycotoxins	
9:50	Food Omics *KN: Lynn Vanhaecke*	Proficiency Testing & Reference Materials
10:40	Coffee Break & Poster exhibition	
11:30	Food Genomics	Proficiency Testing, Reference Materials & Accreditation
12:30	LUNCH	
13:45	Food Contact Materials *KN: Cristina Nerin*	Workshop Mycotoxins *KN: Michael Rychlik*
15:15	Coffee Break & Poster exhibition (15:15-16:20)	
15:30	Sciex (15:30-16:10)	
15:30	Workshop QualiT (15:30-17:20)	
16:00	Workshop METROFOOD-RI (16:00-17:20)	
16:20	Nutrition	
17:30	Bus Tervuren-Brussels	
17:30	TC 23 Meeting	
19:30	Bus Brussels-Tervuren	
20:00	Gala Dinner	
23:30	Bus Tervuren-Brussels	

	Wednesday, September 18th
8:00	Bus Brussels-Tervuren
9:00	Nanomaterials & Microplastics *KN: Johanna Noireaux*
10:30	Coffee Break & Poster exhibition
11:00	Nanomaterials & Microplastics *KN: Ralf Kaegi*
12:30	Award & Closing Ceremony
13:30	Farewell Barbecue

IMEKOFOODS 4

4th international conference on metrology in food and nutrition

16-18 September, 2019
Tervuren, Belgium

Program

Date of publication: September, 2019

Organisation and Patronages

4th international conference on metrology in food and nutrition in collaboration with Sciensano and IMEKO TC 23

Patronages

IMEKOFOODS is supported by METROFOOD-RI and BEMEKO

Welcome

We cannot imagine a modern society without metrology. Industry, science and legal instances rely on the correctness of results and data they are using. Novel technologies and emerging concerns put new challenges for metrologists in terms of standardisation and harmonisation and to assess the uncertainties of their data. Furthermore, there is an increasing need of data and knowledge sharing, strengthening the application of the FAIR data principle. The fourth Imekofoods conference will address metrological issues in measurement and data in food quality, food integrity, food safety and nutrition, with emphasis on new technologies.

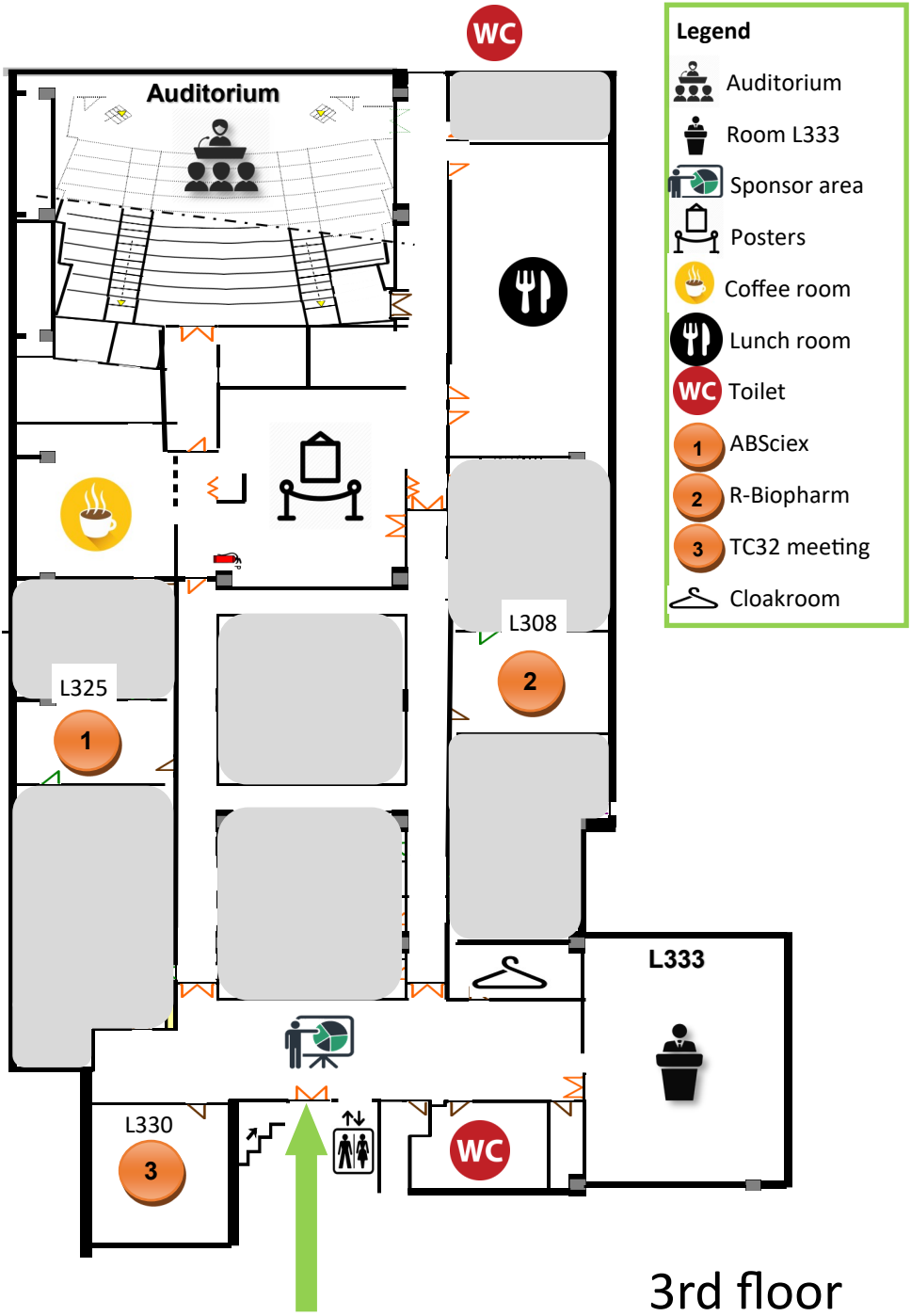
On behalf of Sciensano and Imeko TC 23 we cordially invite you to take part in the fourth international conference IMEKOFOODS. The symposium will be organised at the Sciensano site in Tervuren, which is located in the green long around Brussels. Sciensano is a new born federal research centre in Belgium which finds its foundation in the concept of 'One Health'.

The IMEKOFOODS 4 conference brings together scientists from academia, laboratories and industry, control authorities and representatives of national and international agencies to exchange scientific results and to discuss the latest findings in food quality, -integrity, -safety, -traceability and nutrition. The conference will offer keynote lectures, oral and poster sessions, workshops, poster awards, vendor seminars and exhibition. A social program with get-2-gether party, visit of the Africa museum, gala dinner and Farewell BBQ will be offered in the splendid premises of the Africa Museum and in the park of Tervuren.

Tervuren is the ideal place for delegates to enjoy the beautiful green surroundings of Brussels with a walking or a biking trip, to visit the Africa Museum or to visit Brussels or Leuven. Due to his central location the historical cities Ghent, Bruges, Antwerp, and Liège… can be easily visited.

Welcome!

Joris Van Loco
Chair of the organizing committee


WC
Auditorium
L308
2
L325
1
L333
L330
3
WC
Legend
Auditorium
Room L333
Sponsor area
Posters
Coffee room
Lunch room
WC
Toilet
1
ABSciex
2
R-Biopharm
3
TC32 meeting
Cloakroom
3rd floor

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The Cities

Tervuren

Tervuren is situated in the ‘green belt’ of Flemish Brabant, and only 15 km away from Brussels, the capital of Belgium. It is especially known for the Royal Museum for Central Africa, the park and the Sonian forest. Many walking and biking routes traverse Tervuren. Enjoy the relaxing environment!

Brussels

Brussels is the capital of Belgium and Europe. Admire the Town Hall while having a drink at the Grand Place or stroll the streets to find Manneken-Pis. Don’t forget to check out the Atomium. This gigantic iron molecule was built for Expo 58 and has a permanent expo inside.

Leuven

Leuven is the capital of the Belgian province of Flemish Brabant. Leuven can charm you with its picturesque buildings like the Town Hall, University library and the great Beguinage. If you are in for a drink, don’t hesitate to go to the ‘Oude Mark’ which is called the ‘longest bar of the world’.

Committees

Scientific Committee

Name		*Institute | company*
Mariana	Arce Osuna	CENAM - Mexico
Nastasia	Belc	Bioresurse - Romania
Isabel	Castanheira	IMEKO – INSA - Portugal
Maria	Fernandes-Whaley	NMISA - South Africa
Paul	Finglas	Quadram - United Kingdom
Liu	Jun	National Institute of Metrology Beijing - China
Akos	Kukovecz	University of Szeged - Hungary
Ana Sofia	Matos	FCT/UNL - Portugal
Hayrettin	Özer	TUBITAK - Turkey
Karl	Presser	PREMOTEC - Switzerland
Janaína M	Rodrigues	INMETRO - Brazil
Michael	Rychlik	Technical University of Munich - Germany
Maria	Tsimidou	Aristotle University of Thessaloniki - Greece
Sandra	Šikic	STAMPAR - Croatia
Joris	Van Loco	Sciensano - Belgium
Kaoru	Yoshida	Sony Computer Science Laboratories, Inc. - Japan
Giovanna	Zappa	ENEA - Itally
Claudia	Zoani	ENEA - Italy

Organising Committee

Name		*Institute | company*
Mia	Abbeloos	Sciensano - Belgium
Jill	Alexandre	Sciensano - Belgium
Kristine	Brouwers	Sciensano - Belgium
Séverine	Goscinny	Sciensano - Belgium
Benoît	Guillaume	Sciensano - Belgium
Sabine	Janssens	Sciensano - Belgium
Joris	Van Loco	Sciensano - Belgium – Chair IMEKOFOODS4

International conferences for metrology in food and nutrition

1st IMEKOFOODS— Rome, IT	2014	3rd IMEKOFOODS—Thessaloniki, GR	2017
2nd IMEKOFOODS— Benevento, IT	2016	4th IMEKOFOODS—Brussels, BE	2019

Plenary and Keynote speakers

Dr. Urska Vrhovsek

Metabolomic Unit, Food Quality and Nutrition Department
Research and Innovation Centre, Edmund Mach Foundation
San Michele all'Adige, Italy

Session: Plenary Lecture | Monday 16th of September 9:30

Title of lecture: Foodomics: a milestone in food and nutritional studies

Biography

Urska Vrhovsek got her Bachelor degree at Food sciences at Biotechnical faculty of University of Ljubljana, Slovenia, and a Ph.D. in Food sciences at Universität für Bodenkultur, Vienna, Austria. At present she is a senior researcher and currently leads the metabolomic unit at Edmund Mach Foundation. She was a visiting scientist at the Department of viticulture and enology at University of California Davis, Metabolomics Fiehn laboratory at the University of California Davis and at the Plant Products and Food Quality Department of The James Hutton Institute.

Her scientific fields of work are food chemistry and human nutrition. She is especially interested in studies of food composition especially berries, apples, grape and wine. The second part of her research activity is devoted to the studies of the mechanistic approaches of polyphenols absorption in different models, cell cultures, rats and humans. Her current primary scientific interest is metabolomics. She is a supervisor of graduate and postgraduate students in the fields of food chemistry and nutrition and author of more than 160 ISI papers.

Senior Scientist Jens J. Sloth

National Food Institute, Technical University of Denmark
Lyngby, Denmark

Session: Food Safety, Trace Elements, Contaminants | Monday 16th of September 11:10

Title of lecture: Determination of trace elements in food - recent developments from research, reference lab and standardization activities

Biography

Jens Sloth is a MSc graduate from the Technical University in Denmark (1995) and later finalized his phd studies at the University of Bergen in Norway (2005). He has extensive experience within various research projects on toxic and essential trace elements in food and feed with special emphasis on the development of methods for trace element speciation (e.g. selenium, arsenic, iodine, mercury) using HPLC-ICPMS based methods and has been the project leader of several research projects with activities in this area. He is a lecturer in analytical food chemistry at DTU and has been supervisor for 25+ thesis works at PhD, MSc and BSc level. He has for more than a decade been an expert member of the CEN standardization committees for trace elements in food and feed and contributed to the development of new standardized methods of analysis for the determination of trace elements and their species. Recently, he was appointed as director of the European Reference Laboratory for metals and nitrogenous compounds in feed and food (EURL-MN) and also as convenor of the CEN expert group for Elements and their chemical species in animal feed (CEN TC327/WG4).

Prof. Jana Hajslova

University of Chemistry and Technology,
Prague, Czech Republic

Session: Food Integrity and Quality | Monday 16th of September 13:45

Title of lecture: Well established analytical methods for food quality and safety control: any risk of biased results?

Biography

Prof Jana Hajslova is the Head of Accredited (ISO17025) Food Quality and Safety Laboratory of the Department of Food Analysis and Nutrition at the University of Chemistry and Technology, Prague. She is a widely recognized expert in the field of food/natural products chemistry and analysis, having published more than 300 original papers on the development of advanced analytical strategies of contaminants, residues, natural toxins and other biologically active compounds, authentication and metabolomics. In 2016, Prof Hajslova obtained from Association of Official Analytical Chemists (AOAC Int.) prestigious scientific Harvey W. Wiley Award for her excellent scientific work. Her research team has participated in many international and national projects at both research, management and coordination levels, including the EC 5-7th Framework Programme, H2020, COSTs and EEA grants. Jana's team has been also involved in various bilateral international research activities. Under her supervision, close collaboration has taken place with many world-renowned institutions, such as WHO, FAO, USDA and the European Commission's Joint Research Centre. Currently, she is the Czech Republic delegate in HORIZON 2020 SOCIETAL CHALLENGE 2: "Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research and the Bioeconomy" committee. In her capacity as Chairwoman, she had a key input into establishing a series of reputable international symposia, the 'Recent Advances in Food Analysis' series, from 2003 till 2019.

Dr. Frans verstraete

DG Health and Food Safety, European Commission
Brussels, Belgium

Session: Food Safety, Contaminants & Pesticides | Monday 16th of September 16:00

Title of lecture: EU policy on contaminants in food: recent developments and outlook

Biography

Frans Verstraete graduated in 1985 as agricultural engineer at the University of Ghent (Belgium). After his studies he held positions at the University of Ghent and thereafter at the Belgian Ministry of Agriculture and he was for a period technical adviser of the Belgian Minister of Agriculture. He is working for the European Commission since 1997. In the European Commission he has had various functions but since 2000 he is working at the Directorate General Health and Food Safety. He is responsible for the elaboration, development and management of the EU-legislation on contaminants in feed and food.

Prof. Sarah De Saeger

Centre of Excellence in Mycotoxicology and Public Health, Department of Bioanalysis, Faculty of Pharmaceutical Sciences, Ghent University

Ghent, Belgium

Session: Plenary Lecture | Tuesday 17th of September 9:00

Title of lecture: Recent technologies in the (bio)analysis of mycotoxins.

Biography

Prof. Dr. Sarah De Saeger is head of the Centre of Excellence in Mycotoxicology and Public Health at Ghent University, Belgium. She is coordinator of the international thematic network MYTOX-SOUTH.
As a full professor she is teaching all food-related courses in the Faculty of Pharmaceutical Sciences (Bromatology, Bioanalytical Practical, Food Safety, Special Nutrition).
The laboratory focuses on 4 research lines: mycotoxins and human health, detection methods, metabolomics and untargeted analysis, and mycotoxin occurrence. Many research proposals are running and funded by the EU H2020 programme, HERCULES, FWO, FOD, BELSPO, BOF, VLIR-UOS.
Research results are published in more than 300 A1 peer reviewed papers (h-index 41).
She was an expert in EFSA CONTAM working groups in the period 2011-2018 and she is a member of the Scientific Committee (SciCom) of the Belgian Federal Agency for Food Chain Safety since 2015. In June 2015 she established the Joint Laboratory of Mycotoxin Research of the Ghent University-Shanghai Jiao Tong University-Chinese Academy of Sciences (Shanghai Institutes of Biological Sciences). In 2015 she was awarded the Ghent University Prometheus Award for research.

Prof. Lynn Vanhaecke

Ghent University, Lab of Chemical Analysis

Merelbeke, Belgium

Session: Food Omics | Tuesday 17th of September 9:50

Title of lecture: Nutrimetabolomics: integrative action for metabolomic analyses in human nutritional research as proposed by the Foodball consortium

Biography

Lynn Vanhaecke is a Master in Bioscience Engineering and was from 2004-2008 affiliated with the Lab of Microbial Ecology and Technology, Faculty of Bioscience Engineering at Ghent University as a PhD student. During this period her research focused on the impact of the human intestinal microbiota on the metabolism and biological activity of meat and environmental contaminants. In 2008 she graduated as a PhD in Bioscience Engineering and shifted to the Laboratory of Chemical Analysis within the Department of Veterinary Public Health and Food Safety at Ghent University, where she obtained a postdoctoral fellowship from the FWO-Vlaanderen. Since October 2011 she is appointed as Associate Professor and head of the Lab of Chemical Analysis. The chemical analyses of food, biofluids and environmental matrices, the metabolism and biological activity of food and contaminants, and the holistic analysis of small molecules using metabolomics using advanced high -resolution mass spectrometry in relation to human health belong to her major research objectives now. She is author and co-author of 184 peer-reviewed international publications and presented her work in many national and international conferences. Prof. Vanhaecke is also one of the 5 promotors of MSsmall (Mass Spectrometry for Small Organic Molecules: 14 UGent partners from 5 faculties). Prof. Vanhaecke is member of the Ghent University Research Council, and of several scientific committees of international symposia.

Prof. Dr. Cristina Nerín

University of Zaragoza, I3A, Dept. Analytical Chemistry
Zaragoza, Spain

Session: Food Contact Materials | Tuesday 17th of September 13:45

Title of lecture: Analysis of food contact materials: IAS and NIAS

Biography

Professor at the University of Zaragoza (Spain), PhD in Analytical Chemistry, Master in Science and Degree in Chemistry at the University of Zaragoza (Spain). Director of the Research Group GUIA. Director of the Master in Environmental Engineering (1990-2012). Author of > 340 Scientific Publications, Director of 37 PhD Thesis (+5 in process). Principal Investigator of > 200 Research Projects in Competitive calls and R&D&i with Industry. Inventor in 7 International Patents on active packaging and one International Patent on Intelligent Packaging, all in exploitation. 6 Research Awards received. Participant in >140 International Conferences and Professor of several International Courses in Europe, Asia and South-America. Organizing Committee and Chairwomen of several International Symposiums and > 50 Plenary Lectures in International Conferences.
Member of WG Recycling in EFSA from 2010 to end 2018. Member of Scientific Panel in AESAN in 2010-2015. Board of Directors in ILSI Europe (2019-2021). Editor of Packaging Technology and Science journal.
Evaluator of R&D&i Projects (EU-VII Frame Program, H2020, Chile, Brasil, The Netherlands, Austria, Belgium, Portugal, Argentina, France, Saudi Arabia, USA, Israel, Spain). Evaluator of PhD Thesis in Spain, Belgium, France, Sweden, India, Ireland, South Africa, New Zealand, Australia. Referee of many Scientific Journals in Analytical Chemistry, Materials Science, Food Chemistry, Food Technology, Food Packaging, Food Science, Environmental…

Prof. Michael Rychlik

TUM, Analytical Food Chemistry
Munich, Germany

Session: Workshop Toxins | Tuesday 17th of September 13:45

Title of lecture: Alternaria toxins: Analysis and risk assessment of emerging and modified mycotoxins.

Biography

Prof. Dr. Michael Rychlik is the Head of the Chair of Analytical Food Chemistry at the Technical University of Munich, Germany (TUM).
He graduated in food chemistry at the University of Kaiserslautern in 1988.
His PhD studies on the flavour of bread were completed in 1996 and he was appointed full professor at the TUM in 2010.

In 2015 he served as a Visiting Professor at the University of Queensland (UQ), Australia and in 2016 he was appointed an Honorary Professor at the latter University.
In the last years he was also active as a Visiting Professor in 2016 at the National University of Singapore (NUS) and i salso teaching since 2018 at the University of Hong Kong.
At the TUM School of Life Sciences Weihenstephan, Michael Rychlik is engaged as the Director of the Research Department Nutrition and Food Sciences since 2016.

His group has been working for 15 years in the field of developing analytical methods for bioactive food components, in particular for vitamins, mycotoxins, odorants and lipids. For these compounds, he developed stable isotope dilution assays that reveal superior accuracy. Moreover, his research is focused on the application of these methods to recent areas in food chemistry, technology, toxicology and nutrition. Since 2014 he serves as the Head of the “Committee on Contaminants in the Food Chain” at the Federal Institute for Risk Assessment, Berlin, Germany.

Dr. Johanna Noireaux

LNE, Biomedical and inorganic chemistry department

Paris, France

Session: Nanomaterials and Microplastics | Wednesday 18th of September 9:00

Title of lecture: Perspective in nanoparticle analysis in food with single particle ICPMS

Biography

I received a PhD in geochemistry at IPGP (Institute for earth's physics) in Paris, with a specialization on boron isotope ratio measurements and application. During that time I became an expert on ICPMS measurements, mainly trace analysis and isotope ratios.
I joined Paola Fisicaro's group at LNE in 2017 where I continued my work on trace element analysis and developed an interest on nanoparticles. I started training myself on single particle ICPMS analysis and my work now focuses on sample preparation and data treatment with this technique and others available at the nanoparticle characterization platform at LNE.

LNE is partner of the Research Infrastructure METROFOOD, where it is recognized for its role of National Metrology Institute. LNE brings its competencies in the development of metrological references such as reference materials and methods, in particular in the field of inorganic and organic contaminants and NP characterization.

Dr. Ralf Kaegi

Eawag, Swiss Federal Institute for Water Science and Technology,
Department of Process Engineering
Duebendorf, Switzerland

Session: Nanomaterials & Microplastics | Wednesday 18th of September 11:00

Title of lecture: Quantification of (Engineered) Nanoparticles in Complex Matrices: More than a Silver Lining on the Horizon?

Biography

Ralf Kaegi studied Earth sciences at University of Basel and did his PhD in the field of magmatic petrology at ETH Zürich. He then spent 5 years as a scientist at the Swiss Federal Institute for Materials Science and Technology (Empa) in the field of aerosol science. During that time, the research of Ralf Kaegi was focused on the representative collection, detection and quantification of ultrafine particles in the atmosphere using electron microscopy techniques. In 2006, Ralf Kaegi joined Eawag as a scientist and leader of the particle laboratory. The main research interests of Ralf Kaegi include the fate and transformation of engineered nanoparticles in urban (waste)water systems. For that purpose his group has established a suite of pilot scale facilities, including a wastewater treatment plant simulating the activated sludge process, an anaerobic digester and a fluidize bed incinerator. This unique infrastructure allows investigating the behavior of engineered nanomaterials under most realistic conditions. In addition and related to these activities, the group of Ralf Kaegi is involved in the development of new analytical methods to detect and quantify engineered nanoparticles in aqueous suspensions and complex matrices, in general.

Sponsors


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Social Program

Informal Get-together on September 16th

Sciensano Ground Floor — 17h00-19h30

Leuvensesteenweg 17, 3080 Tervuren

Attendance to this event is included in the registration fee. The dress code is casual.

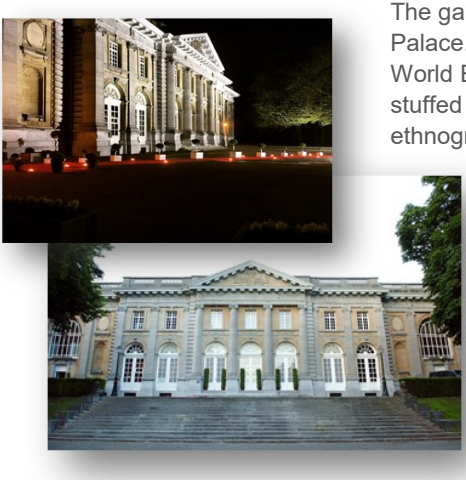
All registered delegates, accompanying persons and sponsors are invited to an informal drink in the official venue of IMEKOFOODS4, at Sciensano. Drinks and snacks will be served.

Gala Dinner on September 17th

The Colonies' Palace — 20h00-23h30

Paleizenlaan, 3080 Tervuren

Ticket is needed to attend this event (see registration). The ticket is only available upon registration. The dress code is casual.



The gala dinner will be held at the 'Colonies' Palace. The Colonies Palace was build for the World Exposition of 1897. Among other things, stuffed animals, soil samples, foodstuffs, ethnographic and artistic objects from Congo were housed in the halls of this building during the Expo. A real African village was built in the park, where Congolese residents were staying during the day. Seven Congolese people died here during their stay.

Farewell Barbecue on September 18th

The Foyer, Warandepoort — 13h30-15h30

Markt 7b, 3080 Tervuren

Ticket is needed to attend this event (see registration). The ticket is only available upon registration. The dress code is casual.

We will enjoy our last lunch together outside, at the Cultural Center of Tervuren, Warandepoort, where drinks and food will be served.

Free visit to the Museum of Central Africa

Leuvensesteenweg 13, 3080 Tervuren

With your ticket (see registration), you can freely visit the Museum of Central Africa on **Tuesday 17th, Wednesday 18th and Thursday 19th** of September. Change your ticket at the Museum counter.

Opening hours:

- 10 am-6 pm

General information

Reception Desk and Congress Secretariat:
Located on the ground floor of the conference venue, just in front of the main entrance.

Opening hours:

Monday: 8:00 am - 5:00 pm
Tuesday: 8:00 am - 5:30 pm
Wednesday: 8:00 am - 1:30 pm

Wi-Fi :
Free Wi-Fi will be provided within the conference venue for it's entire duration.

Parking: Free parking is available around the conference center

Taxi: 02/349 49 49 - Taxi Verts - Taxi Brussels

Currency: The currency used in Belgium is the Euro (€).

Electricity: Electricity in Belgium is 230V, 50Hz. Plugs French 2-pin (Type E) or (older plugs) European 2-pin (Type C).

Emergency services: For police, fire, or ambulance: **DIAL 112**.

Language: Belgium has three official languages: Dutch, French and German. The country is divided in "languages zones" indicating the mother tongue of the native population. Although Tervuren and Leuven are situated in the Dutch speaking part of Belgium, you will get around using English and French. Brussels is the capital of Belgium, so you can get around using Dutch, French and English.

Telephone: To make an international call from Belgium, dial 00 (or +) followed by the country code. To dial a Belgian number use 0032 or +32.

Time: The local time in Belgium is Central European Time (GMT + 2 hours)

Tipping: Tips are always included in the prices given in taxies, restaurants etc. However, a voluntary tip is appreciated.

Bars and restaurants:

Tervuren

- see 'Plan Tervuren'

Brussels

- Around the 'grand place'
- Around the hotels

Leuven

- Munt straat - restaurants
- Oude markt - Bars
- Grote markt

Hotels of the symposium

Tervuren

Hotel Rastelli***

e-mail: info@hotelrastelli.be
Tel.: + 32.(0)2 766 66 66
Hoornzeelstraat 63,
3080 TERVUREN

or 317

Brussels

Hotel Novotel Brussels off Grand Place****

e-mail: 1030-RE@accor.com
Tel: +3226200429
rue du Marché Aux Herbes 120, 1000 BRUSSELS

Ibis Brussels City Center***

e-mail: H1046-RE@accor.com
Tel: +3226200426
rue Joseph Plateau N°2, 1000 BRUSSELS

Atlas Hotel***

email: info@atlas.be
Tel: +32 (0)2 502 60 06
rue du Vieux Marché aux Grains 30, 1000 BRUSSELS

Conference bus or Metro 1 → Tram 44

Leuven

Park Inn by Radisson***

e-mail: info.leuven@parkinn.com
Tel: +32 (16) 61 66 00
Martelarenlaan 36, 3010 LEUVEN

317 or 410

Plan Tervuren

1 **Conference Venue** | Leuvensesteenweg 17

2 **Museum of Central Africa** | Leuvensesteenweg 13

3 **The Colonies' Palace** | Paleizenlaan

4 **The Foyer, Warandepoort** | Markt 7b

1 **Hotel Rastelli** | Hoornzeelstraat 63

The **conference bus** will pick you up at **Nieuwe Graanmarkt, Antoine Dansaertstraat, Brussels** and drop you of at the conference venue.

Hours:

Monday | Brussels 7:20 - Tervuren 19:30

Tuesday | Brussels 7:35 - Tervuren 17:30

Tuesday Gala dinner | Brussels 19:30 - Tervuren 23:30 (little bus)

Wednesday | Brussels 7:45

Restaurants

1

The Lodge | Markt 6 - Monday, Tuesday and Wednesday - Tel: +32 28 80 40 67
Foyer De Warandepoort | Markt 7b - Tuesday and Wednesday - Tel: +32 470/10.01.01
't Park | Markt 9 - Wednesday - Tel: +32 23/06.71.32
Gambrinus | Markt 12 – Monday and Tuesday **-** Tel: +32 23/06.01.05
Capriccio | Kerkstraat 15 - Tuesday and Wednesday - Address:, Tervuren—Tel: +32 27/67.35.26
Den Engel | Kerkstraat 21 - Wednesday - Tel: +32 27/67.95.90
Modern Sushi | Kerkstraat 25 - Tuesday and Wednesday - Tel: +32 27/31.08.65
Il Carrettino | Peperstraat 2 - Tuesday and Wednesday - Tel: +32 27/67.64.01

Public Bus stops

Tram stop

2 **Pizzeria Di Fiore |** Brusselsesteenweg 67 - Tuesday and Wednesday - Tel: +32 27/31.51.31

3 **La Cantina Italiana |** Duisburgsesteenweg 22 - Monday, Tuesday and Wednesday - Tel: +32 27/67.02.22

4 **Restaurant De Linde |** Leuvensesteenweg 7 - Wednesday - Tel: +32 27/67.87.42

Workshop METROFOOD-RI

METROFOOD-RI "infrastructure for promoting metrology in food and nutrition" (ESFRI domain "Health & Food" - www.metrofood.eu)

Dr. C. Zoani
Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Sustainability Department (SSPT)– Via Anguillarese 301, 00123 Roma (Italy) – claudia.zoani@enea.it , Claudia.zoani@metrofood.eu

METROFOOD-RI is a new, distributed Research Infrastructure of Global Interest by means of which it will be possible to carry out different activities supporting data collection and measurement reliability, as well as basic and frontier research in food and nutrition. METROFOOD-RI aims at providing high quality metrology services in food and nutrition, comprising an important cross-section of highly interdisciplinary and inter-connected fields throughout the food value chain, including agro-food, sustainable development, food safety, quality, traceability and authenticity, environmental safety, and human health. Its general objective is to enhance scientific cooperation and encourage interaction between the various stakeholders, as well as the creation of a common and shared base of data, information and knowledge.

Speakers	*Title presentation*
Isabelle Vercruysse (Eurachem)	The Eurachem contribute to quality of measurements (analysis/sampling) in the agrifood sector
Silvia Orlandini (ISO/IDF)	ISO/IDF - the role of standardisation in the dairy sector
Silvia Mallia (METAS)	Food Metrology - Food safety laboratory at METAS
Karine Vandermeiren (Sciensano)	METROFOOD testcase: Transmission Electron Microscopy for characterization of nanomaterials in food
Nastasia Belc (IBA)	Improvement of food quality and safety during food processing: pilot plant experiments
Karl Pesser (PREMOTEC)	Architecture and functionality of METROFOOD e-RI
Cristian Chiavetta (ENEA - Comité des dix-Italie)	Circular Economy for Food - Partnership for Sustainable Coastal Cities in the Western Mediterranean

Workshop QualiT- A new Quality Control Toolbox for Mycotoxin and Allergen Analysis

QualiT™ is a toolbox developed by Trilogy Analytical Laboratory (Washington, MO, USA) for quality control in mycotoxin analysis and - now introducing – also allergen analysis. QualiT™ offers (certified) reference materials, both as pure material and as well as naturally contaminated materials, quality control materials and analytical standards. Besides that Trilogy offers additional useful tools for sample preparation and sample clean-up and knowledge database, collecting 20 years of experience as an (ISO 17025 accredited) food testing lab, specialized in mycotoxin, allergen and biogenic amines testing.

Mycotoxin analysis in your hand

C. Gutschelhofer and R. Niemeijer
R-Biopharm AG, An der neuen Bergstrasse 17, Darmstadt

Mycotoxin contaminations of food and feed have a huge economic impact. Mycotoxins impose a risk to human and animal health. Therefore maximum limits have been established for many commodities. Legislations and guidelines are implemented and enforced in most parts of the world.

Since mycotoxins are natural occurring toxins, they cannot be avoided. As a result significant amounts of commodities are discarded or used for feed or non-food applications at a lower sales price. Financial losses however go far beyond the value of the contaminated commodities and may actually affect the entire food production chain. Animal feed contaminated with mycotoxins may cause production losses in livestock production and mycotoxins may cause significant health costs.

Mycotoxins contaminations of crops are unavoidable but mycotoxins can be managed. Good agricultural and good manufacturing practices will help. Monitoring mycotoxin contaminations by testing is necessary to verify the products will meet international regulations and guidelines. Yet, instead of testing large numbers of end-products, a more pro-active approach would have many benefits.

During the entire process from field to food or feed critical steps can be identified to monitor mycotoxins. For this approach a mobile, easy to use tool to make quick, on-site decisions is essential. Lateral flow based test are well accepted methods for this. For a quantitative result a lab environment was still required. R-Biopharm now presents the next generation in rapid, on-site mycotoxin testing. We have developed an app, which allows you to use your smartphone as a lateral flow reader.

Vendor presentation - Waters

Advances in Ion Mobility Mass Spectrometry for Food Analysis

Dr. J.Claereboudt (Senior MS product Specialist), Waters Corporation, Zellik, Belgium
Dr. S. Goscinny (Scientist), Sciensano - Service Organic Contaminants and Additives, Brussels, Belgium

In this session, you will learn about the added value of Ion Mobility towards Food Analysis by Mass Spectrometry. Examples will illustrate how these advances in Ion Mobility High Resolution Mass Spectrometry can successfully be applied to routine Food Residue Analysis and to more in-depth Food Characterisation/Profiling studies.

Monday September 16th,

Auditorium

15h10-15h50

Waters

THE SCIENCE OF WHAT'S POSSIBLE.™

Vendor presentation - ABSciex

Ensuring the authenticity & safety of food with new advances in LC-MS/MS workflows

D. McMillan (Sr Market Development Manager), EMEAI at SCIEX, Manchester, Greater Manchester, United Kingdom

Food testing can be challenging and complex - from sample preparation (so many different matrices!) to residue detection (so many different compounds from pesticides and mycotoxins, and not to mention the mysterious unknowns!), going from the raw sample to the final result of "What is in this food sample?" is no trivial task. And how do you know that the food is authentic or allergen free?

Sciex have developed analytical tools and workflows to ease the pain and help to answer these questions quickly, efficiently and with the confidence needed to arrive at the right result, every time.

Tuesday September 17th,

Auditorium

15h30-16:10

Program Monday 16th of September

7:30	*Bus Brussels - Tervuren*		
08:00	**Registration**		
Aud 09:00	**Opening** *J. Van Loco | Welcome word of the symposium Chair* *I. Castanheira | Welcome word of IMEKO*		
Aud 9:30	**Plenary presentation** *U. Vrhovsek (FMACH, IT)* Foodomics: a milestone in food and nutritional studies		
10:10	**Coffee Break & Posters Exhibition**		
Aud	**Session**: Food Safety, Trace Elements, Contaminants	L333	**Session:** Food Integrity / Quality
11:10	**Key note presentation** *J. J. Sloth (DTU, DK)* Determination of trace elements in food - recent developments from research, reference laboratory and standardization activities	11:10-	The effect of temperature on the nutritional quality of edible mealworm Tenebrio molitor ***L. Kouřimská**, M. Kulma, A. Nevrzalová, D. Homolková*
11:40	Nickel in feed and food – Results of proficiency tests by the EURL-MN ***H. Amlund**, H. Fodnæss, A. Landin and J.J. Sloth*	11:30	Direct elemental analysis of cereal and rice flour using total reflection X-ray fluorescence: new challenges ***F. Bilo**, L. Borgese, C. Zoani, G. Zappa, R. Dalipi, L. E. Depero*
12:00	Occurrence of perfluoroalkylated substances (PFAS) in drinking water in Czech Republic ***J. Pulkrabova**, M. Buresova, D. Lankova and J. Hajslova*	11:50	Development of the analytical method for 87Sr/86Sr determination in olive oil *M. Furdek Turk, E. Epova, J. Barre, S. Berail, O. X. Donard and **T. Zuliani***

12:20	*Short communication:* Is there too much lead in Belgian big game meat? ***A. Ruttens**, J. Casaer, C. Marien, A. Rutten and N. Waegeneers*	12:10	Nutrients, secondary metabolites and anti-oxidant activity Moringa oleifera leaves and Moringa-based commercial products ***N.S. Mokgalaka**, M.Y. Aphane, V.J. Tembu and L.M. Cele*
12:30	**Lunch**		
Aud	**Session:** Food Safety, Allergens	*L333*	**Session:** Food Integrity / Quality
13:45	Flaws and hurdles concerning the harmonization of detecting allergens in food ***K. Van Vlierberghe**, M. Gavage, M. Dieu, P. Renard, T. Arnould, N. Gillard, I. Taverniers, M. De Loose, K. Gevaert, C. Van Poucke*	13:45	**Key note presentation** *J. Hajslova (VSCHT, CZ)* Well established analytical methods for food quality and safety control: any risk of biased results?
14:05	Quantification of SO2 in wines by Surface Enhanced Raman Spectroscopy and the comparison with the official OIV method *I. Cagnasso, L. Berta, L. Mandrile, A.M. Giovannozzi, M. Petrozziello, A.M. Rossi,* ***F. Durbiano***	14:15	Enhanced capability of a purge-and-trap, thermal desorption and GCxGC-MS methodology for aroma profiling ***F. A. Franchina**, D. Zanella, E. Lazzari, P-H. Stefanuto, and J-F. Focant*
14:25	Development of a DNA barcoding-like approach to detect mustard allergens in wheat flours *J. Frigerio,* ***R. Pellesi**, V. Mezzasalma , F. De Mattia , A. Galimberti , F. Lambertini , M. Suman , S. Zanardi , A. Leporati and M. Labra.*	14:35-14:55	Implementing sodium reduction in food regulations in South Africa – the analytical measurement challenges ***M. Fernandes-Whaley**, M. Linsky and D. Prevoo-Franzsen*
14:45 - 16:00	**Coffee Break & Exhibition**		

Aud *15:10-15:50*	**Vendor Presentations | Waters |** *J. Claereboudt* Advances in Ion Mobility Mass Spectrometry for Food Analysis			*L308 - upon registration* *15:10-17:00*
Aud	**Session:** Food Safety, Contaminants & Pesticides	*L333*	**Session:** Food Safety / Food Hygiene	**QualiT - A new Quality Control Toolbox for Mycotoxin and Allergen Analysis** (offered by r-Biopharm AG)
16:00	**Key note presentation** *F. Verstraete (DG Santé, BE)* EU policy on contaminants in food: recent developments and outlook	16:00	Monitoring on hygiene in institutional kitchens in Belgium ***E. Duthoo**, S. Krings, G. Daube, B. Taminiau, M. Heyndrickx, and K. De Reu*	
16:30	Multi-approach determination of dithiocarbamate fungicides and of their degradation products in fruits and vegetables ***A. C. Dirtu**, G. Lavison-Bompard, A. Ducrocq, C. Inthavong, T. Guérin, P. Jitaru*	16:20	Detection and quantification of biogenic amines in Cambodian smoked freshwater fish ***C. Douny**, H. Mith, F. Brose, A. Igout, M-L. Scippo*	
16:50-17:10	New developments in integrated 'sample to results' workflows for the multi-residue analysis of polar anionic pesticides and their metabolites ***R.J. Fussell**, F. Pigozzo, Q. Guo, Y. Li and T. Bo, E. George*	16:40	Proposal for a European Metrology Network on food safety – EMN-FS ***A. M. Rossi** and F. Durbiano*	
17:00-19:30	**Get-together party**			
19:30	Bus Tervuren—Brussels			

Program Tuesday 17th of September

7:45	*Bus Brussels - Tervuren*		
	Auditorium		
9:00-9:40	**Plenary lecture** *Prof. S. De Saeger (Ugent, BE)* Recent technologies in the (bio)analysis of mycotoxins		
Aud	**Session**: Food Omics	*L333*	**Session:** Proficiency Testing & Reference Materials
9:50	**Key note presentation** *Prof. L. Vanhaecke (Ugent, BE)* Nutrimetabolomics: integrative action for metabolomic analyses in human nutritional research as proposed by the Foodball consortium	9:50	Certified reference material of nitrofuran metabolites in chicken breast muscle from incurred samples *F. G. M. Violante, B. C. Garrido, E. C. P. Rego, E. F. Guimarães; N. O. C. Zúniga, W. Wollinger;* ***J. M. Rodrigues****; F. R. Aquino Neto.*
10:20-10:40	Avoiding the culture step in outbreak investigations: parameters for optimised metagenomics of contaminated food ***F. Buytaers****, A. Saltykova, S. Denayer, B. Verhaegen, N. Roosens, K. Vanneste, D. Piérard, K. Marchal, S. C. J. De Keersmaecker*	10:10	Proficiency Testing Scheme for Benzoic acid in Banana-based Condiment to Support the Traceability of Chemical Measurements to SI units ***B. S. Ebarvia****, A. C. Dacuya, A. R. C. Veranga, J. A. C. Valdueza*
10:30-11:30	**Coffee Break & Poster Exhibition**		
Aud	**Session:** Food Genomics	*L333*	**Session:** Proficiency Testing, Reference Materials and accreditation
11:30	Detection of antibiotic resistance genes in microbial fermentation products ***M-A. Fraiture****, M. Deckers, N. HC Roosens*	11:30	Development of new stable isotope reference materials for food authentication and traceability ***N. Ogrinc****, A. Schimmelmann, F. Camin, D. Potočnik, H. Qi and S. Kelly*

11:50	Reconstruction of plasmids carrying antimicrobial resistance genes in food, feed and human bacterial isolates using short and long read sequencing reads ***B. Berbers**, A. Saltykova, P.J. Ceyssens, C. Garcia-Graells, K. Vanneste, N. H. Roosens, K. Marchal, S. C.J. De Keersmaecker*	11:50	ICAR proficiency testing scheme and a novel calculation model to compare proficiency testing schemes ***S. Orlandini***
12:10	Rationalizing the GMO analytical detection procedure: optimization of subsampling, homogenization and milling steps ***I. Taverniers,** S. Liévrard, J. Baert, M Dhondt, A. Staelens, M. De Loose*	12:10	International co governance of food safety Based on quality infrastructure ***L. Jun** , X. Xuelin, F. Xiang*
12:30-13:45	**Lunch**		
Aud	**Session:** Food Contact Materials	*L333*	**Workshop Toxins**
13:45	**Key note presentation** *Prof. C. Nerin (UNIZAR, ES)* *Analysis of individual (MOAH) by APGC- QTOF-MS and comparison to the conventional method LC-GC-MS*	13:45	**Key note presentation** *Prof. Dr. M. Rychlik (TUM, DE)* *Alternaria toxins: Analysis and Risk assessment of Emerging and Modified Mycotoxins*
14:15	Mineral oil in food: How is the situation in Belgium and what are the risks? **A. Van Heyst**, S. Goscinny, B. Mertens, M. Vanlancker, J. Vercammen, S. Bel, S. Vandevijvere, M. Elskens and E. Van Hoeck	14:15	MYCOSUGAR: Investigation on mycotoxins and their producing fungi in sugarcane and its by-products **M.F. Abdallah**, C. Bereket, V. Kagot, L. Matumba, S. Okoth, M. De Boevre, G. Haesaert, K. Audenaert and S. De Saeger
14:35	Effect of food composition on the migration of surrogate contaminants from paperboard packaging **M. Baele**, A. Vermeulen, P. Ragaert and B. De Meulenaer	14:35	Occurrence, toxicokinetics and toxicity of citrinin and risk assessment **C. Meerpoel**, A. Vidal, B. Huybrechts, E.K. Tangni, M. Devreese, S. Croubels and S. De Saeger
14:55	Investigation of migrating substances from food fabrics K. Van Den Houwe, B. Dewilde, J. Van Loco,**S. Goscinny** and E. Van Hoeck	14:55	Analytical methods for mycotoxin determination **B. Huybrechts**
15:15-16:20	**Coffee break Exhibition**		

Aud 15:30-16:10	**Vendor presentations | ABSciex|** *D. McMillan* Ensuring the authenticity & safety of food with new advances in LC-MS/MS workflows			L308 - upon registration 15:30-17:20
Aud	**Session:** Nutrition	*L333*	**Session:** Metrofood-RI	**QualiT - A new Quality Control Toolbox for Mycotoxin and Allergen Analysis (offered by r-Biopharm AG)**
16:20	Calcium and vitamin D intake from foods and supplements in the Dutch population ***MC Ocké**, HAM Brants, CS Dinnissen, J Verkaik-Kloosterman, CTM van Rossum*	16:00	The Eurachem contribute to quality of measurements (analysis/sampling) in the agrifood sector - ***I. Vercruysse*** (Eurachem)	
		16:15	ISO/IDF - the role of standardisation in the dairy sector - ***S. Orlandini*** (ISO/IDF)	
16:40	School meals in light of the regulation – Assessment of the public catering decree in primary schools in Hungary ***A. Varga**, M. Bakacs, A. Zentai, B. Nagy, Z. Nagy-Lőrincz, G. Erdei, É. Illés, V. Varga-Nagy, K. Mihályd, E. Sarkadi Nagy, C. Kaposvári*	16:25	Food Metrology - Food safety laboratory at METAS - ***S. Mallia*** (METAS)	
		16:35	METROFOOD testcase: Transmission Electron Microscopy for characterization of nanomaterials in food - ***K. Vandermeiren*** (Sciensano)	
17:00-17:20	Robiotic properties of lactic acid bacteria isolated from household fermented Sorghum slurries ***M.L. Thaoge** and S. Rapoo*	16:45	Improvement of food quality and safety during food processing: pilot plant experiments - ***N. Belc*** (IBA)	
		16:55	Architecture and functionality of METROFOOD e-RI - ***Karl Pesser*** (PREMOTEC)	
		17:05	Circular Economy for Food - Partnership for Sustainable Coastal Cities in the Western Mediterranean - **C. Chiavetta** (ENEA)	
17:30	*Bus Tervuren - Brussels*			
17:30-19:00	**TC 23 Meeting** **(L330 - invitation only)**			
19:30	*Bus Brussels - Tervuren*			
20:00-23:30	**Gala Diner** **The Colonies' Palace , Paleizenlaan, 3080 Tervuren**			
23:30	*Bus Tervuren - Brussels*			

Program Wednesday 18th of September

8:00	*Bus Brussels - Tervuren*
	Auditorium
	Session: Nanomaterials & Microplastics
9:00	**Key note presentation** *J. Noireaux (LNE, FR)* *Perspective in nanoparticle analysis in food with single particle ICPMS*
9:30	Method validation for determination of microplastics in food ***M. Dekimpe**, D. Deloof, J. Robbens, K. Hostens, B. De Witte*
9:50	Characterization of the nano-sized fraction of silver particles in food additive E174 by EM and SP-ICP-MS ***S. De Vos**, E. Verleysen, M. Ledecq, N. Waegeneers and J. Mast*
10:10	Inhibition of pathogenic bacteria in duck meat using nanoclay encapsulated oregano essential oil ***P. Klouček**, J. Táborský, N. West, A. Fraňková and M. Božik*
10:30-11:00	**Coffee break**
	Auditorium
	Session: Nanomaterials & Microplastics
11:00	**Key note presentation** *R. Kaegi (Eawag,CH)* *Quantification of (Engineered) Nanoparticles in Complex Matrices: More than a Silver Lining on the Horizon?*
11:30	Physicochemical characterisation of several types of the E171 food additive ***E. Verleysen**, M. Ledecq, S. De Vos, I. Ojea Jimenez, F. Brassinne, N. Waegeneers and J. Mast*
11:50	Towards a routine method for the characterisation of TiO2 nanoparticles in food by single particle-ICP-MS *L. Givelet, **P. Jitaru**, D. Truffier-Boutry, J.-F. Damlencourt and T. Guérin*
12:10	*Validation of single particle ICP-MS for routine sizing and quantification of the fraction of silver nanoparticles in E174 food additives and confectionery products.* ***N. Waegeneers**, L. Delfosse, S. De Vos, E. Verleysen, J. Mast*
12:30-13:15	**Best poster award** **Announcement Imekofoods 5** **Closing ceremony Symposium Chair : Joris Van Loco**
13:30	**Farewell BBQ**

Monday's Oral presentations

Plenary presentation

9h30-10h10 - **PL1 - Foodomics: a milestone in food and nutritional studies**
U. Vrhovsek

Session Food safety, Trace Elements and Contaminants - Auditorium

11h10-11h40 - **K01 - Determination of trace elements in food - recent developments from research, reference laboratory and standardization activities**
J. J. Sloth (DTU)

11h40-12h00 - **OC01 - Nickel in feed and food – Results of proficiency tests by the EURL-MN**
H. Amlund, H. Fodnæss, A. Landin and J.J. Sloth

12h00-12h20 - **OC02 - Occurrence of perfluoroalkylated substances (PFAS) in drinking water in Czech Republic**
J. Pulkrabova, M. Buresova, D. Lankova and J. Hajslova

12h20-12h30 - **OC03 - Is there too much lead in Belgian big game meat?**
Short communication
A. Ruttens, J. Casaer, C. Marien, A. Rutten and N. Waegeneers

Session Food Integrity / Quality – L333

11h10-11h30 - **OC04 - The effect of temperature on the nutritional quality of edible mealworm Tenebrio molitor**
L. Kouřimská, M. Kulma, A. Nevrzalová, D. Homolková

11h30-11h50 - **OC05 - Direct elemental analysis of cereal and rice flour using total reflection X-ray fluorescence: new challenges**
F. Bilo, L. Borgese, C. Zoani, G. Zappa, R. Dalipi, L. E. Depero

11h50-12h10 - **OC06 - Development of the analytical method for 87Sr/86Sr determination in olive oil**
M. Furdek Turk, E. Epova, J. Barre, S. Berail, O. X. Donard and T. Zuliani

12h10-12h30 - **OC07 - Nutrients, secondary metabolites and anti-oxidant activity Moringa oleifera leaves and Moringa-based commercial products**
N.S. Mokgalaka, M.Y. Aphane, V.J. Tembu and L.M. Cele

13h45-14h15 - **K02 - Well established analytical methods for food quality and safety control: any risk of biased results?**
J. Hajslova, M.Stupak, Z. Dzuman, V. Kocourek and J. Pulkrabova

14h15-14h35 - **OC08 - Enhanced capability of a purge-and-trap, thermal desorption and GCxGC-MS methodology for aroma profiling**
F. A. Franchina, D. Zanella, E. Lazzari, P-H. Stefanuto, and J-F. Focant

14h35-14h55 - **OC09 - Implementing sodium reduction in food regulations in South Africa – The analytical measurement challenges**
M. Fernandes-Whaley, M. Linsky and D. Prevoo-Franzsen

Session Food Safety, Allergens – Auditorium

13h45-14h05 - **OC10 - Flaws and hurdles concerning the harmonization of detecting allergens in food**
K. Van Vlierberghe, M. Gavage, M. Dieu, P. Renard, T. Arnould, N. Gillard, I. Taverniers, M. De Loose, K. Gevaert, C. Van Poucke

14h05-14h25 - **OC11 - Quantification of SO2 in wines by Surface Enhanced Raman Spectroscopy and the comparison with the official OIV method**
I. Cagnasso, L. Berta, L. Mandrile, A.M. Giovannozzi, M. Petrozziello, A.M. Rossi, F. Durbiano

14h25-14h45 - **OC12 - Development of a DNA barcoding-like approach to detect mustard allergens in wheat flours**
J. Frigerio, R. Pellesi, V. Mezzasalma , F. De Mattia , A. Galimberti , F. Lambertini , M. Suman , S. Zanardi , A. Leporati and M. Labra.

Session Food Safety, Contaminants, Pesticides - Auditorium

16h00-16h30 - **K03 - EU policy on contaminants in food: recent developments and outlook**
F. Verstraete

16h30-16h50 - **OC13 - Multi-approach determination of dithiocarbamate fungicides and of their degradation products in fruits and vegetables**
A.C. Dirtu, G. Lavison-Bompard, A. Ducrocq, C. Inthavong, T. Guérin, P. Jitaru

16h50-17h10 - **OC14 - New developments in integrated 'sample to results' workflows for the multi-residue analysis of polar anionic pesticides and their metabolites**
R.J. Fussell, F. Pigozzo, Q. Guo, Y. Li and T. Bo, E. George

Session Food Safety / Food Hygiene - L333

16h00-16h20 - **OC15 - Monitoring on hygiene in institutional kitchens in Belgium**
E. Duthoo, S. Krings, G. Daube, B. Taminiau, M. Heyndrickx, and K. De Reu

16h20-16h40 - **OC16 - Detection and quantification of biogenic amines in Cambodian smoked freshwater fish**
C. Douny, H. Mith, F. Brose, A. Igout, M-L. Scippo

16h40-17h00 - **OC17 - Proposal for a European Metrology Network on food safety – EMN-FS**
A. M. Rossi and F. Durbiano

Tuesday's Oral presentations

Plenary presentation

9h00-9h40 - **PL2 - Recent technologies in the (bio)analysis of mycotoxins**
S. De Saeger

Session Food Omics - Auditorium

9h50-10h20 - **K04 - Nutrimetabolomics: integrative action for metabolomics analyses in human nutritional research as proposed by the Foodball consortium**
L. Vanhaecke, M. M. Ulaszewska, C. Weinert, A. Trimigno, R. Portmann, G. Vergères

10h20-10h40 - **OC18 - Avoiding the culture step in outbreak investigations: parameters for optimised metagenomics of contaminated food**
F. Buytaers, A. Saltykova, S. Denayer, B. Verhaegen, N. Roosens, K. Vanneste, D. Piérard, K. Marchal, S. C. J. De Keersmaecker

Session Proficiency Testing & Reference Materials - L333

9h50-10h10 - **OC19 - Certified reference material of nitrofuran metabolites in chicken breast muscle from incurred samples**
F.G.M. Violante, B. C. Garrido, E. C. P. Rego, E. F. Guimarães; N. O. C. Zúniga, W. Wollinger; J.M. Rodrigues, F. R. Aquino Neto.

10h10-10h30 - **OC20 - Proficiency testing scheme for benzoic acid in banana-based condiment to support the traceability of chemical measurements to SI units**
B. S. Ebarvia, A. C. Dacuya, A. R. C. Veranga, J. A. C. Valdueza

Session Food Genomics - Auditorium

11h30-11h50 - OC21 - Detection of antibiotic resistance genes in microbial fermentation products
M-A. Fraiture, M. Deckers, N. HC Roosens

11h50-12h10 - OC22 - Reconstruction of plasmids carrying antimicrobial resistance genes in food, feed and human bacterial isolates using short and long read sequencing reads
B. Berbers, A. Saltykova, P.J. Ceyssens, C. Garcia-Graells, K. Vanneste, N. H. Roosens, K. Marchal, S. C.J. De Keersmaecker

12h10-12h30 - OC23 - Rationalizing the GMO analytical detection procedure: optimization of subsampling, homogenization and milling steps
I. Taverniers, S. Liévrard, J. Baert, M Dhondt, A. Staelens, M. De Loose

Session Proficiency Testing, Reference Materials & accreditation - L333

11h30-11h50 - OC24 - Development of new stable isotope reference materials for food authentication and traceability
N. Ogrinc, A. Schimmelmann, F. Camin, D. Potočnik, H. Qi and S. Kelly

11h50-12h10 - OC25 - ICAR proficiency testing scheme and a novel calculation model to compare proficiency testing schemes
S. Orlandini

12h10-12h30 - OC26 - International co governance of food safety based on quality infrastructure
L. Jun , X. Xuelin, F. Xiang

Session Food Contact Materials - Auditorium

13h45-14h15 - K05 - Analysis of individual (MOAH) by AGPC-QTOF-MS and comparison to the conventional method LC-GC-MS
J. Jaén, C. Domeño, P. Alfaro, C. Nerín

14h15-14h35 - OC27 - Mineral oil in food: How is the situation in Belgium and what are the risks?
A. Van Heyst, S. Goscinny, B. Mertens, M. Vanlancker, J. Vercammen, S. Bel, S. Vandevijvere, M. Elskens, E. Van Hoeck

14h35-14h55 - **OC28 - Effect of food composition on the migration of surrogate contaminants from paperboard packaging**
M. Baele, A. Vermeulen, P. Ragaert, B. De Meulenaer

14h55-15h15 - **OC29 - Investigation of migrating substances from food fabrics**
K. Van Den Houwe, B. Dewilde, J. Van Loco, S. Goscinny and E. Van Hoeck

Workshop Toxins - L333

13h45-14h15 - **K06 - Alternaria toxins: Analysis and Risk assessment of Emerging and Modified Mycotoxins**
M. Rychlik

14h15-14h35 - **OC30 - MYCOSUGAR: Investigation on mycotoxins and their producing fungi in sugarcane and its by-products**
M.F. Abdallah, C. Bereket, V. Kagot, L. Matumba, S. Okoth, M. De Boevre, G. Haesaert, K. Audenaert and S. De Saeger

14h35-14h55 - **OC31 - Occurrence, toxicokinetics and toxicity of citrinin and risk assessment**
C. Meerpoel, A. Vidal, B. Huybrechts, E.K. Tangni, M. Devreese, S. Croubels and S. De Saeger

14h55-15h15 - **OC32 - Analytical methods for mycotoxin determination**
B. Huybrechts

Session Nutrition - Auditorium

16h20-16h40 - **OC33 - Calcium and vitamin D intake from foods and supplements in the Dutch population**
MC Ocké, HAM Brants, CS Dinnissen, J Verkaik-Kloosterman, CTM van Rossum

16h40-17h00 - **OC34 - School meals in light of the regulation – Assessment of the public catering decree in primary schools in Hungary**
A. Varga, M. Bakacs, A. Zentai, B. Nagy, Z. Nagy-Lőrincz, G. Erdei, É. Illés, V. Varga-Nagy, K. Miháldy, E. Sarkadi Nagy, C. Kaposvári

17h00-17h20 - **OC 35 - Probiotic properties of lactic acid bacteria isolated from household fermented Sorghum slurries**
M.L. Thaoge and S. Rapoo

Wednesday's Oral presentations

Session Nanomaterials and Microplastics - Auditorium

9h00-9h30 - **K07 - Perspective in nanoparticle analysis in food with single particle ICPMS**
J. Noireaux, P. Fisicaro

9h30-9h50 - **OC36 - Method validation for determination of microplastics in food**
M. Dekimpe, D. Deloof, J. Robbens, K. Hostens, B. De Witte

9h50-10h10 - **OC37 - Characterization of the nano-sized fraction of silver particles in food additive E174 by EM and SP-ICP-MS**
S. De Vos, E. Verleysen, M. Ledecq, N. Waegeneers and J. Mast

10h10-10h30 - **OC38 - Inhibition of pathogenic bacteria in duck meat using nanoclay encapsulated oregano essential oil**
P. Klouček, J. Táborský, N. West, A. Fraňková and M. Božik

11h00-11h30 - **K08 - Quantification of (Engineered) Nanoparticles in Complex Matrices: More than a Silver Lining on the Horizon?**
R. Kaegi, T. Uusimäki

11h30-11h50 - **OC39 - Physicochemical characterisation of several types of the E171 food additive**
E. Verleysen, M. Ledecq, S. De Vos, I. Ojea Jimenez, F. Brassinne, N. Waegeneers and J. Mast

11h50-12h10- **OC40 - Towards a routine method for the characterisation of TiO2 nanoparticles in food by single particle-ICP-MS**
L. Givelet, P. Jitaru, D. Truffier-Boutry, J.-F. Damlencourt and T. Guérin

12h10-12h30 - **OC41 - Validation of single particle ICP-MS for routine sizing and quantification of the fraction of silver nanoparticles in E174 food additives and confectionery products.**
N. Waegeneers, L. Delfosse, S. De Vos, E. Verleysen, J. Mast

Posters

Food Safety	**A1 - A18**	**Proficiency Testing & Refernce Materials**	**F1 - F4**
Food Data	**B1 - B2**	**Food Contact Materials**	**G1 - G3**
Food Integrity	**C1**	**Nutrition**	**I1 - I5**
Food Quality	**D1 - D9**	**Nanomaterials**	**J1 - J3**
Food Omics	**E1 - E6**	**Accreditation**	**K1**

Session A | Food Safety

A1 - Isolation and identification of microorganisms from processed milkfish products for the development of matrix-based PT material for salmonella sp. in milkfish
M.S.A. Aguinaldo, A.P. de Asis, N.M.L. Dela Cruz and S.M. Estrada

A2 - Antioxidant and antimicrobial activities of leaves extracts of urtica dioica L. from Algeria: application in apple fruits
A. Ouelhadj, L. Khati , D. Tadjenant

A3 - Occurrence of polyether ionophores residues in Brazilian Minas cheese
F. R. N. Silva, P. A. de C. Braga, F. G. R. Reyes, M. F. Capristo, A. P. Arisseto -Bragotto

A4 - Use of additives in Brazilian dairy products and compliance with current legislation
A. V. Botaro, A. P. Arisseto Bragotto

A5 - Ultra-low level quantification of pesticides in baby foods using an advanced triple quadrupole GC-MS/MS
R. J. Fussell, R. Law, A. Lamb, P. Silcock, T. Anderson, J. Cole and C. Cojocariu

A6 - Fluorimetric method and trends in aflatoxins determination
A.Najdenkoska, P.Misevski, B.Georgievski

A7 - Optimization and validation of HS-SPME GC/MS to measure furan and alkylfurans in babyfood
Z. Alsafra, G. Scholl, B. De Meulenaer, G. Eppe.

A8 - Investigation of the Polycyclic Aromatic Hydrocarbons contamination in spices and dried herbs available on the Belgian market
Ph. Szternfeld

A9 - Exposure to pesticides and metals following tea consumption in Belgium
K. Cheyns, Ph. Szternfeld

A10 - Development and application of a novel analytical methodology for simultaneous speciation analysis of Cr(III) and Cr(VI) in foodstuffs by HPLC-ICP-MS using species-specific isotope dilution
M. Saraiva, A. Leufroy, R. Chekri, T. Guérin, J.J. Sloth and P. Jitaru

A11 - SIMBA: Design, formulation and optimization of plant growth-promoting microbes for their use as microbial consortia inoculants
A. Bevivino, C. Cantale, S. Tabacchioni, P. Ambrosino, S. Passato, C. Nobili, A. Fiore, A. Del Fiore, O. Presenti, G. Giovannetti, D. Neuhoff, M. Sudau, E. Maestri, M. Caldara, N. Marmiroli, S.J. Sørensen, J. Nesme, T. Evison, A. Sczyrba, A. Schlüter, A. Brunori, A. Pihlanto

A12 - Toxic element mobility in soil-wheat system: comparison between 6 wheat varieties
E. Pucci, G. Zappa, C. Zoani, L. Gazza, C. Manetti

A13 - Accomplishment of the EU regulations 2017/644-771 for PCDD/Fs and PCBs in food by using a novel triplequadrupole MS generation
E. Lazzari, F. A. Franchina, G. Scholl and J-F. Focant

A14 - Aluminium in food
N. Møller Iversen, H. Amlund, B. Koch Herbst and J.J. Sloth

A16 - Pilot study for developing an interactive platform to facilitate communication between main actors in the food packaging chain
G. Mustatea, E. L. Ungureanu, D. E. Duta and N. Belc

A17 - Fast Analysis of a Multi-class Pesticides Panel in Wine and Olive Oil Extracts by LC-MS/MS
L. De Keyzer, B. Miserez, C. Brodie, A. Hilkert, O. Kracht, D. Juchelka and J. Radke

A18 - Food and Beverage Fraud Prevention Using Isotope Fingerprints
B. Miserez, I. Paolini, S. Bani, D. D'Addona, . T. Yang and D. Ghosh

Session B | Food Data

B1 - Smart Store-Keep your sample and data safe forever.
F. Bilo, L. Borgese, A. Zacco, E. Bontempi, L. E. Depero

B2 - The use of Biotechnology to improve the use of indigenous complementary food
M.L. Thaoge and M.M. Mosele

Session C | Food Integrity

C1 - Comparison between ELISA and qPCR kits for detection of hazelnut incurred in rice, cookies and chocolate samples
I. Taverniers, S. Maes, M. Dhondt, N. Victoor, A-C. Huet, A. Lamote, M. Paulus, G. Janssens, N. Gillard and M. De Loose

Session D | Food Quality

D1 - Assessment of physicochemical, antioxidant and antimicrobial characteristics of Algerian honeys
A. Ouelhadj, R. Nakib, C. Seijo

D2 - Estimation of flavonoid and chlorophyll changes in several mi cro-green species due to different LED light regimes with multiparametric fluorescence indexes
C. Nugnes, G. Metelli, L. Nardi, E. Benvenuto

D3 - Validation of HPLC method with pre-column derivitization for the determination of histamine in dried fish
B.S. Ebarvia, A.C. Dacuya, R.R.L. Rondilla

D4 - Comparison of ascorbic acid and nitrates content in fruit and vegetables from farmers´ market and supermarket
M. Sabolová, T. Dupalová, L. Kouřimská

D5 - The use of a biofixators for the removal of AFM1 from milk
J. Bošnir, M. Ivešić, Ž. Pavlek, Ž. Kuharić, S. Serdar, S. Šikić, K. Markov, J. Frece, Ž. Jakopović

D6 - Could the antioxidant profile be related to the presence of toxic elements in Olea Europea L. leaves and in drupes? A study on 11 Italian cultivars
S. Mastrantonio, C. Nobili, C. Zoani, S. Procacci, D. Palumbo, A.M. Giusti, E. Pucci, L. Bacchetta

D7 - Sustainability in the food industry: managerial and technological actions to reduce the environmental footprint of Tinaia wine and Taleggio
A. Del Fiore, M. Valerio, C. Chiavetta, S. Cortesi, V. Fantin, C. Rinaldi, O. Presenti and N. Colonna

D8 - Evaluation of antifungal activity of essential oils against Penicillium spp. in in vitro and in vivo conditions by integrated approaches
A. Del Fiore, P. De Rossi, D. Palumbo, L. Quercia, C. Dalmastri, S. Sarrocco, G. Zappa and A. Bevivino

D9 - METROFOOD-CZ: state-of-the-art national research infrastructure in the fields of food quality & nutrition
L. Pacek, L. Kouřimská , P. Klouček , T. Míčka, M. Božík, K. Jíralov, J. Hajšlová and M. Urban

D10 - Researches on the impact of minimal processing on the antioxidant potential of cabbage varieties
M. Mulțescu, M. Zachia, N. Belc, T. Manasia, F. Burnichi and F. Israel-Roming

Session E | Food Omics

E1 - Development of a bioinformatics pipeline for routine analysis of whole genome sequencing data of Escherichia coli isolates
B. Bogaerts, S. Nouws, R. Winand, Q. Fu, J. Van Braekel, S. Denayer, B. Verhaegen, S. C. J. De Keersmaecker, N. Roosens, K. Marchal and K. Vanneste

E2 - Detection of food enzyme-producing microorganisms in food enzyme preparations
M. Deckers, K. Vanneste, R. Winand, S. C.J. De Keersmacker, S. Denayer, M. Heyndrickx, D. Deforce, M-A. Fraiture, N. H.C. Roosens

E3 - An integrated strategy combining DNA walking and NGS to detect GMOs
M-A. Fraiture, N. H.C. Roosens

E4 - The added value of WGS for foodborne outbreak investigation and surveillance of STEC and Staphylococcal enterotoxins
S. Nouws, B. Bogaerts, S. Denayer, B. Verhaegen, D. Piérard, N. Roosens, K. Vanneste, K. Marchal, and S. C. J. De Keersmaecker

E5 - Establishment of the international joint research center of reference material for mycotoxins: contexts and fields of activities
E.K. Tangni, Z. Han, B. Huybrechts, J. Mesquelier, E. Van Hoeck, W. Guo, K. Jiang, J. Van Loco, Z. Zhao

E6 - Preparation of dimethylarsinic acid reference material
Q.Y. Sun, G. Bo, L. Feng-li, W. Yun, Q. Dai-jun, H. Qing-bo, Y. Zhong-yuan, Z. Jian-qiang

Session F | Proficiency Testing & Reference Materials

F1 - Proficiency test round for the determination of deoxynivalenol, ochratoxin A and zearalenone in cereals
E.K. Tangni, Z. Han, B. Huybrechts, J. Mesquelier, E. Van Hoeck, W. Guo , Du. Ying, Z. Zhao

F2 - Certified reference materials and quality control materials …… Valuable tools for laboratory management
C. Maune, R. Malone, J. Rodgers and R. Niemeijer

F3 - The role of scientific research in increasing the performance of agro-food testing/analysis
F. Șerbancea, N. Belc, C. Uțoiu, V. Ionescu, A. Culețu, F. Manolache

F4 - Primary reference material for somatic cell counting in milk
S. Orlandini, H. van den Bijgaart and R. Zeleny

Session G | Food Contact Materials

G1 - Mineral oil migration from cardboard food contact materials: assessing the endocrine activity of mineral oils (PAHs) using the DRE-, ERE- and PPARγ CALUX bioassays
I. Boonen, A. Van Heyst, K. Van Langenhove, E. Van Hoeck, B. Mertens, M. Elskens, H. Demaegdt

G2 - Analysis of individual (MOAH) by APGC- QTOF-MS and comparison to the conventional method LC-GC-MS
J. Jaén, C. Domeño, P. Alfaro, C. Nerín

G3 - Release of trace elements from porcelain enamelware
H. Demaegdt, K. Cheyns

Session I | Nutrition

I1 - Level of minerals and inorganic contaminants in meat, fish and mixed dishes: an exploratory analysis developed in Portugal
M. Mendes, I. Coelho, I. Castanheira, I. Cabral, A.S. Matos

I2 - Influence of fat types on the fatty acids and trans fatty acids composition of biscuits
A.L. Mihai, M. Negoiță, G.A. Horneț and N. Belc

I3 - Soy protein hydrolysates in bakery products
A. Culetu, D.E. Duta, Z. Knežević-Jugović, J. Jovanović, N. Šekuljica, D.L. Comaniciu, L.V. Ordodi

I4 - Analysis of the amylose content of starch from different gluten-free flours
A. Culetu, D.E. Duta, M. Schimbator, I. Susman, G. Stamatie, N. Belc

I5 - Characterization of Jerusalem artichoke as ingredient in bakery products
L. Apostole, N. Belc, I. Susman, M. Schimbator

Session J | Nanomaterials

J1 - Optimization and validation of quantitative TEM analysis of pristine titanium dioxide powders in a regulatory context
F. Brassinne, E. Verleysen, M. Ledecq and J. Mast

Session K | Accreditation

K1 - Shortening the traceability chain for Africa: purity assignment of organic calibrators
M. Fernandes-Whaley, N. Nhlapo, L. Quinn, D. Prevoo-Franzsen

Best Poster Award

A poster prize will be awarded for the best poster. All posters will be eligible for nomination for the award. The winners of the poster award will be announced during the closing ceremony.

IMEKOFOODS5

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Metrology for Sustainable Food Production

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