PROGRAM

10th International Symposium on

RECENT ADVANCES IN FOOD ANALYSIS (RAFA 2022)

September 6-9, 2022

Organized by

**Department of Food Analysis and Nutrition,
University of Chemistry and Technology, Prague (UCT Prague),
Czech Republic**

&

**Wageningen Food Safety Research (WFSR),
part of Wageningen University & Research, The Netherlands**

MINISTRY OF AGRICULTURE
OF THE CZECH REPUBLIC

PRA HA
PRA GUE
PRA GA
PRA G

RAFA 2022 is held under auspices of the Minister of Agriculture of the Czech Republic, Zdeněk Nekula, and the Capital City of Prague.

RAFA 2022 – PROGRAM AT A GLANCE

Time / Date	TUESDAY 6 September 2022		WEDNESDAY 7 September 2022		THURSDAY 8 September 2022			FRIDAY 9 September 2022	
7:30-8:30	Registration for the conference		Registration for the conference **Vendor seminars** (7:45-8:30)		Registration for the conference **Vendor seminars** (7:45-8:30)			Registration desk open	
8:30-9:00									
9:00-10:30	**Pre-Workshops** (9:00-13:00) **Workshop on "Vibrational spectroscopy and chemometrics"** **Workshop on "Opportunities to collaborate in a European research and innovation area"**		**Session 3** Experiences, achievements and challenges of EU Reference Laboratories I	**Session 4** Sensors & Portable food analysis	**Session 9** Natural toxins	**Session 10** Workshop Analysis of contaminants and migrants in circular food production	**Session 11** Workshop METRO FOOD-RI: Workshop on metrology in food and nutrition	**Session 16** Food contaminants II	**Session 17** Omics approaches in food analysis
10:30-11:00			**Exhibition** & Coffee break		**Exhibition** & Coffee break				
11:00-11:30			**Session 5** Experiences, achievements and challenges of EU Reference Laboratories II	**Session 6** General food analysis	**Session 12** Food authenticity & Fraud I	**Session 13** Residue analysis		**Exhibition** & Coffee break	
11:30-12:00								**Session 18** Food analysis beyond imagination	
12:00-12:30	**Vendor seminars** (12:15-13:00)								
12:30-13:00			Lunch		Lunch			**Closing address, Including Poster Awards**	
13:00-13:30									

Coffee breaks and **Welcome Cocktail** will be located in Exhibition & Poster halls. **Conference lunches** will be served in the conference centre restaurant Teatro.

Time / Date	TUESDAY 6 September 2022		WEDNESDAY 7 September 2022		THURSDAY 8 September 2022	
13:30-14:00			**Exhibition & Poster session 1 & Vendor seminars** (13:30-14:15) **Vendor seminars** (14:45-15:30)		**Exhibition & Poster session 2 & Vendor seminars** (13:30-14:15) **Vendor seminars** (14:45-15:30)	
14:00-15:00	**Welcome & Opening ceremony**					
15:00-16:00	**Session 1 – Plenary** **Recent issues and novel approaches in food analysis I**					
16:00-16:30	**Exhibition** & Coffee break		**Exhibition** & Coffee break		**Exhibition** & Coffee break	
16:30-18:00	**Session 2 - Plenary** **Recent issues and novel approaches in food analysis II**		**Session 7** **Food contaminants I**	**Session 8** Interactive seminar **Step by step strategies for fast development of smart analytical methods**	**Session 14** **Food authenticity & Fraud** II	**Session 15** Tutorial **Data quality and smart data handling in food analysis**
18:00-18:30						
18:30-19:30	**Welcome Cocktail**					
19:30-20:00						
20:00-23:00					**Symposium Dinner**	

REGISTRATION

MONDAY, September 5, 2022

16:00–19:00	**Registration for the RAFA 2022 conference** Foyer of the Don Giovanni Hotel Prague

TUESDAY, September 6, 2022

8:00–18:00	**Registration for the RAFA 2022 conference** Foyer of the Don Giovanni Hotel Prague

WEDNESDAY, September 7, 2022

8:00–18:00	**Registration for the RAFA 2022 conference** Foyer of the Don Giovanni Hotel Prague

THURSDAY, September 8, 2022

8:00–18:00	**Registration for the RAFA 2022 conference** Foyer of the Don Giovanni Hotel Prague

FRIDAY, September 9, 2022

8:00–14:00	**Registration desk open** Foyer of the Don Giovanni Hotel Prague

WORKSHOPS

TUESDAY, September 6, 2022

9:00–11:15 Don Giovanni 1	**Opportunities to collaborate in a European research and innovation area** *Moderators:* **Jana Hajslova,** *University of Chemistry and Technology Prague, Prague, Czech Republic* **Nada Konickova,** *Technology Centre of the Czech Academy of Sciences, Czech Republic*

8:30–9:00	**Registration & Welcome Coffee**
9:00–9:05	**Opening & Welcome** **Jana Hajslova,** *University of Chemistry and Technology Prague, Prague, Czech Republic & EIT Food Hub Czech Republic* **Nada Konickova,** *Technology Centre of the Czech Academy of Sciences, Czech Republic*
9:05–9:30	**EU presidency of Czechia – priorities relevant to research and innovation** **David Chvala,** *Czech Liaison Office for Education and Research (CZELO)* *Representative of the Ministry of Agriculture of the Czech Republic*
9:30–10:00	**Opportunities for food scientists to participate in the EU programme Horizon Europe, MSCA, Partnerships and Missions** **Nada Konickova,** *Technology Centre CAS, Horizon Europe National contact point – Food security*
10:00–10:30	**Collaboration opportunities and support to innovation offered by the EIT Food** **Programmes dedicated to students, start-ups, researchers and government** **Aleksandra Bara**, *European Institute of Innovation & Technology (EIT) Food, Warsaw, Poland*
10:30–11:00	**EU and EIT Food PROJECTS ACHIEVEMENTS AND PRACTICAL APPLICATIONS** *(examples)*
11:00–11:15	**Questions & Answers & Networking** **Closing of the workshop**

WORKSHOPS

TUESDAY, September 6, 2022

9:00–13:00
Don
Giovanni 3

WORKSHOP on
Vibrational spectroscopy and chemometrics

Moderators:
Vincent Baeten & Juan-Antonio Fernández Pierna
Walloon Agricultural Research Centre (CRA-W), Gembloux, Belgium

Wallonie recherche
CRA-W

Time		Title
8:30–9:00		**Registration & Welcome Coffee**
9:00–10:00	W1	**BASICS OF VIBRATIONAL SPECTROSCOPY** *Vincent Baeten, Walloon Agricultural Research Centre, Belgium*
10:00–11:00	W2	**BASICS OF CHEMOMETRICS** *François Stevens & Juan A. Fernández Pierna, Walloon Agricultural Research Centre, Belgium*
11:00–11:30		**Coffee break**
11:30-11:55	W3	**APPLICATIONS OF VIBRATIONAL SPECTROSCOPY AND CHEMOMETRICS IN THE FOOD SECTOR** *J. A. Fernández Pierna & François Stevens, Walloon Agricultural Research Centre, Belgium*
11:55-12:20	W4	**DETECTION OF PROCESSED ANIMAL PROTEINS (PAPS) BY NEAR-INFRARED MICROSCOPY (NIRM)** *Abigail Anselmo, Walloon Agricultural Research Centre, Belgium*
12:20-12:45	W5	**TBC**
12:45-13:00		**Discussion & Conclusions**

TUESDAY, September 6, 2022

12:15–13:00	**VENDOR SEMINARS**
Don Giovanni 1	**New Developments in Fast Food Testing**

BRUKER

Don Giovanni 2	**Improvements in LC-MS/MS Analysis of Anionic Polar Pesticides in Fruits and Vegetables**

phenomenex™

September 6, 2022

TUESDAY, September 6, 2022

14:00–15:00 Don Giovanni hall		**OPENING CEREMONY & WELCOME** **REFLECTION OF PAST 20 RAFA YEARS**
14:00–14:20		OPENING & WELCOME
14:20–14:40		**MUSIC WELCOME**
14:40–15:00		REFLECTION OF THE PAST 20 RAFA YEARS *Michel Nielen, RAFA chairman, Wageningen Food Safety Research (WFSR), part of Wageningen University & Research, The Netherlands*
15:00–16:00 Don Giovanni hall		**SESSION 1 - PLENARY:** **Recent issues and novel approaches in food analysis I**
15:00–15:30	L1	SEARCHING FOR THE UNKNOWN - ANALYTICAL APPROACHES TO UNCOVER FOOD ADULTERATIONS *Carsten Fauhl-Hassek, German Federal Institute for Risk Assessment, Berlin, Germany*
15:30–16:00	L2	CLIMATE CHANGE AND AGRICULTURE: HOW PLANTS COPE WITH RECLAIMED WATERS FOR IRRIGATION *Christian Klampfl, Johannes Kepler University Linz, Linz, Austria*
16:00–16:30		**Coffee Break / EXHIBITION**

* Young scientists´ presentation

ORAL SESSIONS

TUESDAY, September 6, 2022

16:30–18:00 Don Giovanni hall	**SESSION 2 - PLENARY:** **Recent issues and novel approaches in food analysis II**

16:30–16:55	L3	**PANDEMIC IMPACTS ON FOOD ANALYSTS - AND VICE VERSA?** *Michael Rychlik, Technical University of Munich, Munich, Germany*
16:55–17:20	L4	**THE ROLE OF FOOD ALLERGEN ANALYSIS IN PROTECTING ALLERGIC CONSUMERS** *Clare Mills, The University of Manchester and School of Biosciences and Manchester and Guildford, Manchester, United Kingdom*
17:20–17:45	L5	**EMERGING FOOD SAFETY CHALLENGES AND THE IMPORTANCE OF VALIDATED MULTI-CLASS METHODS** *Rudolf Krska, University of Natural Resources and Life Sciences, Vienna, IFA-Tulln, Austria*
17:45–18:00	L6*	**INVESTIGATING THE POTENTIAL OF BERRY PLANT EXTRACTS TO INHIBIT PANCREATIC LIPASE: COMBINING IN VITRO ASSAYS TO SUSPECT METABOLOMIC SCREENING** *Aristeidis Tsagkaris, University of Chemistry and Technology Prague, Prague, Czech Republic*
18:30–19:30		**Symposium Welcome Cocktail** (Don Giovanni Hotel Prague)

* Young scientists´ presentation

September 7, 2022

WEDNESDAY, September 7, 2022

7:45–8:30	**VENDOR SEMINARS**
Don Giovanni 1	**The quality of food characterized by gas chromatography**
Don Giovanni 3	**Make it your analysis with Waters' solutions for Food Quality Control!**
	Increase workflow efficiency by automation, latest UPLC innovations and a compact highly selective detector

SHIMADZU
Excellence in Science

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

ORAL SESSIONS

WEDNESDAY, September 7, 2022

SESSIONS 3 & 4, *in parallel*

9:00–10:30 Don Giovanni 1 & 2		**SESSION 3:** WORKSHOP on **Experiences, achievements and challenges of EU Reference Laboratories I**

9:00–9:10	L7	**EUROPEAN UNION/NATIONAL REFERENCE LABORATORIES NETWORK: AN INDISPENSABLE BRIDGE BETWEEN POLICY AND EFFECTIVE ENFORCEMENT** *Frans Verstraete, European Commission, DG for Health and Food Safety, Brussels, Belgium*
9:10–9:30	L8	**WHEN MORE IS MORE IN PESTICIDE RESIDUE ANALYSIS** *Amadeo R. Férnandez Alba, European Union Reference Laboratory for Pesticide Residues in Fruit and Vegetables, University of Almeria, Almeria, Spain*
9:30–9:50	L9	**IMPROVEMENT IN ANALYTICAL PERFORMANCE FROM PARTICIPATION IN EU PROFICIENCY TEST ON CEREALS AND FEED** *Mette Erecius Poulsen, European Union Reference Laboratory for Pesticide Residues in Cereals and Feeding Stuffs, Technical University of Denmark, National Food Institute, Lyngby, Denmark*
9:50–10:10	L10	**EXPERIENCES FROM THE EURL PROFICIENCY TESTS FROM THE EUROPEAN UNION REFERENCE LABORATORY FOR PROCESSING CONTAMINANTS** *Arvid Fromberg, European Union Reference Laboratory for Processing Contaminants, National Food Institute, Technical University of Denmark, Lyngby, Denmark*
10:10–10:30	L11	**THE EU REFERENCE LABORATORY FOR MYCOTOXINS AND PLANT TOXINS: ACHIEVEMENTS AND CHALLENGES WITH IMPLEMENTATION OF NEW AND UPCOMING REGULATIONS** *Patrick Mulder, European Union Reference Laboratory for Mycotoxins and plant Toxins, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands*
10:30–11:00		**Coffee Break / EXHIBITION**

SESSIONS 5 & 6, *in parallel*

11:00–12:30 Don Giovanni 1 & 2		**SESSION 5:** WORKSHOP on **Experiences, achievements and challenges of EU Reference Laboratories II**

11:00–11:20	L12	**SMART INTERPRETATION OF RESULTS FROM FOOD ANALYSIS: HOW TO USE ALL INFORMATION AVAILABLE** *Christoph von Holst, European Commission, Joint Research Centre, Geel, Belgium*
11:20–11:40	L13	**ANALYSIS OF METALS AND NITROGENOUS COMPOUNDS - EXPERIENCES AND ANALYTICAL CHALLENGES FROM THE PERSPECTIVE OF THE EURL-MN** *Heidi Amlund, European Union reference laboratory for metals and nitrogenous compounds, National Food Institute, Technical University of Denmark, Lyngby, Denmark*

ORAL SESSIONS

September 7, 2022

11:40–12:00	**L14**	**IMPORTANCE OF REGULATORY KNOWLEDGE WHEN TRANSFORMING THE SCIENCE TO THE COMMERCIAL FOOD AND FEED PRODUCTS** *Mari Eskola,* Medfiles Ltd, Food & Nutrition and Feed Team, Vantaa/Helsinki, Finland
12:00–12:20	**L15**	**HALOGENATED POPS IN FEED AND FOOD – RECENT DEVELOPMENTS IN THE EURL/NRL NETWORK** *Alexander Schaechtele,* European Union Reference Laboratory for Halogenated Persistent Organic Pollutants (POPs) in Feed and Food, Freiburg, Germany
12:20–12:30		**Discussion**
12:30–13:30		**Lunch**

ORAL SESSIONS

WEDNESDAY, September 7, 2022

SESSIONS 3 & 4, *in parallel*

| 9:00–10:30 Don Giovanni 3 | | **SESSION 4: Sensors & Portable food analysis** |

| 9:00–9:20 | **L16** | **MID-INFRARED PHOTONIC SOLUTIONS FOR SOURCE TRACKING OF FUNGAL CONTAMINAITON IN AQUAPONIC PRODUCTIONS**
Volha Shapaval, Norwegian University of Life Sciences, As, Norway |

| 9:20–9:40 | **L17** | **RAPID AUTHENTICITY VERIFICATION AND FRAUD DETECTION USING A PORTABLE HANDHELD LASER-INDUCED BREAKDOWN SPECTROSCOPY (LIBS) SYSTEM**
Bartek Rajwa, Bindley Bioscience Center, Purdue University, West Lafayette, United States |

| 9:40–10:00 | **L18** | **PORTABLE LAMP DIAGNOSTICS FOR FOOD SAFETY**
Marleen Voorhuijzen, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands |

| 10:00–10:10 | **L19*** | **MONITORING OF FERMENTATION PROCESSES BY GAS CHROMATOGRAPHY-ION MOBILITY SPECTROMETRY (GC-IMS) AND MACHINE LEARNING**
Joscha Christmann, Mannheim University of Applied Sciences, University of Hamburg, Mannheim, Germany |

| 10:10–10:20 | **L20*** | **TOWARDS PORTABLE ON-SITE MYCOTOXIN DETECTION: PAPER MICROFLUIDICS WITH MID-INFRARED SPECTROSCOPIC DETECTION OF DEOXYNIVALENOL IN WHEAT**
Anouk J. Bosman, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands |

| 10:20–10:30 | **L21*** | **RAPID ON-SITE TOOL FOR SEMI-QUANTITATIVE SCREENING OF THC ANALOGUES IN CANNABIS BY "DIGITAL" CHROMATOGRAPHIC SEPARATION FROM INTERFERING CBD ANALOGUES, FOLLOWED BY CHROMOGENIC SMARTPHONE DETECTION**
Si Huang, Key Laboratory of Phytochemical R&D of Hunan Province and Key Laboratory of Chemical Biology & Traditional Chinese Medicine Research of Ministry of Education, Hunan Normal University, China; Wageningen University, Wageningen, The Netherlands |

| 10:30–11:00 | | **Coffee Break / EXHIBITION** |

SESSIONS 5 & 6, *in parallel*

| 11:00–12:30 Don Giovanni 3 | | **SESSION 6: General food analysis** |

| 11:00–11:20 | **L22** | **WHICH TECHNIQUE TO ASSESS THE PRESENCE AND ABSENCE IN FEED OF AUTHORISED AND NON-UNAUTHORISED INSECT SPECIES?**
Vincent Baeten, Walloon Agricultural Research Centre, Gembloux, Belgium |

| 11:20–11:40 | **L23** | **EXPLORING FLAVOR DEVELOPMENT IN FERMENTED FOODS BY REAL-TIME HIGH-THROUGHPUT PTR-MS ANALYSIS**
Franco Biasioli, Edmund Mach Foundation, San Michele All'adige, Italy |

* Young scientists´ presentation

ORAL SESSIONS

11:40–11:50	L24*	**ALKYL PYRAZINES DETERMINATION BY GAS CHROMATOGRAPHY – ION MOBILITY SPECTROMETRY. THE ROASTED HAZELNUT CASE STUDY** *Maria Mazzucotelli, Edmund Mach Foundation / Center Agriculture Food Environment C3A - University of Trento, San Michele all'Adige, Italy*
11:50–12:00	L25*	**ISOALLERGENE SPECIFIC QUANTIFICATION OF THE APPLE ALLERGEN MAL D 1 IN DIFFERENT APPLE SAMPLES** *Julia Kaeswurm, University of Stuttgart, Stuttgart, Germany*
12:00–12:10	L26*	**FAST CENTRIFUGAL PARTITION CHROMATOGRAPHY: DEVELOPMENT OF THE METHOD FOR ISOLATION OF PHYTOCANNABINOIDS** *Matej Maly, University of Chemistry and Technology Prague, Prague, Czech Republic*
12:10–12:20	L27*	**COMPARISON OF CHROMATOGRAPHIC CONDITIONS FOR THE TARGETED TANDEM MASS SPECTROMETRIC DETERMINATION OF 344 MAMMALIAN METABOLITES** *Kangkang Xu, University of Natural Resources and Life Sciences, Vienna (BOKU), Department of Agrobiotechnology (IFA-Tulln), Wien, Austria*
12:20–12:30	L28*	**QUALITY ASSURANCE SAMPLES IN NON-TARGETED ANALYSIS – MAKING USE OF THE WHOLE SPECTRA INFORMATION THROUGH MULTIVARIATE ANALYSIS IN A USER-FRIENDLY ROUTINE** *Felix Wustrack, German Federal Institute for Risk Assessment, Berlin, Germany*
12:30–13:30		**Lunch**

* Young scientists´ presentation

POSTER SESSIONS

13:00–16:00 Don Pedro & Leporello & Foyers & Tent	**POSTER SESSION I**
Donna Anna & Donna Elvira & Zerlinda & Don Ottavio & Massetto halls	**EXHIBITION**

POSTER SESSION I:

Distribution of posters into individual sessions and categories will be announced on August 19, 2022.

15:30–16:00	**Coffee break**

September 7, 2022

WEDNESDAY, September 7, 2022

13:30–14:15	**VENDOR SEMINARS**

Don Giovanni 1

Tipps and Tricks to Quantify Emerging Toxins and Process Contaminants

RESTEK
Pure Chromatography

Don Giovanni 2

Implementing New GC-MS and LC-MS Technologies to Stay Ahead with Your Food Safety Analysis from Pesticides to PFAS and Microplastics

ThermoFisher
SCIENTIFIC

Don Giovanni 3

Recent Advances in a Well-Established Analytical Method – The Next Generation of Enzymatic Food Analysis

r-biopharm®

14:45–15:30	**VENDOR SEMINARS**

Don Giovanni 1

Developments in Food Safety and Trace of Origin Testing

Agilent
Trusted Answers

Don Giovanni 2

New Developments for the Analysis of MOSH/MOAH and 3MCPD in Food

AXELSEMRAU

Don Giovanni 3

Improved Characterization of Fatty Acids in Food for Reliable Nutritional Labelling

MILESTONE
HELPING CHEMISTS

SepSolve
Analytical

ORAL SESSIONS

WEDNESDAY, September 7, 2022

SESSIONS 7 & 8, *in parallel*

16:00–18:00 Don Giovanni 1 & 2		**SESSION 7: Food contaminants I**

16:00–16:20   L29   **PARTNERSHIP FOR THE ASSESSMENT OF THE RISK FROM CHEMICALS (PARC) PROJECT REAL-LIFE MIXTURES**
Jacob van Klaveren, National Institute for Public Health and the Environment, Rhenen, The Netherlands

16:00–16:40   L30   **EDIBLE OIL QUALITY: RAPID ASSESSMENT OF PROCESSING CONTAMINANTS AND OTHER QUALITY INDICATORS USING CHROMATOGRAPHY AND MASS SPECTROMETRY**
Hans-Gerd Janssen, Unilever Food Innovation Centre, Vlaardingen, The Netherlands

16:40–16:50   L31*   **BENCHMARKING OF SOLID-PHASE MICROEXTRACTION, STATIC HEADSPACE AND DYNAMIC HEADSPACE COUPLED TO GAS CHROMATOGRAPHY-MASS SPECTROMETRY FOR FURAN QUANTIFICATION IN INFANT FOOD**
Donnelle Roline Sandjong Sayon, French National Research Institute for Agriculture, Food and Environment (INRAE), Saint-Genès-Champanelle, France

16:50–17:00   L32*   **TARGET AND NON-TARGET FOODOMICS INVESTIGATION OF CHEMICAL CHANGES IN MEAT SAUSAGES INDUCED BY VARIOUS PROCESSING CONDITIONS**
Agnieszka Niklas, Technical University of Denmark, National Food Institute, Lyngby, Denmark

17:00–17:20   L33   **SAMPLE POOLING STRATEGY: A REALISTIC OPTION TO STRENGTHEN THE SURVEILLANCE OF FOOD CHEMICAL SAFETY**
Erwan Engel, French National Research Institute for Agriculture, Food and Environment (INRAE), UR QuaPA, MASS Group, Saint-Genès-Champanelle, France

17:20–17:40   L34   **A MULTI-PLATFORM METABOLOMICS APPROACH TO CHARACTERIZE THE EFFECTS ON THE METABOLISM IN PIGS DUE TO CHRONIC EXPOSURE TO LOW DOSES OF NON-DIOXIN-LIKE POLYCHLORINATED BIPHENYLS**
Maykel Hernández-Mesa, ONIRIS, INRAE, LABERCA / University of Granada, Nantes, France

17:40–18:00   L35   **ADVANCES IN THE ANALYSIS OF TRACE ELEMENTS IN FOOD - RECENT DEVELOPMENTS FROM RESEARCH - REFERENCE LABORATORY- AND STANDARDIZATION ACTIVITIES**
Jens J. Sloth, National Food Institute, Technical University of Denmark, Lyngby, Denmark

* Young scientists´ presentation

10th International Symposium on **RECENT ADVANCES IN FOOD ANALYSIS**, Prague, September 6–9, 2022

17

September 7, 2022

WEDNESDAY, September 7, 2022

SESSIONS 7 & 8, *in parallel*

16:00–18:00 Don Giovanni 3	L36	**SESSION 8:** INTERACTIVE SEMINAR on **Step by step strategies for fast development of smart analytical methods** *Moderators:* **Katerina Mastovska**, *Eurofins Scientific, US Food Division, United States* **Hans Mol**, *Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands* **Michal Stupak**, *University of Chemistry and Technology Prague, Prague, Czech Republic* **All attendees on the board through your mobile devices!**

VENDOR SEMINARS

THURSDAY, September 8, 2022

7:45-8:30	**VENDOR SEMINARS**

Don Giovanni 1

Improved Confidence with Superior Qualitative and Quantitative Data Using LECO´s GC×GC-TOFMS

Don Giovanni 3

Introducing Novel Mass Spectrometry Techniques and their Applications in Food Testing

September 8, 2022

THURSDAY, September 8, 2022

SESSIONS 9 & 10 & 11, *in parallel*

9:00–10:30 Don Giovanni 1		**SESSION 9: Natural toxins**

9:00–9:20 L37

SAFETY PROFILE AND RISK ASSESSMENT OF FOOD SUPPLEMENTS

Chiara Dall'Asta, University of Parma, Parma, Italy

9:20–9:40 L38

CIGUATERA FISH POISONING OUTBREAK IN EUROPE LEADS TO A NOVEL CIGUATOXIN-3C GROUP CHARACTERIZATION FROM THE INDIAN OCEAN

Christopher Loeffler, German Federal Institute for Risk Assessment, Berlin, Germany

9:40–9:50 L39*

QUANTIFICATION OF CONJUGATED TYPE A TRICHOTHECENES IN CEREALS USING IMMUNO-AFFINITY CLEAN-UP AND ENZYMATIC HYDROLYSIS

Nela Prusova, University of Chemistry and Technology Prague, Prague, Czech Republic

9:50–10:10 L40

TOWARDS NOVEL GREEN SAMPLE PREPARATIONS FOR MULTI-MYCOTOXIN DETERMINATION IN FOODS

Laura Carbonell-Rozas, University of Parma, Parma, Italy

10:10–10:20 L41*

INTEGRATED BIORECOGNITION-MASS SPECTROMETRY APPROACHES FOR IMPROVED FOOD SAFETY TESTING

Ariadni Geballa-Koukoula, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands

10:20–10:30 L42*

ANALYTICAL STRATEGY FOR IDENTIFICATION OF UNKNOWN TRANSFORMATION PRODUCTS OF MYCOTOXINS AFTER THEIR DECONTAMINATION BY PULSED ELECTRIC FIELD TECHNOLOGY

Adam Behner, University of Chemistry and Technology Prague, Prague, Czech Republic

10:30–11:00

Coffee Break / EXHIBITION

SESSIONS 12 & 13, *in parallel*

11:00–12:35 Don Giovanni 1 & 2		**SESSION 12: Food Authenticity & Fraud I**

11:00–11:20 L43

SAFETY AND AUTHENTICITY OF DIETARY SUPPLEMENTS: ANALYTICAL CHALLENGES AND STRATEGIES

Katerina Mastovska, Eurofins Scientific, US Food Division, United States

11:20–11:30 L44*

APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE DEVELOPMENT OF HONEY DIFFERENTIATION MODELS. A COMPARISON AMONG THE EFFICIENCY OF SEVERAL MACHINE LEARNING ALGORITHMS

Ariana Raluca Hategan, National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania

11:30–11:40 L45*

HAZELNUT PRODUCTS TRACEABILITY THROUGH ISOTOPE RATIO MASS SPECTROMETRY APPROACH

Giuseppe Sammarco, Advanced Laboratory Research, Barilla G. e R. Fratelli S.p.A., Parma, Italy & University of Parma, Parma, Italy

ORAL SESSIONS

11:40–11:50	**L46***	**VOC-BASED PROFILING OF OILS AND JUICES WITH GC-MS/MS-IMS AND MACHINE LEARNING** *Lukas Bodenbender, Mannheim University of Applied Sciences, Mannheim, Germany*
11:50–12:00	**L47***	**ARTIFICIAL INTELLIGENCE SMELLING MACHINES BASED ON TWO-DIMENSIONAL GAS CHROMATOGRAPHY: A HIGH-INFORMATIVE TOOL FOR FOOD AUTHENTICATION AND QUALITY ASSESSMENT** *Simone Squara, University of Turin, Turin, Italy*
12:00–12:20	**L48**	**COMPARISON OF THREE METHODS (DNA METABARCODING, REAL-TIME PCR, DNA ARRAY) FOR SPECIES IDENTIFICATION IN FOOD AND PET FOOD SAMPLES** *Stefanie Dobrovolny, Austrian Agency for Health and Food Safety (AGES), Vienna, Austria*
12:20–12:30		**Discussion**
12:30–13:30		**Lunch**

* Young scientists´ presentation

September 8, 2022

THURSDAY, September 8, 2022

SESSIONS 9 & 10 & 11, *in parallel*

9:00–10:30 Don Giovanni 2		**SESSION 10:** WORKSHOP on **Analysis of contaminants & migrants in circular food production**

9:00–9:20 L49 — INFORMING EFSA ON CIRCULAR ECONOMY FOOD AND FEED PRACTICES: WHAT IS THE EVIDENCE FOR EMERGING RISKS?
Nicola Randall, Harper Adams University, Newport, Shropshire, United Kingdom

9:20–9:40 L50 — RECYCLING OF FORMER FOODSTUFFS IN ANIMAL FEED: HOW TO DISTINGUISH AUTHORISED COLLAGEN FROM PROHIBITED ONE?
Marie-Caroline Lecrenier, Walloon Agricultural Research Centre (CRA-W), Gembloux, Belgium

9:40–9:50 L51* — CHARACTERIZATION AND VALORIZATION OF FRUIT SIDE STREAMS AS UNCONVENTIONAL SOURCES OF FUNCTIONAL INGREDIENTS
Veronica Lolli, University of Parma, Parma, Italy

9:50–10:10 L52 — PFAS IN FOOD CONTACT MATERIALS – ANALYZING THE HIDDEN TREAT
Milica Jovanovic, Graz University of Technology, Graz, Austria

10:10–10:20 L53* — MULTIMODAL CHARACTERIZATION OF MICROPLASTICS IN DRINKING WATER
Clementina Vitali, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands

10:20–10:30 — **Discussion**

10:30–11:00 — **Coffee Break /** EXHIBITION

SESSIONS 12 & 13, *in parallel*

11:00–12:30 Don Giovanni 2		**SESSION 13: Residue analysis**

11:00–11:20 L54 — HUMAN BIOMONITORING AS TOOL FOR EXPOSURE ASSESSMENT TO PESTICIDE MIXTURES
Hans Mol, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands

11:20–11:30 L55* — RAPID APPROACH FOR THE DETERMINATION OF ETHYLENE AND PROPYLENE OXIDE IN DIFFERENT FOODSTUFFS
Michal Stupak, University of Chemistry and Technology Prague, Prague, Czech Republic

11:30–11:50 L56 — TOWARDS AUTOMATION OF HIGH THROUGHPUT ANALYSIS OF PESTICIDES IN FEED
Ederina Ninga, National Food Institute, Technical University of Denmark, Lyngby, Denmark

11:50–12:10 L57 — DETERMINATION OF AMINOGLYCOSIDE ANTIBIOTICS IN FEED AT CROSS-CONTAMINATION LEVELS – UNEXPECTED CHALLENGES
Carlos Gonçalves, European Commission, Joint Research Centre (JRC), Geel, Belgium

ORAL SESSIONS

12:10–12:30	L58	**FEASIBILITY OF COATED BLADE SPRAY AS A SMART SAMPLING APPROACH FOR TESTING OF RESIDUES IN FOOD** *Ane Arrizabalaga Larrañaga*, *Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands*
12:30–13:30		Lunch

* Young scientists´ presentation

September 8, 2022

THURSDAY, September 8, 2022

SESSIONS 9 & 10 & 11, *in parallel*

| 11:00-12:30 Don Giovanni 3 | **SESSION 11:** WORKSHOP on **METROFOOD-RI: Metrology in food and nutrition** | METRO FOOD — INFRASTRUCTURE FOR PROMOTING METROLOGY IN FOOD AND NUTRITION |

11:00-11:20	L59	ANALYTICAL QUALITY ASSURANCE AND METROLOGICAL TRACEABILITY OF MEASUREMENT DATA IN PROCESS ANALYTICAL TECHNOLOGIES FOR FOOD CONTROL ASSESSMENT *Federica Bianchi, University of Parma, Parma, Italy*
11:20-11:40	L60	STABLE ISOTOPE METROLOGY IN FOOD AUTHENTICITY AND TRACEABILITY *Nives Ogrinc, Jožef Stefan Institute, Ljubljana, Slovenia*
11:40-12:00	L61	CHALLENGES IN FOOD ADDITIVES ANALYSIS FOR ENSURING TRANSPARENCY IN THE FOOD CHAIN *Joris Van Loco, Sciensano, Brussels, Belgium*
12:00-12:20	L62	TOWARDS AI-DRIVEN FOOD SCIENCE AND SOCIETY: OPPORTUNITIES AND CHALLENGES *Tome Eftimov, Jožef Stefan Institute, Ljubljana, Slovenia*
12:20-12:30	L63	ANALYTICAL EVALUATION OF SAFETY AND QUALITY OF FOOD BYPRODUCTS IN THE CONTEXT OF CIRCULAR FOOD SYSTEM *Gabriel Mustatea, National R&D Institute for Food Bioresources - IBA Bucharest, Bucharest, Romania*
10:30-11:00		**Coffee Break /** EXHIBITION

POSTER SESSIONS

THURSDAY, September 8, 2022

13:00–16:00

Don Pedro &
Leporello &
Foyers &
Tent

POSTER SESSION II

Donna Anna
& Donna
Elvira &
Zerlinda &
Don Ottavio
& Massetto
halls

EXHIBITION

POSTER SESSION II:

Distribution of posters into individual sessions and categories will be announced on August 19, 2022.

15:30–16:00   **Coffee break**

September 8, 2022

THURSDAY, September 8, 2022

| 13:30-14:15 | VENDOR SEMINARS |

Don Giovanni 1

Mycotoxins Risk Management: Industrial Solutions for On-site Testing

eurofins | Technologies

Don Giovanni 2

Elemental and Isotopic Analysis: Solutions for Food Authenticity, Quality and Safety

ThermoFisher SCIENTIFIC

Don Giovanni 3

Application of Trapped Ion Mobility Mass Spectrometry for Food Research

BRUKER

| 14:45-15:30 | VENDOR SEMINARS |

Don Giovanni 1

Analysis of Alternative and Conventional Proteins

Agilent
Trusted Answers

Don Giovanni 2

Ways to Master your Pooling Testing Approach for Food Pathogen Testing

ThermoFisher SCIENTIFIC

Don Giovanni 3

Make it your Analysis with Waters' Solutions for Food Safety!

Application Solutions for Natural Toxins, Anionic Polar Pesticide, and PFAS

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

ORAL SESSIONS

THURSDAY, September 8, 2022

SESSIONS 14 & 15, *in parallel*

16:00–18:00 Don Giovanni 1 & 2		**SESSION 14: Food Authenticity & Fraud II**
16:00–16:20	L64	**DURUM WHEAT ORIGIN BY MEANS OF COMBINED NOT CONVENTIONAL ISOTOPES AND MULTI-ELEMENTAL ANALYSIS** *Michele Suman, Barilla SpA - Analytical Food Science, Parma, Italy*
16:20–16:30	L65*	**THE GERMAN PURITY LAW – METABOLITES OF WHEAT, CORN AND RICE IN BEER** *Stefan Pieczonka, Technical University of Munich, Freising, Germany*
16:30–16:50	L66	**HS-GC-IMS RAPID FINGERPRINTING OF FOODS: UNTARGETED AND TARGETED ROUTES APPLIED TO QUALITY, AUTHENTICITY, AND SAFETY ASSESSMENT** *Marco Arlorio, Dipartimento di Scienze del Farmaco - Università del Piemonte Orientale "Amedeo Avogadro", Novara, Italy*
16:50–17:10	L67	**DETECTION OF MECHANICALLY SEPARATED MEAT IN SAUSAGE AND COLD MEAT BY "TARGETED" LC-MS/MS ANALYSIS** *Stefan Wittke, University of Applied Sciences Bremerhaven, Bremerhaven, Germany*
17:10–17:30	L68	**DISCRIMINATION OF ITALIAN GRAPE MUSTS USING NMR METABOLOMICS** *Pavel Solovyev, Edmund Mach Foundation, San Michele All'adige, Italy*
17:30–17:40	L69*	**IMPLEMENTATION OF SPME-GC–HRMS METHOD FOR DETECTING ADULTERATION OF SAFFRON BY MIXING IT WITH OTHER PLANT SPECIES** *Maria Filatova, University of Chemistry and Technology Prague, Prague, Czech Republic*
17:40–18:00	L70	**DNA METABARCODING FOR THE SIMULTANEOUS DETECTION OF INSECTS IN FOODS** *Rupert Hochegger, Austrian Agency for Health and Food Safety (AGES), Vienna, Austria*
From 20:00		**Symposium Dinner** (Municipal House, Prague Old Town)

* Young scientists´ presentation

September 8, 2022

THURSDAY, September 8, 2022

SESSIONS 14 & 15, *in parallel*

16:00–18:00 Don Giovanni 3		**SESSION 15:** TUTORIAL on **Data quality and smart data handling in food analysis**
16:00–16:40	L71	CURRENT APPROACHES TO DATA HANDLING IN METABOLOMICS: FROM BASIC TO ADVANCED CONCEPTS *Vit Kosek, University of Chemistry and Technology Prague, Prague, Czech Republic*
16:40–17:00	L72	DATA FUSION – AN EFFECTIVE TOOL FOR THE DEVELOPMENT OF RECOGNITION MODELS FOR HONEY AUTHENTICATION *Dana Alina Magdas, National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania*
17:0–17:20	L73	RAPID EVAPORATIVE IONISATION MASS SPECTROMETRY BASED – NOVEL MACHINE LEARNING VERSUS ESTABLISHED CHEMOMETRIC ANALYSIS FOR FISH FRAUD DETECTION *Nicholas Birse, Queen's University Belfast, Belfast, United Kingdom*
17:20–17:30	L74*	VALIDATION OF LONG-TERM STABILITY OF CHEMOMETRIC MODELS EMPLOYED FOR VARIETAL AUTHENTICATION OF WINE *Leos Uttl, University of Chemistry and Technology Prague, Prague, Czech Republic*
17:30–17:40	L75*	EXPLORATION OF HIDDEN AUTHENTICATION PATTERNS IN NATIONAL FOOD CONTROL DATA *Amelie Wilde, National Food Institute, Technical University of Denmark, Lyngby, Denmark*
17:40–17:50	L76*	MONITORING FOOD ADDITIVES AND IMPACT OF "CLEAN" LABELLING: WHEN THE TRENDS MATTER! *Salvatore Ciano, Sciensano, Service Organic Contaminants and Additives, Elsene, Belgium*
17:50–18:00		**Discussion**
From 20:00		**Symposium Dinner** (Municipal House, Prague Old Town)

* Young scientists´ presentation

ORAL SESSIONS

SESSIONS 16 & 17, *in parallel*

9:00–11:00 Don Giovanni 1 & 2	**SESSION 16: Food contaminants II**
9:00–9:20 **L77**	**ANALYSIS OF PFAS IN FOOD ITEMS, FOOD PACKAGING MATERIALS, HUMAN MILK AND SERUM** *Jacob de Boer, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands*
9:20–9:40 **L78**	**PARTS PER TRILLION LEVELS OF PFAS IN FOOD** *Xanthippe Theurillat, Nestlé Research, Lausanne, Switzerland*
9:40–10:00 **L79**	**ENHANCED FOOD SAFETY AND QUALITY ASSESSMENT THROUGH HYPHENATED AND AUTOMATED SAMPLE INTRODUCTION COUPLED TO GC×GC** *Giorgia Purcaro, Gembloux Agro-Bio Tech, Univeristy of Liege, Gembloux, Belgium*
10:00–10:20 **L80**	**NON-VOLATILE SUBSTANCES EXTRACTIBLE FROM INNER COATINGS OF METALLIC CANS FROM THE FRENCH MARKET AND THEIR OCCURRENCE IN THE CANNED VEGETABLES** *Ronan Cariou, Oniris, French National Research Institute for Agriculture, Food and Environment (INRAE), LABERCA, Nantes, France*
10:20–10:40 **L81**	**BISPHENOL A BY LC-MS/MS: A CHALLENGING INCREASE IN SENSITIVITY** *Jörg Konetzki, Institut Kirchhoff Berlin GmbH & Mérieux NutriSciences Company, Berlin, Germany*
10:40–11:00 **L82**	**ANALYTICAL STRATEGIES IN THE EDIBLE OIL INDUSTRY TO CONTROL MOSH-MOAH CONTAMINATION** *Carlos Martin-Alberca, Cargill Global Edible Oils Solutions, Botlek - Rotterdam, The Netherlands*
11:00–11:30	**Coffee break / EXHIBITION**

September 9, 2022

FRIDAY, September 9, 2022

SESSIONS 16 & 17, *in parallel*

9:00–11:00 Don Giovanni 3	**SESSION 17: Omics approaches in food analysis**

9:00–9:20	L83	**FOODOMICS & THE HOLOMETABOLOME: HIGH RESOLUTION TAILORED METABOLOMICS IN THE FOOD-NUTRITION-HEALTH CHEMICAL CONTINUUM** *Philippe Schmitt-Kopplin, Hellmholtz Munich / Technical University Munich, Munich, Germany*
9:20–9:40	L84	**GUT MICROBIAL METABOLITES: THE COMBINATION OF LC-(HR)MS TECHNIQUES TO ELUCIDATE THE BREAKDOWN OF APPLE (POLY)PHENOLS** *Josep Rubert, Wageningen University & Research, Wageningen, The Netherlands*
9:40–10:00	L85	**MODULATION OF STAPHYLOCOCCUS AUREUS MULTIDRUG RESISTANCE BY NATURAL COMPOUNDS AND THEIR DERIVATIVES** *Jitka Viktorova, University of Chemistry and Technology Prague, Prague, Czech Republic*
10:00–10:10	L86*	**POST TRANSLATIONAL MODIFICATION (PTM) PROFILING OF BOVINE WHEY PROTEINS BY A SEMI-UNTARGETED SHOTGUN PROTEOMIC APPROACH** *Andreas Mauser, Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany*
10:10–10:30	L87	**NON-TARGETED VOLATILOMICS AND MACHINE LEARNING – FINDING FEATURES AND GETTING THE MOST OUT OF YOUR GC-IMS DATA** *Philipp Weller, Mannheim University of Applied Sciences, Mannheim, Germany*
10:30–10:50	L88	**AN INNOVATIVE TOP-DOWN METHODOLOGY BASED ON METABOLOMICS APPROACHES FOR A NEW UNDERSTANDING ON THE ROLE OF PLANT BIOACTIVE PHENOLIC COMPOUNDS. LOOKING FOR COMMON CIRCULATING METABOLITES BASED ON 5 BIOACTIVE PLANT MATRICES** *Álvaro Fernández-Ochoa, University of Granada, Granada, Spain*
10:50–11:00	L89*	**MICROALGAE AS SUSTAINABLE SOLUTIONS FOR LIPID PRODUCTION: FROM LIPIDOMICS ANALYSIS TO BIOACTIVITY SCREENING** *Natalia Castejon, University of Vienna, Vienna, Austria*
11:00–11:30	**Coffee break / EXHIBITION**

* Young scientists´ presentation

ORAL SESSIONS

FRIDAY, September 9, 2022

11:30–12:50 Don Giovanni hall		**SESSION 19: Food analysis beyond Imagination**
11:30–12:00	L90	**EU POLICY ON CONTAMINANTS IN FOOD: OUTLOOK AND ANALYTICAL CHALLENGES** *Frans Verstraete, European Commission, DG Health and Food Safety, Brussels, Belgium*
12:00–12:20	L91	**PERSISTENT AND MOBILE INDUSTRIAL POLLUTANTS IN A CIRCULAR FOOD CHAIN: AN OVERLOOKED PROBLEM?** *Stefan van Leeuwen, Wageningen Food Safety Research, Wageningen University & Research, Wageningen, The Netherlands*
12:20–12:35	L92*	**GOING ´-OMICS´ TO UNDERSTAND PLANT RESPONSE TO MULTIPLE CHEMICALS** *Laura Righetti, University of Parma, Parma, Italy*
12:35–12:50	L93	**SUMMARY OF RAFA 2022 HIGHLIGHTS** *Michele Suman, Barilla Advanced Research Laboratories, Parma, Italy*
12:50–13:15 Don Giovanni hall		**RAFA 2022 poster award, sponsored poster awards** **Announcement of the 11th RAFA 2024, Prague, Czech Republic**
13:15–13:30 Don Giovanni hall		**CLOSING ADDRESS**

* Young scientists´ presentation