

Detailed Program

17 th June	
8:30-9:00	Registration
9:00-9:30	Opening Ceremony
Plenary session 1 – Chairperson: Marco Arlorio	
9:30-10:10	Livia Sarkadi - "Peter Czedik-Eysenberg Lecture". The role of food chemistry in the development of food science. History and future challenge"
Room 1 – Functional Foods – Chairperson: Tanja Cirkovic Velickovic	
10:15-10:30	Yan Wang - Prenylated flavonoids derived from <i>Flemingia philippinensis</i> display potent bacterial neuraminidase inhibition activities
10:30-10:45	Filipa Mandim - Influence of the harvest stage on the phenolic composition and bioactive properties of <i>Cynara cardunculus</i> L. var. <i>altilis</i> heads
10:45-11:00	Laura Mateo-Vivaracho - Study of functional properties of wild and cultivated edible mushroom powder
Room 2 – Food Safety – Chairperson: Vieno Piironen	
10:15-10:30	Sonia Losada-Barreiro - The antioxidant efficiency in O/W emulsions can be controlled by modulating antioxidant interfacial concentrations
10:30-10:45	Maria S. Silva Lopes - Mycotoxin content of <i>Salicornia</i> L. in Portugal
10:45-11:00	Caroline Douny - Development of an analytical method for the simultaneous measurement of 10 biogenic amines in meat. Application to Beninese grilled pork samples.
Room 3 – Food Sustainability – Chairperson: Victor de Freitas	
10:15-10:30	Rúbia Corrêa - Chemical composition and bioactivities of Juçara fruit bio-residues, a promising source of valuable molecules
10:30-10:45	Elisabete Coelho - Antimicrobial potential of essential oils from agro-industrial by-products as possible feed ingredients
10:45-11:00	Tassadit Benhammouche - Enhancing Proteins extraction from <i>Moringa Oleifera</i> leaves: From conventional methods to a fully integrate process
11:00-11:45	Coffee break / posters session
Room 1 – Functional Foods – Chairperson: José Baptista	
11:45-12:00	Franks Kamgang Nzekoue - Development of a new functional dairy product enriched in phytosterols: the importance of food chemistry
12:0-12:15	Elisabete Gonçalves - Administration of <i>Castanea sativa</i> flowers extract in Wistar rats
12:15-12:30	Paulina Opyd- Comparative effects of dietary hempseeds and hempseed oil on liver functions and lipid metabolism in genetically obese rats

12:30-12:45 Maria Rita Martins - Acorn Flour as bioactive compounds source in gluten free bread

Room 2 – Food Safety – Chairperson: Reto Battaglia

11:45-12:00 Zuzana Ciesarová - Health promoting foods with sea buckthorn: more benefits, less acrylamide

12:0-12:15 Rebeca Cruz- -Is it safe to eat seafood? A case study of flame-retardants

12:15-12:30 Iolanda Nicolau-Lapeña - Selecting alternatives to chlorine for strawberry sanitation while maintaining nutritional and physicochemical quality

12:30-12:45 Lieselot Hemeryck - Investigation of diet-related DNA adduct formation by means of DNA adductomics

Room 3 – Food Sustainability – Chairperson: Susana Cardoso

11:45-12:00 Kandi Sridhar - Kinetics modeling and effect of drying temperature on new commercial grape 'Kyoho' skin: Evaluation for functional and antioxidant properties

12:0-12:15 Franziska Hanschen - Stability of glucosinolate hydrolysis products and the identification of novel compounds in foods

12:15-12:30 Rossana Cardoso - Gamma irradiation preserves nutritional and chemical composition of *Agaricus bisporus* Portobello

12:30-12:45 Thi-Van-Linh Nguyen - Effects of Drying Conditions in Low-temperature Microwave-assisted Drying on Bioactive Compounds and Antioxidant Activity of Dehydrated Bitter Melon Slices (*Momordica charantia* L.)

Keynote 1 – Chairperson: Fernando Ramos

12:45-13:15 **Nicoletta Pellegrini** - Food design and low-calorie intake

13:15-14:30 *Lunch break*

Plenary session 2 – Chairperson: Tanja Dcirkovic Velickovic

14:30-15:10 **Isabel CFR Ferreira** - Functionalizing food with natural bioactive ingredients

Room 1 – Functional Foods – Chairperson: Nadia Mulinacci

15:15–15:30 Bartosz Fotschki - The effect of diets supplemented with hemp and poppy seed oils on the development of obesity-related disorders in Zucker rats

15:30-15:45 Oludemi Taofiq - Enhanced extraction of ergosterol from *Pleurotus ostreatus* using response surface methodology (RSM)

15:45-16:00 Tuba Esatbeyoglu - Biological activities of stilbenoids in vitro

16:00-16:15 Giovanni Caprioli - Simultaneous quantification of 30 different bioactive compounds including polyphenols in spent coffee ground and coffee silverskin by HPLC-MS/MS triple quadrupole

Room 2 – Food Composition – Chairperson: Roberto Larcher

15:15–15:30 Antonio Salatino - How diverse is Brazilian propolis?

15:30-15:45	Iris Tauber - Flavour analysis of an old Austrian apple variety at different ripening stages
15:45-16:00	Fernando Tateo - IRMS characterization of the saffron water-soluble fraction for the discrimination of the origin.
16:00-16:15	Carmen Gonzalez Sotelo - SEA-TRACES – Sustainable Seafood Production using Authenticity and Traceability tools
16:15-16:30	Christoph Walkner - Food authentication by rare earth element labelling and detection using solution based and laser ablation ICP-MS

Room 3 – Food Sustainability – Chairperson: Daniel Alberto Wunderlin

15:15–15:30	Ana Rita Silva - Agrocybe cylindracea bio-residues: a sustainable source of ergosterol-rich bioactive extracts
15:30-15:45	Vera Barbosa - Tailored farmed fish iodine and selenium fortification with naturally enriched diets: gilthead seabream (<i>Sparus aurata</i>) and common carp (<i>Cyprinus carpio</i>) as case studies
15:45-16:00	Steve Huysman - At-line boar taint classification by means of Rapid Evaporative Ionisation Mass Spectrometry (REIMS)
16:00-16:15	Ana Luísa Fernandes - Anthocyanins Thermostability Modulation Through the Fortification with Pectic Polysaccharides Extracts
16:15-16:30	Filipa Pimentel - Simulated gastrointestinal digestion increases the antioxidant activity of <i>Porphyra dioica</i>

16:30-16:45 **Coffee break and poster session**

Room 1 – Functional Foods – Chairperson: Nicolas Sommerer

17:15-17:30	Małgorzata Starowicz - Influence of heat treatment on biological compounds profile and antioxidant activity of herbs and spices and cookies with their contribution
17:30-17:45	Ecem Evrim Çelik - Determination of the Interactions between Bound and Free Antioxidants Naturally Occurring in Foods
17:45-18:00	Bianca Albuquerque - Composition in anthocyanins and bioactive properties of jabuticaba bioresidues
18:00-18:15	Vaida Kitryte - Multistep fractionation of blackberry (<i>Rubus fruticosus</i> L.) pomace into high value functional ingredients
18:15-18:30	Carlos Gomes - Valorisation of a Portuguese endemic species as a potential functional food: <i>Thymus carnosus</i> Boiss.

Room 2 – Food Composition and Authenticity – Chairperson: Sauro Vittori

17:15-17:30	Helmut Mayer - Genetic variants of bovine milk proteins – “A2 milk” authentication using isoelectric focusing and PCR
17:30-17:45	Jing Zhang - Comparison of fatty acids and triglycerides profiles among big eye tuna (<i>Thunnus obesus</i>), Atlantic salmon (<i>Salmo salar</i>) and bighead carp (<i>Aristichthys nobilis</i>) heads

- 17:45-18:00 Daniel Wunderlin - Authenticity of Complex Foods: A Targeted Metabolomics Study of Authenticity Markers of Chía, Flax and Sesame Seeds in Bakery Products.
- 18:00-18:15 Hanna Manninen - Linking non-volatile taste compounds with the sensory profile of Nordic wild mushrooms
- 18:15-18:30 Tatiana Vilela - The Effect of Dissociating Agents on the Dispersion of a Grated Cheese – Conclusions for its Structure-Holding Interactions

Room 3 – Food Processing – Chairperson: Jorge Saraiva

- 17:15-17:30 Stephanie Treibmann - Dicarbonyl Scavenging by Creatine in Food and in vivo
- 17:30-17:45 Maria Gabriela Lima - Shiitake mushroom (*Lentinola edodes*) spread creams
- 17:45-18:00 Alexandra Fatouros - Potential browning precursors within uronic acid reaction-systems
- 18:00-18:15 Ítala Marx - Monitoring physicochemical and sensory attributes during debittering of stoned green olives
- 18:15-18:30 Floriane Doudiès - Impact of low temperature on interactions and cohesiveness of casein micelles dispersions

Keynote 2 – Chairperson: Karel Cejpek

- 18:30-19:00 **Lilia Ahrné** - Customised dairy products by gentle processing
- 19:30 *Welcome reception*

18th June

Plenary session 3 – Chairperson: Livia Simon-Sarkadi

9:00-9:40 **Luciano Navarini** - New trends in Coffee Research: a Chemical Perspective

Room 1 – Food Composition and Authenticity – Chairperson: Isabel Revilla

- 9:45–10:00 Cemile Yilmaz - Neuroactive Compounds in Fermented Foods
- 10:00-10:15 Lorenzo Cecchi - Volatile fraction by HS-SPME-GC-MS and sensory evaluation of more than 1200 Virgin Olive Oil samples: methods to support Panel Test in Virgin Olive Oil classification
- 10:15-10:30 Thelma Machado - Blockchain technology for the management of food sciences researches

Room 2 – Food Processing – Chairperson: Dulcineia Ferreira Wessel

- 9:45–10:00 Małgorzata Wronkowska - Bioaccessible of D-chiro-inositol from water biscuits formulated from common buckwheat flours fermented by lactic acid bacteria or fungi
- 10:00-10:15 Sandra Grebenteuch - Thermal deterioration of ω -3 and ω -6 fatty acids under food processing conditions
- 10:15-10:30 Michael Hellwig - Protein oxidation in food: Focus on individual structures
- 10:30-10:45 Maria Serrano - Effect of drying methods on the properties of mixtures of aromatic plants for gastronomy using different encapsulated agents

Room 3 – Food Packaging – Chairperson: Yildirim Selçuk

- 9:45–10:00 Paula Ferreira - BIOFOODPACK - Biocomposite Packaging for Active Preservation of Food: the project and the progresses
- 10:00-10:15 Ana Machado Silva - Innovation in food packaging: a retailer's perspective
- 10:15-10:30 Gianni Sagratini - GRAFOOD: 'Active GRAPhene based FOOD packaging system for a modern society'
- 10:30-10:45 Ana Barra - Development of clay-supported graphene materials for electrical conductive food packaging applications

10:45-11:30 *Coffee break / posters session*

Room 1 – Food Composition and Authenticity – Chairperson: Ewa Sikorska

- 11:30-11:45 Diletta Balli - Optimized hydrolytic methods by response surface methodology to avoid underestimation of phenols in cereals: the case of millet.
- 11:45-12:00 Antónia Nunes - Olive pomace: a multidimensional approach focusing zero wastes
- 12:00-12:15 Juhász Réka - Comparison of dietary fiber enriched cookies
- 12:15-12:30 Claudia Passos - Role of espresso and instant coffee melanoidins on chlorogenic acids and caffeine adsorption and potential immunomodulation effects

Room 2 – Food Processing – Chairperson: Hans-Jacob Skarpeid

- 11:30-11:45 Maria João Carvalho - Repitching impact on sugars and amino acids uptake by a lager yeast
- 11:45-12:00 Clemens Kanzler - Maillard induced color formation based on intermediates with activated methylene groups
- 12:00-12:15 Sónia Ferreira - Broccoli by-products as ingredients rich in bioactive compounds after microwave assisted dehydration
- 12:15-12:30 Andreia Silva - From maize flour to bread: changes in hydroxycinnamic acid and their derivatives after processing

Room 3 – Food Packaging – Chairperson: Paula Ferreira

- 11:30-11:45 Zélia Ribeiro Alves - Exploring the zinc oxide – reduced graphene oxide as an active composite in alginate films for food packaging application
- 11:45-12:00 Carla Barbosa - Effect of MAP (high CO₂%) on quality of fresh-cut non-climacteric vegetables in light of PCA with predictive biplots
- 12:00-12:15 Duarte Rego - BioFoodPack Pulsed Electric Fields: in-package application for microbial inactivation for food products
- 12:15-12:30 Gonçalves Idalina - Agrofood byproducts as feedstocks for active food packaging materials

Keynote 3 – Chairperson: Zuzana Ciesarova

- 12:30-13:00 **Saskia Van Ruth** - Smelling fraud: sniffing spices
- 13:00-14:30 *Lunch break*
- 14:00-14:25 Vendors seminar – WATERS
- Euan Ross - Determination of acrylamide in processed foods by LC-MS/MS

Plenary session 4 – Chairperson: Hans-Jacob Skarpeid

- 14:30-15:10 **Jesus Simal Gandara** - What to do to fit our food system for the future?

Room 1 – Functional Foods – Chairperson: Thelma B. Machado

- 15:15-15:30 Cláudia Nunes - Structural analysis of *Nannochloropsis oculata* polysaccharides and its potential as functional food
- 15:30-15:45 Sónia Barroso - Response surface optimization of Phycobiliprotein pigments extraction from *Gracilaria gracilis* and application in pancakes
- 15:45-16:00 Giuseppina Crescente - Hemp Seed: an unthinkable source of bioactive compounds
- 16:15-16:30 Sheila Oliveira-Alves - Phenolic acids from baru nuts target cell proliferation in a 3D cell model of colorectal

Room 2 – Food Composition and Authenticity – Chairperson: Reşat Apak

- 15:15-15:30 José Figueira - New analytical approach, NTME/GC-MS, as a powerful strategy for establishment of the volatome profile, an alternative to SPME/GC-MS

- 15:30-15:45 Carolina Camacho - Carotenoids and colour of wild sea urchin (*Paracentrotus lividus*) gonads
- 15:45-16:00 Ewa Sikorska - Optical spectroscopy and chemometrics as a tool for quality and authenticity assessment of apple fruits and juices
- 16:00-16:15 Rafael Sprea - A comprehensive study on the nutritional, chemical and bioactive properties of lovage (*Levisticum officinale* W.D.J. Koch)
- 16:15-16:30 Marijana Ačanski - Hierarchical clustering of cold-pressed pumpkin seed oil samples from various sources

Room 3 – Food Safety – Chairperson: Giovanni Caprioli

- 15:15-15:30 Bienvenida Gilbert-Lopez - Liquid chromatography/mass spectrometry and dielectric barrier discharge ionization (DBDI): a versatile tool for pesticide analysis in food
- 15:30-15:45 Tiziana Nardin - Glycoalkaloid profiles of herbal infusion using neutral loss - high resolution mass spectrometry
- 15:45-16:00 Carlos Cardoso - Algal consumption: weighing benefits against risks
- 16:00-16:15 Rosa Pilolli - Multidisciplinary characterization of selected wheat genotypes and in-silico risk assessment of their potential toxicity for celiac disease patients
- 16:15-16:30 Sarah Azinheiro - Comparative study of multiplex real-time Recombinase Polymerase Amplification and ISO 11290-1 methods for the detection of *Listeria monocytogenes* in dairy products

16:30-17:15 **Coffee break and poster session**

Room 1 – Functional Foods – Chairperson: Franziska S. Hanschen

- 17:15-17:30 Andre Horta - Extraction optimization of phenolic compounds from *Fucus spiralis*
- 17:30-17:45 Yibin Li - Effect of Different Encapsulating Agent Combinations on Physicochemical Properties and Stability of Microcapsules Loaded with Phenolics of Plum (*Prunus salicina* Lindl.)
- 17:45-18:00 Débora A. C. Campos - Pineapple by-products integrated valorisation towards functional foods

Room 2 – Food Processing – Chairperson: Michael Hellwig

- 17:15-17:30 Custódio Lobo Roriz - Dragon fruits as an alternative source of colorants: evaluation of antibacterial activity and colouring capacity
- 17:30-17:45 Baoru Yang - Impact of Bioprocessing on Bioactive and Flavour Compounds of Berry Products
- 17:45-18:00 Ma. Michelle Lopez - Flavonoid enrichment of fresh-cut apple through osmotic dehydration

Room 3 – Food Safety – Chairperson: António Peres

- 17:15-17:30 Tomas Lafarga - Potential of thermosonication as an alternative to chlorine disinfection in strawberries inoculated with *Listeria innocua*
- 17:30-17:45 Susana Bernardino - Use of a seaweed-enriched kefir whey in the development of edible food coatings
- 17:45-18:00 Kristina Kukurova - Variability of L-asparagine level in sea buckthorn berries and acrylamide formation in novel cereal products

Keynote 4 – Chairperson: Joana Amaral

18:00-18:30 **Yildirim Selçuk** - Active food packaging

20:00 *Congress dinner*

19th June

Plenary session 5 – Chairperson: Michael Murkovic

9:00-9:40 **Gaud Dervilly-Pinel** - An ever-increased confidence in chemical food safety driven by latest analytical innovation

Room 1 – Functional Foods – Chairperson: José Câmara

9:45–10:00 Mafalda A.M.M. Silva - Functional features of two varieties of *Cucumis melo* L.: pulp and by-products

10:00-10:15 Maja Jež - Functional properties of tomatoes in the aspect of inhibition of advanced glycation end products formation and activity of antiangiotensine and antiacetylcholinesterase

10:15-10:30 Ana Margarida Faustino - Goat Probiotic Whey Cheese: Development and Nutritional Value

10:30-10:45 Maria Cermenó - Generation and characterisation of phenolic rich extracts from brewers' spent grain with hypotensive properties

Room 2 – Food Composition and Authenticity – Chairperson: Thelma B. Machado

9:45–10:00 Diana Melo - Trends in human diets: Seeds as a source of fibre

10:00-10:15 Nicolas Sommerer - Linking cocoa polyphenol composition to chocolate quality with Average-Mass-Spectra fingerprints

10:15-10:30 Mustafa Reşat Apak - Criteria for selection of antioxidant capacity assays for food antioxidants: Evaluation of CUPRAC, FRAP, Folin-Ciocalteu, ORAC, ABTS and DPPH assays

Room 3 – Food Processing – Chairperson: Małgorzata Wronkowska

9:45–10:00 Csilla Benedek - Effect of sweetener and storage on formation of compositional and sensory properties of jams

10:00-10:15 Pedro António Fernandes - Flavan-3-ols in apple pomace: role of their interactions with arabinans

10:15-10:30 Tanja Seppälä - Quality of protein concentrates isolated by two different methods from Baltic herring (*Clupea harengus membras*) and roach (*Rutilus rutilus*)

10:30-10:45 Susana Soares - Interaction of human salivary proteins with food polyphenols

10:45-11:30 **Coffee break / posters session**

Room 1 – Functional Foods – Chairperson: Manuel António Coimbra

11:30-11:45 Priscilla Figueira - In vitro investigation of the health promoting benefits from different food matrices: From extraction to characterization and in vitro evaluation

11:45-12:00 Henghui Zhang - Preparation and Purification of Antioxidative Peptides Generated from Enzymatic Hydrolysates of Perilla Seed Meal

12:00-12:15 Ana Rita Circuncisão - In vitro bioaccessibility and bioavailability of minerals and pigments from macroalgae-fortified frankfurters

Room 2 – Food Safety – Chairperson: Vaida Kitryte

- 11:30-11:45 Ly Tuan-Kiet - Matrix effect in multi-pesticide residues analysis: the complexity in tea commodities
- 11:45-12:00 João Reboleira - I.FILM: Multifunctional films for application in active and smart packages
- 12:00-12:15 Luiza Kijewska - Depletion of methylene blue from muscles of rainbow trout (*Oncorhynchus mykiss*)

Room 3 – Food Processing – Chairperson: Michael Murkovic

- 11:30-11:45 Antia Gonzalez Pereira - Extraction of phenolic compounds by high hydrostatic pressure from eight edible algae species from the North-West coast of Spain: Process modelling and optimization
- 11:45-12:00 Elisabete Alexandre - Pomegranate peel extraction optimization and characterization and their inclusion in carrot juice improving their safety and quality

Keynote 5 – Chairperson: Baoru Yang

- 12:30-13:00 **Ricardo Calado** - The geographic origin of seafood - Why should we care about traceability?
- 13:00-14:30 Lunch break

Plenary session 6 – Chairperson: Vieno Piironen

- 14:30-15:10 **Barbara Burlingame** - Achieving sustainable diets: the fundamental role of the food chemist

Keynote 6 – Chairperson: Małgorzata Starowicz

- 15:10-15:40 **Keynote 6**
Richard FitzGerald - Marine protein-derived biofunctional peptides
- 15:40 *Closing ceremony and awards*
- 16:15 *Farewell party*