

CHEM2023 Oral Program

10th Oct 2023

11:00 - 13:00

Registration
Congress Foyer

13:00 - 15:15

Plenary Session 1 & Welcome and Opening Presentations

Saal 1 & 2
Paul Finglas, Dongxiao Sun-Waterhouse
Session title: Insights into components in foods

13:00-13:15 - Opening Remarks & Introduction to Food Chemistry, Inez Van Korlaar, Senior Publisher, Elsevier BV, Netherlands

IN01 - Botanical authentication of plant food supplements: current trends and challenges, Joana S. Amaral, Polytechnic Institute of Bragança, Portugal

IN02 - Multidimensional spectroscopy unravels the nature and intensity of polysaccharide-polyphenol interactions, Adriana M. Aguilar-Torres, Aarhus University Department of Food Science, Denmark

IN03 - Advanced statistical analysis as an essential tool in the multiparametric evaluation of natural matrices, Joao Barreira, Polytechnic Institute of Bragança, Portugal

IN04 - Quantifying protein-polyphenol adducts in foods: insights from synthesis of standards and LC-MS/MS analysis, Mahesha M. Poojary, Department of Food Science, University of Copenhagen, Denmark

13:15 - 13:45 [IN01]

Botanical authentication of plant food supplements: current trends and challenges

Joana S. Amaral
Instituto Politécnico de Bragança, Portugal

13:45 - 14:15 [IN02]

Multidimensional spectroscopy unravels the nature and intensity of polysaccharide-polyphenol interactions

Adriana M. Aguilar-Torres¹, Jacopo Catalano², Banny S.B. Correia¹, Ivan M. Lopez-Rodulfo¹, Mario Martinez-Martinez¹
¹Aarhus University, Aarhus, Denmark. ²Aarhus University, Denmark

14:15 - 14:45 [IN03]

Advanced statistical analysis as an essential tool in the multiparametric evaluation of natural matrices

Joao Barreira
Polytechnic Institute of Bragança, Portugal

14:45 - 15:15 [IN04]

Quantifying protein-polyphenol adducts in foods: insights from synthesis of standards and LC-MS/MS analysis

Mahesha M. Poojary¹, Michael Hellwig², Thomas Henle², Marianne N. Lund¹
¹University of Copenhagen, Denmark. ²Technische Universität Dresden, Germany

15:15 - 15:45

Coffee Break
Piano Bar + Salons Rotterdam and Petersburg

15:45 - 17:45

Plenary Session 1 (contd.)

Saal 1 & 2
Paul Finglas, Dongxiao Sun-Waterhouse
IN05 - A perspective on the validity of using Jones factors to calculate protein content, Hettie C Schönfeldt Co-director: ARUA CoE, Sustainable Food Systems Uni Pretoria (ZA), South Africa

IN06 - Phytosterols: Sources, Applications, New Product Developments, and Cardioprotective Effects, Cesarettin Alasalvar, TÜBİTAK Marmara Research Centre Life Sciences, Turkey

IN07 - Phenolics of pulse hulls and their roles in modulating oxidative stress, inflammation and intestinal health, Rong Tsao, Agriculture and Agri-Food Canada Guelph Research and Development Centre, Canada

IN08 - Honey: an old food and traditional medicine re-evaluated as a novel functional product, Maurizio Battino, Polytechnic University of Marche Department of Specialised Clinical Sciences and Odontostomatology, Italy

15:45 - 16:15 [IN05]

A perspective on the validity of using Jones factors to calculate protein content

Hettie C Schönfeldt, Beulah Pretorius

University of Pretoria, Pretoria, South Africa

16:15 - 16:45 [IN06]

Phytosterols: Sources, Applications, New Product Developments, and Cardioprotective Effects

Cesarettin Alasalvar

Life Sciences, TÜBİTAK Marmara Research Center, Turkey

16:45 - 17:15 [IN07]

Phenolics of pulse hulls and their roles in modulating oxidative stress, inflammation and intestinal health

Rong Tsao

Agriculture and Agri-Food Canada Guelph Research and Development Centre, Guelph, ON, Canada

17:15 - 17:45 [IN08]

Honey: an old food and traditional medicine re-evaluated as a novel functional product

Maurizio Battino¹, Francesca Giampieri²

¹Polytechnic University of Marche, Ancona, Italy. ²European University of the Atlantic, Santander, Spain

17:45 - 18:45

Poster Session 1 & Welcome Drinks Reception

Piano Bar + Salons Rotterdam and Petersburg

08:00 - 10:30

Plenary Session 2: New, rapid, or green methods for food chemistry

Saal 1 & 2

Siân Astley, Dimitris Charalampopoulos

IN09 - Applications of Nanotechnology in Sensing, Separations, Agriculture and Therapies, Geoff Waterhouse, University of Auckland, New Zealand

IN10 - Metrology in food analysis: Case for sensors, Isabel Castanheira, National Institute of Health Doctor Ricardo Jorge, Portugal

IN11 – Smart sensors and devices for food quality, safety & authenticity: Application examples and metrological issues, Claudia Zoani, MetroFoods, Italy

IN12 – Exploring tannins content and reactivity in red wines by means of an innovative and rapid optical method, Arianna Ricci, University of Bologna Department of Agri-Food Sciences and Technologies, Italy

IN13 – Effects of the ultrasound-assisted green solvent extraction process, bath and tip, on the bioactive compounds of mangosteen peels (*Garcinia mangostana*), Edna Amante, Federal University of Santa Catarina, Florianópolis, Brazil**08:00 - 08:30 [IN09]****Applications of Nanotechnology in Sensing, Separations, Agriculture and Therapies**Geoff Waterhouse*University of Auckland, New Zealand***08:30 - 09:00 [IN10]****Metrology in food analysis: Case for sensors**Isabel Castanheira*National Institute of Health Doctor Ricardo Jorge, Portugal***09:00 - 09:30 [IN11]****Smart sensors and devices for food quality, safety & authenticity: Application examples and metrological issues**Claudia Zoani*ENEA, SSPT-BIOAG, METROFOOD, Italy***09:30 - 10:00 [IN12]****Exploring tannins content and reactivity in red wines by means of an innovative and rapid optical method**Arianna Ricci, Giuseppina Paola Parpinello, Eleonora Iaccheri, Luigi Ragni, Andrea Versari*University of Bologna, Bologna, Italy***10:00 - 10:30 [IN13]****Effects of the ultrasound-assisted green solvent extraction process, bath and tip, on the bioactive compounds of mangosteen peels (*Garcinia mangostana*)**Jhenyfe Monteiro, Walter Neves Junior, Laura Ferreira, Edna Amante, Luiza Silva, Antonio Rodrigues*Federal University of Pará, Brazil*

10:30 - 11:00

Coffee Break

Piano Bar + Salons Rotterdam and Petersburg

11:00 - 12:30

Plenary Session 3: Effects of processing on food chemistry including novel delivery systems and packaging

Saal 1 & 2

Edna Regina Amante, Daniel Granato

IN14 – Cereal bran stabilises vitamin A during storage: Role of bran antioxidants, lipids and endogenous lipase activity, Eline Van Wayenbergh, KU Leuven, Belgium

IN15 – Metabolomic fingerprinting of bioactive and flavor compounds in cocoa liquor and their traceability over the major steps of cocoa post-harvesting, Miguel Fernández-Niño, Leibniz-Institute of Plant Biochemistry, Department of Bioorganic Chemistry, Colombia

IN16 – Effect of dehydration on phenolic compounds and antioxidant activity of blackcurrant pomace, Dimitris Charalampopoulos, University of Reading Department of Food and Nutritional Sciences, UK

11:00 - 11:30 [IN14]

Cereal bran stabilises vitamin A during storage: the role of bran antioxidants, lipids and endogenous lipase activity

Eline Van Wayenbergh¹, Lisa Coddens¹, Niels Langenaeken¹, Imogen Foubert², Christophe Courtin¹
¹KU Leuven, Leuven, Belgium. ²KU Leuven - Kulak Kortrijk Campus, Kortrijk, Belgium

11:30 - 12:00 [IN15]

Metabolomic fingerprinting of bioactive and flavor compounds in cocoa liquor and their traceability over the major steps of cocoa post-harvesting

Fabio Herrera-Rocha¹, Ana M. Leon-Inga¹, Ludger A. Wessjohann², Mónica P. Cala¹, Miguel Fernández-Niño³
¹Universidad de los Andes, Colombia. ²Leibniz-Institute of Plant Biochemistry, Germany. ³Leibniz-Institute of Plant Biochemistry, Colombia

12:00 - 12:30 [IN16]

Effect of dehydration on phenolic compounds and antioxidant activity of blackcurrant (*Ribes nigrum* L.) pomace

Dimitris Charalampopoulos¹, Ezzat Azman², Afroditi Chatzifragkou¹
¹University of Reading Department of Food and Nutritional Sciences, Reading, UK. ²Universiti Putra Malaysia Faculty of Food Science and Technology, Serdang, Malaysia

12:30 - 13:15

Lunch

Piano Bar + Salons Rotterdam and Petersburg

13:15 - 14:45

Plenary Session 4: Valorisation of food co-products

Saal 1 & 2

Beatriz Cabanillas, Ron Pegg

IN17 – Biorefinery approach to recover bioactive fractions from food side streams: from processing to human nutrition, Daniel Granato, University of Limerick Faculty of Science and Engineering, Ireland

IN18 –Influence of cultivated cardoon and globe artichoke ethanolic leaf extracts on the shelf life of poultry meat, Fernanda Vilarinho, INSA, National Institute of Health Doutor Ricardo Jorge, Portugal

IN19 - Seaweeds: As sustainable and green biomass for foods and feeds, Kazuo Miyashita, Obihiro University of Agriculture & Veterinary Medicine Center for Regional Collaboration in Research, Japan

13:15 - 13:45 [IN17]

Biorefinery approach to recover bioactive fractions from food side streams: from processing to human nutrition

Daniel Granato

University of Limerick, Limerick, Ireland

13:45 - 14:15 [IN18]

The influence of cultivated cardoon and globe artichoke ethanolic leaf extracts on the shelf life of poultry meat

Fernanda Vilarinho¹, Cássia Barbosa¹, Mariana Andrade¹, Ana Sanches-Silva², Ana Fernando³
¹National Institute of Health Doutor Ricardo Jorge, Portugal. ²National Institute for Agrarian and Veterinary Research (INIAV), Portugal. ³Universidade NOVA de Lisboa, Portugal

14:15 - 14:45 [IN19]

Seaweeds: As sustainable and green biomass for foods and feeds

Kazuo Miyashita

Hokkaido Bunkyo University, Eniwa, Japan

14:45 - 15:45

Poster session 2 & Coffee break

Piano Bar + Salons Rotterdam and Petersburg

Session 1: Insights into components in Food

Saal 1 & 2

Maurizio Battino, Isabel Castanheira

15:45 - 16:05 [O1.1]**Effect of Sprouting and Fermentation on the Formation of γ -Aminobutyric Acid, Histamine, and Phenylethylamine in Wholegrains**Ecem Evrim Çelik¹, Merve Canlı¹, Tolgahan Kocadağlı¹, Evrim Özkaynak Kanmaz², Vural Gökmen¹¹Hacettepe University, Ankara, Turkey. ²Artvin Coruh University, Artvin, Turkey**16:05 - 16:25 [O1.2]****Impact of fining agents on aflatoxins removal and wine quality**Fernanda Cosme¹, António Inês¹, Beatriz Ferreira¹, Luís Filipe-Ribeiro¹, Luís Abrunhosa², Fernando M. Nunes¹¹CQ-VR, Chemistry Research Centre, Food and Wine Chemistry Lab., School of Life Sciences and Environment, University of Trás-os-Montes and Alto Douro, Portugal. ²CEB-Centre of Biological Engineering, Campus de Gualtar, University of Minho, Portugal**16:25 - 16:45 [O1.3]****Metabolomics-based holistic analysis of microbial cultures fermenting pea protein beverages for enhanced flavor profile**Andrea Spaccasassi^{1,2}, Lijuan Ye³, Filippo De Franceschi³, Rosa Aragao Börner³, Arne Glabasnia³, Biljana Bogicevic⁴, Florian Utz¹, Sapna Sharma¹, Thomas Hofmann¹, Corinna Dawid¹¹Technical University of Munich, Munich, Germany. ²TUMCREATE Limited, Singapore, Singapore. ³Nestlé Research Center, Lausanne, Switzerland. ⁴Nestlé Research Center, Vevey, Switzerland**Session 2: Valorization of food co-products**

Salon

Dresden/Düsseldorf/Frankfurt
Cesarettin Alaşalvar, Sonia Sayago-Ayerdi**15:45 - 16:05 [O2.1]****Upcycling brewery spent grain into bioplastics. (VIRTUAL PRESENTATION)**Ilary Belardi¹, Ombretta Marconi¹, Fabrizio Sarasini², Assunta Marrocchi¹¹University of Perugia, Italy.²Sapienza-University of Rome, Italy**16:05 - 16:25 [O2.2]****Understanding the foaming properties of proteins isolated from a co-product of the potato industry**Ben Van den Wouwer^{1,2}, Laura Scheldewaert², Kristof Brijs², Arno G. B. Wouters², Katleen Raes¹¹Ghent University, Gent, Belgium.²KU Leuven, Leuven, Belgium**16:25 - 16:45 [O2.3]****LC-ESI-QTOF-MS/MS-based hierarchical clustering of (poly)phenol binding to the plant cell wall explains cold-pressing extractability and in vitro bioaccessibility**Ivan M. Lopez-Rodulfo, Emmanouil D. Tsochatzis, Pamela Martinez-Carrasco, Emil W. Stentoft, Mario M. Martinez

Aarhus University Department of Food Science, Aarhus, Denmark

16:45 - 17:05 [O2.4]**Purification of microRNAs by scalable solid phase extraction increases food compatibility and offers applicability as health promoting nutritional ingredient**Daniela A. Hey¹, Michele Gelmi², Monia Zuntini², Peter Robatscher¹, Roberto Viola², Michael Oberhuber¹¹Versuchszentrum Laimburg Experimentation Center, Auer, Italy. ²Mirnagreen Srl, Italy**17:05 - 17:25 [O2.5]****Charting a Course for Food Legislation and Analytical Excellence Amidst Evolving Global Challenges: 4 case studies**
Anastasios Koidis**Session 3: Effects of processing on food chemistry including novel delivery systems and packaging.**

Salon Rossini

Amparo Lopez-Rubio, Kazuo Miyashita

15:45 - 16:05 [O3.1]**Strategies for the targeted preparation of functional casein microparticles**Ronald Gebhardt, Md Asaduzzaman

RWTH Aachen University, Chair of Soft Matter Process Engineering (AVT.SMP), Germany

16:05 - 16:25 [O3.2]**Low Temperature Electrostatic Spray Drying Improves Oxidative and Non-Enzymatic Browning Stability in Milk- and Oil-Encapsulated Powders**Bogdan Zisu, Loc Pham, Masum AKM

Fluid Air, a Division of Spraying Systems Co., Australia

16:25 - 16:45 [O3.3]**Conjugation of potato protein with flavonoids to influence nanostructure and emulsifying properties**Nisufyan Nimaming, Amin Sadeghpour, Brent S. Murray, Anwasha Sarkar

Food Colloids and Bioprocessing Group, School of Food Science and Nutrition, University of Leeds, UK

16:45 - 17:05 [O3.4]**A green particle formation approach to increasing bioavailability of curcumin using nanoporous composite starch bioaerogels and supercritical fluid technology**Farhad Alavi, Lingyi Liu, Ozan Ciftci

University of Nebraska-Lincoln, Lincoln, NE, USA

17:05 - 17:25 [O3.5]**Effect of incorporating barley flour in Bread making: A balance between nutritional value, technological and sensorial quality analysis.**Fadwa ELOUADI¹, Ahmed AMRI², Adil EL-BAOUCHI³, Abderrazek JILAL⁴, Mohammed IBRIZ¹

16:45 - 17:05 [O1.4]
Kombucha: ¹H-NMR and HPLC-PDA to monitor the fermentation process
Giacomo Di Matteo¹, Mattia Spano¹, Stefano Zamboni², Martina Bruschi³, Luisa Mannina¹
¹University of Rome La Sapienza, Roma, Italy.
²Legendary Drink srl, Italy.
³Bioniks srl, Italy

Lecturer in Food Science and Nutrition, Greece

¹Ibn Tofail University Kenitra Faculty of Sciences, Kenitra, Morocco. ²International Center for Agricultural Research in the Dry Areas Morocco, Rabat, Morocco. ³Mohammed VI Polytechnic University, Ben Guerir, Morocco. ⁴National Institute of Agronomic Research, Rabat, Morocco

17:05 - 17:25 [O1.5]
Quinone modification by reactive carbonyls
Rosario Zamora, Francisco J. Hidalgo
Fat Institute, Sevilla, Spain

17:25 - 17:30

17:30 - 18:15

Author workshop
Saal 1

18:15 - 19:15

19:15 - 22:15

Dinner river cruise (optional - tickets can be purchased)
Motor Ship Gräfin Cosel
Ticket holders meet in the HILTON DRESDEN LOBBY on the ground floor by the reception at 19:10

08:00 - 09:20

**Session 4: Food chemistry:
Fate in foods and humans**Salon Rossini
Tassos Koidis, Ashkan
Madadlou**08:00 - 08:20 [O4.1]****Interaction of SiO₂
nanoparticles with sodium
caseinate and its effects on
digestibility and bioactive
peptides**Nazim Sergen Mısırlı, Ceyda
Dudak Seker, [Seda Yildirim-
Elikoglu](#)
*Hacettepe University,
Ankara, Turkey***08:20 - 08:40 [O4.2]****Evaluating mineral
absorption of sprouted or
hydrothermally processed
wheat using an *in vitro*
digestion assay combined
with Caco-2 cell lines**[Marie Huyskens](#)¹, Elien
Lemmens¹, Charlotte
Grootaert², Kristin Verbeke¹,
Erik Smolders¹, Jan Delcour¹
¹*KU Leuven, Leuven, Belgium.*
²*Ghent University, Gent,
Belgium***08:40 - 09:00 [O4.3]****Identification of Novel
Chlorinated Lipids during In
Vitro Digestion of Epoxidized
Triacylglycerols from Canola
Oil**[Matthias Strauss](#)¹, Yifan Bao¹,
Andreas Gufler¹, Sergio
Armentia Matheu¹, Yury
Lebedev¹, Nuno Maulide¹,
Monika Riederer², Miriam
Ressler², Marc Pignitter¹
¹*University of Vienna, Wien,
Austria.* ²*Joanneum University
of Applied Sciences, Graz,
Austria***09:00 - 09:20 [O4.4]****Changes in antioxidant
potential of pickled apricot
with salted red perilla leaf
during pickling process and
simulated *in vitro* digestion**Jutalak Suwannachot,
[Yukiharu Ogawa](#)
*Chiba University, Chiba,
Japan***Session 5: Valorization of food co-
products**Saal 2
Nandika Bandara, Veronica
Dodero**08:00 - 08:20 [O5.1]****Turning poop into gold?
Fermentation and extrusion for
increasing the value of sunflower
seed press cakes and cheese
whey**[Norbert Raak](#)¹, Nicola Mangieri^{1,2},
Gianluca Colombo¹, Roberto
Foschino², Milena Corredig¹
¹*Aarhus University, Aarhus,
Denmark.* ²*Università degli Studi di
Milano, Italy***08:20 - 08:40 [O5.2]****Revealing the potential of Brewer's
Spent Grains in Human Nutrition:
Exploration of Protein Extraction
Performance and Functional
Properties**[Jonathan Gagnon](#)^{1,2}, Sylvie
Turgeon^{1,2,3}, Sergey Mikhaylin^{1,2}
¹*Laval University Department of
Food Science, Québec, QC,
Canada.* ²*Laval University Institute
of Nutrition and Functional Foods,
Québec, QC, Canada.* ³*Quebec
Institute of Tourism and Hospitality,
GastronomiQc Lab, Montréal, QC,
Canada***08:40 - 09:00 [O5.3]****A New Approach: Co-Product
from the Edible Swiftlet's Nest
Industry as Future Low-Cost
Functional Food and Ingredient**Tan Hui Yan¹, Lee Sin Chang²,
Seng Joe Lim³, Abdul Salam Babji³,
[Shahrul Razid Sarbini](#)¹
¹*Universiti Putra Malaysia - Bintulu
Campus, Bintulu, Malaysia.* ²*UCSI
University, Kuala Lumpur,
Malaysia.* ³*National University of
Malaysia, Bangi, Malaysia***09:00 - 09:20 [O5.4]****Valorization of onion and chicory
by-products and polyphenols
recovery using liquid submerged
fermentation by selected
microbial strains**[Gianluca Bleve](#)¹, Francesca Anna
Ramires¹, Anna Rita Bavaro²,
Isabella D'Antuono², Leone
D'Amico³, Vito Linsalata², Federico**Session 6: New, rapid, or green
methods for food chemistry**Saal 1
Andrea Gomez-Zavaglia, Vural
Gökmen**08:00 - 08:20 [O6.1]****Advances in food fraud detection:
using cross-matrix non-targeted
analysis for terroir biomarker
discovery**[Nicolas Mialon](#)^{1,2}, Axelle Cadiere¹,
Eric Capodanno²
¹*University of Nîmes, Nîmes,
France.* ²*Phytocontrol, France***08:20 - 08:40 [O6.2]****Comparison between AAPH and
H₂O₂ induced oxidative stress in
red blood cells to evaluate the
cellular antioxidant activity of
food matrices**[Daniel Granato](#)¹, Thiago
Mendanha Cruz¹, Amanda dos
Santos Lima¹, Luciana Azevedo¹,
Mariza B. Marques², Nima
Mohammadi¹
¹*University of Limerick, Limerick,
Ireland.* ²*State University of Ponta
Grossa, PONTA GROSSA, Brazil***08:40 - 09:00 [O6.3]****Convergent analysis of food
products using molecular
barcodes, based on LC-HRMS
data**[Anne Kleinnijenhuis](#)
*Triskelion, Utrecht, The Netherlands***09:00 - 09:20 [O6.4]****The inhibitory effect of the
nanoparticles on the
immunological reactivity**[Matej Pospiech](#), Lenka Havlová,
Dani Dordevic, Zdeňka Javůrková,
Bohuslava Tremlová
*University of Veterinary Sciences
Brno, Brno, Czech Republic*

Baruzzi², Loris Pinto², Annamaria Tarantini^{3,4}, Angela Cardinali²
¹National Research Council – Institute of Sciences of Food Production, Lecce, Lecce, Italy.
²National Research Council – Institute of Sciences of Food Production, Bari, Italy. ³National Research Council – Institute of Sciences of Food Production, Lecce, Italy. ⁴University of Bari - Department of Soil, Plant and Food Sciences (DISSPA), Bari, Italy

09:20 - 09:50

Coffee Break

Piano Bar + Salons Rotterdam and Petersburg

09:50 - 11:50

Plenary Session 5: Food chemistry: Fate in foods and humans

Saal 1 & 2

Francisco Hidalgo, Dongxiao Sun-Waterhouse

IN20 – Mechanisms of dietary isothiocyanates in cancer prevention and therapy, Yongping Bao, University of East Anglia Norwich Medical School, UK

IN21 – Phenolic compounds in the digestive system: Potential beneficial effects and interactions with dietary fibers, Lidija Jakobek, Josip Juraj Strossmayer University of Osijek, Croatia

IN22 – Oligomerization of PPII-rich gluten peptides and their implications in the early events of gluten-related disorders, Veronica Doderer, Bielefeld University, Germany

IN23 – Investigation of the Role of 5-Hydroxymethylfurfural Accumulation via Sucrose Degradation on Acrylamide Formation in Low Moisture Food Systems by Means of Multiresponse Kinetic Modeling Approach, Vural Gökmen, Food Engineering Department at Hacettepe University, Turkey

09:50 - 10:20 [IN20]

Mechanisms of dietary isothiocyanates in cancer prevention and therapy

Yongping Bao

University of East Anglia Norwich Medical School, Norwich, UK

10:20 - 10:50 [IN21]

Phenolic Compounds In The Digestive System: Their Potential Beneficial Effects And Interactions With Dietary Fibers

Lidija Jakobek, Petra Matić

Josip Juraj Strossmayer University of Osijek, Croatia

10:50 - 11:20 [IN22]

Oligomerization of PPII-rich gluten peptides and their implications in the early events of gluten-related disorders

Veronica Doderer, Maria Amundarain

Bielefeld University, Bielefeld, Germany

11:20 - 11:50 [IN23]

Investigation of the Role of 5-Hydroxymethylfurfural Accumulation via Sucrose Degradation on Acrylamide Formation in Low Moisture Food Systems by Means of Multiresponse Kinetic Modeling Approach

Dilara Şen, Vural Gökmen

Hacettepe University, Ankara, Turkey

11:50 - 12:50

Poster Session 3 & Lunch

Piano Bar + Salons Rotterdam and Petersburg

12:50 - 14:50

Plenary Session 6: Food chemistry: Fate in foods and humans

Saal 1 & 2

Yongping Bao, Hettie Schonfeldt

IN24 - Unraveling the effects of different processing treatments on peanut allergenic potential, Beatriz Cabanillas, Hospital Research Institute, Madrid, Spain

INV25 - Addressing the Nexus of Food Security and Climate Change: Challenges and Opportunities, Turan Veysel, Bingol University, Faculty of Agriculture, Turkey

IN26 - How do we green our bodies?, María Roca, Food Phytochemistry Department, Instituto de la Grasa, Spain

IN27 - Bioaccessibility of iron and zinc is negatively correlated with the phytate concentration in commercial plant-based meat alternative burger patties, Jonas Pospiech, University of Hohenheim, Germany

12:50 - 13:20 [IN24]

Unraveling the effects of different processing treatments on peanut allergenic potential

Rafael Valdelvira, Guadalupe Garcia-Medina, [Beatriz Cabanillas](#)
12th of October Hospital Research Institute, Madrid, Spain

13:20 - 13:50 [IN25]

Addressing the Nexus of Food Security and Climate Change: Challenges and Opportunities

[Turan Veysel](#)
Bingol University, Bingöl, Turkey

13:50 - 14:20 [IN26]

How do we green our bodies?

[María Roca](#)
Instituto de la Grasa (CSIC), Spain

14:20 - 14:50 [IN27]

The bioaccessibility of iron and zinc is negatively correlated with the phytate concentration in commercial plant-based meat alternative burger patties

[Jonas Pospiech](#)
University of Hohenheim, Germany

14:50 - 15:20

Coffee Break

Piano Bar + Salons Rotterdam and Petersburg

15:20 - 17:00

Plenary Session 7 and Closing remarks & Awards

Saal 1 & 2

Natalia Drabińska, Mauricio Rostagno

Session title: Valorisation of food co-products

IN28 - Bio-based approaches for cocoa bean shells valorisation and new fiber-based ingredients design: From bioactivity to rheology, Marco Arlorio, Università del Piemonte Orientale Amedeo Avogadro, Italy

IN29 – Fruit by-products-snacks are the better choice for a healthier diet, Sonia Guadalupe Sáyago-Ayerdi, Technological Institute of Tepic, Mexico

IN30 - Valorizing food processing industry byproducts for polymer applications: Canola protein-based packaging materials reinforced with chemically tailored nanomaterials, Nandika Bandara, University of Manitoba, Canada

15:20 - 15:50 [IN28]

Bio-based approaches for cocoa bean shells valorisation and new fiber-based ingredients design: from bioactivity to rheology

Vincenzo Disca¹, Edoardo Capuano², Yassine Yaouhari¹, Lorella Giovannelli¹, Lorena Segale¹, [Marco Arlorio](#)¹

¹Department of Pharmaceutical Science – Università del Piemonte Orientale Amedeo Avogadro (UPO), Novara, Italy. ²Wageningen University & Research Food Quality and Design Group, Wageningen, The Netherlands

15:50 - 16:20 [IN29]

Fruit by-products-snacks are the better choice for a healthier diet

Sonia Guadalupe Sáyago-Ayerdi¹, Yolanda E. Pérez-Beltrán¹, Edgar Mendivil²

¹Tecnológico Nacional de México/Instituto Tecnológico de Tepic, Mexico. ²Universidad Iberoamericana, Mexico

16:20 - 16:50 [IN30]

Valorizing food processing industry byproducts for polymer applications: Canola protein-based packaging materials reinforced with chemically tailored nanomaterials

Nandika Bandara, Thilini Dissanayake

University of Manitoba Department of Food and Human Nutritional Sciences, Winnipeg, MB, Canada