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

<u>Adriana M. Aguilar-Torres</u>¹, 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, TUBİTAK 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 <u>Hettie C Schönfeldt</u>, 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 ReceptionPiano 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

<u>Isabel Castanheira</u>

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

<u>Claudia Zoani</u>

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

<u>Arianna Ricci</u>, 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, <u>Edna Amante</u>, 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, <u>Miguel Fernández-</u>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

<u>Piano Bar + Salons Rotterdam and Petersburg</u>

13:15 - 14:45

Plenary Session 4: Valorisation of food co-products

Saal 1 & 2

Beatriz Cabanillas, Ron Pega

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

<u>Daniel Granato</u>

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

<u>Fernanda Vilarinho</u>¹, 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 Gökmen¹
¹Hacettepe 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. Nunes¹
¹CQ-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,

16:25 - 16:45 [O1.3] Metabolomics-based holistic analysis of microbial cultures fermenting pea protein beverages for enhanced

Portugal

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 Dawid¹ ¹Technical University of Munich, Munich, Germany. ²TUMCREATE Limited, Singapore, Singapore. ³Nestlé Research Center. Lausanne, Switzerland, ⁴Nestlé Research Center, Vevey, Switzerland

Session 2: Valorization of food coproducts

Salon

Dresden/Düsseldorf/Frankfurt Cesarettin Alaşalvar, Sonia Sayago-Ayerdi

15:45 - 16:05 [O2.1] Upcycling brewery spent grain into bioplastics. (VIRTUAL PRESENTATION)

<u>Ilary Belardi</u>¹, Ombretta Marconi¹, Fabrizio Sarasini², Assunta Marrocchi¹ ¹University 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

<u>Ben Van den Wouwer</u>^{1,2}, Laura Scheldewaert², Kristof Brijs², Arno G. B. Wouters², Katleen Raes¹ ¹Ghent 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

Oberhuber¹

¹Versuchszentrum Laimburg
Experimentation Center, Auer,
Italy. ²Mirnagreen SrI, 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
Mivashita

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

<u>Bogdan Zisu</u>, 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, Anwesha 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, <u>Ozan</u> <u>Ciftci</u>

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 17:05 - 17:25 [O1.5] Quinone modification by reactive carbonyls Rosario Zamora, Francisco J. Hidalgo Fat Institute, Sevilla, Spain	Lecturer in Food Science and Nutrition, Greece	¹ Ibn Tofail University Kenitra Faculty of Sciences, Kenitra, Morocco. ² International Center for Agricultural Research in the Dry Areas Morocco, Rabat, Morocco. ³ Mohammed VI Polytechnic University, Ben Guerir, Morocco. ⁴ National Institute of Agronomic Research, Rabat, Morocco
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

Nazım 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 Huyskens¹, Elien

Lemmens¹, Charlotte Grootaert², Kristin Verbeke¹, Erik Smolders¹, Jan Delcour¹ ¹KU Leuven, Leuven, Belgium. ²Ghent University, Gent, Belaium

08:40 - 09:00 [O4.3] **Identification of Novel** Chlorinated Lipids during In Vitro Digestion of Epoxidized Triacylglycerols from Canola Oil

Matthias Strauss¹, Yifan Bao¹, Andreas Gufler¹, Sergio Armentia Matheu¹, Yury Lebedev¹, Nuno Maulide¹, Monika Riederer², Miriam Ressler², Marc Pignitter¹ ¹University of Vienna, Wien, Austria. ²Joanneum 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 coproducts

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 Raak¹, Nicola Mangieri^{1,2}, Gianluca Colombo¹, Roberto Foschino², Milena Corredig¹ ¹Aarhus University, Aarhus, Denmark. ²Università 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**

<u>Jonathan Gagnon^{1,2}, Sylvie</u> Turgeon^{1,2,3}, Sergey Mikhaylin^{1,2} ¹Laval University Department of Food Science, Québec, QC, Canada. ²Laval University Institute of Nutrition and Functional Foods, Québec, QC, Canada. 3Quebec 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 Sarbini¹

¹Universiti Putra Malaysia - Bintulu Campus, Bintulu, Malaysia. ²UCSI University, Kuala Lumpur, Malaysia. 3National 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 Bleve¹, 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

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 ¹University of Nîmes, Nimes, France. ²Phytocontrol, 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

<u>Daniel Granato</u>¹, Thiago Mendanha Cruz¹, Amanda dos Santos Lima¹, Luciana Azevedo¹, Mariza B. Marques², Nima Mohammadi¹

¹University of Limerick, Limerick, Ireland. ²State 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, Bari, 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 Dodero, 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

<u>Lidija Jakobek</u>, 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

<u>Veronica Dodero</u>, 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, <u>Vural Gökmen</u>

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, <u>Beatriz Cabanillas</u> 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, <u>Marco</u> <u>Arlorio</u>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-Beltran¹, 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