



UNITED Scientific
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FCT - 2022

Rome 12-14 October, 2022

8th International Conference on

Food Chemistry & Technology

October 12-14, 2022

Rome, Italy and Online (Hybrid Conference)

Venue

Sheraton Parco de' Medici Rome Hotel
Viale Salvatore Rebecchini 39
Rome, Italy



Awards Sponsor

Food Bioscience journal is presenting the awards to the best oral presenter and two best poster presenters to support and encourage the young researchers to build their confidence and dedication towards food bioscience

Best Oral Presenter – **400 EURO**

Best Poster Presenter – **200 EURO**

Certificate - The winners will receive a certificate issued by Elsevier.

ABOUT JOURNAL

Food Bioscience is a peer-reviewed journal that aims to provide a forum for recent developments in the field of bio-related food research. The journal focuses on both fundamental and applied research worldwide, with special attention to ethnic and cultural aspects of food bio research.

Topics covered in the journal include but are not limited to:

1. Biochemical, biophysical and biological properties of foods, ingredients, and components
2. Mechanism of functional foods and ingredients including both novel and traditional fermented foods
3. Genetic, and cellular and molecular biology germane to food production and processing
4. Foodomics: comprehensive studies involving genomics, proteomics, metabolomics, nutrigenomics and chemogenomics of foods and their interactions with humans
5. Biomaterials for food-related systems such as food packaging, food analysis, and delivery of nutraceuticals and functional food additives
6. Application of novel technology to foods.

For more details, please visit: <https://www.sciencedirect.com/journal/food-bioscience>

2021 IF: 5.318



ROOM NAMES FOR FCT-2022

	Parallel Session I - Room	Parallel Session II - Room
12-Oct	Boncompagni	Lounge
13-Oct	Boncompagni	Lounge
14-Oct	Lounge	Cervini

PARALLEL SESSION I @ Boncompagni

Meeting Link:

<https://us06web.zoom.us/j/87625009325?pwd=QWZrVUhNWHNRReGI4ejF6dFR0bmdaUT09>

Meeting ID: 876 2500 9325

Passcode: 231974

- 08:00 – 08:45 Registration
- 08:45 – 09:00 Welcome and Inauguration Speech
Introduction by: **Antonio Derossi**, University of Foggia, Italy

Session I – Food Chemistry

Chairs: **Alireza Abbaspourrad**, Cornell University, NY, United States
Maria Buchweitz, University of Stuttgart, Germany

- 09:00 – 09:30 **Keynote**
Food Ingredients: Modification, Encapsulation and Controlled Release
Alireza Abbaspourrad, Cornell University, NY, United States
- 09:30 – 09:55 **Invited**
Mushrooms and Plants as a Source of Natural Ingredients for Food Application
Lillian Barros, Polytechnic Institute of Bragança, Portugal - **Virtual**
- 09:55 – 10:15 **Comparison of Different Extraction Methods of Vitamin K from Plant Samples by the UPLC-APCI-MS Method**
Iryna Bryshten, Maria Curie-Skłodowska University, Poland
- 10:15 – 10:35 **Adducts Formed between Rutin and Methylglyoxal in Foods and in-vivo, and their Safety Concerns**
Jie Zheng, Jinan University, China - **Virtual**
- 10:35 – 10:55 **Why are some Apple Varieties Less Allergenic than Others? - Insights into Parameters which Might be Relevant**
Maria Buchweitz, University of Stuttgart, Germany
-
- 11:00 – 11:20 **Coffee Break**
-
- 11:20 – 11:40 **Virgin Olive Oil-Derived Nitro-Fatty Acids: Relationship to Cultivar, Fruit Ripening, Polyphenol Content and Protection of Mitochondrial Function in Non-Alcoholic Fatty Liver Disease**
Homero Rubbo, The University of the Republic, Uruguay
- 11:40 – 12:00 **Revalorization of Industrial Pineapple (*Ananas comosus (L.) Merrill*) by-products as Antioxidant Source: Optimization of Ultrasonic-Assisted Extraction of Phenolic Compounds**
Ana Beltran Sanahuja, University of Alicante, Spain - **Virtual**
- 12:00 – 12:20 **Chemical Fingerprints of Pomegranate (*Punica granatum L.*) Seed Oil: Correlation of Bioactive Compounds with Origins**
Sonia Bonacci, University Magna Graecia of Catanzaro, Italy
- 12:20 – 12:40 **Non-thermal and Thermal Treatments Impact the Structure and Microstructure of Milk Fat Globule Membrane**
Fatma Ali, Tianjin University of Science and Technology, China - **Virtual**

12:40 – 13:00

Rabdosianone I, a Bitter Diterpene from an Oriental Herb *Isodon japonicus* Hara- Identification of its Direct Targets in Cancer Cells and Elucidation of Anticancer Mechanisms of Action

Motoki Watanabe, Kyoto Prefectural University of Medicine, Japan - **Virtual**

13:00 – 13:05

Group Photo

13:05 – 14:00

Lunch Break

Session I – Food Chemistry

Chairs: Fabio Bruni, University of Roma Tre, Italy

Paolo D’Incecco, University of Milan, Italy

14:00 - 14:25

Invited

Production of Natural Colorants from Plant Pigments: Stability Enhancement of Pigments via Modification of their Molecular Structures

Sakamon Devahastin, King Mongkut’s University of Technology Thonburi, Thailand - **Virtual**

14:25 - 14:50

Invited

Microscopic Insight to Sweetness

Fabio Bruni, University of Roma Tre, Italy

14:50 - 15:10

NMR and MS as Toolset in Metabolomics Analysis of Apple Juice and the Use of Membrane Operations for Partial Removal of Sugar

Martina Gagliano, University of Calabria, Italy

15:10 - 15:30

Mechanism Exploration of the Reduced Allergenicity of Shrimp (*Macrobrachium nipponense*) by Combined Thermal/Pressure Processing

Na Sun, Dalian Polytechnic University, China

15:30 - 15:50

Simple and Fast Method for the Determination of Caffeic Acid in Wine Using a Molecularly Imprinted Polymer and a Screen-Printed Electrode

Elias Bou-Maroun, UMR PAM, Food and Wine Science and Technology, France - **Virtual**

15:50 - 16:10

Enzymatic Recovery of Natural Pigments from Unsold Vegetables: Process Optimization and Stability

Ilaria Benucci, University of Tuscia, Italy

16:10 - 16:30

Coffee Break

16:30 - 16:55

Invited

LC-ESI-QTOF-MS/MS Study on Phosphopeptide Profile of Kefir and Peptides from Kefir-Type Soy Drink

Sandra Pati, University of Foggia, Italy

16:55 - 17:15

Does High-Speed Cold Centrifugation of Milk Impair Quality of Hard Cheese?

Paolo D’Incecco, University of Milan, Italy

17:15 - 17:35

Catalytic Properties of Lipoygenase Extracted from Different Italian Varieties of Olive Fruit (*Olea europaea* L.)

Katia Liburdi, University of Tuscia, Italy

17:35 - 17:55

Effects of Processing on Proteinaceous Nutrients Bio-Accessibility

Chiara Nitride, University of Naples, Italy

PARALLEL SESSION II @ Lounge

Meeting Link:

<https://us06web.zoom.us/j/82849423924?pwd=N21lNjNWcnp3bFNUMWJZc0d0emVtQT09>

Meeting ID: 828 4942 3924

Passcode: 871593

Session II – Food Customization and Health

Chairs: Yanfeng Tuo, Dalian Polytechnic University, China
Dorit Avni, MIGAL Galilee Research Institute, Israel

09:55 - 10:20

Invited

Gluten-Friendly Bread Exerts a Bifidogenic Effect and a Modulating Action on Celiac Gut Microbiota: A Prebiotic-Like Effect or a New Mode of Action?

Carmela Lamacchia, University of Foggia, Italy

10:20 - 10:40

Exopolysaccharide Produced by *Lactiplantibacillus plantarum* Y12 Inhibits the Biofilm Formation and Virulence Genes Expression of *Shigella flexneri*

Yanfeng Tuo, Dalian Polytechnic University, China

10:40 - 11:00

Preheat-induced Soy Proteins with Enhanced Thermal Stability and their Application

Chao Wu, Dalian Polytechnic University, China

11:00 – 11:20

Coffee Break

11:20 - 11:40

Mitigation of Acrylamide Formation in Biscuits through the Use of Alternative Ingredients: Effect of Legume Flour Types and Preparations

Maria Alessia Schouten, University of Bologna, Italy

11:40 - 12:00

The Sustainable, Nutritious and Functional Power of Algae as the Future Functional Food Ingredients

Dorit Avni, MIGAL Galilee Research Institute, Israel

12:00 - 12:20

The Role of Lipid Nanoparticles in the Development of Emulsion Formulations able to Carry/Deliver Multiple Actives

Georgia Ioanna Sakellari, University of Birmingham, United Kingdom

12:20 - 12:40

The Effects of Water Characteristics on the Physicochemical and Sensorial Properties of Water Kefir

Suzan Tireki, Ozyegin University, Turkey - **Virtual**

13:00 – 13:05

Group Photo

13:05 – 14:00

Lunch Break

Session I – Food Chemistry

Chairs: Concetta Condurso, University of Messina, Italy
Remigiusz Olędzki, Wrocław University of Economics and Business, Poland

14:50 - 15:10

Recovery, Metabolic Characterization, and Reuse of Waste Materials from Olive Oil Production Chain: Olive Mill Wastewaters (OMWs) and Leaves

Maria Francesca Colella, University of Calabria, Italy

15:10 - 15:30

Effects of Microwave Radiation on the Bioactive Properties of Peppers

Remigiusz Olędzki, Wrocław University of Economics and Business, Poland

15:30 - 15:50

The Potential of *Rosmarinus officinalis L.* Extracts Obtained through Green Methodologies to Enhance Bread Organoleptic Properties

Júlia C. Kessler, University of Porto, Portugal

15:50 - 16:10

In Depth LC-ESI/LTQOrbitrap/MS/MSn Guided Phytochemical Analysis of Fresh and Roasted Hazelnut (*Corylus avellana Cultivar "Nocciola Piemonte"*)

Antonietta Cerulli, University of Salerno, Italy - **Virtual**

16:10 - 16:30

Coffee Break

16:55 - 17:15

Breeding of Faba Beans for Feed and Food Production

Svend Secher Dam, Business Academy Aarhus, Denmark

17:15 - 17:35

Biogenic Amines and Other Unconventional Indexes as New Markers of Qualitative Decay in Packaged Chicken Meat

Maria Martuscelli, University of Teramo, Italy

17:35 - 17:55

Brassinosteroids Control the Inflammation, Oxidative Stress and Cell Migration through the Control of Mitochondrial Function on Skin Regeneration

Debora Esposito, North Carolina State University, United States

17:55 - 18:15

Effects of Tannins on Physicochemical and Sensory Properties of Stirred-Type Yogurt

Negin Seif Zadeh, University of Turin, Italy

PARALLEL SESSION I @ Boncompagni

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08:15 – 08:45 Registration

Session III – Sustainability in Food Production and Technology

Chairs: Paola Giavedoni, Director of Innovation, EIT Food, Belgium
 Maria G. Corradini, University of Guelph, Canada

08:45 - 09:15

Keynote

Innovation with Impact for a Sustainable Food System

Paola Giavedoni, Director of Innovation, EIT Food, Belgium

09:15 - 09:40

Invited

Extending Shelf Life and Enhancing Safety through Food Design and Modeling

Maria G. Corradini, University of Guelph, Canada

09:40 - 10:00

Valorisation of Waste from Fish and Tomato Processing, to Generate Biodegradable Food Packaging with Hydrophobic Properties

Marta Mroczkowska, South East Technological University, Ireland

10:00 - 10:20

Mycoprotein as Novel Functional Ingredient: Mapping of Functionality, Composition and Structure Throughout the Quorn Fermentation Process

Julien Lonchamp, Queen Margaret University, United Kingdom

10:20 - 10:40

Valorization of Aquaculture Waste Side Streams

Nicole Cheam Mein Ji, Nanyang Technological University, Singapore

10:40 - 11:00

Development of a Colorimetric Indicator Based on Metal Nanoparticles for Monitoring Deterioration of Chicken and/or Fish Meat, with Potential Use in Smart Packaging

Lissage Pierre, University of Santiago, Chile

11:00 – 11:20

Coffee Break

11:20 - 11:40

Sustainable Re-use of Brewer's Spent Grain for the Production of High Protein and Fibre Pasta

Francesca Cuomo, University of Molise, Italy

11:40 - 12:00

Development of Films Based on Andean Potato Starch/Chitosan/Propolis as Promising Biopackaging Materials

Ivone Iquiapaza, University of Sao Paulo, Brazil

12:00 - 12:20

Effects of Different Modifications on Composition and Technological Properties of Lingonberries (*Vaccinium vitis-idaea*) Pomace

Loreta Basinskiene, Kaunas University of Technology, Lithuania

12:20 - 12:40

Effect of Different Modified Packaging Atmospheres on the Shelf-life of Sourdough Bread

Alessandro Bianchi, University of Pisa, Italy - **Virtual**

13:00 – 14:00

Lunch Break



Chairs: **Julien Lonchamp**, Queen Margaret University, United Kingdom
Loreta Basinskiene, Kaunas University of Technology, Lithuania

14:00 - 14:25

Invited

Innovations and Technology Disruptions in the Post-COVID-19 Pandemic Era of the Food Sector

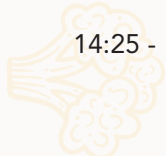
Charis M. Galanakis, Galanakis Laboratories, Greece - **Virtual**



14:25 - 14:45

Novel Bioplastics Obtained from Glycerol-Plasticized Films Functionalized with Spent Coffee Grounds Phenolic Extracts

Seyedeh Fatemeh Mirpoor, University of Naples Federico II, Italy



14:45 - 15:05

Properties of Different Cattle Hide Sources in Relation to Co-Extruded Sausage Casings

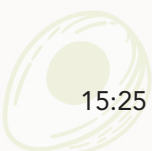
Patricia Suurs, Wageningen University & Research and Marel, Boxmeer, Netherlands



15:05 - 15:25

Optimization of High-Pressure Homogenization for Modification of Functional Properties of Pea Pod Proteins

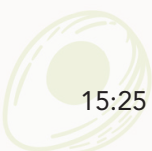
Semanur Yildiz, Sakarya University, Turkey - **Virtual**



15:25 - 15:45

Functional and Nutritional Properties of Fava Bean Ingredients Processed Using Extrusion

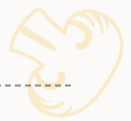
Imen Jebalia, INRAE, France - **Virtual**



15:45 - 16:05

Recovery of Anti-Glycative Compounds from Rice Husk (*Oryza sativa L.*)

Adele Papetti, University of Pavia, Italy - **Virtual**



16:10 - 16:30

Coffee Break

16:30 - 16:50

Optimizing Liquid Smoke Conditions for the Production and Preservation of Innovative Fish Products

Barbara Speranza, University of Foggia, Italy - **Virtual**



16:50 - 17:10

Bioconversion of HO.RE.CA. Waste Through Black Soldier Fly (*Hermetia illucens*) Larvae and Fractionation of the Mature Larvae to Obtain Protein Intended for Food and Feed

Giuseppe Montevecchi, University of Modena and Reggio Emilia, Italy



17:10 - 17:30

Advancing Green Biorefining from the Bottom-Up: from Grass to Food Protein and Ingredients Aided by Proteomics and Bioinformatics

Simon Gregersen Echers, Aalborg University, Denmark - **Virtual**

17:30 - 17:50

Vine Shoot Xylooligosaccharides as a Prebiotic Ingredient to Develop a Functional Spreadable Cheese

Graziana Difonzo, University of Bari Aldo Moro, Italy



17:50 - 18:10

Development of an Active Edible Coating Loaded with Hydroxyapatite/Lactoferrin/Quercetin Complexes for Food Preservation

Francesca Malvano, University of Salerno, Italy



18:35 - 20:00

Poster Presentations - Networking & Drinks

PROGRAM



PARALLEL SESSION II @ Lounge

Meeting Link:

<https://us06web.zoom.us/j/82849423924?pwd=N21lNjNWcnp3bFNUMWJZc0d0emVtQT09>

Meeting ID: 828 4942 3924

Passcode: 871593

Session-IV Food Sensory Evaluation and Novel Experience for a Better Health and Sustainability

Chairs: Fosca Vezzulli, Catholic University of the Sacred Heart, Italy
Marco A Deriu, Polytechnic of Turin, Italy

09:40 - 10:10

Keynote

Gastrophysics: A New Multisensory Approach to Encouraging Healthy and Sustainable Diets

Charles Spence, Oxford University, United Kingdom - **Virtual**

10:10 - 10:30

Mechanistic and Machine Learning Driven Modelling to Predict and Understand Taste

Marco A Deriu, Polytechnic of Turin, Italy

10:30 - 10:50

Future Super Food: Comprehensive Investigation of New Mixed Fruit Juice

Mansour Rabie Ashkezary, University of Palermo, Italy

11:00 – 11:20

Coffee Break

11:20 - 11:40

Sensory Profile of Italian Espresso Brewed Arabica Specialty Coffee Under Three Roasting Profiles with Chemical and Safety Insight on Roasted Beans

Fosca Vezzulli, Catholic University of the Sacred Heart, Italy

11:40 - 12:00

Advancements in the Omega-3 Fatty Acids Enrichment in Meat Products

Trinidad Perez Palacios, University of Extremadura, Spain

12:00 - 12:20

Effect of Different Content of 'Maiorca' Common Wheat Malt in Bread Production on Physico-Chemicals and Sensory Characteristics of Products

Ignazio Maria Gugino, University of Palermo, Italy

12:20 - 12:40

Chemical Characterization of *Moringa oleifera* Leaves for Cookies Formulation

Zarroug Ouederni Youkabed, National Agricultural Research Institute of Tunisia, Tunisia - **Virtual**

12:40 - 13:00

Evaluation of Different Storage Conditions on Chemical Composition and Bioactive Compounds of Voghiera Garlic PDO

Paola Tedeschi, University of Ferrara, Italy

13:00 – 13:50

Lunch Break

Session V – 3D Food Printing

Chairs: Bhesh Bhandari, University of Queensland, Australia
Anne Louise Dannesboe Nielsen, Danish Technological Institute, Denmark

13:50 - 14:25

Keynote

3D Food Printing: Recent Developments at TNO

Kjeld Van Bommel, TNO, Netherlands

14:25 - 14:50

Invited

Application of 3D Printing for Morphing of Food

Bhesh Bhandari, University of Queensland, Australia

14:50 - 15:15

Invited

Designing Mechanical Properties of Starch-Protein-Based Foods by Additive Manufacturing

Mario Jekle, University of Hohenheim, Germany

15:15 - 15:35

Modulating 3D Food Architecture for New Sensorial Perceptions

Rossella Caporizzi, University of Foggia, Italy

15:35 - 15:55

Fruit- and Seafood-Based Formulations for 3D Printing of Foods: Effect of Thickeners Agents

Tatiana Pereira, MARE - Polytechnic of Leiria, Portugal

15:55 - 16:10

3D Food Printing by Rheology and Nozzle Design

Michinao Hashimoto, Singapore University of Technology and Design, Singapore

16:10 - 16:30

Coffee Break

16:30 - 16:55

Invited

Bottlenecks and Possible Solutions to Increase the Throughput of 3D Printers in the Case of Food Application

Alain le Bail, Nantes-Atlantic National College of Veterinary Medicine, France

16:55 - 17:15

Accelerating the Process Development of Innovative Food Products by Prototyping Through 3D Printing Technology

Antonio Derossi, University of Foggia, Italy

17:15 - 17:35

Creating Digital Solutions to Improve 3D Food Printing Efficiencies

Yizhou Ma, Wageningen University and Research, Netherlands

17:35 - 17:55

Improving the Precision and Efficiency of 3D Printing Movements for Superior Food Structures

Mehmet Onur ORAL, University of Foggia, Italy

17:55 - 18:15

3D-Printing of Food for Personalized Nutrition

Anne Louise Dannesboe Nielsen, Danish Technological Institute, Denmark

18:15 - 18:35

Preliminary Study of the Use of 3D Printing to Prepare Meat Mimics from Plant-Based Protein and Hydrocolloids: Effect of Texture Modifiers

Supanut Leelapunnawut, King Mongkut's University of Technology, Thailand - **Virtual**

18:35 – 20:00

Poster Presentations - Networking & Drinks

**Meeting Link:**

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**Meeting ID: 876 2500 9325****Passcode: 231974****18:35 - 19:35****Virtual - Poster Presentations****@ Boncompagni**

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- VP-01** 18:35 - 18:39
Improving and Developing Environmentally Sustainable Methods for Food and Feed Analysis
Keshun Liu, United States Department of Agriculture, United States - **Virtual**
- VP-02** 18:39 - 18:43
Impact of UV-Light Irradiation on Sensory Properties and Volatile, Fatty Acid and Tocopherol Composition of Peanuts (*Arachis hypogaea L.*)
Adriana Juan Polo, University of Alicante, Spain - **Virtual**
- VP-03** 18:43 - 18:47
Spectroscopy Tools in the Authentication of Debittered Tarwi
Patricia Glorio-Paulet, National Agrarian University, Peru - **Virtual**
- VP-04** 18:47 - 18:51
Phenolic Compounds Profile of *Aronia melanocarpa L.* Extract Identified by UPLC-PDA-ESI-TQD-MS/MS and their in vitro Antioxidant, Potentially Anti-Diabetic, Anti-Obesity Potencies
Sabina Lachowicz-Wisniewska, Calisia University, Poland - **Virtual**
- VP-05** 18:51 - 18:55
The Use of Yellow Mealworm (*Tenebrio molitor*) Powder in the Functional Biscuits Production
Alexandra Uivarasan, Technical University of Cluj Napoca, Romania - **Virtual**
- VP-06** 18:55 - 18:59
The Consistency Factor and the Viscosity Exponent of Soybean-Protein-Isolate/Wheat-Gluten/Corn-Starch Blends Using a Capillary Rheometry
Donglin Zhao, Chinese Academy of Agricultural Sciences, China - **Virtual**
- VP-07** 18:59 - 19:03
Regression Analysis of Dough Stability Time and Extensibility Based on Physicochemical Characteristics of Wheat Milling Streams Flour Protein
Ting SU, Chinese Academy of Agricultural Sciences, China - **Virtual**
- VP-08** 19:03 - 19:07
Relationship Between Structure and Function of Soybean Protein Components Based on Literature Review
Binyu Luan, Chinese Academy of Agricultural Sciences, China - **Virtual**
- VP-09** 19:07 - 19:11
Antibacterial Activity of a Commercial Propolis Ethanolic Extract against Staphylococci Isolated from Skin
Mary Kalamaki, American College of Thessaloniki, Greece - **Virtual**
- VP-10** 19:11 - 19:15
Palmaria Palmata- Extraction of Polyphenols and Determination of Antioxidant Activity
Ligia-Ioana Todea, Technical University of Cluj Napoca, Romania - **Virtual**
- VP-11** 19:15 - 19:19
Technology of the Hopping Process and the Quality of Non-Alcoholic Beer
Kinga Adamenko, Wrocław University of Environmental and Life Sciences, Poland - **Virtual**
- VP-12** 19:19 - 19:23
Impact of Drying Methods on the Yield and Chemistry of *Origanum vulgare L.* Essential Oil
Lucia Caputo, University of Salerno, Italy - **Virtual**

VP-13 19:23 - 19:27

Influence of Pasture Feeding from Winter to Spring on Volatile Profile of a 4-Months Ripened Ewe Cheese

Giuseppe Natrella, University of Bari, Italy - **Virtual**

VP-14 19:27 - 19:31

3D Printed Rigid Food Packaging Based on Polylactic Acid Modified with Nano-Silver for the Storage of Cow Cheese

Ana Iancu, Technical University of Cluj Napoca, Romania - **Virtual**

VP-15 19:31 - 19:35

Bio-based Seaweed (*Fucus spiralis* and *Phorphyra dioica*) Edible Coatings for Enhancing the Shelf Life of Salmon Fillets

Andreia Miranda, MARE - Polytechnic of Leiria, Portugal - **Virtual**

In-Person - Poster Presentations

P-01

Composition and Physico-Chemical Properties of Milk from Indoor Feeding versus Pasture at Different Altitudes in the Production of Formaggella Della Valle Di Scalve Cheese in Bergamo Province

Paolo Formaggioni, University of Parma, Italy

P-02

Use of Alternative Ingredients to the Neapolitan Pizza Topping

Amalia Piscopo, University Mediterranea of Reggio Calabria, Italy

P-03

The Impact of Environment on Micro and Macronutrients in Meat

Sofia Skoumpa, South East Technological University, Ireland

P-04

Environmental and Mechanical Properties of Starch Protein Blend Bioplastic Packaging

Jade Stanley, South East Technological University, Ireland

P-05

Effect of Process Variables on the Physico-Chemical Properties of B-Sitosterol Nanoparticles Encapsulated in Polycaprolactone for their Potential Use in Nutraceutical Products

Daniela Cerro, Universidad de Santiago de Chile, Chile

P-06

Variability of Grain Albumen Minor Components and Technological Quality of Wheat

Laura REZETTE, INRAE - BIA, France

P-07

Effect of Extrusion-Cooking Process Parameters on Selected Characteristics of NSP-Rich Wheat Flour Enriched with Fungal Xylanase Addition

Piotr Lewko, University of Life Sciences in Lublin, Poland

P-08

The Effect of Oven drying, Dehydrator Drying and Freeze-drying Process on Physicochemical Properties and Bioactive Compounds of Beetroot (*Beta vulgaris* L.)

Abubakar Sani Ali, University of Lincoln, United Kingdom

P-09

Volatile and Odour-Active Compounds of Air-Classified Faba Bean Fractions

Adeline Karolkowski, CSGA/INRAE, France

P-10

Nutraceuticals from Agro-Waste: Green Extraction and Innovative Formulation

Dubravka Vitali Cepo, University of Zagreb, Croatia (Hrvatska)

P-11

Bio-Purification of Plant Proteins: Elimination of Off-Flavours

Pauline F.R. Damhof, Wageningen University and Research, Netherlands

P-12

Strategies Facilitating Edible Insects Acceptance

Agnieszka Orkusz, Wroclaw University of Economics and Business, Poland

- P-13 **Microbiological, Physicochemical and Phytochemistry Compounds of Three Ecotypes of Andean Lupin (*Lupinus mutabilis*) Flours Evaluated in Two Altitudes**
Gloria Jesus Pascual Chagman, National Agrarian University, Peru
- P-14 **Development and Characterisation of a Hybrid Beef/Plant-Based Burger Patty**
Bjorn Petrat-Melin, Business Academy Aarhus, Denmark
- P-15 **Biomimetic Oxidative Coupling of Phenol-Agmatine Amides with Horseradish Peroxidase**
Annemiek van Zadelhoff, Wageningen University and Research, Netherlands
- P-16 **The True Behind the Myth of Pomegranate Bark: Proofs on Nutraceutical Properties of Pelletierine**
Giuseppe Iriti, University Magna Graecia of Catanzaro, Italy
- P-17 **Assessment of Microbiome and Mycotoxins Contamination in Different Processing Fractions of Brazil Nuts (*Bertholletia excelsa*)**
Otniel Freitas-Silva, The Brazilian Agricultural Research Corporation, Brazil
- P-18 **Development of an Isoallergene-Specific Quantification Method for the Apple Allergen Mal D 1**
Julia Kaeswurm, University of Stuttgart, Germany
- P-19 **Effect of Different Processing Technologies on Chemical and Sensory Properties of Dried Caper (*Capparis spinosa L.*) Powder**
Concetta Condurso, University of Messina, Italy
- P-20 **Hemp Seed Flour Enriched Fresh Pasta: Nutritional, Technological, and Sensory Properties**
Concetta Condurso, University of Messina, Italy
- P-21 **Influence of Gellan Gum on the Rheological Properties of New Enteral Food Formulations**
Ivona Kurečić, Ruđer Bošković Institute, Croatia (Hrvatska)
- P-22 **Rheological Investigation of the Effect of Low-Fat Cocoa Powder on Different Composition of Enteral Food Formulations**
Nataša Šijaković Vujčić, Ruđer Bošković Institute, Croatia (Hrvatska)
- P-23 **Continuous Enzymatic Treatment for the Chill Haze Prevention in Beer**
Marco Esti, University of Tuscia, Italy
- P-24 **Antioxidant Activity of Digestion-Resistant Whey Peptides in Glial Cells**
Fabiana Andrea Barrera Galland, ITAL - Institute of Food Technology, Brazil
- P-25 **Bioaccessibility of Sunflower Flour Compounds Released after Simulated in vitro Digestion**
Maria Teresa Bertoldo Pacheco, ITAL - Institute of Food Technology, Brazil
- P-26 **Green Emerging Technologies Adding Value to Sunflower Oil Manufacturing Byproduct**
Maria Teresa Bertoldo Pacheco, ITAL - Institute of Food Technology, Brazil
- P-27 **Food for 9 Billion People: Meat Vs. Edible Insects**
Agnieszka Orkusz, Wroclaw University of Economics and Business, Poland
- P-28 **The Content of Antioxidants and Polyphenols in the Fruit of Selected Hybrid Grape Varieties from Poland**
Remigiusz Olędzki, Wroclaw University of Economics and Business, Poland
- P-29 **Use of Pulsed Electric Field Pre-Treatment to Enhance Drying Characteristics of Chilean Abalone (*Concholepas concholepas*)**
Roberto Lemus-Mondaca, University of Chile, Chile



P-30 High Hydrostatic Pressure (HHP) Effect on Proteins Profile of Wheat Flour

Maria Teresa Murillo Arbizu, Public University of Navarra, Spain

P-31 Vitamin D2 and Phytochemicals Enhanced King Oyster Mushrooms (*Pleurotus eryngii*) Decrease Plasma oxLDL in Metabolically Unhealthy Overweight/obese Adults: A Randomized Controlled Trial

Andriana C. Kaliora, Harokopio University of Athens, Greece

P-32 A Novel Nutraceutical Supplement Regulates Blood Inflammation and Oxidative Stress in Patients with Knee Osteoarthritis

Andriana C. Kaliora, Harokopio University of Athens, Greece

P-33 Effect of Treatments and Washing on the Bitterness Perceptions as Assessed by a Sensory Analysis

Antonio Higinio Sánchez-Gómez, Instituto de la Grasa (IG), CSIC, Spain

P-34 Phycocyanin Enrichment of Minimally Processed Organic Apples

Maria Alessia Schouten, University of Bologna, Italy

P-35 Towards Sound-Assisted Fermentation: A New Sustainable and Environmentally Friendly Industrial Process to Improve the Speed of Production

Giulia Chicarella, University of Rome "Tor Vergata", Italy



PARALLEL SESSION I @ Lounge

Meeting Link:

<https://us06web.zoom.us/j/87625009325?pwd=QWZrVUhNWHNReGI4ejF6dFR0bmdaUT09>

Meeting ID: 876 2500 9325

Passcode: 231974

08:15 - 08:45 Registration

Session VI – Traditional Process for Food Scale Up and Adaptation in Other Localities

Chairs: Antonio Bevilacqua, University of Foggia, Italy
Xinping Lin, Dalian Polytechnic University, China

08:45 - 09:15

Keynote

Transfer and Scale Up of Food Processing Technologies in Developing Countries: Focus on Food Fermentations

Rosa Rolle, Food and Agriculture Organization of the United Nations, Italy - **Virtual**

09:15 - 09:40

Invited

Fermentation, Bio-Preservation and Probiotication: Ancient and Modern Approaches for Food Valorization

Antonio Bevilacqua, University of Foggia, Italy

09:40 - 10:00

The Effect of Microbial Succession on the Quality of Chinese Traditional Fermented Fish and Its Industrialization

Xinping Lin, Dalian Polytechnic University, China

10:00 - 10:20

Ultrasound Pretreatment Enhances Anti-Inflammatory and Hypoglycemic Activities of Edible Bird's Nest Hydrolysate

Pei Ling Tang, Tunku Abdul Rahman University College, Malaysia - **Virtual**

10:20 - 10:40

Organoleptic Quality and Processing Ability According to the Variety and Location in Yam (*Dioscorea alata*)

Dominique Rinaldo, INRAE, Guadeloupe - **Virtual**

10:40 - 11:00

Sustainability Assessment of Food Waste Biorefineries as the Base of the Entrepreneurship in Rural Zones of Colombia

Carlos Ariel Cardona, National University of Colombia, Colombia

11:00 - 11:20

Coffee Break

11:20 - 11:40

In-Mouth Metabolism and Production of Flavor Sulfur Compounds by Oral Microbiota Enzymes

Mathieu Schwartz, CSGA/INRAE, France - **Virtual**

Session VII – Disruptive Technology Intervention

Chairs: Marco Dalla Rosa, University of Bologna, Italy
Joanna Harasym, Wroclaw University of Economics and Business, Poland

11:40 - 12:10

Keynote

Digital Twins of Food: From Modelling to Inline Applications

Pieter Verboven, Leuven University, Belgium

12:10 - 12:30

Effects of Plasma Activated Water on Rheological, Thermal, Hydration and Pasting Properties of Normal Maize, Waxy Maize and Potato Starches

Gebremedhin Gebremariam Gebremical, University of Bologna, Italy

12:30 - 12:50

Role of Sugars on Horseradish Peroxidase Inactivation by Cold Atmospheric Plasma Treatment

Jessica Laika, University of Teramo, Italy

12:50 - 14:00

Lunch Break

14:00 - 14:30

Journal's Presentation – Food Bioscience

14:30 - 15:00

Keynote

Smart Food Production Systems in the Nexus Project Framework

Marco Dalla Rosa, University of Bologna, Italy

15:00 - 15:20

Static Magnetic Field SMF Treatment Impact on Functional Characteristic of Buckwheat Flour

Joanna Harasym, Wroclaw University of Economics and Business, Poland

15:20 - 15:40

In-Silico Modelling of Digestion, Absorption, Hormonal Responses and Sensations of Hunger and Satiety, Applied to Food Systems

George Van Aken, COSUN Innovation Centre, Netherlands - **Virtual**

15:40 - 16:00

Impact of Plasma Activated Water (PAW) Treatments on the Oxidation of Mussels' Lipids

Roberta Foligni, Marche Polytechnic University, Italy - **Virtual**

PARALLEL SESSION II @ Cervini

Meeting Link:

<https://us06web.zoom.us/j/82849423924?pwd=N21lNjNWcnp3bFNUMWJZc0d0emVtQT09>

Meeting ID: 828 4942 3924

Passcode: 871593

Session VIII – Physical Properties in Food

Chairs: Bart Nicolai, Leuven University, Belgium
Antonio Derossi, University of Foggia, Italy

09:45 – 10:15 **Keynote**
3-D Visualisation of Food Structure at Multiple Scales by Means of X-ray Computed Tomography
Bart Nicolai, Leuven University, Belgium

10:15 – 10:35 **Monitoring of Canola Protein Gels Digestion by Rheology and Small-Angle Scattering Techniques**
Francois Boue, Laboratoire Léon Brillouin - CNRS/CEA/UPSay, France - **Virtual**

10:35 – 10:55 **How to Control the Torque of Plant-Based Protein Extrusion?**
Bo Zhang, Chinese Academy of Agricultural Sciences, China - **Virtual**

11:00 – 11:20 **Coffee Break**

11:20 – 11:45 **Invited**
Food Structuring and Customized Nutrition
Jeyan A. Moses, National Institute of Food Technology, Entrepreneurship and Management - Thanjavur, India - **Virtual**

12:10 - 12:30 **Relationship between the Physicochemical Properties of Soybean Protein Isolate and its Extrudate Based on High-Moisture Extrusion Torque**
Ang Meng, Chinese Academy of Agricultural Sciences, China - **Virtual**

12:30 - 12:50 **Effect of Glucose Levels on the Rheo-Fermentation Properties of Dough During Fermentation**
Dongdong Xie, Henan University of Technology, China - **Virtual**

12:50 - 14:00 **Lunch Break**

Session IX – Consumer's Trust and Awareness in Food Science and Technology & Open Science Culture, Data Mining and Visualization in Food Science

Chairs: Bart Nicolai, Leuven University, Belgium
Antonio Derossi, University of Foggia, Italy

14:30 – 15:00 **Keynote**
Four Levels of Data Visualization in Food Science
Min Chen, University of Oxford, United Kingdom - **Virtual**

15:00 – 15:20 **Segmenting Countries Based on Global Food Security Index: Biclustering Approach**
Milica Maričić, University of Belgrade, Serbia

15:20 – 15:40

Exploiting Comprehensive Two-Dimensional Liquid Chromatography for Pesticides Determination in Food Real-World Samples

Francesco Cacciola, University of Messina, Italy - **Virtual**

15:40 – 16:00

Impact of Mediteranian Cricket (*Gryllus bimaculatus*) Powder Addition on the Viscometric Profiles of Millet Flour Blends

Joanna Harasym, Wroclaw University of Economics and Business, Poland

16:00 – 16:10

Awards by Food Bioscience

16:10 – 16:30

Concluding Remarks & End of the Conference

NOTES





We wish to see you again in

FCT-2023



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USG-United Scientific Group (A non-profit organization)

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