



8<sup>th</sup> International Conference on

**FOOD CHEMISTRY AND TECHNOLOGY**

FCT-2022

October 12-14, 2022 | Rome, Italy

### Accepted oral presentations

(\*Listed alphabetically by names)

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

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

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

**Agnieszka Orkus**, Wrocław University of Economics and Business, Poland

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

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

Revalorization of Industrial Pineapple (*Ananas comosus (L.) Merrill*) By-Products as Antioxidant Source and its Application in Food Packaging Materials

**Ana Beltran Sanahuja**, University of Alicante, Spain

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

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

3D-Printing of Food for Personalized Nutrition

**Anne Louise Dannesboe Nielsen**, Danish Technological Institute, Denmark

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

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

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

How to Control the Torque of Plant-Based Protein Extrusion?

**Bo Zhang**, Chinese Academy of Agricultural Sciences, China

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Polyhydroxyalkanoate (PHA)-polylactic Acid (PLA) Films with Natural Extracts for Harvest and Post-Harvest Handling of Food

**Cesar A. Sierra**, The National University of Colombia, Colombia

Role of the Gut Microbiota in Long-Term Dietary Patterns Rich in Torularhodin Via OSA Colon-Targeted Delivery

**Chang Liu**, Jiangnan University, China & National University of Singapore, Singapore

In Situ Synthesis of Prebiotics to Improve Health-Related Functionality of Fruit Preparations

**Clarisse Nobre**, University of Minho, Portugal

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

**Dominique Rinaldo**, INRAE, Guadeloupe

Effect of Glucose Levels on the Rheo-Fermentation Properties of Dough During Fermentation

**Dongdong Xie**, Henan University of Technology, China

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

**Dorit Avni**, MIGAL Galilee Research Institute, Israel

Nutraceuticals from Agro-Waste: Green Extraction and Innovative Formulation

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

Cocoa Extract with High Content of Bioactive Compounds in the Development of a Cocoa-Based Functional Beverage

**Elly Acosta-Otálvaro**, National Chocolate Company, S.A.S, Colombia

Non-thermal and Thermal Treatments Impact the Structure and Microstructure of Milk Fat Globule Membrane

**Fatma Ali**, Tianjin University of Science and Technology, China

Effect of Moderate Pulsed Electric Field on Sugar Extraction from Date Fruit Powder and Thermokinetic Analysis of Associated Residues

**Fawzi Banat**, Khalifa University of Science and Technology, UAE

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

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Sustainable Re-Use of Brewer's Spent Grain for the Production of High Protein and Fibre Pasta  
**Francesca Cuomo**, University of Molise, Italy

Exploiting Comprehensive Two-Dimensional Liquid Chromatography for Pesticides Determination in Food Real-World Samples  
**Francesco Cacciola**, University of Messina, Italy

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

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

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

Vine Shoot Xylooligosaccharides as a Prebiotic Ingredient to Develop a Functional Spreadable Cheese  
**Graziana Difonzo**, University of Bari Aldo Moro, Italy

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

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

Enzymatic Recovery of Natural Pigments from Unsold Vegetables: Process Optimization and Stability  
**Ilaria Benucci**, University of Tuscia, Italy

Functional and Nutritional Properties of Fava Bean Ingredients Processed Using Extrusion  
**Imen Jebalia**, INRAE, France

Comparison of Different Extraction Methods of Vitamin K from Plant Samples by the UPLC-APCI-MS Method  
**Iryna Bryshten**, Maria Curie-Sklodowska University, Poland

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Role of Sugars on Horseradish Peroxidase Inactivation by Cold Atmospheric Plasma Treatment  
**Jessica Laika**, University of Teramo, Italy

Adducts Formed Between Rutin and Methylglyoxal in Foods and in-vivo, and Their Safety Concerns  
**Jie Zheng**, Jinan University, China

Mycoprotein As Novel Functional Ingredient: Mapping of Functionality, Composition and Structure Throughout the Quorn Fermentation Process  
**Julien Lonchamp**, Queen Margaret University, United Kingdom

Catalytic Properties of Lipoxygenase Extracted from Different Italian Varieties of Olive Fruit (*Olea europaea* L.)  
**Katia Liburdi**, University of Tuscia, Italy

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

Effects of Different Modifications on Composition and Technological Properties of Lingonberries (*Vaccinium vitis-idaea*) Pomace  
**Loreta Basinskiene**, Kaunas University of Technology, Lithuania

Novel Infrared Popping of Popcorn (*Zea Mays* L. var. *Everta*)  
**Majid Javanmard**, Iranian Research Organization for Science & Technology, Iran

Future Super Food: Comprehensive Investigation of New Mixed Fruit Juice  
**Mansour Rabieashkezary**, University of Palermo, Italy

Mechanistic and Machine Learning Driven Modelling to Predict and Understand Taste  
**Marco A Deriu**, Polytechnic of Turin, Italy

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

Why Are Some Apple Varieties Less Allergenic than Others? - Insights into Parameters Which Might Be Relevant  
**Maria Buchweitz**, University of Stuttgart, Germany



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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

Extending Shelf Life and Enhancing Safety through Food Design and Modeling

**Maria G. Corradini**, University of Guelph, Canada

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

**Maria Martuscelli**, University of Teramo, Italy

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

**Marta Mroczkowska**, Institute of Technology Carlow, Ireland

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

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

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

**Negin Seif Zadeh**, University of Turin, Italy

Rapid Determination of PCDDs/PCDFs and DL-PCB in Fatty Matrices using New Modified Acid Silica

**Ovanes Chakoyan**, Fidelitas Lab, Bulgaria

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

**Paola Tedeschi**, University of Ferrara, Italy

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

**Patricia Suurs**, Wageningen University & Research, Netherlands

New Approaches to Improving Techno-Functionality of Plant Protein Food Ingredients

**Rewati Bhattarai**, Curtin University, Australia

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

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

Modulating 3D Food Architecture for New Sensorial Perceptions

**Rossella Caporizzi**, University of Foggia, Italy

Innovative Mobile Application for Reducing Food Insecurity and Food Waste in Qatar

**Sana Abusin**, SESRI-QATAR University, Qatar

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

**Seyedeh Fatemeh Mirpoor**, University of Naples Federico II, Italy

Chemical Fingerprints of Pomegranate (*Punica granatum L.*) Seed Oil: Correlation of Bioactive Compounds with Origins

**Sonia Bonacci**, University Magna Graecia of Catanzaro, Italy

Variation in the Essential Oil Composition of Black, White, Green, Yellow and Red Turmeric Varieties Grown in North Alabama, USA

**Srinivasa Mentreddy**, Alabama A&M University, United States

Breeding of Faba Beans for Feed and Food Production

**Svend Secher Dam**, Business Academy Aarhus, Denmark

Study of the Behavior of Post-Consumer Recycled PLA

**Tannia Silva Pavez**, University of Santiago, Chile

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

**Tatiana Pereira**, MARE - Polytechnic of Leiria, Portugal

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

**Trinidad Perez Palacios**, University of Extremadura, Spain

Chemical Characterization of *Moringa oleifera* Leaves for Cookies Formulation

**Zarroug Ouederni Youkated**, National Agricultural Research Institute of Tunisia, Tunisia

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## Accepted poster presentations

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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

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

**Adeline Karolkowski**, CSGA/INRAE, France

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

Strategies Facilitating Edible Foods Acceptance

**Agnieszka Orkusz**, Wroclaw University of Economics and Business, Poland

The Use of Yellow Mealworm (*Tenebrio molitor*) Powder in the Functional Biscuits Production

**Alexandra Uivarasan**, Technical University of Cluj Napoca, Romania

Use of Alternative Ingredients to the Neapolitan Pizza Topping

**Amalia Piscopo**, University Mediterranea of Reggio Calabria, Italy

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

**Andreia Miranda**, MARE-IPLeiria, Portugal

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

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

**Andriana C. Kaliora**, Harokopio University of Athens, Greece

Natural Volatile Compounds as Possible Replacement Agents for Chlorpyrifos

**Angie Daniela Torres Garcia**, National University of Colombia, Colombia

Biomimetic Oxidative Coupling of Phenol-Agmatine Amides with Horseradish Peroxidase

**Annemiek van Zadelhoff**, Wageningen University and Research, Netherlands

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Relationship Between Structure and Function of Soybean Protein Components Based on Literature Review

**Binyu Luan**, Chinese Academy of Agricultural Sciences, China

Development and Characterisation of a Hybrid Beef/Plant-Based Burger Patty

**Bjorn Petrat-Melin**, Business Academy Aarhus, Denmark

Effect of Different Processing Technologies on Chemical and Sensory Properties of Dried Caper (*Capparis spinosa L.*) Powder

**Concetta Condurso**, University of Messina, Italy

Hemp Seed Flour Enriched Fresh Pasta: Nutritional, Technological, and Sensory Properties

**Concetta Condurso**, University of Messina, Italy

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

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

Vegetable By-Products as Potential Source of Plant-Based Ingredients

**Federica Flamminii**, D'Annunzio University of Chieti - Pescara, Italy

The Effect of Harvesting Time on Olive Fruits and Oils Quality Parameters of Tortiglione and Dritta Olive Cultivars

**Federica Flamminii**, D'Annunzio University of Chieti - Pescara, Italy

The Industrial Green Revolution in Food Extraction and Processing Scaling up of Green Enabling Technologies

**Giancarlo Cravotto**, University of Turin, Italy

The True Behind the Myth of Pomegranate Bark: Proofs on Nutraceutical Properties of Pelletierine

**Giuseppe Iriti**, University Magna Graecia of Catanzaro, Italy

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

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Environmental and Mechanical Properties of Starch Protein Blend Bioplastic Packaging  
**Jade Stanley**, Institute of Technology Carlow, Ireland

Development of An Isoallergene-Specific Quantification Method for the Apple Allergen Mal D 1  
**Julia Kaeswurm**, University of Stuttgart, Germany

Improving and Developing Environmentally Sustainable Methods for Food and Feed Analysis  
**Keshun Liu**, United States Department of Agriculture, United States

Technology of the Hopping Process and the Quality of Non-Alcoholic Beer  
**Kinga Adamenko**, Wrocław University of Environmental and Life Sciences, Poland

Variability of Grain Albumen Minor Components and Technological Quality of Wheat  
**Laura REZETTE**, INRAE - BIA, France

Antioxidant Capacity and Sensorial Analyses of Six Cultivars of Sweet Potato Cultivated at Setentrional Amazon Region  
**Leandro Camargo Neves**, Roraima Federal University, Brazil

*Palmaria Palmata*- Extraction of Polyphenols and Determination of Antioxidant Activity  
**Ligia-Ioana Todea**, Technical University of Cluj Napoca, Romania

Mass Transfer of Organic Acids during the Cocoa Seed Transformation under Controlled Process Conditions in Two Cocoa Varieties  
**Lili Dahiana Becerra Garcia**, University of La Sabana, Colombia

High Hydrostatic Pressure (HHP) Effect on Proteins Profile of Wheat Flour  
**Maria Teresa Murillo Arbizu**, Public University of Navarra, Spain

Antibacterial Activity of a Commercial Propolis Ethanollic Extract against *Staphylococci* Isolated from Skin  
**Mary Kalamaki**, American College of Thessaloniki, Greece

Valorization of Aquaculture Waste Side Streams  
**Nicole Cheam Mein Ji**, Nanyang Technological University, Singapore

Assessment of Microbiome and Mycotoxins Contamination in Different Processing Fractions of Brazil Nuts (*Bertholletia excelsa*)  
**Otniel Freitas-Silva**, The Brazilian Agricultural Research Corporation, Brazil

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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

Spectroscopy Tools in the Authentication of Debittered Tarwi

**Patricia Glorio-Paulet**, National Agrarian University, Peru

Development of Active Materials with Inclusion Complexes ( $\beta$ -cyclodextrin/Carvacrol) by Supercritical Impregnation Process

**Patricia Rivera Fuentealba**, University of Santiago, Chile

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

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

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

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

The Impact of Environment on Micro and Macronutrients in Meat

**Sofia Skoumpa**, Institute of Technology Carlow, Ireland

Production of Hybridgel Based on Beeswax Oleogel: Application in Reduced Fat Chocolate Spread

**Sousan Karimi**, Research Institute of Food Science and Technology, Iran

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

Phycocyanin Enrichment of Minimally Processed Organic Apples

**Urszula Tylewicz**, University of Bologna, Italy

**\*Note:** This file updated on July 11, 2022, and it can be modified/updated with or without notice.

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