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**FCT-2025**

October 15-17, 2025 | Rome, Italy

# PROGRAM

**11<sup>th</sup>**

International Conference on

# Food Chemistry & Technology



October 15-17, 2025 

NH Roma Villa Carpegna  
Via Pio IV, 6, 00165  
Rome, Italy



<https://food.unitedscientificgroup.org/>

Join the meeting: [To be updated](#)

Meeting ID: **To be updated**

Passcode: **To be updated**

07:00 Registrations and Badge Pickup

07:50 Welcome Speech

## Keynotes (25+5 QA)

**Session Chair:** [Guy Della Valle](#), INRAE, France



08:00-08:30

[Elliot Woolley](#), Loughborough University, United Kingdom

**Technological Solutions for Food Packaging Systems in a Circular Economy**



08:30-09:00

[Elias Hakalehto](#), Finnflag Oy, Finland

**Microbes Sustain Industrial Ecosystems and Food Production**



09:00-09:30

[Da-Wen Sun](#), University College Dublin, Ireland

**Novel Freezing Technologies for Enhancing Frozen Food Quality**



09:30-10:00

[Marco Dalla Rosa](#), University of Bologna, Italy

**Beyond "Use By" Dating of Food to Avoid the Paradox of Waste of Safe Products: the Case of Fresh Pasta**

## Coffee Break 10:00-10:20

@Foyer

## Oral Presentation (15+2 QA)

### Sustainability and Climate Neutral Food Sector

**Session Chair:** [Alessandro Bianchi](#), University of Pisa, Italy

10:20-10:37 [Ana Belen Diaz Sanchez](#), University of Cadiz, Spain

**Production of High-added Value Products from by-products of the Sugar Production Process**

10:37-10:54 [Amalia Piscopo](#), University Mediterranea of Reggio Calabria, Italy

**Effectiveness of a Minimal Processing Technology Combined with Biodegradable Packaging to Produce a New Ready-to-eat Vegetable: Fresh Cut Fennel**

10:54-11:11 [Juan David Lopez Taborda](#), TU Delft, Netherlands

**An Inclusive Innovation Approach for Designing Cellular Agriculture Value Chains Towards a Sustainable Food System**

11:11-11:28 [Corinne Giacondino](#), University Mediterranea of Reggio Calabria, Italy

**Sustainable Approaches in the Preservation of Cherry Tomatoes Aimed at Reducing Food Waste and Plastic Use**

11:28-11:45 [Nusrat Sharmin](#), Nofima AS, Norway

**Development of Porcine and Warm Water Fish Gelatin Blends with Gelan or Sodium Alginate as Food Contact Materials**

## Physical Properties of Food

**Session Chair:** [Alessandro Bianchi](#), University of Pisa, Italy

- 11:45-12:02 [Izumi Sone](#), Nofima AS, Norway  
Gelation of Acid Milk Gel with and without Addition of Fish Gelatine, Investigated from Macroscopic to Microscopic and Nanoscopic Levels
- 12:02-12:19 [Guy Della Valle](#), INRAE, France  
Biochemical, Hydrothermal and Texture Characterizations of Lentils and Chickpeas for Pulse-based Model Foods

## Novel Food Detection and Process Control

**Chair:** [Guy Della Valle](#), INRAE, France

- 12:19-12:38 [Marta Ferreiro Gonzalez](#), University of Cadiz, Spain  
Intelligent Quality Control of Food-grade Paraffin Wax Odor Using an Electronic Nose
- 12:38-12:55 [Jose Luis Perez Calle](#), University of Cadiz, Spain  
Detection and Quantification of Fruit Juice Adulteration Using FT-IR and HS-GC-IMS Combined with Machine Learning
- 12:55-13:12 [Gerardo Fernandez Barbero](#), University of Cadiz, Spain  
Application of Extractive Techniques for Obtaining Bioactive Compounds from Mushrooms

## Group Photo & Networking Lunch 13:12-14:10

@RISTORANTE

- 14:10-14:27 [Billy Salgado](#), University of Kaiserslautern, Germany  
Benchtop NMR for Grape Quality Assessment and Fermentation Monitoring
- 14:27-14:44 [Tawfiq Alsulami](#), King Saud University, Saudi Arabia  
Fluorescent Detection of Antibiotics in Dairy Products and Household Water Using Biocompatible Doped Carbon Dots
- 14:44-15:01 [Maria Piochi](#), University of Gastronomic Sciences, Italy  
Exploring the Influence of Masticatory Behaviour on Pasta Preferences: Opportunities for Innovation in Food Products
- 15:01-15:13 [Irene Maria Punta Sanchez\\*](#), University of Cadiz, Spain  
Advanced Analytical Strategies for the Authentication of Honey

## Poster Presentations Part I and Networking Drinks

@RAFFAELLO A

### Session-1 15:13-16:13

- FCT25 P01 [Anna Shik](#), M.V. Lomonosov Moscow State University, Russia  
Reaction-based Optical Fingerprinting Strategy vs. Existing Techniques for the Discrimination of Food Samples
- FCT25 P02 [Joanna Le Thanh-Blicharz](#), Institute of Agricultural and Food Biotechnology - State Research Institute, Poland  
Zero Waste Processing of Legumes: Pea Starch Valorization
- FCT25 P03 [Elzbieta Wojtowicz](#), Institute of Agricultural and Food Biotechnology-State Research Institute, Poland  
Valorization of Pea Husks in No Waste Processing of Legumes
- FCT25 P04 [Francisco de la Haba](#), University of Extremadura, Spain  
Bioaccessibility of Omega-3 Fatty Acids in Fish Oil Microcapsules as Affected by Protein-based Wall Material and Homogenization Procedure

- FCT25 P05 **Roberto Sturniolo**, University of Messina, Italy  
**Mineral Profile of Citrus Fruits from Volcanoes Etna and Stromboli**
- FCT25 P06 **Rodolfo Lopez-Gomez**, Universidad Michoacana de San Nicolas de Hidalgo, Mexico  
**Avocado Fruit Defensin (PaDef) Bioactive Peptides Promote Trypsin and Chymotrypsin Digestive Enzymes Activity**
- FCT25 P07 **Arjun Mohanakumar**, University of Parma, Italy  
**Processing and Valorization of Agri-food by-products and Their Use as Elicitors in Agriculture**
- FCT25 P08 **Anastasiya Oprunenko**, Lomonosov Moscow State University, Russian Federation  
**Impact Degradation of Antibiotics in Aqueous Solutions by Electron Beam Irradiation**
- FCT25 P09 **Polina Borshchegovskaya**, M.V. Lomonosov Moscow State University, Russian Federation  
**Impact of Irradiation on Germination, Yield and Phytopathogenic Status of Seeds and Potatoes**
- FCT25 P10 **Elena Kozlova**, I.M. Sechenov First Moscow State Medical University, Russian Federation  
**Catalase Inhibition Under Electron Beam Irradiation: spectrophotometry and Oxygen Bubble Method Study**
- FCT25 P11 **Pedro Luiz Manique Barreto**, Universidade Federal de Santa Catarina, Brazil  
**Oil Spill on the Brazilian Coast: Development of Analytical Methods for Polycyclic Aromatic Hydrocarbons Control and Risk-based Fish Monitoring**
- FCT25 P12 **Takenobu Ogawa**, Kyoto University, Japan  
**Prediction and Mechanistic Elucidation of Texture in Noodles and Bread Based on Microstructure Using Artificial Intelligence**
- FCT25 P13 **Hiromichi Yamasaki**, Kyoto University, Japan  
**Development of Optimal Decolorization and Degreasing Reagents for Three-dimensional Fluorescence Imaging of Food Microstructures**
- FCT25 P14 **Alistair Grima**, The Malta Chamber of Commerce, Enterprise and Industry, Malta  
**Living Labs for Sustainable Agri-food Commercialisation**
- FCT25 P15 **Emma Cutajar**, Malta Food Agency, Malta  
**Consumer Acceptance of Bioactive-enriched Foods Derived from Citrus and Pomegranate Residues: Insights from the Excel4med Project**
- FCT25 P16 **Raquel Bridi**, Universidad de Chile, Chile  
**Soluble and Insoluble Phenolic Compounds from Lupin Grains: Phenolic Profile and Antioxidant**
- FCT25 P17 **Maria da Luz Calado**, Polytechnic University of Leiria, Portugal  
**Testing the Antimicrobial Properties of Various Beeswax Coating Formulations for Food Packaging Applications**
- FCT25 P18 **Maria Jorge Campos**, Polytechnic Institute of Leiria, Portugal  
**Development of a Hydrophobic Coating for Sustainable Food Packaging Derived from Wood Shaving Waste**
- FCT25 P19 **Alessandro Bianchi**, University of Pisa, Italy  
**Development of a Lab-on-chip for Detecting Polyphenolic Compounds in Olive and Its Derivatives**
- FCT25 P20 **Bruna B. Neves**, Aveiro University, Portugal  
**Sustainable Approach Towards Value-added Lipids from Portuguese Hass Avocado by-products for Health-promoting Applications**

**Coffee Break 16:13-16:33**

@Foyer



## Session-2 16:33-17:33

- FCT25 P21 **Tania Melo**, Aveiro University, Portugal  
**Species Specificity of Portuguese Avocados: Insights from Untargeted Lipidomics Approaches**
- FCT25 P22 **Klara Opacak**, Faculty of Food Technology Osijek, Croatia  
**Analysis of Cupriavidus Necator Biomass by GC-MS**
- FCT25 P23 **Ema Pavicic**, Faculty of Food Technology Osijek, Croatia  
**Green Approach for Polyphenolic Extraction and Valorization of *Mentha x piperita* L. Leaves Herbal Dust**
- FCT25 P24 **Samanta Tapia Molina**, Universidad de Guanajuato, Mexico  
**Potential Use of Brewery Solid Waste in Human and Animal Food**
- FCT25 P25 **Francesca Bonazza**, CNR, Italy  
**Microbial and Biochemical Impact of Starter Culture in Valtellina Casera PDO Cheese Production**
- FCT25 P26 **Maria Piochi**, University of Gastronomic Sciences, Italy  
**An Ethnobotanical, Sensorial and Chemical Characterization of *Prunus brigantina* Vill: A Traditional Plum of the Piedmont Occitan Valleys**
- FCT25 P27 **Mustafa Bener**, Istanbul University, Turkey  
**Practical Measurement Package for Antioxidant Capacity Determination**
- FCT25 P28 **Lia Ethel Velasquez Castillo**, Universidad Nacional Agraria La Molina, Peru  
**Extraction of Phenolic Compounds from Muna Leaves (*Minthostachys spicata*) Using Pressurized Liquid Extraction in Intermittent Process**
- FCT25 P29 **Itzel Lopez-Monterrubio**, Universidad Autonoma Chapingo, Mexico  
**Chipilin Protein (*Crotalaria longirostrata*): Digestibility, Structure and Techno-functional Properties**
- FCT25 P30 **Negar Azizi**, NTNU, Norway  
**Electrohydrodynamic Response of Clay-stabilized Pickering Droplets in Castor Oil**
- FCT25 P31 **Tarsicio Medina Saavedra**, Universidad de Guanajuato, Mexico  
**Rabbit Meat as a Traditional Ingredient: Culinary Uses and Perception in Local Cuisine**
- FCT25 P32 **Amin Majdalawieh**, American University of Sharjah, United Arab Emirates  
***Sesamum indicum* (Sesame) Enhances NK Anti-cancer Activity and Splenocyte Proliferation, Modulates Th1/Th2 Balance, and Suppresses Macrophage Inflammatory Response**
- FCT25 P33 **Ilaria D'Agostino**, University of Pisa, Italy  
**Toxic Aldehydes from High-Temperature Cooking of Vegetable Oils: Could Enzymes Offer a Solution? Toward Innovative Bioremediation Tools**
- FCT25 P34 **Roberto Larcher**, Fondazione Edmund Mach, Technology Transfer Centre, Italy  
**Unveiling the Bioactive Potential of Fermented Vegetables: A Metabolomic Approach Using High-resolution Mass Spectrometry**
- FCT25 P35 **Carla Boga**, University of Bologna, Italy  
**Onion Peels From Waste to Resource: A Scientific Approach to an Environmentally Friendly Hair Dyeing**

Join the meeting: [To be updated](#)

Meeting ID: [To be updated](#)

Passcode: [To be updated](#)

## Keynotes

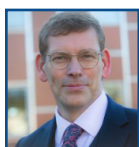
**Session Chiar:** [Fabrizio Cincotta](#), University of Messina, Italy



08:00-08:30  
[Hosahalli Ramaswamy](#), McGill University, Canada  
High Pressure Impregnation of Foods



08:30-09:00  
[Alain Le Bail](#), ONIRIS VetAgroBio, Food Engineering and Food Science Campus, France  
Increasing the Storage Temperature of Frozen Foods by 3°C; Impact on Kinetics of Quality Loss



09:00-09:30  
[Charles Brennan](#), RMIT University, Australia  
Role of Pro, Pre and Post Biotics in Food and Nutrition



09:30-10:00  
[Sara Gonzalez-Garcia](#), CRETUS, University of Santiago de Compostela, Spain  
What is Sustainability in the Dairy Industry and How Can It Be Achieved? A Case Study of Premium Cheese Production

## Coffee Break 10:00-10:20

@Foyer

## Oral Presentation (15+2 QA)

## Food Chemistry and Ingredients

**Session Chair:** [Estrella Espada Bellido](#), University of Cadiz, Spain

- 10:20-10:37 [Estrella Espada Bellido](#), University of Cadiz, Spain  
Post-fire Metal Content Analysis in Morchella Mushrooms: Health Implications and Safety Concerns
- 10:37-10:54 [Fabrizio Cincotta](#), University of Messina, Italy  
Characterization of Black Legume Flours as Ingredient for Food Applications
- 10:54-11:11 [Marina Gonzalez Ramirez](#), Universidad de Sevilla, Spain  
Relations Between the Synthesis of the Bioactives Tyrosol, Hydroxytyrosol, and Melatonin and Volatile Compounds by *Saccharomyces cerevisiae*
- 11:11-11:28 [Sakhi Ghelichi](#), National Food Institute, Technical University of Denmark, Denmark  
Antioxidant Properties of Extracts Obtained Through a Sequential Approach from Red Seaweed *Palmaria palmata*
- 11:28-11:45 [Chiara Fabrizi](#), University of Tuscia, Italy  
Purification and Identification of Cardosins A and B in the Pistils of *Cynara cardunculus* L. During Floral Development
- 11:45-12:02 [Julien Lonchamp](#), Queen Margaret University, United Kingdom  
Reformulation of Bakery Products with Nutritional and Sustainability Benefits Using a Novel Palm Shortening Substitute

- 12:02-12:19 **Paola Coccetti**, University of Milano-Bicocca, Italy  
Targeting Protein Aggregation Using a Cocoa-bean Shell Extract to Reduce  $\alpha$ -Synuclein Toxicity in Models of Parkinson's Disease
- 12:19-12:36 **Graziana Difonzo**, University of Bari Aldo Moro, Italy  
Opportunities and Drawbacks in Agri-food Waste Upcycling: The Case Study of Olive Leaf Extract
- 12:36-12:53 **Katia Liburdi**, University of Tuscia, Italy  
Optimizing Sugar-reduced Ice Cream: A Physicochemical and Sensory Approach

## Lunch and Networking 12:53-13:50

@RISTORANTE

**Session Chair:** **Katia Liburdi**, University of Tuscia, Italy

- 13:50-14:07 **David Shiuan**, National Dong Hwa University, China  
Noni and the Advanced Glycation End-products
- 14:07-14:24 **Paola Tedeschi**, University of Ferrara, Italy  
Chemical Composition, Quality and Shelf-life of Bread Enriched with PDO Voghiera Black Garlic Powder
- 14:24-14:41 **Nardin Tiziana**, Fondazione Edmund Mach, Technology Transfer Centre, Italy  
High-resolution Mass Spectrometry (HRMS) to Investigate the Alkaloid Profile of Italian Alpine Herbs and Milk
- 14:41-14:58 **Maria de las Mercedes Vazquez Espinosa**, University of Cadiz, Spain  
Advanced Extraction Method for the Recovery of Bioactive Compounds from Enological by-products (Winemaking lees)
- 14:58-15:15 **Mutamed Ayyash**, United Arab Emirates University, United Arab Emirates  
Date by-product Polysaccharides Enhance Gut Health via Microbiota-dependent Metabolic Pathways and Immune Stability: In Vivo Study
- 15:15-15:27 **Neha Sharma\***, Teagasc Food Research Centre, Ireland  
Pre-processing and Thermal Treatment Modulate Structure, Solubility, and Digestibility of Fava Bean Protein Isolates: A Structure-function Perspective
- 15:27-15:39 **Chang Li \***, Beijing Forestry University, China  
The Role of Hydrolysis on the Fibrillization of Walnut Protein: Self-assembly Behavior, Structural Characteristics

## Coffee Break 15:39-16:10

@Foyer

## Food Modeling & Sensory Experience of Food

**Session Chair:** **Fabrizio Cincotta**, University of Messina, Italy

- 16:10-16:27 **Krystyna szymandera-Buszka**, Poznan University, Poland  
Sensory Requirements of Polish Consumers Towards Fruit and Vegetable Juices
- 16:27-16:44 **Deborah Becker**, Nestle S.A.-NR Lausanne, Switzerland  
Simulation-assisted Multi-objective Optimization of Low-moisture Food Extrusion
- 16:44-17:01 **Miguel Antonio Martins de Oliveira**, Marine and Environmental Sciences Centre - Polytechnic University of Leiria, Portugal  
Improving Wood Packaging Performance with Hydrophobic and Antimicrobial Coatings: Beeswax and Beeswax-Lignin Case Study

- 17:01-17:18 **Mary Angela Favaro Perez**, Food Technology Institute, Brazil  
Specific Migration of Benzophenone and Bisfenol A in Virgins and Post-consumer Recycled Paper
- 17:18- 17:35 **Feng Feng**, Chinese Academy of Quality and Inspection & Testing, China  
Rapid Screening of Unknown Illegal Additives in Foods by Ultra-high Performance Liquid Chromatographyhigh Resolution Mass Spectrometry

## DAY-03 In Person

Friday, October 17, 2025

Room: @LEONARDO A

Join the meeting: [To be updated](#)

Meeting ID: [To be updated](#)

Passcode: [To be updated](#)

### Oral Presentations (15 + 2 QA)

#### Food and Health in A New Dimension

**Session Chiar:** **Paola Tedeschi**, University of Ferrara, Italy

- 08:30-08:47 **Ulyana Bliznyuk**, M.V. Lomonosov Moscow State University, Russian Federation  
Comprehensive Two-phase Approach to Food Irradiation with Electron Beam for Enhancing Food Irradiation Efficiency
- 08:47-09:04 **Victoria Ipatova**, Skobeltsyn Institute of Nuclear Physics of Lomonosov Moscow State University, Russian Federation  
Molecular Compound Transformations in Biological Objects During Irradiation
- 09:04-09:21 **Derya Ozalp Unal**, Field Crops Central Research Institute-Herbal Foods Research Center, Turkey  
Impact of Extraction Methods on the Anticancer Potential of White and Black Garlic Extracts
- 09:21-09:38 **Federico Bianchi**, University of Verona, Italy  
Effect of Annurca by-product, Soluble and Insoluble Fibers on Techno-physical, Textural Properties, and Polyphenols Recovery of Wheat-based Crackers
- 09:38-09:55 **Valentina Fernandes Domingues**, Polytechnic of Porto, Portugal  
Monitoring of Persistent Organic Pollutants and Contaminants of Emerging Concern in Wild Macroalgae

### Coffee Break 09:55-10:15

@Foyer

#### Emerging Technologies and Future Food

**Session Chiar:** **Paola Tedeschi**, University of Ferrara, Italy

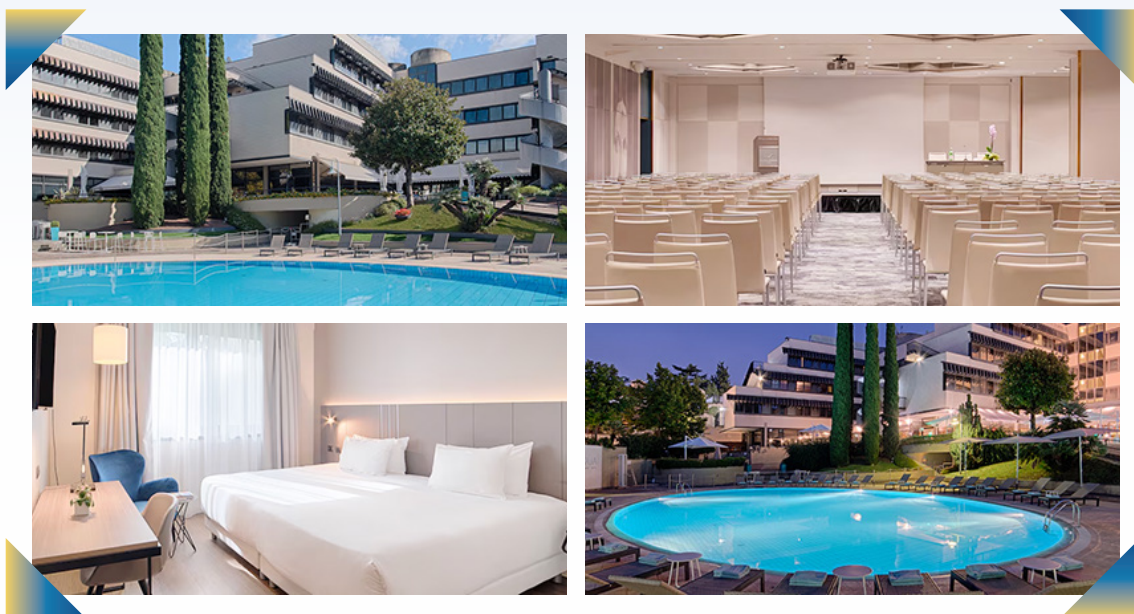
- 10:15-10:32 **Alessandro Bianchi**, University of Pisa, Italy  
Innovative Salty Biscuits Enriched with Fresh and Dried Bee Pollen: Chemical, Technological, and Sensory Characterization
- 10:32-10:49 **Boravelli Joseph Abhisheka Rao**, Indian Institute of Technology Tirupati, India  
Multilayered Encapsulation of Betalains by Ionic Gelation
- 10:49-11:06 **Neamtallah Assaf**, University of Parma, Italy  
Application of Pulsed Electric Field to Promote Peelability on Peponids and Drupes: Understanding the Effects on Cells and the Physical Properties of Fruits



- 11:06-11:23 **Homero Rubbo**, Universidad de la Republica, Uruguay  
**Nitro-fatty Acids: Novel Virgin Olive Oil Quality Markers Responsible for Health Benefits**
- 11:23-11:40 **Marcello Gigliotti**, Universita di Parma, Italy  
**Probing the Staling Process in Chickpea Composite Bread Through Dynamic Mechanical Analysis**
- 11:40-11:57 **Mohammed Salman**, University of Napoli Federico II, Italy  
**Characterization of Ahl-mediated Quorum Sensing in Pseudomonas Gessardii from Raw Milk and Application of Polyphenols for Controlling Proteolytic Activity**

**11:57 Lunch & Departures**

We wish to see you again in  
**FCT-2026**  
Valencia, Spain



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