

29th WORKSHOP Developments in the Italian PhD Research on Food Science Technology and Biotechnology



Scientific Programme

WEDSNED	OAY, 10 th SEPTEMBER 2025		DAY 1	
09:00-13:30	REGISTRATION			
13:30	OPENING SESSION AND INSTITUT	ONAL GREETINGS		
		AULA MAGNA		
	KEYNOTE LECTURE			
14:00	Designing Future Food Research for a Sustainable Planet Prof. Milena Corredig, Aarhus University, Denmark			
	KEYNOTE LECTURE			
14:30	Unraveling the Role of Foods and Recipes as Modulator of Inflammatory and Oxidative Response in "Real Life" Nutrition Prof. Mauro Serafini, University of Teramo, Italy			
	AULA MAGNA	AULA TESI	AULA 13	
	Chair: Sonia Calligaris (UNIUD), Giorgia spigno (UNICATT)	Chair: Fabio Licciardello (UNIMORE), Eleonora Carini (UNIPR)	Chair: Clara Comuzzi (UNIUD),Prospero Di Pierro (UNINA)	
	PARALLEL SESSION 1 Processing-Structure-Function Relationships in Food Design	PARALLEL SESSION 2 Smart Packaging and Green Technologies for Food Preservation	PARALLEL SESSION 3 Innovative and Green Approaches for Food Safety and Sustainability	
15:15	Application of innovative technologies for the functionalisation of alternative proteins and the associated functional and rheological characterisation, Federico Drudi, UNIBO	Intelligent sensors and laser spectroscopy for improving quality and prolonging the shelf life of food without chemical additives, Nicola Mercanti , UNIPI	Use of Non-Thermal Treatments to Improve the Quality Safety, and Shelf-Life of Raw Pork Sausages, Chiara Angelucci , UNIBO	
15:30	Impact of process factors and agri-food by-products on the oxidative and physico-chemical stability of oleogels, Giulia Salvatori, UNIBO	Biodegradable Innovative Packaging: A Sustainable Solutions for Food Shelf Life Extension, Corinne Giacondino , UNIRC	Nature-inspired compounds: synthesis and interaction with molecular targets for the application in plant protection, Francesca Sacchi , UNIMI	
15:45	Development of Plant-Based Cheese Analogues: The Role of Ingredients and Processes, Irene Fenga , UNIPR	Sustainability and innovation of spray packaging applied to food and nutraceutical products: development of innovative sprayable solutions and study of their application in bakery and confectionery, Chiara Rossetti, UNICATT	Biomimetic synthesis of phytoalexins as environmentally friendly antimicrobials, Denise Dozio , UNIMI	
16:00-16:45	COFFEE BREAK AND POSTER SESSION	1		
16:45	Application of innovative processing technologies on Plant Materials: Unraveling structure – Process interactions, Neamtallah Assaf , UNIPR	Free and microencapsulated olive pomace extracts to improve the phenolic content and shelf-life of fresh pasta, Mariana Miccolis, UNIBA	From agri-food waste to high-value compounds via green technology approaches, Agostina Colacicco , UNIMI	
17:00	Exploring the physical, structural and technological properties of ball-milled starches from different origins from granules to porous gels, Reindorf Boateng , UNITE	Microbial Biopolymers for Potential Applications in Food Packaging, Marianna Ciccone , UNIBO	Dietary Exposure to Chemicals and Implications for Consumers Health, Giovanni Tommaso Lanza , UNIPF	
17:15-17:45	POSTER SESSION			
	Aula Magna Chair: Simone Giacosa (UNITO), Fabio Chinnici (UNIBO)	Aula Tesi Chair: Giovanna Ferrentino (UNIBZ), Giacomo Squeo (UNIBA)	Aula 13 Chair: Sandra Fratianni (UNIMOL), Michele Paradiso (UNISALENTO)	
	PARALLEL SESSION 4A Advanced Approaches in Wine Science	PARALLEL SESSION 5A Functional Ingredients from By-Products	PARALLEL SESSION 6A Emerging Analytical Tools for Food Quality and Safety	
17:45	Optimizing Negroamaro Wine Quality: The Effect of Withering Techniques and Defoliation the Apulian Landscape, Ilaria Prezioso , UNISALENTO	Fostering Sustainability in the Olive Oil Supply Chain: Valorization of Typical Extra Virgin Olive Oils and Olive Mill By-products, Sofia Zantedeschi , UNIBO	Combining Instrumental and Sensory Methods to Assess the Quality and Authenticity of Foods of Animal Origin, Mara Antonia Gagliano, UNIBO	
18:00	Assessment of quercetin precipitation risk in Italian red wines, Alessandra Luciano , UNINA	Development of functional ingredients using byproducts from agro-industrial process, Benedetta Fanesi , UNIVPM	Advanced chemical characterization and functional assessment of hemp flour-enriched bread: opportunity and challenges in valorizing hemp chain by-products, Lorenzo Del Vecchio, UNIPR	
18:15	Wild yeasts as source for designing specific "synthetics microbiota" to be used for wine fermentations, Ernesto Petruziello , UNINA	Technological treatments to obtain high-quality vegetable products, lolanda Cilea , UNIRC	Designing advanced materials and self contained platforms for analytical applications in food analysis, Davide Paolini, UNITE	











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THURSDAY,	11 th SEPTEMBER 2025		DAY 2
		KEYNOTE LECTURE	
09:00	Computational Food Science: making sense of food data Prof. József Baranyi, ERA-Chair Holder, foodigIT Computational Food Science Centre, Aristotle University of Thessaloni Greece		
	Aula Magna	Aula Tesi	Aula 13
	Chair: Simone Giacosa (UNITO), Fabio Chinnici (UNIBO)	Chair: Giovanna Ferrentino (UNIBZ), Giacomo Squeo (UNIBA)	Chair: Sandra Fratianni (UNIMOL), Michele Paradiso (UNISALENTO)
	PARALLEL SESSION 4B Advanced Approaches in Wine Science	PARALLEL SESSION 5B Functional Ingredients from By-Products	PARALLEL SESSION 6B Emerging Analytical Tools for Food Quality and Safety
09:45	Yeast Derivatives for Precision Oenology: Emerging and Sustainable Application for Wine Production (WInnY), Alessio Altomare, UNIMI	A "green path" strategy for complete recovery of buckwheat processing byproducts, Anna Ramona Speranza , UNIMI	Analysis of volatilome of virgin olive oils and flavored oils: quality grade evaluation and study of modification during storage, Rosalba Tucci , UNIBO
10:00	Study of combined stress factors on shelf-life of rosé wines: interaction of oxygen, light and temperature on color and aroma evolution, Leonardo Vanzo , UNIVR	Integrated strategies to overcome lignocellulosic recalcitrance for the recovery, fractionation and characterization of functional fibers, Pio Viscusi , UNIPR	Identification and quantification of microplastics in the clam <i>Chamelea gallina</i> using different analytical techniques, Rosaria Aloia , UNITE
10:15	Oenological characterization of ancient Sicilian cultivars and grape heterogeneity assessment using technological parameters and phenolic markers, Clara Vitaggio, UNIPA	Sustainable valorisation of high value added compounds from secondary raw materials of the milling industry, Claudio Cinquanta , UNIMOL	Electrochemical and Machine Learning Approaches for the Classification and Functional Assessment of Oenological Tannins During Wine Ageing, Rosario Pascale , UNIVR
10:30-11:15	COFFEE BREAK AND POSTER SESSION		
	Aula Magna	Aula Tesi	Aula 13
	Objective Description Association (UNITE) Living		
	Chair: Donato Angelino (UNITE), Luca Cocolin (UNITO)	Chair: Amalia R.M. Piscopo (UNIRC), Massimiliano Rinaldi (UNIPR)	Chair: Diego Mora (UNIMI), Teresa Zotta (UNIBAS)
11:15	Cocolin (UNITO) PARALLEL SESSION 7	Massimiliano Rinaldi (UNIPR) PARALLEL SESSION 8 Processing and Reformulation Strategies	(UNIBAS) PARALLEL SESSION 9 Food Microbiology and biotechnology (1) Innovative Approaches in the Development of Novel
11:15 11:30	Cocollin (UNITO) PARALLEL SESSION 7 Food, Microbiota and Health Ultra-Processed foods: from the nutritional characteristics to the impact on human health, Beatrice	Massimiliano Rinaldi (UNIPR) PARALLEL SESSION 8 Processing and Reformulation Strategies for Product Innovation Technological and Nutritional Properties of Pigmented Whole Wheat Foods: The Role of Innovative	(UNIBAS) PARALLEL SESSION 9 Food Microbiology and biotechnology (1) Innovative Approaches in the Development of Novel Organic Food Products by Applying Careful Processing,
	Cocolin (UNITO) PARALLEL SESSION 7 Food, Microbiota and Health Ultra-Processed foods: from the nutritional characteristics to the impact on human health, Beatrice Pellegrini, UNIMI In Vitro Evaluation of Probiotic, Enzymatic, and Botanical Supplements on Gut Microbiota and	Massimiliano Rinaldi (UNIPR) PARALLEL SESSION 8 Processing and Reformulation Strategies for Product Innovation Technological and Nutritional Properties of Pigmented Whole Wheat Foods: The Role of Innovative Technologies, Ilenia Gaeta, UNIMOL Bioactive-Rich Mushrooms for Food Reformulation	(UNIBAS) PARALLEL SESSION 9 Food Microbiology and biotechnology (1) Innovative Approaches in the Development of Novel Organic Food Products by Applying Careful Processing, Yasmin Muhammed, UNIBA Microbial Collections as Biorepositories for Sourdough Microbiomes: Microbiological Assessment, Metagenomic Analysis, and Nutritional Profiling,
11:30	Cocolin (UNITO) PARALLEL SESSION 7 Food, Microbiota and Health Ultra-Processed foods: from the nutritional characteristics to the impact on human health, Beatrice Pellegrini, UNIMI In Vitro Evaluation of Probiotic, Enzymatic, and Botanical Supplements on Gut Microbiota and Digestion, Robin Duncan, UNIMI Genomic characterization of Lactic Acid Bacteria strains for the development of a novel psychobiotic product,	Massimiliano Rinaldi (UNIPR) PARALLEL SESSION 8 Processing and Reformulation Strategies for Product Innovation Technological and Nutritional Properties of Pigmented Whole Wheat Foods: The Role of Innovative Technologies, Ilenia Gaeta, UNIMOL Bioactive-Rich Mushrooms for Food Reformulation (BIOMUSH-FOOD), Giulia Bearzi, UNIMI	(UNIBAS) PARALLEL SESSION 9 Food Microbiology and biotechnology (1) Innovative Approaches in the Development of Novel Organic Food Products by Applying Careful Processing, Yasmin Muhammed, UNIBA Microbial Collections as Biorepositories for Sourdough Microbiomes: Microbiological Assessment, Metagenomic Analysis, and Nutritional Profiling, Roberta Coronas, UNISS Lactic acid bacteria as a tool to reduce the allergenicity of Arginine Kinase and Tropomyosin from the edible insect Hermetia illucens, Claudia Dellapina, UNIPR
11:30 11:45	PARALLEL SESSION 7 Food, Microbiota and Health Ultra-Processed foods: from the nutritional characteristics to the impact on human health, Beatrice Pellegrini, UNIMI In Vitro Evaluation of Probiotic, Enzymatic, and Botanical Supplements on Gut Microbiota and Digestion, Robin Duncan, UNIMI Genomic characterization of Lactic Acid Bacteria strains for the development of a novel psychobiotic product, Chiara Maria Calvanese, UNINA Study of the Effects of Plant-Derived MicroRNAs on the	Massimiliano Rinaldi (UNIPR) PARALLEL SESSION 8 Processing and Reformulation Strategies for Product Innovation Technological and Nutritional Properties of Pigmented Whole Wheat Foods: The Role of Innovative Technologies, Ilenia Gaeta, UNIMOL Bioactive-Rich Mushrooms for Food Reformulation (BIOMUSH-FOOD), Giulia Bearzi, UNIMI Application of Liquid Nitrogen for Pistachio Skin Removal, Fabiola Pesce, UNICT	PARALLEL SESSION 9 Food Microbiology and biotechnology (1) Innovative Approaches in the Development of Novel Organic Food Products by Applying Careful Processing, Yasmin Muhammed, UNIBA Microbial Collections as Biorepositories for Sourdough Microbiomes: Microbiological Assessment, Metagenomic Analysis, and Nutritional Profiling, Roberta Coronas, UNISS Lactic acid bacteria as a tool to reduce the allergenicity of Arginine Kinase and Tropomyosin from the edible insect Hermetia Illucens, Claudia Dellapina, UNIPR Genomic and functional characterization of a novel BSH positive Lacticaseibacillus rhamnosus probiotic candidate with potential hypocholesterolemic effect, Gianluigi Agolino, UNICT



14:30

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DAY 2

Aula 13

AULA MAGNA

KEYNOTE LECTURE

Consumer-led Product Ecodevelopment: Can We Truly Shape the Future of Sustainable Food Using 14:00 Consumers, Sensory Sciences, and Life Cycle Analysis?

Prof. Ronan Symoneaux, Ecole Supérieure des Agricultures (ESA), France

Aula Tesi

Flow Cytometry Meets Foood Science: Exploring Applications from Food Processing to Human Health Dr. Marina Ramal Sanchez, UNITE sponsored by Beckman Life Sciences

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	Chair: Roberto Moscetti (UNITUS), Cristina Alamprese (UNIMI)	Chair: Cristina Restuccia (UNICT), Giampiero Sacchetti (UNITE)	Chair: Fabio Minervini (UNIBA), Annalisa Serio (UNITE)
	PARALLEL SESSION 10 Smart and Sustainable Food Processing	PARALLEL SESSION 11 Genomics and Microbiomes for Food Systems and Environment	PARALLEL SESSION 12 Food Microbiology and biotechnology (2)
15:00	Innovative Technologies and Processes for Sustainable Frozen Foods, Bilge Ece Ozel , UNITE	Development of a comprehensive cheese metagenome catalogue reveals potential markers of origin and quality, Raffaele Magliulo , UNINA	Innovative bioprocesses and extraction techniques of high value molecules and products from agricultural biomasses, Luca Fontechiari , UNIPR
15:15	Integrating automation in food processing operations, Eleonora Di Palma, UNIFG	Closing the loop in agriculture: effects of a fermented tomato-based biostimulant on tomato growth and fruit quality, Anna Agosti , UNIPR	Effect of GABA production on biomass yield and stress robustness of <i>Levilactobacillus brevis</i> , Emanuela Lavanga , UNIBAS
15.30	Integrating food reformulation strategies and emerging technologies to promote healthy diet, Grazia Marinaro , UNIFG		Valorisation of Alternative Protein Sources by Tailored Biotechnological Processes and Non-Thermal Technologies to Obtain New Ingredients to Be Used in the Formulation of Innovative Foods, Solidea Amadei , UNIBO
5:45-16:30	COFFEE BREAK AND POSTER SESSION	1	

Aula Magna

Mohammed Salman, UNINA
ization of Fermentation Parameters for Biomass ction of <i>Streptococcus thermophilus</i> BT01 with High Urease Activity, Ylenia Zanchetta , UNIMI
izatior

POSTER SESSION

17:00

20:30-23:30 WORKSHOP GALA DINNER



Applications of MOX Sensors for Volatile Organic Compound Detection in Agri-Food sector, **Elisabetta Poeta**, UNIMORE





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FRIDAY, 12 ^t	h SEPTEMBER 2025	DAY 3	
09:15	OPENING SESSION		
AULA MAGNA			
09:15	KEYNOTE LECTURE Title in progress, Maarten Van Der Kamp (EITFood, BE)		
09:45	KEYNOTE LECTURE From Research to Market: First Steps to Build a Startup Dr. Danilo Mazzara (SkillforEquity, IT)		
10:15	Interactive session: My PhD skills: which, what for, and in my future I will		
10:45-11.15	COFFEE BREAK		
11:15	Round Table: Research and PhD programs for the food systems transition		
12:15	AWARDS SESSION: What For (CLAN), SISS, Anton Paar, Barilla		
13:00	CLOSING SESSION		