XIV Congresso Nazionale di Chimica degli Alimenti



CHIMALI 2025

Milano, 9-11 Luglio

ITA CHEMFOOD

Società Chimica Italiana
Divisione di Chimica degli Alimenti

UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA

XIV CONGRESSO NAZIONALE DI CHIMICA DEGLI ALIMENTI

Università degli Studi di Milano-Bicocca ▪ mercoledì 9 luglio 2025

Registrazione partecipanti

9.00-10.00 registrazione partecipanti evento SCI giovani

12.00-13.15 registrazione partecipanti congresso

Sessione I

Moderatori: Luca Rastrelli e Marzia Innocenti

14.00-14.30 KN-1 **Restani Patrizia - Università degli Studi di Milano**
The long scientific journey of a functional ingredient.

14.30-14.45 OP-1 **Acquaticci Laura - Università degli Studi di Camerino**
Comprehensive investigation of a corn flour: nutritional composition, phenolic compounds by HPLC MS/MS and new untargeted compounds by UHPLC-QTOF data dependent approach.

14.45-15.00 OP-2 **Celano Rita - Università degli Studi di Salerno**
Pyrrolizidine alkaloids: an ongoing analytical challenge in food and natural products.

15.00-15.15 OP-3 **Di Giglio Irene - Università degli Studi di Firenze**
Smelling the Difference: HS-SPME-GC-MS and Chemometric Profiling of Virgin Olive Oils to Support Sensory Classification.

15.15-15.30 OP-4 **Salvo Andrea - Università di Roma – La Sapienza**
Characterization of *Capparis spinosa* oil by cis-vaccenic triglyceride synthesis.

15.30-15.36 FC-1 **Serio Simona - Università degli Studi di Salerno**
Enhancing green extraction strategies of *Ceratonia siliqua* leaves compounds.

15.36-15.42 FC-2 **Schiavone Consolato - Università di Torino (INRIM)**
Novel chromatographic approach for ultra-short chain PFAS in tomato samples.

15.42-15.48 FC-3 **Zonfrillo Beatrice - Università degli Studi di Firenze**
A general approach to evaluate bioaccessibility and bioavailability of complex phenolic extracts from two by-products: olive pomace (paté) and pomegranate peel.

15.48-15.54 FC-4 **Donzella Silvia - Università degli Studi di Milano**
Agri-food residues as sustainable feedstocks for microbial carotenoid and lipid production.

15.54-16.00 FC-5 **Lo Vecchio Giovanna - Università degli Studi di Messina**
Biotechnological valorization of artichoke wastes: astaxanthin production via *Phaffia rhodozyma* fermentation and development of artichoke-based composites.

Q&A FC 5 min

Coffee break – Poster session 1

16.15-16.45 Poster da n°1 a n°35

Sessione II

Moderatori: Chiara Cordero e Giusi Di Bella

16.45-17.00 OP-5 **Aprea Eugenio - Università di Trento**
Application of a functionalized thermal electronic nose for volatile-based discrimination of shrimp drying techniques.

17.00-17.15 OP-6 **Russo Marina - Università degli Studi di Messina**
Valorization of *Olea europaea* pruning waste within a circular economy framework: a sustainable source of bioactive compounds.

17.15-17.30 OP-7 **Annunziata Francesca - Università degli Studi di Milano**
Gut microbiota-derived resveratrol metabolites and analogues as potential antimicrobial agents.

17.30-17.36 FC-6 **Litrenta Federica - Università degli Studi di Messina**
Chemical characterization of donkey milk from an indigenous Sicilian breed.

17.36-17.42 FC-7 **Grasso Federica - Università degli Studi di Genova**
Turning aquaculture side-streams into industrial solutions: a possibility to promote sustainability and economic efficiency.

17.42-17.48 FC-8 **Felizzato Giorgio - Università di Torino**
Artificial intelligence smelling machine as decision-making tools for food industry.

17.48-18.03 OP-8 **Valentini Sabina - Institut Agricole Régional Aosta**
Skin repairing ingredient from fontina cheese whey.

18.03-18.18 OP-9 **Squara Simone – Barilla**
Tracing unintended flavor transfer in manufacturing: a case study.

18.18-18.33 OP-10 **Ianni Federica – Università degli Studi di Perugia**
Adsorption behavior of phenolic compounds from agri-food wastes on lamellar solids.

Q&A FC 5 min

Aperitivo – Poster session 1

Poster da n°1 a n°35

19.00-20.15 presso Università degli Studi di Milano-Bicocca

XIV CONGRESSO NAZIONALE DI CHIMICA DEGLI ALIMENTI

Università degli Studi di Milano ▪ giovedì 10 luglio 2025

Sessione I

Moderatori: Gianni Sagratini e Severina Pacifico

08.45-09.15 KN-2 **Dugo Paola – Università degli Studi di Messina**
Trends in Food Chemistry research.

09.15-09.30 OP-11 **Nava Vincenzo - Università degli Studi di Messina**
Discrimination of Moroccan and Italian carobby mineral element and lipid fraction chemometrics profiling.

09.30-09.45 OP-12 **Rocchetti Gabriele – Università di Piacenza**
Liquid or encapsulated duckweed (Lemnaminor L.) extracts differentially modulate quality traits and metabolomic fingerprints of packaged beef burgers during shelf life.

09.45-10.00 OP-13 **Arena Katia -Università degli Studi di Messina**
Characterization of secondary metabolites in complex food samples using different separation properties in comprehensive two-dimensional liquid chromatography.

10.00-10.15 OP-14 **Pozzoli Carola – Università degli Studi di Milano**
Valorization of chestnut by-products: bioactive potential for gastrointestinal health.

10.15-10.30 OP-15 **Spano Mattia – Università di Roma - La Sapienza**
Malting process to improve legume pulses nutritional properties: an NMR metabolomics study.

10.30-10.36 FC-11 **Fina Angelica – Università di Torino**
Decoding the aroma blueprint of peanuts (*Arachis hypogaea*) through sensomics and GC×GC-TOF MS: molecular differentiation of geographic origin and industrial quality.

10.36-10.42 FC-12 **Cafeo Giovanna – Università degli Studi di Messina**
Recovery and characterization of bioactive compounds from the pruning of typical Mediterranean crops.

10.42-10.48 FC-13 **Carini Chiara – Università degli Studi del Piemonte Orientale**
Red vine leaves phenolic compounds: characterization and optimization of an aqueous solvent-free extraction.

10.48-10.54 FC-14 **Cairone Francesco – Università di Roma - La Sapienza**
Punica Granatum L. "prized waste": Focus on prevention and health care.

Q&A FC 5 min

Coffee break – Poster session 2

11.00-11.30 Poster da n°36 a n°70

Sessione II

Moderatori: Giancarlo Tenore e Adele Papetti

11.30-11.45 OP-16 **Pagliari Stefania – Università degli Studi di Milano-Bicocca**
Green extraction and evaluation of the biological properties of *Pinus mugo* (needles and strobili) as a source of bioactive compounds for nutraceutical products.

11.45-12.00 OP-17 **Zoccatelli Gianni – Università degli Studi di Verona**
Impact of chitosan–TPP nanoparticles loaded with olive pomace extract on gut microbiota: an in vitro SHIME® study.

12.00-12.15 OP-18 **Aiello Gilda – Università Telematica San Raffaele Roma**
Lipidomics and bioinformatics to evaluate the anti-inflammatory effects of polyphenols from thinned apples: a cellular model for nutritional applications.

12.15-12.30 OP-19 **Maietti Annalisa - Università degli Studi di Ferrara**
Functional and sensorial properties of black garlic powder enriched bread and its shelf-life.

12.30-12.36 FC-15 **Shaymaa Abdulrazzaq - Università degli Studi di Camerino**
Chemical characterization and prebiotic potential of olive oil derived by-products: phenolic compounds profiling, total phenolic content, antioxidant capacity, and potential prebiotic characteristics.

12.36-12.42 FC-16 **Di Salvo Eleonora – Università degli Studi di Messina**
The sentinel of the vines: Sicilian black bees as bioindicators of viticultural health and safety.

Q&A FC 5 min

Pranzo – Poster session 2

13.00-14.15 Poster da n°36 a n°70

Sessione III

Moderatori: Maria Daglia e Nicola Cicero

14.15-14.45 KN-3 **Mannina Luisa - Università degli Studi di Roma - La Sapienza**
Foodstuffs: from chemical composition to new databases.

14.45-15.00 OP-20 **La Torre Chiara – Università della Calabria**
Antioxidant properties and phenolic content of Kombucha drink made from infused orange peel.

15.00-15.15 OP-21 **Masala Valentina – Università degli Studi di Cagliari**
Valorization of bioactive compounds with antioxidant activity from *Salvia desoleana* Atzei & Picci steam-distillation water by-products.

15.15-15.30 OP-22 **Micucci Matteo – Università degli Studi di Urbino**
Phytochemicals for healthy aging: protective insights from blue turmeric.

15.30-15.45 OP-23 **Piccolella Simona – Università degli Studi della Campania**
Sustainable valorization of bioactives from tomato supply chain by-products: comparative approaches and chemical-functional characterization.

15.45-16.00 OP-24 **Iammarino Marco – IZSPB Foggia**
Possible high nitrite levels in processed leafy vegetables: a study of probable sources.

Coffee break – Poster session 3

16.00-16.30 Poster da n°71 a n°108

Sessione IV

Moderatori: Marco Arlorio e Raffaella Boggia

16.30-16.45 OP-25 **Longobardi Francesco - Università degli Studi di Bari**
MS-based electronic nose for early detection of ochratoxigenic Aspergillus strain on traditional Italian Caciocavallo cheese during ripening.

16.45-17.00 OP-26 **Rigano Francesca – Università degli Studi di Messina**
Profiling of phenolic compounds in herbs and spices through green analytical methods.

17.00-17.15 OP-27 **D'Adduzio Lorenza – Università degli Studi di Milano**
Ultrasonicated Atlantic herring side streams as source of multifunctional bioactive and bioavailable peptides.

17.15-17.30 OP-28 **Izzo Luana- Università degli Studi di Napoli Federico II**
Occurrence and dietary exposure to acrylamide from ready-to-eat chips consumed in Italy.

17.30-17.36 FC-17 **Ambroselli Donatella – Università degli Studi di Roma - La Sapienza**
Nickel-free datterino tomatoes: analysis of composition, allergenicity, and the role of edible coatings in shelf-life extension.

17.36-17.42 FC-18 **Blasi Francesca – Università degli Studi di Perugia**
Carotenoids from pumpkin waste for the formulation of functional foods.

17.42-17.48 FC-19 **Marchesiello Wadir – Università degli Studi di Messina**
Comprehensive profiling of (lipo)phenolic compounds in olive oil by-products using UHPLC PDA/MS and UHPLC-HRMS analytical techniques.

Q&A FC 5 min

Orchestra UNIMI

18.00-18.30

Riunione Divisione

18.30-19.00

Cena Sociale – "Osteria del Treno"

20.30 *Via San Gregorio n°46, 20126 Milano, Italia*

XIV CONGRESSO NAZIONALE DI CHIMICA DEGLI ALIMENTI

Università degli Studi di Milano ▪ venerdì 11 luglio 2025

Sessione I

Moderatori: Mariateresa Russo e Gianni Galaverna

09.00-09.15 KN-4 **Conte Lanfranco - Università degli Studi di Udine**
Analysis of the volatile compounds in foods: an historical perspective.

09.30-09.45 OP-29 **Cardenia Vladimiro – Università di Torino**
Critical evaluation of reference materials for the accurate determination of phytosterol oxidation products in vegetable oils.

09.45-10.00 OP-30 **Marinaccio Lorenza – Università di Chieti-Pescara**
Grape seed oil from Montepulciano d'Abruzzo grape seeds: ultrasound-assisted extraction using the deep eutectic solvent menthol-thymol and its biological evaluation.

10.00-10.15 OP-31 **Martoccia Manuel – Università degli Studi del Piemonte Orientale**
Health-promoting properties from quinoa, red lentil, and yellow pea protein hydrolysates.

10.15-10.30 OP-32 **Spadafora Natasha Damiana - Università degli Studi di Ferrara**
Optimising volatiles extraction and analysis for honey authentication by integrating green sampling techniques, automated statistical tools, and correlation analyses.

10.30-10.36 FC-20 **Annunziato Alessandro – CNR**
Development of a UPLC method with mass spectrometric and diode array detection for the simultaneous analysis of NX and six trichothecenes.

10.36-10.42 FC-21 **Lolli Veronica – Università degli Studi di Parma**
Optimizing hemicellulose and fiber extraction from lignocellulosic biomass through hydrothermal methods and pre-treatment strategies.

Q&A FC 5 min

Coffee break – Poster session 3

11.00-11.30 Poster da n°71 a n°108

Sessione II

Moderatori: Nicola Marchetti e Lina Cossignani

11.30-11.45 OP-33 **Caratti Andrea – Università di Torino**
From omics to industrial assessment: validation of GC×GC-derived oxidation markers for hazelnut shelf-life prediction.

11.45-12.00 OP-34 **Moret Sabrina – Università degli Studi di Udine**
The impact of transport and storage of cocoa beans in jute bags on mineral oil contamination.

12.00-12.15 OP-35 **Moretto Giulia – Università di Pavia**
Bioaccessibility and prebiotic effect of *Aloysia citrodora* polyphenolic extract.

12.15-12.30 OP-36 **Peron Gregorio – Università degli Studi di Brescia**
Feeding the "TrichEco": producing 2.0 biostimulants trough the solid-state fermentation of agrifood by products.

12.30-12.36 FC-22 **Trapani Fulvia – Università di Torino**
High-resolution workflow for volatilome profiling in artisanal cheese using GC×GC-MS/FID and image-based pattern recognition.

12.36-12.42 FC-23 **Pati Sandra – Università degli Studi di Foggia**
Assessment of migration from packaging for fresh vegetables.

12.42-12.48 FC-24 **Del Vecchio Lorenzo – Università degli Studi di Parma**
Exploring hemp seed flour as a fortifying ingredient in bread-making: nutritional and metabolomic perspectives.

12.48-12.54 FC-25 **Fanzaga Melissa – Università degli Studi di Milano**
Bioaccessibility, bioavailability, and hypocholesterolemic activity of a novel olive seed protein hydrolysate: an integrated approach.

Q&A FC 5 min

Pranzo

13.00-14.15

Sessione III

Moderatori: Filomena Corbo e Alberto Angioni

14.15-14.30 OP-37 **Costa Giosuè – Università di Catanzaro**
Computational Discovery of Natural-Product-Inspired Bioactives: From CAs to RNA-Binding Proteins

14.30-14.45 OP-38 **Mattioli Laura Beatrice - Università di Bologna**
From waste to health: olive mill wastewater for cardiovascular disease prevention.

14.45-15.00 OP-39 **Dellafiora Luca – Università degli Studi di Parma**
Enniatins and disruption of heme-binding protein: spotlighting hormones production and impairment of cytochromes activity.

15.00-15.15 OP-40 **Truzzi Eleonora – Università di Modena e Reggio Emilia**
Use of IRMS and NMR techniques for authenticating grape musts and wine vinegar used in the balsamic vinegar industry.

15.15-15.21 FC-26 **Di Minno Alessandro – Università di Napoli**
In vitro and in vivo efficacy and tolerability of a *Scutellaria lateriflora* L. extract as sleep aid.

15.21-15.27 FC-27 **Maisto Maria – Università di Napoli**
Liposomal myrosinase enhances the antimicrobial potential of glucosinolates-rich extracts.

15.27-15.33 FC-28 **Barp Laura – Università degli Studi di Udine**
Pea flour: a functional ingredient between health benefits and hidden hazards.

15.33-15.39 FC-29 **Bani Corinne – Università degli Studi di Milano**
Analysis of real-world food allergy cases: potential implications for consumer safety.

Q&A FC 5 min

Premiazioni

16.00-16.30

Chiusura attività congressuali

16.30-17.00

Con la partecipazione di







