

Modena
7-9 October
2026

9th MS
Food Day



SCIENTIFIC PROGRAMME

9th MS FOOD DAY

Modena - Italy

October 7-9, 2026

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Roberta Galarini	<i>Ist. Zooprof. Sperim. Umbria e Marche</i>
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SCIENTIFIC PROGRAMME

Wednesday, October 7th, 2026

- 2:00 p.m. Registration
- 2:30 p.m. Welcome addresses
- Federico Desimoni**
Presidente Consorzio Tutela Aceto Balsamico di Modena, Modena
- Marcello Pinti**
Vice Rector for Tech Transfer, Outreach and Community Engagement, UNIMORE
- Paola Montoro**
University of Salerno, President of the Division of Mass Spectrometry of the Italian Chemical Society
- Gianluca Giorgi**
University of Siena, 9th MS Food Day Chairman
- 3:00 p.m. **Session 1: Volatilomics**
Chairpersons: Luciano Navarini, Carmela Zacometti
- 3:00 p.m. **PL1: The key role of GC×GC-MS in food analysis**
Giorgia Purcaro
Analytical Chemistry, Gembloux Agro-Bio Tech, University of Liège, Belgium
- 3:45 p.m. **OR1: South Tyrolean speck aroma: characterization of volatiles and aroma-active compounds by GC-MS**
Ariana Soledad Poetto, Daniela Hey, Flavia Bianchi, Andrea Moretta, Thomas Winnischhofer, Peter Robatscher
Laboratory of Flavours and Metabolites - Laimburg Research Centre, Auer-Ora, Italy
- 4:00 p.m. **OR2: Volatilomic profiling of balsamic vinegars by HS-SPME-GC×GC-TOFMS: from protected-origin differentiation to maturation assessment**
Allan Polidoro, Sofia Malcangi, Monica Romagnoli, Nicola Marchetti, Flavio A. Franchina
Department of Environmental and Prevention Sciences, University of Ferrara, Ferrara, Italy
- 4:15 p.m. **OR3: Defining the chemical and sensory identity of Italian no- and low-alcohol beers market by HS-SPME-GC×GC-MS and sensory analysis**
Leonardo D'Intino, Gianluca Donadini, Giorgia Spigno, Mario Gabrielli
Dipartimento di Scienze e Tecnologie Alimentari per una filiera agro-alimentare sostenibile (DiSTAS), Università Cattolica del Sacro Cuore, Piacenza (Italy)
- 4:30 p.m. **OR4: From waste to bioactive resource: GC-MS profiling and bioherbicidal potential of Petroselinum crispum essential oil**
R. Francolino, R. Gaeta, L. De Martino, V. De Feo
Department of Pharmacy, University of Salerno, Fisciano, SA, Italy

- 4:45 p.m. **OR5: Unveiling chemical fingerprints of aging in balsamic vinegar of Modena (PGI) with GC-IMS**
S. Pellacani, M. Cocchi, G. Gazzoli, F. Martone, R. Marabottini, A. Napolitano, F. Ladogana, F. Desimoni, C. Durante, L. Strani
Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia, Modena, Italy
- 5:00 p.m. Poster session (Poster P1-P27), Coffee break
- 5:30 p.m. **Session 2: Stable isotopes & food**
Chairpersons: Roberto Larcher, Giuliana Bianco
- 5:30 p.m. **OR6: Orbitrap HRMS for compound-specific isotope measurements: applications to pharmaceuticals and curcumin**
Alberto Roncone, Domenico Masuero, Roberto Penasa, Silvia Pianezze, Luana Bontempo
Fondazione Edmund Mach, Traceability Lab., San Michele all'Adige (TN), Italy
- 5:45 p.m. **OR7: Application of stable isotope ratio mass spectrometry (IRMS) for verification of geographical origin of egg products: establishment of a French reference dataset**
Michele Suman, Freddy Thomas
Barilla G.R. F.lli SpA, Research, Development & Quality & University of Parma, Parma, Italy
- 6:00 p.m. **OR8: *Griffonia simplicifolia* seed-based supplements: how stable isotope ratio analysis can help in commercial samples authentication**
Silvia Pianezze, Sara Malpaga, Arianna Vanelli, Filomena De Biasio, Matteo Perini
Centro di Trasferimento Tecnologico, Fondazione Edmund Mach, San Michele all'Adige, TN
- 6:15 p.m. **OR9: Authentication of high-value food products using combined GC-MS and GC-IRMS approaches: case studies on lavender and mint essential oils**
Roberto Penasa, Luana Bontempo, Long Chen, Mauro Paolini, Alberto Roncone, Domenico Masuero, Roberto Larcher
Fondazione Edmund Mach, San Michele all'Adige, Trento
- 6:30 p.m. **OR10: From liquid phase to headspace: compound-specific $\delta^{13}\text{C}$ analysis of aceto balsamico tradizionale di modena PDO by IRMS-based techniques**
Veronica D'Eusanio, Mirco Rivi, Andrea Marchetti
Department of Chemical and Geological Sciences, University of Modena and Reggio Emilia, Modena, Italy
- 6:45 p.m. **IP1: High- and low-resolution Agilent GC/MS platforms: technologies applied to the food market**
Marica Beggio
Agilent Italia
- 6:55 p.m. End of session
- 7:00 p.m. Welcome cocktail

Thursday, October 8th, 2026

9:00 a.m. **Session 3: Chemical contaminants**

Chairpersons: Michele Suman, Donatella Caruso

9:00 a.m. **PL2: Mass spectrometry analytical toolbox to tackle the PFASs challenge in food**

Stefan van Leeuwen

Wageningen University & Research (The Netherlands)

9:45 a.m. **OR11: Beyond chromatography: unmasking spice & herbs adulteration via AP-MALDI-MS**

Alessandra Tata, Alessia Di Noi, Andrea Massaro, Chiara Salvitti, Carmela Zacometti, Michele Suman, Federico Pepi, Anna Troiani

Laboratory of Experimental Chemistry, Istituto Zooprofilattico Sperimentale delle Venezie, Vicenza (VI), Italy

10:00 a.m. **OR12: Beyond standard trichothecenes: profiling emerging NX toxins in rice and wheat**

Alessandro Annunziato, Vito D'Ascanio, Daria Carella, Gerline Wiesenberger, Antonia Susca, Miriam Haidukowski, Antonio Moretti

National Research Council (CNR), Institute of Sciences of Food Production (ISPA), Bari, Italy

10:15 a.m. **OR13: Integrated mass spectrometry workflow for PFAS assessment in food contact materials according to the new PPWR requirements**

F. Cozzolino, F. Pratesi, M. Vitulli

Food Contact Center s.r.l

10:30 a.m. **OR14: Determination of phthalates in bottled, purified and reusable bottled water by SPME-GC/MS**

Claudia Lino, David Bongiorno, Serena Indelicato, Giuseppe Avellone

Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche, Università di Palermo, Palermo, Italy

10:45 a.m. **OR15: Development and validation of an analytical procedure based on a simplified μ -QuEChERS extraction for monitoring bisphenols in different honey botanical varieties using UHPLC-MS/MS**

Lorenzo Marino Cerrato, Rosalia López-Ruiz, Roberto Romero-González, Antonia Garrido Frenich, Stefania Albrizio

Department of Pharmacy, School of Medicine and Surgery, University of Naples Federico II, Naples, Italy

11:00 a.m. Poster session (Poster P1-P27), Coffee break

- 11:40 a.m. **Session 4:** Joint session with the Divisione di Chimica degli Alimenti-SCI
Bioactive compounds
Chairpersons: Paola Montoro, Nadia Mulinacci
- 11:40 a.m. **KN: The gas-phase goldmine: volatilomics from cutting edge platforms to real world use**
Philipp Weller, Lukas Bodenbender, Richard Frey, Nabiollah Mobaraki
Technical University of Applied Sciences, Mannheim, Germany
- 12:10 p.m. **OR16: HS-SPME-GC-MS and HPLC-DAD-MS as tools to support the optimization of high-quality flavoured olive oils produced through co-milling: case studies using chili peppers, basil and rosemary**
Lorenzo Cecchi, Carlotta Breschi, Tommaso Ugolini, Erminio Monteleone, Renzo Fusi, Francesca Ieri, Silvio Menghini, Fabio Boncinelli, Maria Bellumori, Marzia Innocenti, Nadia Mulinacci, Bruno Zaroni
Department of Agricultural, Food, Environmental, and Forestry Sciences and Technologies (DAGRI) – University of Florence, Firenze, Italy
- 12:25 p.m. **OR17: From cabbage to fermented foods: integrated profiling of bioactive compounds**
Tiziana Nardin, Francesca Martinelli, Roberto Larcher
Fondazione Edmund Mach, Technology Transfer Centre, Food Chemistry, San Michele all'Adige (TN), Italy
- 12:40 p.m. **OR18: Marine by-product valorization: LC-MS/MS Characterization of collagen peptides derived from the edible sea urchin *Paracentrotus lividus***
Tamara Chwojnik, Gijs JC Vreeke, Giovanni A van Kralingen, Matteo Brilli, Stefania Marzorati, Michela Sugni, Jean-Paul Vincken
Department of Environmental Science and Policy, University of Milan, Milan, Italy
- 12:55 p.m. **OR19: Supramolecular solvents for modern food analysis**
Noelia Caballero-Casero, Soledad Rubio
Department of Analytical Chemistry, Institute of Chemistry for Energy and the Environment (IQUEMA), University of Córdoba, Córdoba, Spain
- 1:10 p.m. End of session
- 1:15 p.m. Buffet lunch
- 2:30 p.m. **Session 5: Flavour**
Chairpersons: Franco Biasioli, Caterina Durante
- 2:30 p.m. **PL3: Flavour is not concentration: using dynamic mass spectrometry insights to engineer food perception**
Ian Fisk
International Flavour Research Centre, University of Nottingham
- 3:15 p.m. **OR20: Basil volatilome and quality assessment for high-quality pesto: tracing aroma markers across the production chain**
Giulia Tapparo, Erica Liberto, Gianluca Cucco
Department of Drug Science and Technology, University of Turin, Turin, Italy

- 3:30 p.m. **OR21: Influence of fermentation state and amino acid supplementation on volatile compound production by *Lactiplantibacillus plantarum* in a model fermentation system**
Max Nally, Iuliia Khomenko, Franco Biasioli, Phil Bremer, Pat Silcock, Graham Eyres
Department of Food Science, University of Otago, Dunedin, New Zealand
- 3:45 p.m. **OR22: Pyridine precursors other than trigonelline under coffee roasting conditions**
Valentina Lonzarich, Luciano Navarini
illycaffè S.p.A., Trieste, Italy
- 4:00 p.m. **IP2: Recent advancements in mass spectrometry for food analysis: from sample prep to direct analysis**
Daniela Peroni
SRA Instruments Spa, Cernusco sul Naviglio (MI), Italy
- 4:10 p.m. Poster session (Poster P28-P55), Coffee break
- 4:45 p.m. **Session 6: Targeted & untargeted analysis**
Chairpersons: Sauro Vittori, Chiara Cordero
- 4:45 p.m. **OR23: Soft chemical ionization and ultra fast isomer separation in food analysis using Vocus high-resolution chemical ionisation ion mobility spectrometry time-of-flight (Vocus HR-CI-IMS-TOF)**
Iuliia Khomenko, Andrea Romano, Mehdi Moayed, Jiayi Zhang, Emanuela Betta, Michele Pedrotti, Matteo Tonezzer, Luca Cappellin, Franco Biasioli
Fondazione Edmund Mach, San Michele all'Adige, Italy
- 5:00 p.m. **OR24: A rigorous chemometric workflow for multi-year shelf-life prediction of hazelnuts**
Sara Tanilli, Andrea Caratti, Giuseppe Genova, Alex Fissore, Cristina Casetta, Angelica Fina, Fulvia Trapani, Erica Liberto, Chiara Cordero
Department of Drug Science and Technology, University of Turin, Turin, Italy
- 5:15 p.m. **OR25: The use of the untargeted approach by HPLC-Q-ToF to study the chemical profile of different matrices**
Laura Acquaticci, Simone Angeloni, Massimo Ricciutelli, Giovanni Caprioli
University of Camerino, School of Pharmacy, Chemistry Interdisciplinary Project (ChIP), Camerino, Italy
- 5:30 p.m. **OR26: Exploring the phytochemical profile and biological potential of artichoke petal, leaf and stem extracts**
Lorenza Marinaccio, Eulogio J. Llorent-Martínez, Gokhan Zengin, Angelo Cichelli, Adriano Mollica, Azzurra Stefanucci
Department of Innovative Technologies in Medicine and Dentistry, "G. d'Annunzio" University of Chieti-Pescara, Chieti, Italy

- 5:45 p.m. **OR27: A comprehensive characterization of anthocyanins in fungal-resistant red grape varieties by high-resolution mass spectrometry**
M. De Rosso, S. Soligo, E. Piutti, A. Piccinin, D. Piccinin, R. Carraro, L. Tarricone, G. Masi, S. Roccotelli, M. Gardiman, A. Panighel, F. Tarricone, L. Sansone, R. Flamini
Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Conegliano (TV), Italy
- 6:00 p.m. **OR28: Identification of carboxymethylcellulose (CMC) and potassium polyaspartate (KPA) in wine through parallel targeted enzymatic digestion workflows and UHPLC-HRMS**
Francesca Martinelli, Emiliano Fadanelli, Andrea Rosolen, Roberto Larcher, Tiziana Nardin
Fondazione Edmund Mach, San Michele all'Adige (TN), Italy
- 6:15 p.m. **OR29: Integrated untargeted metabolomics workflow enables comprehensive metabolic profiling of *Lepidium sativum* microgreens and vegetative plants**
Francesca Monzillo, Luigi d'Aquino, Vincen Wu, Nicola Zamboni, Sonia Piacente, Paola Montoro
Department of Pharmacy, University of Salerno, Fisciano, Italy
- 6:30 p.m. **OR30: Multiplatform profiling of Maillard reaction products in PEF-treated nuts**
Laura Alessandroni, Albert Sebastià, Emilia Ferrer, Francisco J. Barba, Gianni Sagratini
Chemistry Interdisciplinary Project (ChIP), School of Pharmacy, University of Camerino, Camerino, Italy
- 6:45 p.m. End of session
- 8:30 p.m. Social dinner

Friday, October 9th, 2026

9:00 a.m. **Session 7: AI & metabolomics**

Chairpersons: Linda Monaci, Fabiana Piscitelli

9:00 a.m. **PL4: Chemically grounded AI for untargeted food profiling**

Rasmus Bro

University of Copenhagen, Faculty of Science, Frederiksberg, Denmark

9:45 a.m. **OR31: LC-HRMSMS profiling of bioactive lipids and triterpenoids in pumpkin seeds**

Annunziata Paolillo, Assunta Napolitano, Milena Masullo, Sonia Piacente

Dipartimento di Farmacia, Università degli Studi di Salerno, Fisciano (SA), Italy

10:00 a.m. **OR32: Characterization of pancetta piacentina PDO during ripening through redox markers, fatty acid profiling, and integrated untargeted metabolomics-lipidomics**

Gabriele Rocchetti, Federico Froidi, Giulia Fappani, Michela Errico, Maria Chiara Fontanella, Samantha Sigolo, Aldo Prandini

Department of Animal Science, Food and Nutrition, Università Cattolica del Sacro Cuore, Piacenza, Italy

10:15 a.m. **OR33: Profiling microbial metabolism of verbascoside and olive pomace extract in an *in vitro* fermentation model using a metabolomics approach**

Shaymaa Abdulrazzaq, Rocío García Villalba, Francisco Tomás-Barberán, Stefania Silvi, Polina Makarycheva, Dennis Fiorini, Carlos J. Garcia

School of Science and Technology, University of Camerino, Camerino (MC), Italy

10:30 a.m. **OR34: Formulation, biochemical characterization and shelf-life study of YoAlp® whey based beverage containing local fruits juices**

S. Valentini, M. Merlet, T. Flutto, R. Pramotton, S. Zenato, L. Verneti-Prot

Institut Agricole Régional, Aosta, Italy

10:45 a.m. **OR35: Enhanced MOSH and MOAH screening in fat-rich foods using integrated LC-GC-FID and GC×GC-QToF/FID approaches**

I. Annovazzi, D. Baglio, P. Rovellini, V. Cardenia

Department of Agricultural, Forest and Food Science, University of Turin, Grugliasco (Turin) Italy

11:00 a.m. **IP3: Setting New Standards in PFAS Food Analysis: The AOAC Official Method Developed with Shimadzu LC-MS/MS Technology**

Massimiliano Magna

Shimadzu Italia S.r.l., Milan, Italy

11:10 a.m. **Poster session (Poster P28-P55), Coffee break**

- 11:45 a.m. **Session 8: Primary and specialized metabolites**
Chairpersons: Giuseppe Avellone, Rita Petrucci
- 11:45 a.m. **OR36: Unravelling geographical, seasonal and technological variability in the untargeted metabolomic profile of Parmigiano Reggiano PDO natural whey starter through ASCA-integrated chemometrics**
Pier Paolo Becchi, Rasmus Bro, Valentina Pizzamiglio, Luigi Lucini
Department for Sustainable Food Process, Università Cattolica del Sacro Cuore, Piacenza, Italy
- 12:00 p.m. **OR37: A precursor ion scan-based mass spectrometry workflow for intact glucosinolate characterization in radish microgreens for nutraceutical applications**
Maria Maisto, Vincenzo Piccolo, Adua Marzocchi, Erika Esposito, Emma Mitidieri, Roberta d'Emmanuele di Villa Bianca, Vincenzo Summa, Gian Carlo Tenore
Department of Pharmacy, University of Naples Federico II, Naples, Italy
- 12:15 p.m. **OR38: Enzyme-assisted multidimensional LC-IM-HRMS annotation of acetylated xylo-oligosaccharides generated from commercial xylans**
G. Lupi, A. Fuso, A. Caligiani
University of Parma, Parma, Italy
- 12:30 p.m. **OR39: LC-MS/MS analysis of marker peptides for the detection of various mustard species and rapeseed in foods**
Barbara Prandi, Andrea Faccini, Francesca Lambertini, Tullia Tedeschi
Department of Food and Drug, University of Parma, Parma, Italy
- 12:45 p.m. **OR40: Role of red cabbage anthocyanins in the reaction with AAPH and carotenoid protection**
Claudia Lombroni, Ksenia Morozova, Tiziana Nardin, Roberto Larcher, Matteo Scampicchio
University of Turin, Department of Agricultural, Forest and Food Sciences, Grugliasco (TO), Italy
- 1:00 p.m. Concluding remarks & Arrivederci!!

POSTER COMMUNICATIONS

- P1 From dairy by-product to functional ingredient: valorization of mozzarella stretching water as a source of bioactive peptides through microbial fermentation**
Antonella Lamonaca, Alessia Marzulli, Marianna de Gioia, Loris Pinto, Rosa Pilolli
National Research Council of Italy, Institute of Sciences of Food Production (CNR-ISPA), Bari, Italy
- P2 Data fusion of the non-volatile and volatile metabolome for shelf-life and sensory quality prediction of skim milk powder**
Giulia Gula, Luigi Locuratolo, Franco Rosso, Andrea Peraino, Augusta Caligiani
Food and Drug Department, University of Parma, Parma, Italy
- P3 Aromatic and fatty acid profiling of Aosta Valley milk and fontina PDO cheese: the value of summer alpine pasture**
Thedy Laura, Luca Verneti-Prot, Sabina Valentini
Institut Agricole Régional, Reg. Aosta, Italy
- P4 Comparative metabolite profiling of fourteen aromatic herbs using targeted and untargeted mass spectrometry approaches, combined with chromatographic separation techniques**
Paola Di Matteo, Teresa Bovenzi, Mario Borrelli, Rita Petrucci
Dip. SBAI, Sapienza Università di Roma, Rome, Italy
- P5 Evaluation of Cherry and Datterino tomatoes freshness and variety using a multi-analytical platform: combining PTR-ToF-MS, HS-SPME-GC-MS, and two portable electronic noses**
J. Zhang, I. Khomenko, M. Tonezzer, E. Betta, M. Pedrotti, A. Romano, R. Capuano, A. Catini, C. Di Natale, F. Biasoli
Università di Cagliari, Dipartimento di Scienze Chimiche e Geologiche, Campus di Monserrato, Monserrato, Italy
- P6 HPLC-MS/MS and ¹H-qNMR as complementary techniques for the characterization and quantification of shatavarins in *Asparagus racemosus* L.**
Beatrice Zonfrillo, Maria Bellumori, Mohamad Khatib, Lorenzo Cecchi, Michele Zucherman, Gianluca Bartolucci, Marta Menicatti, Marzia Innocenti, Nadia Mulinacci
Department of Neurofarba, Nutraceutical and Pharmaceutical section, University of Florence, Sesto Fiorentino, Italy
- P7 Effect of *in vitro* gastrointestinal digestion on the metabolic profile of the ancient cultivar "Pericina" pear (*Pyrus communis*) from Picentini Mountains (Salerno, Italy)**
Roberta Cuozzo, Milena Masullo, Sonia Piacente
Dipartimento di Farmacia, Università degli Studi di Salerno, Fisciano (SA), Italy
- P8 High-resolution mass metabolomic profiling for the chemical biodiversity of traditional apulian sweet pepper (*Capsicum annuum* L.) landraces**
Antonino Rizzuti, Emanuela Blanco, Biagia Musio, Vito Gallo, Piero Mastrorilli, Anna Bonasia, Giulia Conversa, Gabriella Sonnante
Department of Civil, Environmental, Land, Construction and Chemistry (DICATECh), Polytechnic University of Bari, Bari, Italy

P9 Characterisation of the volatile fraction of wild food plants before and after fermentation by HS-SPME/GC-MS

Leandra Leto, Benedetta Bottari, Marco Biagi, Francesco Martelli, Federico Bertoldo, Renato Bruni, Martina Cirlini

Department of Food and Drug, University of Parma, Parma, Italy

P10 An ASCA-based investigation of hazelnuts volatilome evolution during storage

Sara Tanilli, Andrea Caratti, Giuseppe Genova, Alex Fissore, Cristina Casetta, Fulvia Trapani, Erica Liberto, Chiara Cordero

Department of Drug Science and Technology, University of Turin, Turin, Italy

P11 Detection of biosynthetic citric acid and sugar addition in Italian tomato passata using liquid chromatography-chemical oxidation-isotope ratio mass spectrometry

Silvia Pianezze, Domenico Masuero, Matteo Perini, Stefania Carpino, Nicola Barilaro, Vincenzo Di Martino, Luana Bontempo

Fondazione Edmund Mach, San Michele all'Adige, Italy

P12 Acrylamide: from bean to cup

Barbara Angelone, Paolo Candotti, Barbara Massardi, Rita Salami, Giulia Lorenzi, Simonetta Menotta, Mara Gasparini

Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna "Bruno Ubertini", Brescia, Italy

P13 Linalool in green *Coffea arabica* by HS-SPME/GC-MS and HS/GC-IMS

Gaia Bechis, Valentina Lonzarich, Matteo Bordiga, Luciano Navarini

illycaffè S.p.A., Trieste, Italy

P14 Multi-analytical benchmarking of cold-brew systems: HS-SPME-GC-MS reveals quality evolution during refrigerated storage

Agnese Santanatoglia, Martina Prioretti, Matteo Petrolati, Giovanni Caprioli, Gianni Sagratini

School of Pharmacy (ChIP), University of Camerino, Camerino (MC), Italy

P15 Cellulose-based films from coffee silverskin for sustainable active packaging: the rECOBIOpack project

Chiara Scapuzzi, Tamara Chwojnik, Valeria Romanucci, Luisella Verotta, Luciano Navarini, Paola Crisafulli, Stefania Lupinelli, Giovanni Di Fabio, Daniele Carullo, Stefano Farris, Stefania Marzorati

Department of Environmental Science and Policy, University of Milan, Milan, Italy

P16 Coffee-derived caffeoylquinides rapidly remodel the intestinal endocannabinoidome and improve epithelial barrier function in Caco-2 cells

Fabiana Piscitelli, Marco Allarà, Roberta Verde, Elisabetta De Angelis, Elena Guercia, Javiera Fontecilla-Escobar, Fabio Arturo Iannotti, Luciano Navarini

Consiglio Nazionale delle Ricerche – Istituto di Chimica Biomolecolare (CNR-ICB), Pozzuoli (NA), Italy

P17 Quinolizidine alkaloids in lupin: a case of acute intoxication

Ilaria Prizio, Mariantonietta Peloso, Gaetan Minkoumba Sonfack, Elisabetta Caprai

National Reference Laboratory for natural toxins in food, Food Chemical Department, Izsler, Bologna, Italy

- P18 Capturing toxic tropane alkaloids from *Datura stramonium*, *Datura metel*, *Mandragora autumnalis* in plant based foods via DART-HRMS**
Nicole Cascio, Carmela Zacometti, Francesca Asson, Andrea Massaro, Roberto Stella, Roberta Masin, Giancarlo Biancotto, Alessandra Tata
Istituto Zooprofilattico Sperimentale delle Venezie, Laboratory of Experimental Chemistry, Vicenza, Italy
- P19 Investigating amino acid–sugar interactions for cocoa-like aroma generation in a chickpea flour-based solid food matrix**
Giorgia Mattina, Leonardo Lorenzi, Andrea Francioni, Riccardo Bottiroli, Vincenzo Fogliano, Eugenio Aprea
University of Trento, San Michele all'Adige, Italy
- P20 Advancing peanut aroma analysis through integrated headspace sampling and GC×GC–HRMS**
Andrea Caratti, Angelica Fina, Sara Tanilli, Fulvia Trapani, Erica Liberto, Giuseppe Genova, Cristina Casetta, Carlo Bicchi, Chiara Cordero
Department of Drug Science and Technology, University of Turin, Turin, Italy
- P21 Authentication of the geographical origin of Italian multifloral honey: multi-analytical characterization of the composition and pesticide residues to distinguish the production area**
Francesca Asson, Carmela Zacometti, Andrea Massaro, Fabjola Bilo, Marianna Martinello, Franco Mutinelli, Elisabetta Schievano, Alessandra Tata
Laboratory of Experimental Chemistry, Istituto Zooprofilattico Sperimentale delle Venezie, Vicenza (VI), Italy
- P22 Comprehensive characterization of honey from Kazakhstan, Italy, China and other countries through volatile profiling by GC-MS, polyphenolic profiling by HPLC-MS/MS and quantification of 5-hydroxymethylfurfural by HPLC-DAD**
Gulzhan Khamitova, Laura Acquaticci, Lazzat Karasholakova, Giovanni Caprioli
Research Institute of Biotechnology and Ecology, Zhetysu University named after I. Zhansugurov, Taldykorgan, Kazakhstan
- P23 HS-GC-IMS authenticates the botanical origin of seven types of Italian monofloral honey, annotating the significant volatile compounds by the novel HS- SPME-GC-IMS-MS prototype**
Filippo Panni, Andrea Massaro, Lukas Bodenbender, Carmela Zacometti, Roberto Piro, Angela Felicità Savino, Philipp Weller, Alessandra Tata
Ministero dell'agricoltura, della Sovranità Alimentare e delle Foreste, Dipartimento dell'Ispettorato Centrale della tutela della Qualità e Repressioni Frodi dei prodotti agro-alimentari, ICQRF Laboratory of Perugia, Perugia, PG, Italy
- P24 High-resolution mass spectrometry for varietal authentication of bread wheat**
Lorenzo Lovatti, Felix Bacher, Peter Robatscher, Ksenia Morozova, Matteo Mario Scampicchio
Faculty of Agricultural, Environmental and Food Sciences, Free University of Bozen-Bolzano, Bolzano, Italy
- P25 UPLC–HRMS and ¹H NMR Fingerprinting for the Authentication of Italian Saffron**
Ksenia Morozova, Lucrezia Angeli, Timo D. Stark, Corinna Dawid, Enmanuel Cruz Muñoz, Davide Ballabio, Matteo Scampicchio
Faculty of Agricultural, Environmental and Food Sciences, Free University of Bozen-Bolzano, Bolzano, Italy

- P26 Development of a HS/GC-IMS screening method for honey geographical origin classification**
Giancarlo Quaglia, Cesare Rossini, Matteo Bordiga
Department of Pharmaceutical Sciences, University of Piemonte Orientale, Novara, Italy
- P27 Characterisation of monofloral and polyfloral honey from rural areas of Guatemala and role in the daily nutrition**
Chiara Scapuzzi, Tamara Chwojnik, Luisella Verotta, Maria Pia Macchi, Stefania Marzorati
Department of Environmental Science and Policy, University of Milan, Milan, Italy
- P28 Screening of fruity esters in sparkling wines produced by refermentation in pressurized stainless steel tank (Charmat-Martinotti method)**
A. Panighel, F. Tarricone, M. De Rosso, A. Sparacio, S. Sparla, S. Vincenzi, L. Vettori, R. Flamini
Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria - Centro Ricerca Viticoltura Enologia, Conegliano (TV), Italy
- P29 Impact of a novel copper-free formulation on stilbene biosynthesis in grapevine shoots**
Ghazal Namazzadeh, Laura Alessandroni, Filippo Maggi, Eleonora Spinozzi, Matteo Michelini, Valerio Borzatta, Gianni Sagratini
School of Pharmacy, Chemistry Interdisciplinary Project (ChIP), University of Camerino, Camerino (MC), Italy
- P30 Multi-matrix LC-MS/MS screening of 40 PFAS in edible oils and food contact paper materials**
G. Mosconi, P. Fusari, C. Scagliarini, D. Baglio, P. Rovellini
Innovhub – Stazioni Sperimentali per l'Industria S.r.l., Milan, Italy
- P31 Chemical characterization of olive mill wastewater by untargeted UHPLC-QTOF-MS data-dependent analysis approach**
Simone Angeloni, Laura Alessandroni, Giovanni Caprioli, Gianni Sagratini, Massimo Ricciutelli
Chemistry Interdisciplinary Project (ChIP), School of Pharmacy, University of Camerino, Camerino, Italy
- P32 High-resolution metabolomics uncovers xylem metabolic signatures associated with *Philaenus spumarius* feeding in olive**
Maria Assunta Crescenzi, Erica Tinelli, Vincenzo Verrastro, Daniele Cornara, Paola Montoro
Department of Pharmacy, University of the Study of Salerno, Fisciano, Italy
- P33 Comparison of commercial monovarietal extra virgin olive oil classification methods: targeted profiling with HS-SPME-GC-MS and HPLC-DAD vs untargeted fingerprinting with HS-GC-IMS**
Tommaso Ugolini, Lukas Bodenbender, Nabiollah Mobaraki, Marzia Migliorini, Ilaria Romei, Bruno Zanoni, Lorenzo Cecchi, Philipp Weller
DAGRI –Department of Agricultural, Food, Environmental, and Forestry Sciences and Technologies, University of Florence, Florence, Italy
- P34 Comparative evaluation of green solvents for the extraction of olive leaf phenolics by UHPLC-HRMS/MS-based metabolomics**
Orsolina Vetrano, Maria Assunta Crescenzi, Daniele Sanna, Angela Fadda, Paola Montoro
Department of Pharmacy, University of the Study of Salerno, Fisciano, Italy

- P35 Tracking reactive aldehydes in bakery matrices and oven emissions via HS-SPME-GC-MS/MS**
Mauro Paolini, Roberto Larcher
Fondazione Edmund Mach (FEM), San Michele all'Adige, Italy
- P36 UHPLC-HRMS profiling of botanical extracts for antifungal and bioactive applications in bakery products**
Giulia Fappani, Gabriele Rocchetti
Department of Animal Science, Food and Nutrition, Università Cattolica del Sacro Cuore, Piacenza, Italy
- P37 An LC-MS/MS method for evaluating cyanotoxins contamination in bivalve mollusks through freshwater-to-marine pathways**
S. Mazza, M. Siracusa, S. Bacchiocchi, G. Diomedì, S. Accoroni, A. Tomasini, M. S. Princivalli, A. Baldoni, F. Serenelli, A. Piersanti
Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche "Togo Rosati", Perugia
- P38 Levels of 3-monochloropropane-1,2-diol (3-MCPD as sum of free and ester-bound forms) and glycidyl esters (GE) in fish oil: results of five-year monitoring**
Valentina Gamba, Elena Pellegrini, Barbara Albanese, Simona Romelli, Mara Gasparini
Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia-Romagna, Brescia, Italy
- P39 Effects of fishing pressure on the fatty acid composition in red mullet (*Mullus barbatus*) from the central Adriatic sea**
Behixhe Ajdini, Federico Girolametti, Silvia Illuminati, Anna Annibaldi, Luca Caracausi, Giacomo Milisenda, Emanuela Fanelli, Cristina Truzzi
Department of Life and Environmental Sciences, Università Politecnica delle Marche, Ancona, Italy
- P40 Unravelling aroma modulation in extruded pea protein through carob bean protein incorporation: A comprehensive GC×GC-MS volatilomic study**
Faezeh Khoobakht, Francesco Reale, Giorgia Mattina, Silvia Carlin, Panagiotis Arapitsas, Eugenio Aprea
Center Agriculture Food Environment, University of Trento, San Michele all'Adige, Italy
- P41 Wildlife: a protein alternative to intensive farming? Food security and environmental bioindicator study**
E. Vaccaro, G. Ferrari, V. Armenio, V. Savio, F. Armellino, S. Robetto, B. Moroni, V. Listorti, L. De Paolis, E. Razzuoli, L. Guardone, V. Ciccotelli
Istituto Zooprofilattico Sperimentale Piemonte, Liguria, Valle d'Aosta, Torino, Italy
- P42 Zein-based nanoparticles: a green approach to bioactive peptides delivery**
Stefania Marzorati, Patricia Duque-Estrada, Davide Emide, Daniela Maggioni, Thamiris Monteverde Vicentini, Chiara Magni, Chiara Scapuzzi, Rene Lametsch, Iben Lykke Petersen, Mikołaj Dziurzyński, Alessio Scarafoni
Department of Environmental Science and Policy, University of Milan, Italy
- P43 Comparison between conventional and functional data analysis of time resolved volatilomics data: a case study of microalgae fermentation with kefir starters**
Iuliia Khomenko, Martina Moretton, Emanuela Betta, Antonio Luca Langellotti, Vittorio Capozzi, Vincenzo Fogliano, Franco Biasioli
Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige (TN), Italy

- P44 From insect frass to valuable microalgal biomass: screening species for sustainable omega-3 PUFA production within the ALGINLOOP project**
Behixhe Ajdini, Miles Minio, Federico Girolametti, Lorenzo Massi, Anna Annibaldi, Silvia Illuminati, Alessandra Norici, Cristina Truzzi
Department of Life and Environmental Sciences, Università Politecnica delle Marche, Ancona, Italy
- P45 Real-time PTR–ToF–MS tracking of volatile sulfur compound release in food matrices: the role of whole saliva and the oral bacterial enzyme FnaPatB1**
Fatemeh Izadfar, Michele Pedrotti, Sylvester Holt, Emanuela Betta, Iuliia Khomenko, Flavia Gasperi, Franco Biasioli
Center for Agriculture, Food and Environment (C3A), University of Trento, San Michele all'Adige, Italy
- P46 Chewing on flavour: temporal dynamics of aroma and sweetness in sugar-free gum**
M. Pedrotti, S. van de Laar, L. Menghi, L. Cappellin, G. Rinaudo, M. Roverso, S. Bogialli, S. Pettenuzzo, V. Fogliano, F. Biasioli
Fondazione Edmund Mach, Research and Innovation Centre, San Michele all'Adige, TN, Italy
- P47 Assessment of phthalate migration from reusable plastic water bottles into drinking water**
Claudia Lino, David Bongiorno, Serena Indelicato, Giuseppe Avellone
Dipartimento di Scienze e Tecnologie Biologiche, Chimiche e Farmaceutiche, Università di Palermo, Palermo, Italy
- P48 Investigation of inorganic elements in insect-based novel foods by ICP-MS**
M. Ciriaci, S. Mazza, F. Griffoni, P. Palombo, M. Siracusa, T. Tavaloni, C. Barola, A. Stramenga, S. Bacchiocchi, A. Piersanti
Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche "Togo Rosati", Ancona-Perugia
- P49 In silico assessment of the potential allergenicity of purple phototrophic bacteria biomass**
Beatrice Aiuto, Cristina Lamberti, Simona Cirrincione, Loredana Tarraran, Antonella Leone, Veronica Lattanzio, Laura Cavallarin
CNR-ISPA Torino, Italy
- P50 Determination of Volatile Organic Compounds (VOCs) released from plastic packaging for dry foods: headspace analysis (HS-GC-MS) and migration studies using Tenax® as food simulant**
Alessandra Como, Carmen Palermo, Diego Centonze, Cristina Nerin
Università di Foggia, Italy
- P51 Land snails as terrestrial sentinel organisms for monitoring heavy metal and phthalate accumulation**
Chiara Marchese, Rosa Avolio, Silvia Olivieri, Roberta Moriano, Paola Brizio, Stefania Squadrone, Maria Cesarina Abete
Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle D'Aosta (IZS PLV), Turin, Italy

P52 Evaluation of SPME fibers and extraction salts for the volatilomic profiling of paprika using a chemometric approach

Alessandra Como, Diego Centonze, Carmen Palermo

Università di Foggia, Foggia, Italy

P53 Effect of Vitis vinifera leaf enrichment on the volatile profile and sensory properties of grape juice

Cristina Matarazzo, Massimo Iorizzo, Livia Malorni, Rosaria Cozzolino

University of Molise, Department of Agriculture, Environmental and Food Sciences, Campobasso, Italy

P54 Geographical authentication of extra virgin olive oil by mid-level fusion of FTIR, NMR and IRMS data

Maria Assunta Acquavia, Francesco Romaniello, Chiara Portesi, Matteo Berruto, Maria Pia Montana Lampo, Vittorio Capozzi, Giuliano de Seenen, Andrea Mario Rossi

National Metrology Institute of Italy, Matera, Italy

P55 Exploring the aroma profile of fermented mung bean gels using lactic acid bacteria and yeast strains

L. Marchesini, M. Mazzucotelli, E. Betta, I. Khomenko, A. Levante, F. Bot, M. Pedrotti

University of Parma, Parma, Italy

P56 iso CHROM® LC: from honey analysis to a versatile platform for complex food matrices

Pasquale Carlino, Philipp Schodder, Marco Schmidt, Silvia Alfieri, Mike Seed

Elementar Italia Srl., Milano, Italy