



SCIENTIFIC PROGRAMME

Bologna, October 11-13, 2017

Scientific Committee

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SCIENTIFIC PROGRAMME

Wednesday, October 11th, 2017

13:00 – 14:00 Registration and reception

14:00 – 14:30 **Welcome addresses**

Simona Caselli

Assessore all'Agricoltura, Caccia e Pesca, Regione Emilia Romagna

Renata Pascarelli

Direttore Qualità, Coop Italia

Donatella Caruso

University of Milan, President of the Division of Mass Spectrometry of the Italian Chemical Society

Davide Garbini

Coop Italia, 5 MS Food Day Organizing Committee, *Chair*

Gianluca Giorgi

University of Siena, 5 MS Food Day Scientific Committee, *Chair*

DSM Awards & Fellowships Ceremony

14:30 **1st Session**

Chairs: Donatella Caruso (Univ. of Milan) Gianluca Giorgi (Univ. of Siena)

14:30 – 15:10 **PL1: Toward Human Cells Using a Multi-Omics Approach
Food Safety: Rapid Assessment of the Mechanism of
Action of Toxicants**

Richard M. Caprioli

Mass Spectrometry Research Center, Vanderbilt University,
Nashville TN (USA)

15:10 – 15:50 **PL2: Comprehensive Two-Dimensional LC in Combination
With MS to Characterize Very Complex Food Samples**

Miguel Herrero

Foodomics Laboratory, Institute of Food Science Research
(CIAL, CSIC), Madrid (Spain)

- 15:50 – 16:05 **OR1: DSM Award for Young Researchers 2017: MALDI-MS Imaging of Glomerular Diseases: A Possible Diagnostic Role?**
Andrew Smith, Vincenzo L'Imperio, Manuel Galli, Martina Stella, Clizia Chinello, Franco Ferrario, Fabio Pagni, Fulvio Magni
Dept of Medicine and Surgery, Proteomics and Metabolomics Unit, University of Milano-Bicocca, Veduggio al Lambro (Italy)
- 16:05 – 16:20 **OR2: Eggproducts Freshness Evaluation: a Metabolomic Approach**
Daniele Cavanna, Dante Catellani, Chiara Dall'Asta, Michele Suman
Advanced Laboratory Research, Barilla G. e R. Fratelli S.p.A., Parma (Italy)
- 16:20 – 16:35 **OR3: Comprehensive Determination of Tyrosol and Hydroxytyrosol Derivatives in Extra Virgin Olive Oil by Microwave Chemistry and Tandem Mass Spectrometry**
Lucia Bartella, Fabio Mazzotti, Anna Napoli, Giovanni Sindona, Leonardo Di Donna
Università della Calabria, Dipartimento di Chimica e Tecnologie Chimiche
Rende (CS) (Italy)
- 16:35 – 16:50 **OR4: New Products from Parmigiano-Reggiano Manufacturing Chain: Characterization of the Nitrogen Fraction and Study of the Bio-Functional Properties**
Sofie Buhler, Ylenia Riciputi, Stefano Sforza, Arnaldo Dossena, Tullia Tedeschi
SITEIA Parma Interdepartmental Center, University of Parma, Parma (Italy)
- 16:50 – 17:30 *Coffee break*
- 17:30 **2nd Session**
Chairs: Tullia Gallina Toschi (Univ. Bologna), Riccardo Flamini (CREA-VE, Conegliano (TV))
- 17:30 – 17:45 **OR5: High Resolution Mass Spectrometry Based Authentication of Czech and Moravian Wines**
Kamila Hurkova, Leos Uttl, Jana Hajslova
University of Chemistry and Technology Prague, Dept. Food Analysis and Nutrition, Prague (Czech Republic)
- 17:45 – 18:00 **OR6: REIMS LiveID™. An Emerging Testing Solution to Safeguard the Food Supply Chain**
S. Scarpella, S. Stead, R. Jandova, E. Jones, J. Balog, Z. Takats
Waters, Milano (Italy)

18:00 – 18:15 **OR7: Quantitation of Polyphenols in Different Types of Craft Beers by HPLC-ESI-MS/MS: a Case Study of Matrix Effect**

Manuela Cortese, Dolores Vargas Peregrina, Maria Ugili, Roberta Censi, Piera Di Martino

University of Camerino, Camerino (Italy)

18:15 – 18:30 **OR8: Ancient Wheat and Gluten: MS Analysis of Peptides Involved in the Onset of Celiac Disease**

Barbara Prandi, Fatma Boukid, Silvia Folloni, Tullia Tedeschi, Gianni Galaverna, Igor Anfelli, Stefano Raimondi, Alberto Amaretti, Maddalena Rossi, Donatella B. M. Ficco, Nicola Pecchioni, Stefano Sforza

Dept. of Food and Drug, University of Parma, Parma (Italy)

18:30 – 18:45 **OR9: Fingerprinting of High Quality Cocoa by Two-Dimensional Comprehensive Gas Chromatography - Time-of-Flight Mass Spectrometry and Tandem Ionization**

Alessandro Guglielmetti, Erica Liberto, Stephen E. Reichenbach, Elena Allegrucci, Guido Gobino, Carlo Bicchi, Lucie Baroux, Philippe Merle, Chiara Cordero

Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino (Italy)

18:45 *End of session*

19:00 Welcome cocktail kindly offered by Thermo Fisher Scientific

Thursday, October 12th, 2017

- 9:00 **3rd Session**
*Chairs: **Arnaldo Dossena** (Univ. Parma), **Roberta Galarini** (IZSUM, Perugia)*
- 9:00 – 9:40 **PL3: High Resolution Mass Spectrometry: How to Deal With Analytes Which Require Additional Selectivity and Sensitivity?**
Anton Kaufmann
Official Food Control Authority of the Canton of Zurich (Switzerland)
- 9:40 – 9:55 **OR10: In House Validation and Small Scale Collaborative Study for Fusarium Toxins Screening in Wheat by Liquid Chromatography – High Resolution Mass Spectrometry**
Biancamaria Ciasca, Michelangelo Pascale, Valerio Guido Altieri, Francesco Longobardi, Dante Catellani, Michele Suman, Veronica M.T. Lattanzio
Barilla SpA, Advanced Laboratory Research, Parma (Italy)
- 9:55 – 10:10 **OR11: Rapid Identification and Typing of *Listeria* and Other Foodborne Pathogens by MALDI-TOF Mass Spectrometry**
Elisa Basso
Bruker Daltonics, Macerata (Italy)
- 10:10 – 10:30 **KN1: EURL Experiences in Application of LC-HRMS for Pesticide Residues Analysis in Fruits and Vegetables**
Łukasz Rajski, Amadeo R. Fernández-Alba
European Union Reference Laboratory for Pesticide Residues in Fruit & Vegetables. University of Almeria (Spain)
- 10:30 – 10:45 **OR12: UHPLC–MS Based Analysis of Polyfluorinated Surfactants and Related Fluorinated Contaminants in Food Contact Materials**
Darina Lanková, Ondřej Lacina, Jana Pulkrabová, Jana Hajšlová
University of Chemistry and Technology Prague, Dept. Food Analysis and Nutrition, Prague (Czech Republic)
- 10:45 – 11:30 Coffee break
Poster session (even number posters)

- 11:30 **4th Session**
Chairs: Franco Biasioli (FEM, S. Michele A/A (TN)), Lanfranco Conte (Univ. di Udine)
- 11:30 – 11:50 **KN2: The Impact of Yeast Strain on Hop Volatiles Produced During Fermentation**
Phil Bremer, Tobias Richter, Pat Silcock, Graham Eyres
Department of Food Science, University of Otago (New Zealand)
- 11:50 – 12:05 **OR13: Non-Destructive Characterization of Volatile Food Quality Indicators by Chemical Ionization MS: Applications of PTR-MS and GC-IMS**
E. Zardin, M. Kunde, C. Franke, S. Hotz, K. Rieblinger, P. Bremer, P. Silcock, A. Buettner, J. Beauchamp
Department of Sensory Analytics, Fraunhofer Institute for Process Engineering and Packaging IVV, Freising (Germany)
- 12:05 – 12:20 **OR14: Analysis of Volatile Compounds in Different Gluten-Free Breads by PTR-ToF-MS: Effects of Flour, Baking and Roasting**
Joana Pico, Iuliia Khomenko, Vittorio Cappozzi, Luciano Navarini, José Bernal, Manuel Gómez, Franco Biasioli
I.U. Cinquima, Analytical Chemistry Department, University of Valladolid, Valladolid (Spain)
- 12:20 – 12:35 **OR15: Screening for Mineral Oil Hydrocarbons in Food Packaging Via Gas-Phase Proton-Transfer-Reaction Mass Spectrometry Analysis**
Jonathan Beauchamp, Mara Gruenbaum, Erika Zardin, Romy Fengler, Ludwig Gruber, Andrea Buettner
Fraunhofer Institute for Process Engineering and Packaging IVV, Freising (Germany)
- 12:35 – 12:50 **OR16: Enhancing MS/MS Spectral Libraries: Improved Approaches Using Triple Quadrupole Mass Spectrometer**
Davide Vecchietti
Shimadzu Italy
- 13:00 – 14:15 Buffet lunch

- 14:15 **5th Session**
Chairs: Davide Garbini (Coop Italia, Bologna), Michele Suman (Barilla, Parma)
- 14:15 - 14:30 **OR17: Unravelling Potent Odorants in Pond-Raised Rainbow Trout (*Oncorhynchus Mykiss*) Using Comparative Aroma Extract Dilution Analyses (CAEDA) and Multi-Dimensional Gas Chromatography-Mass Spectrometry/Olfactometry**
Mohamed Mahmoud, Andrea Buettner
Department of Chemistry and Pharmacy, Universität Erlangen-Nürnberg (FAU), Erlangen (Germany)
- 14:30 – 14:45 **OR18: Carbon and Nitrogen Stable Isotopes to Trace Mozzarella di Bufala Campana Production**
Simona Altieri, Katya Saiano, Mariaida Biondi, Carmine Lubritto
Dept Environmental, Biological and Pharmaceutical Science and Technologies, Università degli Studi della Campania “Luigi Vanvitelli”, Caserta (Italy)
- 14:45 – 15:00 **OR19: New Methods for Quat Pesticides Analysis Using Cationic Chromatography Coupled with High Resolution Mass Spectrometry**
Tiziana Nardin, Roberto Larcher
Centro Trasferimento Tecnologico, Fondazione E. Mach, San Michele all'Adige (TN, Italy)
- 15:00 – 15:15 **OR20: Glyphosate and Other Anionic and Cationic Pesticides Analysis in Food by Ion Chromatography Coupled to a Hybrid Quadrupole FTMS Orbitrap**
Luca Gerardo
Thermo Fisher Scientific S.p.A. Rodano (MI, Italy)
- 15:15 – 15:30 **OR21: A High-Sensitive LC-MS/MS Method for the Quantification of Aflatoxin M₁ in Milk Products and Baby Food: Validation and Application in an ISO/IEC: 17025 Accredited Laboratory**
Sonia Colicchia, Daniel Piller, Celine Zahradnik
Romer Labs Diagnostic GmbH, Tulln (Austria)
- 15:30 – 15:50 **KN3: Advanced MS Approaches for the Size Characterization of Inorganic Nanomaterials: Investigating the Nanofractions of Particulate Food Additives/Nutrient Sources by Single Particle ICP-MS**
Francesco Cubadda, Federica Aureli, Andrea Raggi, Alberto Mantovani
Dept. Food Safety, Nutrition, Veterinary Public Health, Istituto Superiore di Sanità, Rome (Italy)

- 15:50 – 16:05 **OR22: Analysis of Mycotoxins in Food Matrix by Ultivo LC-MS/MS System**
Nicola Cimino, Marica Barbieri
Agilent Technologies, Cernusco Sul Naviglio (MI, Italy)
- 16:05 – 16:45 Coffee break
Poster session (odd number posters)
- 16:45 **PARALLEL SESSIONS**
- 16:45 **6th Session**
Chairs: Paola Pittia (Univ. di Teramo), Sauro Vittori (Univ. Camerino)
- 16:45 – 17:00 **OR23: Extraction of Phytoestrogens from Soy Milk and Soy-Based Meat Substitutes and Quantitation by Liquid Chromatography Coupled to Tandem Mass Spectrometry**
Barbara Benedetti, Marina Di Carro, Emanuele Magi
Department of Chemistry and Industrial Chemistry, University of Genoa, Genoa (Italy)
- 17:00 – 17:15 **OR24: Simultaneous Quantification of Riboflavin, Nicotinamide and Nicotinic Acid in Anchovies (*Engraulis Engraulis*) by HPLC-MS/MS Triple Quadrupole**
Giovanni Caprioli, Sauro Vittori, Gianni Sagratini, Elisabetta Torregiani
School of Pharmacy, University of Camerino, Camerino (Italy)
- 17:15 – 17:30 **OR25: Biomonitoring of Selected Persistent Organic Pollutants (NDL-PCBs and PBDEs) in Wild Fauna from Central Italy**
Tamara Tavoloni, Arianna Stramenga, Giampiero Scortichini, Tommaso Stecconi, Livia Moscati, Arianna Piersanti
Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche, Ancona (Italy)
- 17:30 – 17:45 **OR26: Identification of Non-Intentionally Added Substances by Gas and Liquid Chromatography Coupled to Orbitrap-Mass Spectrometry in Food Packaging Nano Films**
M.J. Martínez-Bueno, M.D. Hernando, S. Uclés, L. Rajski, S. Cimmino, A. R.Fernández-Alba
University of Almeria, Department of Physics and Chemistry, Agrifood Campus of International Excellence (ceiA3), Almería (Spain)

- 17:45 – 18:00 **OR27: Effects of Industrial Processing and Storage on Glycation Levels of Bovine Milk Proteins**
Sanja Milkovska-Stamenova, Ralf Hoffmann
Institute of Bioanalytical Chemistry, Faculty of Chemistry and Mineralogy, Universität Leipzig (Germany)
- 18:00 – 18:15 **OR28: Major Allergens in Cow Milk's whey: Chemical Modifications induced by Technological Treatments and their effect on Allergenicity**
Alessandra Gasparini, Sofie Buhler, Arnaldo Dossena, Stefano Sforza, Tullia Tedeschi
Food and Drug Department, University of Parma (Italy)
- 18:15 – 18:30 **OR29: HRMS/MS Study of the Solvent Mediated UV-C Degradation of the Natural Antioxidant Oleuropein**
Edoardo Longo, Ksenia Morozova, Matteo Scampicchio
Free University of Bozen-Bolzano, Faculty of Science and Technology, Bozen-Bolzano (Italy)
- 16:45 **7th Session**
***Chairs: Giovanni Sindona** (Univ. della Calabria), **Gianluca Bartolucci** (Univ. Firenze)*
- 16:45 – 17:00 **OR30: Screening of Mycotoxins: Benefits Provided by Travelling-Wave Ion Mobility Time-Of-Flight Mass Spectrometry**
Laura Righetti, Giuseppe Paglia, Gianni Galaverna, Chiara Dall'Asta
Department of Food Science, University of Parma, Parma (Italy)
- 17:00 – 17:15 **OR31: The CO₂ Dried Apple Phytoconstituents by LC-MS: Procyanidins, Calchones and Triterpene for Multiple Standardization**
Stefania Sut, Gabriele Poloniato, Sara Spilimbergo, Filippo Michelino, Alessandro Zambon, Stefano Dall'Acqua
Department of Pharmaceutical and Pharmacological Sciences, Padova (Italy)
- 17:15 – 17:30 **OR32: A LC-MS/MS Approach to Evaluate Palytoxins Contamination in Wild Mussels of the Conero Riviera**
Melania Siracusa, Simone Bacchiocchi, Arianna Piersanti
Centro di Referenza Nazionale Molluschi Bivalvi – I.Z.S. Umbria e Marche, Ancona (Italy)

17:30 – 17:45 **OR33: Use of a Single Quadrupole MS Coupled to an HPLC/PDA System for Characterization of Nutraceuticals in Seven Italian Pomegranate Cultivars**

Marina Russo, Chiara Fanali, Paola Dugo, Rosario Muleo, Laura De Gara

Unit of Food Science and Nutrition, Department of Medicine - University Campus Bio-Medico of Rome, Rome (Italy)

17:45 – 18:00 **OR34: Gas Chromatography-Mass Spectrometry for Identification of Fatty Acids Composition of Farmed Atlantic Bluefin Tuna (*Thunnus Thynnus L.*): Nutritional Value in Relation to Size and Sex**

Cristina Truzzi, Silvia Illuminati, Matteo Antonucci, Martina Api, Anna Annibaldi, Giuseppe Scarponi, Francesco Lombardo, Paolo Pignalosa, Oliana Carnevali

Department of Life and Environmental Sciences, Università Politecnica delle Marche, Ancona (Italy)

18:00 – 18:15 **OR35: Determination of Volatile Compounds in Apple by SPME/GC-MS and Their Influence on Perceived Sweetness**

Eugenio Aprea, Mathilde Charles, Isabella Endrizzi, Maria Laura Corollaro, Emanuela Betta, Jessica Zambanini, Franco Biasioli, Flavia Gasperi

Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige (Italy)

18:15 – 18:30 **OR36: Chemometric Evaluation of Volatile Compounds of Olive Oils Based on GC-MS Analysis and Software Elaboration**

Erica Moret, Lanfranco Conte

Dept. of Agriculture, Food, Environmental and Animal Sciences Udine (Italy)

18:30 End of session

20:30 Social dinner

Friday, October 13th, 2017

- 9:00 **8th Session**
Chairs: Chiara Cordero (Univ. di Torino), Luciano Navarini (illicaffè S.p.A., Trento)
- 9:00 – 9:40 **PL4: Sensing Food Fraud**
Saskia van Ruth, Manuel Esbri, Sajad Kiani
Wageningen University and Research (The Netherlands)
- 9:40 – 9:55 **OR37: Coffee Leaves and Walnut Leaves Tea as Source of Hydroxycinnamic Acid Esters (HCEs) and Xanthenes**
S. Colombari, A. Gutiérrez Ortiz, P. Crisafulli, F. Berti, C. Forzato, L. Navarini
illicaffè S.p.A., via Flavia 143, 34100, Trieste (Italy)
- 9:55 – 10:10 **OR38: Prediction of Coffee Sensory Quality in Cup by Headspace Solid Phase Microextraction-Mass-Spectrometry-Based Electronic Nose (HS-SPME-MS)**
Erica Liberto, Davide Bressanello, Chiara Cordero, Patrizia Rubiolo, Manuela R. Ruosi, Gloria Pellegrino, Carlo Bicchi
Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino (Italy)
- 10:10 – 10:25 **OR39: GC-MS Aroma Characterization of Vegetable Matrices: Focus on 3-Alkyl-2-Methoxypyrazines**
Delvana Mutarutwa, Paola Pittia, Valentina Lonzarich, Dario Compagnone, Luciano Navarini
Faculty of Bioscience and Technology for Agriculture, Food and Environment, University of Teramo, Teramo (Italy)
- 10:25 – 10:40 **OR40: New Approaches for Target and Untarget Screening in Food With LC-MS/MS SWATH™ Analysis**
Alessandro Armandi
Sciex Italy, Milano (Italy)
- 10:40 – 11:10 Coffee break
- 11:10 **9th Session**
Chairs: Angelo Visconti (Bonassisa Lab, Foggia), Giuseppe Avellone (Univ. of Palermo)
- 11:10 – 11:50 **PL5: Regulatory Aspects and Main Issues for Quality Control of Pesticide Residues in Food**
Carmen Ferrer, Amadeo R. Fernández-Alba
Agrifood Campus of International Excellence (CeIA3), EU Ref. Lab. for Pesticide Residues in Fruit and Vegetables, University of Almería, Almería (Spain)

11:50 – 12:05 **OR41: Towards an Olive Oil Volatile Compounds Identification and Quantification by SPME-GC-MS and Relation with Sensory Data: Preliminary Results of the OLEUM Project**

Tullia Gallina Toschi, Beatriz Quintanilla Casas, Alba Tres Oliver, Julen Bustamante, Francesc Guardiola, Diego L. García González, Ramón Aparicio-Ruiz, Enrico Valli, Sara Barbieri, Enrico Casadei, Florence Lacoste, Milena Bučar-Miklavčič, Ole Winkelmann, Karolina Brkić Bubola, Ummuhan Tibet, Alessandra Bendini, Stefania Vichi

Alma Mater Studiorum - Università di Bologna, Bologna (Italy)

12:05 – 12:20 **OR42: Multiclass Methods 2.0: Determination of More Than 100 Veterinary Drugs in Meat by LC-Q-HRMS**

Rosanna Rossi, Giorgio Saluti, Simone Moretti, Irene Diamanti, Danilo Giusepponi, Roberta Galarini

Istituto Zooprofilattico Sperimentale dell'Umbria e delle Marche, Perugia (Italy)

12:20 – 12:35 **OR43: Simultaneous Quantification of Sixteen Polyphenols in Pulses by High-Performance Liquid Chromatography – Dynamic MRM Triple Quadrupole Tandem Mass Spectrometry (HPLC-MS/MS)**

Federica Giusti, Giovanni Caprioli, Franks Kamgang Nzekoue, Massimo Ricciutelli, Elisabetta Torregiani, Sauro Vittori, Gianni Sagratini

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

12:35 – 13:00 Closing ceremony

Announcement of next MS Food Day

13:00 – 14:30 Farewell light buffet

POSTER COMMUNICATIONS

- P1 **Determination of Phenolic Compounds from Camu-Camu Fruit (*Myrciaria Dubia*) from Peru by HPLC-DAD-ESI-MS/MS**
Maria Bellumori, Marzia Innocenti, Diletta Balli, Nancy Chasquibol Silva, Giuseppe Pieraccini, Nadia Mulinacci
Department of NEUROFARBA, University of Florence, Sesto F.no, Florence (Italy)
- P2 **UHPLC-HRMS Phenolic Characterization of Chardonnay Wine Obtained With Vinification in Amphorae, Barrels and Barrique**
Fabrizio Rossetti, Michael Jourdes, Pierre-Louis Teissedre, Edoardo Longo, Emanuele Boselli
Università Politecnica delle Marche, Dipartimento di Scienze Agrarie, Alimentari ed Ambientali, Ancona (Italy)
- P3 **Phenolic Acids Distribution in “Carnaroli” Rice (*Oryza Sativa*) and Corresponding Milling Fractions**
Marco Spaggiari, Silvia Folloni, Roberto Ranieri, Chiara Dall’Asta, Gianni Galaverna
Department of Food and Drug, University of Parma, Parma (Italy)
- P4 **Bioaccessibility Evaluation of Red Chicory Polyphenols by HPLC-MS/MS**
Caterina Bergantin, Annalisa Maietti, Alberto Cavazzini, Luisa Pasti, Paola Tedeschi, Vincenzo Brandolini, Nicola Marchetti
University of Ferrara, Department of Chemistry and Pharmaceutical Sciences, Ferrara (Italy)
- P5 ***Chenopodium Quinoa* Willd Phenolic Profile Identification by Means of UHPLC-ESI-MS/MS**
Marika Pellegrini, Maria Chiara Simeoni, Antonella Ricci, Manuel Sergi, Claudio Lo Sterzo
Faculty of Biosciences and Technologies for Agriculture, Food and Environment - University of Teramo, Teramo (Italy)
- P6 **Quantitative Determination of Cereulide in Food by LC-MS/MS**
G.L. Ferro, F. Ostorero, S. Falsetti, M. Bianchi, L. Decastelli, D. Marchis, M. Gili
Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d’Aosta, Torino (Italy)
- P7 **Extra Virgin Olive Oil Volatiles Fingerprinting by GCxGC-TOF MS and Soft Ionization: Exploiting the Potential of Multiple Analytical Dimensions**
Chiara Cordero, Federico Stilo, Erica Liberto, Patrizia Rubiolo, Laura McGregor, Nick Bukowski, Carlo Bicchi
Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, Torino (Italy)

- P8 **Discriminant Analysis of Vegetable Oils by Paper Spray Mass Spectrometry and Statistical Approach**
Lucia Bartella, Fabio Mazzotti, Antonio Tagarelli, Anna Napoli, Giovanni Sindona, Leonardo Di Donna
Department of Chemistry and Chemical Technologies , University of Calabria, Rende (CS, Italy)
- P9 **Nose-Space Analysis of Olive Oil by PTR-Tof-MS**
Iuliia Khomenko, Eugenio Aprea, Franco Biasioli, Flavia Gasperi
Fondaz. E. Mach, Research and Innovation Center, Department of Food Quality and Nutrition, San Michele all'Adige (TN, Italy)
- P10 **Volatile Compounds of the Lychee (*Litchi chinensis* Sonn.)**
Fabrizio Papa, Giovanni Caprioli, Gianni Sagratini, Sauro Vittori, Filippo Maggi, Yanting Zuo
School of Science and Technology, Chemistry Division, University of Camerino (Italy)
- P11 **LC-MS Identification of *Cis*-Isomers of Caffeoylquinic Acids and *p*-Coumaroylquinic Acids**
A. Gutierrez Ortiz, S. Colomban, F. Berti, C. Forzato, L. Navarini
IPCOS - Dipartimento di Scienze Chimiche e Farmaceutiche, Università di Trieste, Trieste (Italy)
- P12 **LC/QTOF Study of Minor Chlorogenic Acids in Roasted *Coffea arabica* from Different Geographical Origin**
Mirko De Rosso, Riccardo Flamini, Silvia Colomban, Luciano Navarini
illycaffè S.p.A., Trieste (Italy)
- P13 **Development of a New Analytical Method to Quantify Lignans in Coffee by HPLC-MS/MS**
Simone Angeloni, Giovanni Caprioli, Gulzhan Kamithova, Manuela Cortese, Massimo Ricciutelli, Luciano Navarini, Gianni Sagratini, Sauro Vittori
University of Camerino, Camerino (Italy)
- P14 **Effects of Espresso Machine Variables on Espresso Coffee Composition**
Gulzhan Khamitova, Simone Angeloni, Giovanni Caprioli, Gianni Sagratini, Sauro Vittori
School of Pharmacy and International Hub for Coffee Research and Innovation, University of Camerino (Italy)
- P15 **Characterization of Chlorogenic Acids by HPLC-DAD-ESI-MS and HPLC-ESI-MS/MS in Cold Brew and Cold Drip Coffee**
Marzia Innocenti, Giulia Angeloni, Maria Bellumori, Piernicola Masella, Lorenzo Guerrini, Nadia Mulinacci, Alessandro Parenti
Department of NEUROFARBA, University of Florence, Sesto F.no, Florence (Italy)

- P16 **Adding Extra-Dimensions to Tea (*Camellia Sinensis* L.) Volatiles Profiling by GC×GC-TOF-MS and Soft Electron Ionization: Effects of Climate Changes on Volatile Metabolome**
Marta Cialliè Rosso, Erica Liberto, Albert Robbat, Laura Mc Gregor, Nick Bukowski, Carlo Bicchi, Chiara Cordero
Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, Torino (Italy)
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