Poster Session 1
Tuesday, 17 September - 17.25-19.00
Giralda

DATA ANALYSIS

[P1.1.1] Nutritional evaluation of gluten-free foods available in the Portuguese market
R. Capelas[1], H.S. Costa[1,2], M.B.P.P. Oliveira[2], T.G. Albuquerque*[1,2], *[1]National Institute of Health Dr. Ricardo Jorge, I.P., Portugal, [2]REQUIMTE-LAQV/Faculdade de Farmácia da Universidade do Porto, Portugal, [3]Instituto Universitário Egas Moniz, Portugal*

[P1.1.2] Free amino acid and organic acid profile of Serpa PDO cheeses from distinct dairy industries
H. Araújo-Rodrigues*[1], F.K. Tavaria[1], M.T.P.G. Santos[2], N. Alvarega[3,4], M.M. Pintado[1], *[1]Universidade Católica Portuguesa, Portugal, [2]Instituto Politécnico de Beja, Portugal, [3]Instituto Nacional de Investigação Agrária e Veterinária, Portugal, [4]Instituto Superior de Agronomia, Portugal, [5]Universidade Nova de Lisboa, Portugal*

[P1.1.3] Soy Okara nutritive flour
L.V.A. Arias*[1], I.H.B.T. Soares[1], V.S. Silva[1,3], C.T. Soares[1], F.M. Fakhouri[2], R.A. Oliveira[1], *[1]University of Campinas, Brazil, [2]Federal University of Grande Dourados, Brazil, [3]University Centre of Amparo, Brazil*

[P1.1.4] Coffee by-product flour for food industry
L.V.A. Arias*[1], I.H.B.T. Soares[1], V.S. Silva[1,3], C.T. Soares[1], R.H. Aguiar[1], F.M. Fakhouri[2], R.A. Oliveira[1], *[1]University of Campinas, Brazil, [2]Federal University of Grande Dourados, Brazil, [3]University Centre of Amparo, Brazil*

[P1.1.5] NIRS and artificial neuronal network to differentiate "Jamón de Guijuelo" DO Iberian dry ham
P. Hernández-Ramos*, I. Martínez-Martín, M. Hernández-Jiménez, A.M. Vivar-Quintana, I. Revilla, M.I. González-Martín, *University of Salamanca, Spain*

[P1.1.6] Characterization of esters and ethanol production by yeasts isolated from traditional cocoa bean fermentations in Tumaco, Colombia as an approach for developing starter cultures
F. Herrera*[1,2], J. Zapata[2], J. Jimenez[1], *[1]CIAD, Colombia, [2]Universidad de Antioquia, Colombia*

[P1.1.7] Effects of grape pomace flour on some physico-chemical and nutritional properties of sponge cake
G. Nakov*[1], A. Brandolini[2], A. Hidalgo[3], N. Ivanova[1], V. Stamatovska[4], I. Dimov[5], *[1]University of Ruse, Bulgaria, [2]Consiglio per la ricerca in agricoltuCentro di Ricerca Zootecnia e Acquacoltura (CREA-ZA), Italy, [3]Università degli Studi di Milano, Italy, [4]"St. Kliment Ohridski" University of Bitola, Macedonia, [5]Trakia University – Stara Zagora, Bulgaria*

[P1.1.8] The profiling of cachaça key aroma compounds according to distinct raw materials and production processes
S. Nicolau Freire Bruno*[1], S.M. da Rocha Simões Carriço[1], C.S. Faria Martins[1], C. Costa[1], A. Iris da Silva Junior[2], *[1]Universidade de Aveiro, Portugal, [2]Instituto Federal do Rio de Janeiro, Brazil*

[P1.1.9] Flours of orange and passion fruit peels
L.V.A. Arias[1], I.H.B.T. Soares[1], V.S. Silva[1,3], C.T. Soares[1], F.M. Fakhouri[2], R.A. Oliveira*[1], *[1]University of Campinas, Brazil, [2]Federal University of Grande Dourados, Brazil, [3]University Centre of Amparo, Brazil*

[P1.1.10] Determination of breed and oleic acid ratio of beef using NIR
S.M. Park*[1], D.S. Son[1], D.J. Kim[2], Y.K. Yun[2], S.I. Cho[1], *[1]Seoul National University, Republic of Korea, [2]Korean Institute for Animal Products Quality Evaluation, Republic of Korea*

[P1.1.11] Experimental design methodologies in the optimization of microextraction techniques in food chemistry - the analysis of alcoholic beverages as case study
A.C. Pereira*[1,2], A.C. Vieira[1], M.S. Reis[2], J.C. Marques[1,3], *[1]University of Madeira, Portugal, [2]CIEPQPF, Chemical Process Engineering and Forest Products Research Centre, Portugal, [3]Institute of Nanostructures, Nanomodelling and Nanofabrication, Portugal*

[P1.1.12] Multivariate analysis led to the identification of cheese profiles with high GABA content
B. Redruello*[1], A. Szwengiel[2], M. Fernandez[1], V. Ladero[1], M. Diaz[3], M. Perez[4], M.C. Martin[1], B. del Rio[1], M.A. Alvarez[1], *[1]Dairy Research Institute (IPLA-CSIC), Spain, [2]Institute of Food Technology of Plant Origin, Poland, [3]Quadram Institute Bioscience, UK, [4]APC Microbiome Ireland, Ireland*

[P1.1.13] A novel measure of quantitative proteomic distance
R. Rodríguez-Vázquez*, C. Zapata, *University of Santiago de Compostela, Spain*

[P1.1.14] Characterization and classification of foods according to their amino acids composition using robust chemometrics
A. Guidea, C. Sarbu*, *Babes-Bolyai University, Romania*

[P1.1.15] Development of functional flour of kabocha pumpkin (*Cucurbita maxima x Cucurbita moschata)* peel for prevention of chronic diseases
V.S. Silva*[1,4], L.V.A. Arias[1], C.T. Soares[1], J.I. Velasco[3], F.M. Fakhouri[2,3], R.A. Oliveira[1], *[1]University of Campinas, Brazil, [2]University of Grande Dourados, Brazil, [3]Universitat Politècnica de Catalunya, Spain, [4]University Centery of Amparo, Brazil*

[P1.1.16] **Gentle flash pasteurization of fruit juices through product identification and characterization using near-infrared spectroscopy as inline analytical method**
I. Weishaupt*, M. Zimmer, J. Schneider, *Institute for Food Technology.NRW, Germany*

[P1.1.17] **Non-invasive diffuse reflectance near-infrared spectroscopy for on-line monitoring and characterisation of food and beverages in sealed glass containers**
M. Zimmer*, J. Schneider, *Institute for Food Technology.NRW, OWL University of Applied Sciences and Arts, Germany*

[P1.1.18] **Internovamarket-Food: Follow-up of the process of innovation and development in food industry with consumers' acceptance assessment**
S. Faria[1], P. Sousa[1], R. Pinheiro*[1,2], M. Vaz-Velho[1,3], *[1]Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, Portugal, [2]Centro de Engenharia Biológica, Universidade do Minho, Portugal, [3]CISAS – Centro de Investigação e Desenvolvimento em Sistemas Agroalimentares e Sustentabilidade, Portugal*

[P1.1.19] **Vacuum drying of sweet cherry (*Prunus avium*): mathematical modelling by application of artificial neural networks**
A. Vakula*[1], A. Tepic Horecki[1], L. Raicevic[2], B. Pavlic[1], T. Danicic[1], J. Dulic[3], T. Narandzic[3], Z. Sumic[1], *[1]University of Novi Sad, Serbia, [2]KU Leuven, Belgium, [3]University of Novi Sad, Serbia*

CHEMICAL REACTIONS IN FOODS

[P1.2.1] **Milk-clotting enzyme from marine algae: The isolation, characterisation and its action on casein from bovine milk**
A.A. Arbita*[1,3], J. Zhao[1], N. Paul[2], J. Cox[1], *[1]University of New South Wales, Australia, [2]University of the Sunshine Coast, Australia, [3]Parahyangan Catholic University, Indonesia*

[P1.2.2] **Effect of sous vide technology on the proteolytic, lipolytic and sensory properties of beef (*Bos Taurus*), pork (*Sus scrofa domestica*) and alpaca (*Vicugna pacos*).**
J.M. Aro-Aro*, M. Calsin-Cutimbo, V. Ibañez-Quispe, D.A. Ruelas-Calloapaza, S. Foraquita Choque, S. Percca-Ccama, R.N. Yanapa-Sanga, N.Y. Barrientos-Huanca, L.F. Yana-Apaza, *Altiplano National University - Puno, Peru*

[P1.2.3] **Non-targeted analytical strategies give insights into the peptide reactivity in Maillard model reactions**
M.T. Berger*[1,2], D. Hemmler[1,2], J.W. Marshall[3], M. Rychlik[1], P. Schmitt-Kopplin[1,2], *[1]Technical University Munich, Germany, [2]Helmholtz Zentrum München, Germany, [3]Mars Petcare, UK*

[P1.2.4] **Influence of organic acids on the hydrolysis of oleuropein**
C. Romero, P. García, M. Brenes*, *Instituto de la Grasa (CSIC), Spain*

[P1.2.5] **Changes in volatile compounds in a fresh lamb sausage refrigerated stored under anaerobic modified atmosphere**
D.E. Carballo*[1], D. Llamazares[1], I. Caro[2], A. Khanjari[3], F.J. Giráldez[4], J. Mateo[1], *[1]University of León, Spain, [2]University of Valladolid, Spain, [3]University of Tehran, Iran, [4]Instituto de Ganadería de Montaña, CSIC, León, Spain*

[P1.2.6] **Quality parameters of sea bass subjected to pulsed electric field (PEF) treatment and brine salting**
J. Cropotova*[1], J. Genovese[1,2], S. Tappi[1,2], P. Rocculi[1,2], L. Laghi[1,2], M. Dalla Rosa[1,2], T. Rustad[1], *[1]Norwegian University of Science and Technology, Norway, [2]University of Bologna, Italy*

[P1.2.7] **Multiresponse kinetic modelling of the formation of α-dicarbonyl compounds in mostly consumed juices**
I. Gursul Aktag*, V. Gokmen, *Hacettepe University, Turkey*

[P1.2.8] **Protective effects against oxidative stress and maintenance effects cognitive dysfunction of *Huperzia Serrata***
H. Hara*[1], T. Ohba[1], Y. Hayashi[2], H. Kono[2], *[1]Gifu Pharmaceutical University, Japan, [2]Api Co. Ltd., Japan*

[P1.2.9] **Molecular self-assembly in lipid oxidation and antioxidation**
A. Kamal-Eldin, *United Arab Emirates University, United Arab Emirates*

[P1.2.10] **Globular proteins influence protein network formation in and quality of wheat-based noodles**
M.A. Lambrecht*, I. Rombouts, M.A. Nivelle, J.A. Delcour, *KU Leuven, Belgium*

[P1.2.11] **Aldehyde oligomerization in the presence of ammonia-producing compounds and their control by phenolics: potential alternatives for modifying processing-induced food flavors**
R. Zamora, C.M. Lavado-Tena*, F.J. Hidalgo, *Instituto de la Grasa-CSIC, Spain*

[P1.2.12] **Effect of buffers and pH on the formation of Maillard Reaction Products under model conditions.**
T. Majchrzak*[2,1], D. Hemmler[1,3], P. Schmitt-Kopplin[1,3], J. Namiesnik[2], *[1]Helmholtz Zentrum München, Germany, [2]Gdansk University of Technology, Poland, [3]Technical University Munich, Germany*

[P1.2.13] **Tracking proteolysis induced by lactic bacteria in wheat dough fermentations: proteomic and peptidomic approach**
A. Reale, T. Di Renzo, L. Di Stasio, S. De Caro, R.G. ianniello, G. Mamone*, *Institute of Food Sciences – National Research Council, Avellino, Italy*

[P1.2.14] **Evolution of the lipid profile and oxidative status of fortified infant flours during retailing and storage: contribution of mathematical modelling**
C. Moustiés*[1,2], C. Bourlieu[2], V. Guillard[2], B. Barea[1], A. Servent[1], P. Alter[1], M. Lebrun[1], Y. Hemery[3], S. Avallone[1], *[1]CIRAD, France, [2]INRA, France, [3]IRD, France*

[P1.2.15] **The functional role of microorganisms during dry fermentation of Australian coffee beans**
D. Mutsla*[1,2], J. Zhao[1], J. Cox[1], *[1]The University of New South Wales, Australia, [2]Institut Teknologi Bandung, Indonesia*

[P1.2.16] **Improvement of flavour in low acrylamide baked potato crackers**
T. Kocadagli, L. Methven, J.K. Parker*, *University of Reading, UK*

[P1.2.17] **Effect of fermentation and solar drying processes on the physical, chemical and sensory composition, in a mixture of cocoa (*Theobroma Cacao* L.) cultivated in Antioquia, Colombia.**
L.D. Porras*, O.L. Martinez, J.D. Torres, J.A. Zapata, *Universidad de Antioquia, Colombia*

[P1.2.18] **Biosynthesis of aroma compounds from buttermilk and whey by *Galactomyces geotrichum* mold**
K. Szudera-Konczal*, M.A. Majcher, K. Myszka, K. Kubiak, A. Tomczak, *Poznan University of Life Sciences in Poznań, Poland*

[P1.2.19] **Structure-activity relationship (SAR) of phenolics in amino acid degradations produced by lipid oxidation products**
R. Zamora*, A. Morales, F.J. Hidalgo, *Instituto de la Grasa-CSIC, Spain*

[P1.2.20] **Black ripe olive processing with KOH**
P. García-Serrano, M. Brenes, C. Romero, P. García-García*, *Instituto de la Grasa (CSIC), Spain*

BIOACTIVE COMPOUNDS

[P1.3.1] **Metabolite profiling, anti-microbial and anti-oxidant activities of different solvent extracts from micromeria fruticosa L. (Lamiaceae)**
I. Abu-Reidah*[1,2], A. Afeef[2], M. Al-Nuri[2], I. Warad[2], *[1]Arab American University, Occupied Palestinian Territory, [2]An-Najah National University, Occupied Palestinian Territory*

[P1.3.2] **Apple tree materials as a source of important phenolic compounds**
A. Adamcová*[1], D. Šatínský[1], A. Horna[2], *[1]Charles University, Czech Republic, [2]Institute of Nutrition and Diagnostics, Czech Republic*

[P1.3.3] **Innovative 3d printed protein-based snacks with bioactive compounds**
E. Álvarez-Castillo*[1], C. Caro[1], S. Oliveira[2], C. Bengoechea[1], A. Raymundo[2], I. Sousa[2], A. Guerrero[1], *[1]University of Seville, Spain, [2]University of Lisbon, Portugal*

[P1.3.4] **Identification and quantification of alpha- and beta-pinene in humans administered with Mastiha oil**
E. Papada[1], A. Gioxari[1], N. Galanis[2], M. Maroulis[2], C. Amerikanou*[1], I. Smyrnioudis[3], A. Kaliora[1], *[1]Harokopio University, Greece, [2]Food Allergens Lab / Modern Analytics, Athens, Greece, [3]The Chios Mastiha Research & Development Center, Greece*

[P1.3.5] **Isolation and purification of polymethoxyflavones from mandarins (*Citrus reticulata*) by-products and processing wastes by preparative MPLC**
A. Accardo, M. Amenta, S. Fabroni, N. Timpanaro, F.V. Romeo, P. Rapisarda, G. Ballistreri*, *CREA, Italy*

[P1.3.6] **Separation of hydroxytyrosol from its aqueous solutions by using macroporous resins**
M. Bilgin*, E. Kurtulbaş, S. Şahin, *Istanbul University-Cerrahpasa, Turkey*

[P1.3.7] **Post-opening storage study of cloudy apple juice enriched with apple polyphenols**
A. Boeykens*, H. Withouck, T. de Nood, M. Vanden Broucke, *Odisee University College, Belgium*

[P1.3.8] **Toxicity and antihypertensive activity of brewer's spent grain extracts**
T. Bonifácio-Lopes*[1,2], J. Teixeira[2], M. Pintado[1], *[1]Escola Superior de Biotecnologia - Universidade Católica Portuguesa, Portugal, [2]Universidade do Minho, Portugal*

[P1.3.9] **Postharvest alternatives for enriching anthocyanins in blood orange juices from tropical areas**
L. Carmona*[1], B. Alquézar[1], G. Diretto[1], M.T. Lafuente[1], L. Peña[1], *[1]Fundo de defesa da citricultura, Brazil, [2]Instituto de Biología Molecular y Celular de Plantas, Spain, [3]Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, Italy, [4]Instituto de Agroquímica y Tecnología de los Alimentos, Spain*

[P1.3.10] **Antioxidant activity of silkworm protein hydrolysates obtained by direct enzymatic hydrolysis**
M. Cermeno*[1], C. Bascon[1,2], M. Felix[2], R.J. FitzGerald[1], *[1]University of Limerick, Ireland, [2]University of Seville, Spain*

[P1.3.11] **A new approach to determine dicarbonyl scavenging activities of scavenging compounds, foods and beverages**
E.D. Comert*, V. Gokmen, *Hacettepe University, Turkey*

[P1.3.12] **Essential oil composition of two culinary herbs from the island of Crete: *Origanum dictamnus* L. and *Salvia fruticosa* Mill.**
K. Voulgaraki, A. Koutsaviti, M. Couladis*, *National and Kapodistrian University of Athens, Greece*

[P1.3.13] **Production of a new functional *Aloe Vera* juice with *Enterococcus faecium***
R.B. Cuvas Limon*[1], C. Nobre[2], R.M. Rodriguez Jasso[1], A. Loredo Treviño[1], M. Cruz H[3], J.A. Teixeira[2], R.E. Belmares[1], H.A. Ruiz[1], *[1]Universidad Autonoma de Coahuila, Mexico, [2]Universidade do Minho, Portugal, [3]Universidad Autonoma Agraria Antonio Narro, Mexico*

[P1.3.14] **Oat porridge β-glucan in a crude extract obtained by a standardized *in vitro* digestion method: Aggregates with coexisting polymers and their impact on extract viscosity**
M.R. Cyran*, K.K. Snochowska, *National Research Institute, Poland*

[P1.3.15] **Characterization of phenolic antioxidants from advanced breeding lines of durum wheat by LC-ESI-QTOF-MS**
A.C. de Camargo*[1], A.P.S. Silva[2], S.M. Alencar[2], F. Shahidi[3], A.R. Schwember[1], *[1]Pontificia Universidad Católica de Chile, Chile, [2]University of São Paulo, Brazil, [3]Memorial University of Newfoundland, Canada*

[P1.3.16] **Effects of dietary intervention with green dwarf banana flour in TNBS relapse model of intestinal inflammation**
A.E.V. Quaglio, G.R. Batista, L.Y. Sassaki, L.C. Di Stasi*, *São Paulo State University (UNESP), Brazil*

[P1.3.17] **Bioactives from guelder-rose berry pomace: isolation, phytochemical composition, antioxidant and antiproliferative activities**
L. Dienaitė*[1], A. Pukalskas[1], M. Pukalskienė[1], C.V. Pereira[2], A.A. Matias[2], P.R. Venskutonis[1], *[1]Kaunas University of Technology, Lithuania, [2]IBET, Portugal*

[P1.3.18] **Shelf-life extension of an edible oil by application of polyphenolic chitosan nanoparticles**
Y. El-Maghraby*, M.A. Farag, A. Ramadan, *The American University in Cairo, Egypt*

[P1.3.19] **Effect of food processing on biopeptides with ACE-inhibitory and antioxidant capacities**
F. Rivero-Pino, F.J. Espejo-Carpio*, E.M. Guadix, *University of Granada, Spain*

[P1.3.20] **Gas chromatography-mass spectrometry-based metabolite profiling of *Hemiselmis andersenii* and *Chlorella stigmatophora*: potential sources of health promoting phytochemicals**
T. Fernandes*[1], A. Quintana[2], N. Cordeiro[1], *[1]University of Madeira, Portugal, [2]University of Las Palmas de Gran Canaria, Spain*

[P1.3.21] **Phenolic composition and antioxidant activity of jaboticaba (Myrciaria cauliflora [Mart] O. Berg) seed extract**
M. Fidelis*, G.B. Escher, S.M. de Oliveira, D. Granato, *UEPG, Brazil*

[P1.3.22] **Bioactivity evaluation of natural products for production of a new functional food**
J. Figueira*[1], P. Porto-Figueira[1], J. Pereira[1], J. Câmara[1,2], *[1]CQM - Centro de Química da Madeira, University of Madeira, Portugal, [2]Faculdade de Ciências Exatas e da Engenharia, University of Madeira, Portugal*

[P1.3.24] **Antioxidant activity and polyphenol content of *Prunus* subgenus *Cerasus* L. taxa in Turkey**
Y. Gercek*[1], D. Ozyurt[1,2], B. Ozturk[1,2], G. Oz[1], O. Erol[1], *[1]Istanbul University, Turkey, [2]Istanbul Technical University, Turkey*

[P1.3.25] **Manufacture of a functional curds' dessert product enriched of bioactive whey protein hydrolysates**
E.Y. Agarkova[1], A.G. Kruchinin[1], O.A. Glazunova*[2], T.V. Fedorova[2], *[1]Federal State Budgetary Scientific Institution "All-Russian Research Institute of Dairy Industry", Russia, [2]A.N. Bach Institute of Biochemistry, Research Centre of Biotechnology of the Russian Academy of Sciences, Russia*

[P1.3.26] **Flour from Prosopis nigra mature pods as suitable substrate for the synthesis of prebiotic fructo-oligosaccharides and stabilization of dehydrated Lactobacillus bulgaricus**
N. Romano, L. Sciammaro, P. Mobili, M.C. Puppo, A. Gomez-Zavaglia*, *Center for Research and Development in Food Cryotechnology (CIDCA CCT Conicet), Argentina*

[P1.3.27] **Differences in the antioxidant and anti-glycative properties between two wines from North America and their respective juices**
A. Brock, R. Pegg, M. Cheung, X. Liao, P. Greenspan*, *University of Georgia, USA*

[P1.3.28] **Effect of roasting parameters on the antioxidant activity, polyphenolic content and profile of carob powder**
A.M. Grigoriou*, E. Pinakoulaki, *University of Cyprus, Cyprus*

[P1.3.29] **Effect of high hydrostatic pressure processing on physicochemical characteristics of fermented Punica granatum beverages**
J. Guerrero-Beltrán*[1], G. Rios-Corripio[1], V. Rodríguez-Martínez[1,2], J. Welti-Chanes[1,2], *[1]Universidad de las Américas, Mexico, [2]Instituto Tecnológico de Monterrey, Mexico*

[P1.3.30] **Evaluation of functional properties of active compounds from onion and watermelon**
E. Guillamon*, A. Rodriguez-Fernández, L. Gil-Martínez, J.J. Ariza, A. Baños, *DMC RESEARCH CENTER, Spain*

[P1.3.31] **Hypoglycemic and hypolipidemic effects and the corresponding chemical components of leaves of *Moringa oleifera***
G.L. Chen[1,2], Y.B. Xu[1,3], M.Q. Guo*[1,2], *[1]Chinese Academy of Sciences, China, [2]Sino-Africa Joi Chinese Academy of Sciences, China, [3]Graduate University of Chinese Academy of Sciences, China*

[P1.3.32] **Optimisation of microwave-assisted extraction of polysaccharides from pineapple core as a canning by-product and its antioxidant and functional characteristics**
M. Hadidi*[1], Z. Hasiri[2], F. B. Khaksar[2], S. Haghani[3], S. Pouramin[3], Z. Favaeefard[4], *[1]University of Lleida, Spain, [2]Islamic Azad University, Iran, [3]University of Khazar, Iran, [4]Shahid Beheshti University, Iran*

[P1.3.33] **Fermentation of food waste for ethanol production**
C. Hodúr*, Z. Jákói, B. Lemmer, S. Beszédes, *University of SZeged, Hungary*

[P1.3.34] **Evaluation of phenolic compounds content in apples - correlation of results from HPLC separation and DPPH assay**
M. Hollá*, H. Sklenářová, D. Šatínský, *Charles University, Czech Republic*

[P1.3.35] **Caffeic acid phenethyl ester: A bioactive compound able to extend the shelf-life of soybean oil**
M.L. Ibargoitia*, P. Sopelana, M.D. Guillén, *Basque Country University UPV/EHU, Spain*

[P1.3.36] **Vitamin K (phylloquinone and menaquinones) in fatty foods - Optimisation of extraction and clean-up procedure for quantification by LC-ESI-MS/MS**
M.B. Jensen*, J. Jakobsen, P. Ložnjak, *Technical University of Denmark, Denmark*

[P1.3.37] **Chickpea protein-stabilised oil-in-water emulsions with bioactive properties**
E. Díaz, M. Jiménez-Rosado*, V. Perez-Puyana, J.M. Aguilar, A. Romero, *Universidad de Sevilla, Spain*

[P1.3.38] **Effect of solvents and extraction techniques on the composition and antioxidant activity of lichen *Pseudevernia furfuracea***
R. Kalra*[1], X. Conlan[1], M. Goel[1], *[1]TERI-Deakin Nanobiotechnology Centre, India, [2]Deakin University, Australia*

[P1.3.39] **Assessment of phenolic profile changes of chokeberry (*Aronia melanocarpa*) and mulberry (*Morus Microphylla. Buckl*) during in vitro gastrointestinal digestion**
I. Kim*, J. Lee, *Chung-Ang University, Republic of Korea*

[P1.3.40] **Creating novel delivery system of lutein and zeaxanthin via maillard reaction between bovine serum albumin and fucoidan**
S.B. Kim*, W.S. Shin, S. Jeong, *Hanyang University, Republic of Korea*

[P1.3.41] ***In vitro* gastrointestinal digestion of black soybean (*Glycine max* [L.] Merr. *Cheongja4ho*)**
E. Koh*, D. Ryu, *Seoul Women's University, Republic of Korea*

[P1.3.42] **Gelatin from Atlantic cod skin obtained by using Protosubtilin and Hepatopancreatin enzymes**
S.R. Derkach, Y.A. Kuchina, D.S. Kolotova*, *Murmansk State Technical University, Russia*

[P1.3.43] **Evaluation of antioxidant and antimicrobial activity of sour cherry (*Prunus cerasus* L.) including its wastes**
E. Kurtulbas Sahin*, M. Bilgin, S. Şahin, *Istanbul-University-Cerrahpaşa, Turkey*

[P1.3.44] **Beneficial health effects of bioconversion product originated from Rice (Oryza sativa L.) extract**
H. Kwon*, K. Lee, K. Lee, *Dongguk university, Republic of Korea*

[P1.3.45] **Sensory evaluation and color of an isotonic drink powder using encapsulated jussara (*Euterpe edulis*) pulp**
M. Costa, D. Perrone, P. Finotelli, E. Lacerda*, *Federal University of Rio de Janeiro, Brazil*

[P1.3.46] **Enhancement of GABA content in fermented soymilk by combining enzymatic treatment and fermentation**
P.H. Le*[1,2], K. Raes[1], T.T. Le[2], *[1]Ghent University, Belgium, [2]Nong Lam University, Viet Nam*

[P1.3.47] **Development of a drink based on common beans (*Phaseolus vulgaris* L.) by extrusion enriched with protein isolate and bioavailable iron**
V. Sanchez, G. Loarca*, M. Gaytan, L. Reyes, *Universidad Autónoma De Querétaro, Mexico*

[P1.3.48] **Characterization of bioactive compounds of *Moringa oleifera* leaves and their antiproliferative effect on human colon cancer cells**
L. Cuellar-Nuñez[1,3], G. Loarca-Piña*[1], M. Berhow[2], E. Gonzalez de Mejia[3], *[1]Universidad Autónoma De Querétaro, Mexico, [2]United States Department of Agriculture, USA, [3]University of Illinois at Urbana-Champaign, USA*

[P1.3.49] **Foam mat drying of Tommy Atkins mango: Effects of air temperature and concentrations of soy lecithin and carboxymethylcellulose on carotenoid compounds and colorimetric**
F.A.T.F. Lobo*[1], J.R. Domingues[1], D.Q. Falcão[1], C.M. Stinco[2], F.J. Rodriguez-Pulido[2], F.J. Heredia[2], D.H. Vila[2], K.G.L. Araújo[1], *[1]Universidade Federal Fluminense, Brazil, [2]Universidad de Sevilla, Spain*

[P1.3.50] **Improving thermal stability of Açai-berry polyphenols through electro-hydrodynamic encapsulation into zein electrosprayed particles**
C. Lopez de Dicastillo*, C. Piña, L. Garrido, M.J. Galotto, *University of Santiago de Chile, Chile*

[P1.3.51] **Squalene-rich fraction from *Amaranthus hypochondriacus* with high antioxidant potential using microwave-assisted extraction**
M.A. Lozano-Grande*[1], J. García-Dávila[2], G. Ríos-Cortés[3], G. Dávila-Ortiz[4], E. Espitia-Rangel[5], A.L. Martínez-Ayala[6], *[1]Centro de Desarrollo de Productos Bióticos IPN, Mexico, [2]Universidad Politécnica de Tlaxcala, Mexico, [3]Instituto Tecnológico de Orizaba, Veracruz, Mexico, [4]IPN Escuela Nacional de Ciencias Biológicas, Mexico, [5]Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias, Mexico, [6]Centro de Desarrollo de Productos Bióticos IPN, Mexico*

[P1.3.52] **Folate quantification in food – pure plant deconjugase and LC-MS/MS for a future standard method**
P. Ložnjak*, J. Jakobsen, *DTU Food, Denmark*

[P1.3.53] **Corn bioethanol side streams: a sustainable source of bioactive compounds for the food sector**
G. Di Lena, M. Lucarini*, J. Sanchez del Pulgar, I. Casini, G. Lombardi-Boccia, *CREA, Italy*

[P1.3.54] **Determination of antioxidant activities of traditional flavoured ice creams**
A. Karimidastjerd*[1], S. Zahedinia[1], B. Ozcelik[1], F. Mohtarami[2], *[1]Istanbul Technical University, Istanbul, Turkey, [2]Urmia Univesrity, Urmia-West Azerbaijan, Iran*

[P1.3.55] **Impact of high power ultrasound (HPU) on the stability of phenols and antioxidant capacity in cloudy apple juice**
D. Bursac Kovacevic*, J. Bilobrk, B. Buntic, P. Putnik, T. Bosiljkov, S. Karlovic, D. Jezek, *Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia*

[P1.3.56] **Multivariate analyses of phytochemical compounds in bee pollen based on particle size: application on carotenoid composition**
C. Salazar-González*[1], C. Díaz-Moreno[1], C.A. Fuenmayor[1], C. Zuluaga-Domínguez[1], F.J. Rodríguez-Pulido[2], C.M. Stinco[2], F.J. Heredia[2], *[1]Universidad Nacional de Colombia, Colombia, [2]Universidad de Sevilla, Spain*

[P1.3.57] **Outlining the bioaccessibility and in vitro bioavailability of *Gracilaria longissima* oxylipins**
S.M. Martínez Sánchez[1], R. Domínguez-Perles[2], S. Montoro-García[1], J.A. Gabaldón-Hernández*[1], A. Guy[3], T. Durand[3], J.M. Galano[3], F. Ferreres[2], A. Gil-Izquierdo[1,2], *[1]Catholic University of Murcia, Spain, [2]CEBAS-CSIC, Spain, [3]Phaculty of Farmacy Montpellier, France*

[P1.3.58] **Almond processing residual hull as a source of bioactive compounds: phytochemical composition, radical scavenging and antimicrobial activities of extracts from Italian cultivars ('Tuono', 'Pizzuta', 'Romana')**
A. Trovato*, P. Foti, G. Ballistreri, P.R. Pepe, F.V. Romeo, P. Rapisarda, S. Fabroni, *Consiglio per la Ricerca in Agricoltura e l'Analisi dell'Economia Agraria, Italy*

Poster Session 2
Wednesday, 18 September - 12:50-14:20
Giralda

FOOD SAFETY

[P2.1.1] **Effect of ochratoxin A-added red wine on markers of oxidative stress in Caenorhabditis elegans**
P. Augusti*, L. Schimidt, I. Ribeiro, N. Heck, I. Ferreira, O. Nunes, G. Göethel, S. Garcia, J. Welke, *Federal University of Rio Grande do Sul, Brazil*

[P2.1.2] **Mustard based antimicrobial packaging: The controlled release of Allyl isothiocyanate and its antimicrobial effect**
N.A. Bahmid*[1,2], M. Dekker[1], V. Fogliano[1], J. Heising[1], *[1]Wageningen University and Research, The Netherlands, [2]Sulawesi Barat University, Indonesia*

[P2.1.3] **Identification of Mango (*Mangifera indica* var Manila) allergens through E. Coli BL21**
R. Diaz-Sobac[1], A. Landa[1], E. Hernandez[2], R. Guzmán[1], A. Vazquez-Luna*[1], *[1]Universidad Veracruzana, Mexico, [2]BioMimic, Mexico*

[P2.1.5] **Effect of thermal processing on the immune cross-reactivity of five edible insects**
S. Cirrincione[1], S. Nebbia[1], C. Lamberti[1], A. Bufo[1], V. Giorgis[2], M. Manfredi[3], E. Marengo[3], M.G. Giuffrida*[1], G. Rolla[2], L. Cavallarin[1], *[1]ISPA-CNR, Italy, [2]University of Torino & AO Mauriziano "Umberto I", Italy, [3]University of Piemonte Orientale, Italy*

[P2.1.6] **Antibiotic residues in crops fertilized with poultry manure**
X. González-Gómez*[1], M.E. López-Mosquera[2], A. López-Fabal[2], L. García-Calvo[3], J. Simal-Gándara[1], E. Martínez-Carballo[1], *[1]University of Vigo, Spain, [2]University of Santiago de Compostela, Spain, [3]Centro Tecnolóxico da Carne de Galicia, Spain*

[P2.1.7] **E. coli with a side of fries: The increasing trend for pink burgers in the UK**
S. Pinnington, K. Heurlier*, C. Morris, C. Millman, *Sheffield Hallam University, UK*

[P2.1.8] **Effect of different types of roasting on hazelnut immunoreactivity**
C. Lamberti*[1], S. Nebbia[1], S. Cirrincione[1], S. Antoniazzi[1], M. Giribaldi[2], M. Manfredi[3], E. Marengo[3], M.G. Giuffrida[1], L. Cavallarin[1], *[1]CNR-ISPA, Italy, [2]CREA, Italy, [3]University of Piemonte Orientale, Italy*

[P2.1.9] **Heterocyclic amine content of vegetable oils after preparing various foods**
K. Lányi*, D. Pleva, J. Szijjártó, C. Hoppe, P. Laczay, *University of Veterinary Medicine, Hungary*

[P2.1.10] **Content of ochratoxin A in grapes during their drying at controlled conditions to obtain raisins**
M.P. Serratosa, L. Moyano, A. Lopez-Toledano*, J. Merida, *Universidad de Córdoba, Spain*

[P2.1.11] **Survey on marine biotoxins contamination status of mussels from the Black Sea, Bulgaria**
M. Stancheva[1], Z. Peteva[1], B. Krock[2], A. Gerassimova[1], S. Georgieva[1], L. Makedonski*[1], *[1]Medical University of Varna, Bulgaria, [2]Alfred Wegener Institute, Germany*

[P2.1.12] **Influence of innovative processing techniques on the acrylamide formation in French Fries**
I. Mandic Andacic*[1], A. Tot[1], A. Krivohlavek[1], S. Rimac Brncic[2], M. Badanjak Sabolović[2], *[1]Andrija Štampar Teaching Institute of Public Health, Croatia, [2]University of Zagreb, Croatia*

[P2.1.13] **Quality and safety of celery roots (*Apium graveolens* L.) randomly collected from open markets in the Province of Vojvodina**
N. Mimica-Dukic*, I. Nemes, S. Pajevic, N. Simin, D. Orcic, D. Arsenov, M. Zupunski, W. Malcolm, *University of Novi Sad, Serbia*

[P2.1.14] **Metabolites in milk after enrofloxacin treatment and their persistence to temperature**
A. Junza, J. Saurina, D. Barron, C. Minguillon*, *University of Barcelona, Spain*

[P2.1.15] **Identification of mold and yeast in bakery based on PCR**
N. Ollinger*, V. Lasinger, J. Weghuber, *FFoQSI, Austria*

[P2.1.16] ***Pseudomonas aeruginosa* sulfur volatile organic compounds useful as contamination markers in packed ready-to-eat leafy greens**
G. Orrù*[1,2], A. Scano[1], A. Barberis[1], Y. Spissu[1], P.A. Serra[1,3], G. D'hallewin[1], *[1]National research Council, Italy, [2]University of Cagliari, Italy, [3]University of Sassari, Italy*

[P2.1.17] **Effect of cultivation practices on the arsenic contents of vegetables from the Apiaceae family**
S. Pajevic*, D. Arsenov, N. Mimica-Dukic, N. Simin, I. Nemes, M. Borisev, M. Zupunski, M. Watson, *University of Novi Sad, Serbia*

[P2.1.19] **Daily intake of fluoride in relation to the adequate intake - enough or too much?**
D. Štepec[1,2], M. Ponikvar-Svet*[1], *[1]Jožef Stefan Institute, Slovenia, [2]Jožef Stefan International Postgraduate School, Slovenia*

[P2.1.20] **Effect of pesticide spray residues on total antioxidant activity of apricots**
A. Bílková[1,2], B. Hortová[2], Z. Nývltová[3], M. Hollá[1], H. Sklenárová*[1], *[1]Charles University, Czech Republic, [2]Research and Breeding Institute of Pomology Holovousy Ltd., Czech Republic, [3]Výzkumný ústav organických syntéz a.s. Rybitví, Czech Republic*

[P2.1.21] **Effect of high hydrostatic pressure and pulsed electric field on immunoreactivity and allergenicity of Pru p 3 protein from peach**
A.P. Tobajas*[1], C. Colás[2], A. Agulló[2], J.L. Cubero[2], I. Segura[1], L. Sánchez[1], M. Calvo[1], M.D. Pérez[1], *[1]University of Zaragoza, Spain, [2]Servicio de Alergología. IIS-Aragón, Spain*

[P2.1.22] **Hepatotoxicity in Wistar male rats caused by acrylamide present in instant soup**
A. Vazquez-Luna*[1], E. Rivadeneyra-Dominguez[1], M. Gertchen[1,2], R. Diaz-Sobac[1], *[1]Universidad Veracruzana, Mexico, [2]Wroclaw University, Poland*

[P2.1.23] **Green separation analytical technique and application in food safety**
M.L. Yang*, W. Guo, F. Zhang, *Chinese Academy of Inspection and Quarantine, China*

[P2.1.24] **Assuring safety of alcoholic beverages by lactic acid bacteria isolated from Nuruk**
J.H. Yun*[1], J.H. Kim[2], J.E. Lee[1,2], *[1]Korea University of Science and Technology, Republic of Korea, [2]Korea Food Research Institute, Republic of Korea*

[P2.1.25] **Traceability of phthalates during the industrial production of tequila spirit**
J.T. Ornelas-Salas[1], V.E. Balderas-Hernandez[2], A. De Leon-Rodriguez*[2], *[1]Universidad Autonoma de Guadalajara, Mexico, [2]IPICyT, Mexico*

[P2.1.26] **Assessment of microbial hazards and purchasing prevalence of ready-to-eat home-made foods using on-line social media platforms in the UAE**
N.M.K. Yousif*, A.A. Alheftei, E.A. Nawafleh, M.A. Albreiki, M.A. Mohammad, M.S. Dhanhani, A.S. Al Dhaheri, *United Arab Emirates University, United Arab Emirates*

ANALYTICAL CHEMISTRY

[P2.2.1] **Use of screen-printed sensors for quality loss determination in vegetables rich in vitamin C or with high ascorbate oxidative metabolism: a fresh-cut parsley and iceberg lettuce case study**
Y. Spissu[1], P.A. Serra[2,1], G. D'hallewin[1], G. Orrù[1,3], A. Scano[3], A. Barberis*[1], *[1]CNR, Italy, [2]University of Sassari, Italy, [3]University of Cagliari, Italy*

[P2.2.2] **Relationship between antioxidant activity and α-tocopherol content on Camellia seed oil**
R. Barreiro*[1,2], E. Pérez-Santín[3], M.C. Salinero[1], *[1]Estación Fitopatolóxica Areeiro, Spain, [2]Universidade de Vigo, Spain, [3]Universidad Internacional de La Rioja, Spain*

[P2.2.3] **Matrix-assisted laser desorption ionization-time of flight mass spectrometry technique for rapid identification and detection of vancomycin and streptomycin resistance in Enterococcus spp. from dairy sources**
P. Bilbao*[1], J. Gutiérrez-Reguera[1], E.J. Quinto[1], J. Mateo[2], I. Caro[1], *[1]University of Valladolid, Spain, [2]University of Leon, Spain*

[P2.2.4] **Near Infrared spectroscopy (NIRS) as Green Analytical Method to control of bioactive compounds in freeze-dried açai**
E.T.S. Caramês*, P.D. Alamar, D.A. Conceição, J.A.L. Pallone, *University of Campinas, Brazil*

[P2.2.5] **Analysis of ethylenediaminetetraacetic acid in noodles using Raman spectroscopy and high performance liquid chromatography**
T. Chang, Y. Chang*, *National Taiwan Ocean University, Taiwan*

[P2.2.6] **Investigation of aromatic compounds on 11 apple varieties grown in South Tyrol (Italy)**
G. Chitarrini*, L. Lozano, P. Robatscher, *Laimburg Research Centre, Italy*

[P2.2.7] **A green analytical assay for the quantitation of the total saponins in quinoa (*Chenopodium quinoa* Willd.) based on macro lens-coupled smartphone**
L. Condezo-Hoyos*[1], N. Leon-Roque[2], S. Aguilar-Tuesta[3], J. Quispe-Neyra[4], W. Mamani-Navarro[3], S. Alfaro-Cruz[5], *[1]Universidad Nacional Agraria La Molina, Peru, [2]Universidad Nacional Pedro Ruiz Gallo, Peru, [3]Universidad Nacional de Juliaca, Peru, [4]Universidad Nacional de Piura, Peru, [5]Universidad Nacional Jose Faustino Sanchez Carrion, Peru*

[P2.2.8] **Study of organic chicken meat contaminated with *Escherichia Eoli***
L.C. Courrol*, M.A. Vallim, *Universidade Federal de São Paulo, Brazil*

[P2.2.9] **Screening of 5-type phosphodiesterase inhibitory drugs in dietary supplements by voltammetry of immobilized microparticles**
G. D. da Silveira*[1], T. R. Dal Molin[2], L. P. Bressan[1], C. V. da Silva[2], J. A.F. da Silva[1], *[1]State University of Campinas, Brazil, [2]Federal University of Santa Maria, Brazil*

[P2.2.10] **Determination of mercury in fish sauces using diffusive gradients in thin films technique**
P. Divis*[1], M. Reichstadter[1,2], M. Leermakers[2], Y. Gao[2], A. Habartova[1], *[1]Brno University of Technology, Czech Republic, [2]Vrije Universiteit Brussel, Belgium*

[P2.2.11] **Characterisation of spoilage-related volatile organic compounds in packaged leaf salads**
K. Dryahina*, S. Som, D. Smith, P. Spanel, *J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i., Czech Republic*

[P2.2.12] **Development of a DNA barcoding-like approach to detect mustard allergens in wheat flours**
J. Frigerio*[1,2], R. Pellesi[3], V. Mezzasalma[2], F. De Mattia[2], A. Galimberti[1], F. Lambertini[3], M. Suman[3], S. Zanardi[3], A. Leporati[3], M. Labra[1], *[1]Università Milano-Bicocca, Italy, [2]FEM2-Ambiente, Italy, [3]BARILLA G. e R. FRATELLI Spa, Italy*

[P2.2.13] **Aroma compounds in gluten-free bread**
A. Giardina*, S. Foria, S. Ciani, O. Polenghi, V. Cerne, *Dr. Schaer SPA, Italy*

[P2.2.14] **Chemometric discrimination of the quality of cocoa beans obtained by solar drying and fluidized bed**
M. Gil*[1,2], V. Gallego[2], Y. Jaramillo[2], J. Londono[3], *[1]Instituto Tecnológico Metropolitano, Colombia, [2]Corporación Universitaria Lasallista, Colombia, [3]AGROSAVIA, Colombia*

[P2.2.15] **New insights into whey-dominant powders wetting and dispersion using near-infrared multiple light scattering**
J. Guralnick*, S. Crowley, J. O'Mahony, *University College Cork, Ireland*

[P2.2.16] **Differentiation of three Iberian pig farms by means of stable isotopes, NIR, and fatty acids with the use of subcutaneous fat**
M.I. González-Martín, A.M. Vivar-Quintana, I. Revilla, M. Hernández-Jimenez*, I. Martínez-Martín, P. Hernández-Ramos, *University of Salamanca, Spain*

[P2.2.17] **Volatile analysis of tea samples using headspace extraction with stir bar sorbtive extraction, thin film-solid phase microextraction and dynamic headspace followed by analysis using gas chromatography- time-of-flight mass spectrometer.**
Y. Huang*[1], R.M.V. Goh[2], K.H. Ee[1], A. Pua[1,2], S.Q. Liu[2], B. Lassabliere[1], B. Yu[1], *[1]Mane SEA Pte Ltd, Singapore, [2]National University of Singapore, Singapore*

[P2.2.18] **Analysis of volatile compounds in Omija (Schizandra chinensis) fruits and leaves using Headspace Stir Bar Sorptive Extraction (HS-SBSE) coupled with Gas Chromatography Mass Spectrometry**
H.W. Jang*, Y.Y. Lee, *Korea Food Research Institute, Republic of Korea*

[P2.2.19] **Nmr and ft-ir characterization of p*leurotus* mushrooms cultivated on agro industrial wastes**
D. Tagkouli[1], A. Drouka[1], G. Bekiaris[2], G. Koutrotsios[2], G.I. Zervakis[2], A.C. Kaliora[1], C. Fotakis[3], P. Zoumpoulakis[3], N. Kalogeropoulos*[1], *[1]Harokopio University, Greece, [2]Agricultural University of Athens, Greece, [3]National Hellenic Research Foundation, Greece*

[P2.2.20] **Green supramolecular solvents for the recovery of bioactive compounds from microalgae**
M.N. Keddar*[1,2], A. Ballesteros[2], J.A. Siles[1], D. Zerrouki[3], M.A. Martín[2], M. Amiali[1], S. Rubio[2], *[1]National High School of Agronomy, Algeria, [2]University of Cordoba, Spain, [3]University of Ouargla, Algeria*

[P2.2.21] **Temperature sensitive smart indicator for determining the optimal fruit taste**
Y.H. Kim*, J.H. Park, J.S. Kim, D.S. Choi, J.Y. Son, C.W. Park, *National Institute of Agricultural Sciences, Republic of Korea*

[P2.2.22] **Surface wax composition of wild and cultivated northern berries**
L. Klavins*, J. Kviesis, M. Klavins, *University of Latvia, Latvia*

[P2.2.23] **Analysis of furan and monosaccharides in various coffee beans**
K. Lee*, Y. Kim, K. Lee, H. Kwon, *Dongguk University, Republic of Korea*

[P2.2.24] **Monitoring volatile compounds of distilled rice spirits aged in oak, stainless steel, and pottery containers during 18 months**
S.J. Lee*, W.K. Kim, *Sejong University, Republic of Korea*

[P2.2.25] **Hydroperoxide determination in olive oils by means of UV absorption spectroscopy**
F. Longobardi*, F. Contillo, V.M. Paradiso, *University of Bari, Italy*

[P2.2.26] **Surface Enhanced Raman Spectroscopy for the quantification of sulfites in wines**
L. Mandrile*[1], I. Cagnasso[1,3], L. Berta[1,2], A.M. Giovannozzi[1], M. Petroziello[4], A.M. Rossi[1], F. Durbiano[1], *[1]INRIM, Italy, [2]Università di Torino, Italy, [3]Politecnico di Torino, Italy, [4]CREA, Italy*

[P2.2.27] **A new cost-effective approach for lavender essential oils quality assessment**
O. Marincas*, I. Feher, *National Institute for Research and Development of Isotopic and Molecular Technologies (INCDTIM), Romania*

[P2.2.28] **Proteolytic changes during salting and smoking of dry-cured ham**
N. Marusic Radovcic*[1], I. Poljanec[1], S. Petricevic[2], T. Bogdanovic[2], E. Listes[2], D. Karolyi[3], H. Medic[1], *[1]University of Zagreb, Croatia, [2]Croatian Veterinary Institute, Regional Institute Split, Croatia, [3]University of Zagreb, Croatia*

[P2.2.29] **Differentiation between oilseed proteins using UHPLC-Q-TOF-MS/MS**
K. Kotecka[1], A. Sumara[2], E. Fornal[2], M. Montowska*[1], *[1]Poznan University of Life Sciences, Poland, [2]Medical University of Lublin, Poland*

[P2.2.30] **Effect of cooking method and extraction temperature on meat volatile profile analysed by SPME-GC/MS.**
L. Moran*, C. Vivanco, N. Aldai, L. Rivera, L.J. R. Barrón, *University of the Basque Country (UPV/EHU),, Spain*

[P2.2.31] **Quantification of amino acids in coffee silverskin using an automatic pre-column derivatization**
R.C. Alves, S. Machado, F. Pimentel, M.B.P.P. Oliveira*, *REQUIMTE, LAQV/FFUP, Portugal*

[P2.2.32] **Release of aroma volatile compounds from strawberries using an artificial mouth**
P.P.J. Jackson, S. Lignou, L. Methven, M.J. Oruna-Concha*, *The University of Reading, UK*

[P2.2.33] **Voltammetric studies of synthetic food dyes, tartrazine, allure red and ponceau 4r, and analyses of them in different sweets**
A. Guiberteau Cabanillas, M. Pallero Aparicio, R. Pardo Botello*, *University of Extremadura, Spain*

[P2.2.34] **Exploring alternative analytical strategies to quantify polyphenols in virgin olive oil**
G. Picariello*[1], F. Siano[1], B. Rinaldi[2], E. Vasca[1], *[1]National Research Council (CNR), Italy, [2]University of Salerno, Italy*

[P2.2.35] **Improved detection of key odourants in Arabica coffee using gas chromatography-olfactometry in combination with low energy electron ionisation gas chromatography-quadrupole time-of-flight mass spectrometry**
A. Pua*[1,2], H. Lau[1,2], S.Q. Liu[1], L.P. Tan[3], R.M.V. Goh[1], B. Lassabliere[2], K.C. Leong[2], J. Sun[2], M. Cornuz[2], B. Yu[2], *[1]National University of Singapore, Singapore, [2]Mane SEA Pte Ltd, Singapore, [3]Agilent Technologies Singapore (Sales) Pte Ltd, Singapore*

[P2.2.36] **FTIR-ATR spectroscopy combined with multivariate regression modelling as an approach for carotenoids determination in pumpkin samples**
N. Quijano-Ortega*[1], C.A. Fuenmayor[1], C. Zuluaga-Domínguez[1], C. Díaz-Moreno[1], S. Ortiz-Grisales[2], M. García-Mahecha[1], S. Grassi[3], *[1]Universidad Nacional de Colombia, sede Bogotá, Colombia, [2]Universidad Nacional de Colombia, sede Palmira, Colombia, [3]University of Milan, Italy*

[P2.2.37] **Extraction, chemical characterization and thermal properties of *Jatropha elliptica*(Pohl) Muell Arg**
M.L.R. Ribeiro*[1,2], J.A.C. Bento[2], M. Caliari[2], M.S. Soares-Júnior[2], L.M. Lião[2], M.C.B. Di-Medeiros[2], *[1]Paulista University, Brazil, [2]Federal University of Goiás, Brazil*

[P2.2.38] **Ultrasound and steam distillation assisted extraction, tandem mass spectrometry profiling and targeted quantification of potential neuroprotective phytochemicals in *Centella asiatica(Gotu Kola)***
R. Sabaragamuwa*[1,2], C. Perera[1], B. Fedrizzi[1], *[1]University of Auckland, New Zealand, [2]Sabaragamuwa University of Sri Lanka, Sri Lanka*

[P2.2.39] **Profile of chlorogenic acids during growth of Aronia melanocarpa fruits, determined by HPLC-DAD and ^{1}H NMR**
K. Paradowska[1], A. Zielinska[1], P. Siudem*[1], V. Kowalska[2], *[1]Medical University of Warsaw, Poland, [2]Medical University of Warsaw, Poland*

[P2.2.40] **Relation between chemical structure and mass spectrum pattern of soyasaponins.**
H.R. Son*[1], K. Mukayama[1], C. Tsukamoto[1,2], *[1]United Graduate School, Iwate University, Japan, [2]Iwate University, Japan*

[P2.2.41] **Sodium reduction in Prato cheese does not affect the bioaccessibility of calcium, magnesium and zinc**
D.P. Baptista, J.L.P. Teixeira*, J.A.L. Pallone, M.L. Gigante, *University of Campinas, Brazil*

[P2.2.42] **Efeito da digestão in vitro sobre a bioacessibilidade do cálcio em iogurte de cabra e vaca**
J.L.P. Teixeira*, J.G.S. Silva, E.T.S. Caramês, D.P. Baptista, M.L. Gigante, J.A.L. Pallone, *University of Campinas, Brazil*

[P2.2.43] **Glyphosate residues in wines and table grapes from Croatian market: In-house UPLC-MS/MS method after derivatization with FMOC-Cl**
A. Tot*, I. Berišić, A. Krivohlavek, *Andrija Štampar Teaching Institute of Public Health, Croatia*

[P2.2.44] **Attempts for developing new soybeans which accumulate only group B saponins to enhance human health benefits**
C. Tsukamoto*[1,2], H.R. Son[1], K. Komagamine[2], K. Mukayama[2], J.D. Lee[3], J.T. Song[3], *[1]United Graduate School of Agricultural Science, Japan, [2]Iwate University, Japan, [3]School of Applied Biosciences, Kyungpook National University, Republic of Korea*

[P2.2.45] **Effects on wine composition applying unripe grapes as an alternative technology to reduce the alcoholic degree and the pH of red wines**
M.L. Fanzone[1], C. Ubeda*[2], V. Jofré[1], S.E. Sari[1], *[1]Inta Mendoza, Argentina, [2]Universidad Autónoma de Chile, Chile*

[P2.2.46] **Flavour of red, white and black currants: comparison of instrumental and sensory data**
E. Vitova*[1], J. Zemanova[1], L. Butorova[2], A. Šimíckova[1], M. Dubašákova[1], *[1]Brno University of Technology, Czech Republic, [2]Institute of Analytical Chemistry of Czech Academy of Sciences, Czech Republic*

[P2.2.47] **Prediction of fatty acid composition of lentils (Lens culinaris) using NIRS on whole or ground samples**
M.I. González-Martín, A.M. Vivar-Quintana*, I. Revilla, C. Lastras, *University of Salamanca, Spain*

[P2.2.48] **Is the titration method as accurate as the HPLC method for determination of vitamin C in supplements?**
L.T. Abe-Matsumoto*[1], G.R. Sampaio[2], D.H.M. Bastos[2], *[1]Adolfo Lutz Institute, Brazil, [2]University of Sao Paulo, Brazil*

[P2.2.49] **Development and validation of a hplc-dad method for quantification of synthetic dyes in various food products and the perspective of their qualitative express determination using liquid anion exchangers**
A. Palianskikh*[1], Y. Pliashak[1], S. Leschev[2], L. Belyshava[1], T. Fiodarava[1], *[1]Republican Unitary Enterprise "Scientific Practical Center of Hygiene", Belarus, [2]Belarusian State University, Belarus*

[P2.2.50] **Characterization of coffee polyphenols during roasting using HPTLC**
E. Stamm*, D. Ebneter, K. Jedrys, V. Pedan, *Zurich University of Applied Sciences, Switzerland*

[P2.2.51] **The evaluation of Coalho cheese by near infrared and Raman: a preliminary study**
F.A. Honorato*, J.M.S. Netto, M.C.G. Freire, M.N. Mota, N.N.O. Bezerra, C.S. Silva, *Federal University of Pernambuco, Brazil*

[P2.2.52] **Variability in dietary fiber content and composition in date fruits (*Phoenix dactylifera*)**
N. George*[1], A. Andersson[2], R. Andersson[2], A. Kamal El-din[1], *[1]United Arab Emirates University, United Arab Emirates, [2]Swedish University of Agricultural Sciences, Sweden*

BIOACTIVE COMPOUNDS

[P2.3.1] **Optimization of the ultrasound-assisted choline chloride-based deep eutectic solvent extraction of flavonoids from common buckwheat sprouts**
A.R. Mansur*[1,2], N.E. Song[1], H.W. Jang[1], T.G. Lim[1], M. Yoo[1], T.G. Nam[1], *[1]Korea Food Research Institute, Republic of Korea, [2]Korea University of Science and Technology, Republic of Korea*

[P2.3.2] **Antidiabetic potential of apple phenolic rich fractions against α-glucosidase enzyme inhibition**
N. Cambeiro-Pérez[1], M. Figueiredo-González[2], M.R. Pérez-Gregorio[1], N. Mateus[2], V. De Freitas[2], J. Simal-Gándara[1], E. Martínez-Carballo*[1], *[1]CITACA, University of Vigo, Spain, [2]LAQV/REQUIMTE, University of Porto, Portugal*

[P2.3.3] **Effect of alkalization on bioactive compounds in cocoa powder samples**
M. Martuscelli*, C.D. Di Mattia, F. Della Pelle, D. Compagnone, G. Sacchetti, D. Mastrocola, *University of the Studies of Teramo, Italy*

[P2.3.4] **Resveratrol supplementation ameliorates disease progression in DSS-induced chronic colitic mice**
Y. Mayangsari*[1], T. Suzuki[2], *[1]Gadjah Mada University, Indonesia, [2]Hiroshima University, Japan*

[P2.3.5] **Antioxidant activity of peptide extracts of artisan cheese from Guerrero**
J.A. Mendoza-Cuevas*[1], D. Guerra-Ramírez[1], G. Hernández-Rodríguez[1], A. Santos-Moreno[1], B.T. Rosas-Barbosa[2], M.C. Ybarra-Moncada[1], E. Flores-Girón[1], *[1]Universidad Autónoma Chapingo, Mexico, [2]Universidad de Guadalajara, Mexico*

[P2.3.6] **Volatile components, elemental composition and antimicrobial activity of monofloral honey from Turkey**
N. Bayram[1,2], Y. Gercek[3], S. Bayram[4], H. Morgil*[3], G. Oz[3], *[1]Bayburt University, Turkey, [2]Bayburt University Beekeeping Research, Turkey, [3]Istanbul University, Turkey, [4]Bayburt University Vocational School And Health Services, Turkey*

[P2.3.7] **Bioaccessibility and cellular uptake by Caco-2 of carotenoids and chlorophylls from orange peel: a comparison between conventional and ionic liquid mediated extractions**
D.C. Murador*[1], L.M. de Souza Mesquita[1], B.V. Neves[1], P.L.G. Martins[2], V.V. de Rosso[1], *[1]Universidade Federal de São Paulo, Brazil, [2]Federal Institute of São Paulo, Brazil*

[P2.3.8] **Sweet potatoes - a source of phenolic bioactive compounds**
J. Musilova*, J. Bystricka, D. Urminska, A. Vollmannova, T. Bojnanska, T. Toth, *Slovak University of Agriculture in Nitra, Slovakia*

[P2.3.9] **Lipid metabolism ameliorating activity of *trans*-tiliroside from rose hip seeds**
A. Nagatomo*[1,2], K. Ninomiya[1], T. Kodama[2], H. Kawakami[2], T. Morikawa[1], *[1]Kindai University, Japan, [2]Morishita Jintan Co., Ltd., Japan*

[P2.3.10] **Neolignans from mace (arils of *Myristica fragrans*) with isulin-like enhancement of glucose consumption in L6 cells**
K. Ninomiya*, K. Miyasaka, I. Hachiman, E. Nishida, O. Muraoka, T. Morikawa, *Kindai University, Japan*

[P2.3.11] **Chemical characterization of an active ingredient derived from olive pomace for incorporation in foodstuff**
M.A. Nunes*, J. Santos, A. S.G. Costa, R. C. Alves, M.B. P.P. Oliveira, *REQUIMTE/LAQV | Faculty of Pharmacy of the University of Porto, Portugal*

[P2.3.12] **Development and sensory analysis of a salty snack with oregano and spicy enriched with lupin flour**
L. Oliveira*, M.I. Nogueira, M. Fonseca, S. Gonçalves, *Universidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Portugal*

[P2.3.13] **Development of dehydrated 'Angeleno' plums enriched in dietary fiber**
P. Calvo Magro, M.J. Rodríguez Gómez, F.M. Sánchez Iñiguez, I. Palacios Romero*, *CYCITEX-INTAEX, Spain*

[P2.3.14] **Characterization of bioactive compounds and potential health benefits of New Zealand grown feijoa cultivars**
Y. Peng*[1], K. Bishop[1], L. Ferguson[1], S.Y. Quek[1,2], *[1]the University of Auckland, New Zealand, [2]Riddet Institute, New Zealand*

[P2.3.15] **An integrative omic approach to explore the natural variation of phenolic compounds to improve the quality of virgin olive oil**
A.G. Pérez*, L. García-Vico, R. Sánchez, C. Sanz, *Instituto de la Grasa (CSIC), Spain*

[P2.3.16] **Suppressing interferences in the analysis of total phenolics: beyond the Folin-Ciocalteu reaction**
J. Pico*, R.Y. Pismag, M. Laudouze, M.M. Martinez, *University of Guelph, Canada*

[P2.3.17] **Enzymatic modification of *Porphyra dioica* proteins to improve their antioxidant potential**
F.B. Pimentel*[1,2], M. Cermeño[2], P.A. Harnedy[2], R.C. Alves[1], R.J. FitzGeralg[2], M.B.P.P. Oliveira[1], *[1]Faculty of Pharmacy, University of Porto, Portugal, [2]University of Limerick, Ireland*

[P2.3.18] **Development of carbohydrate-based microcapsules loaded with omega-3 fatty acids by co-axial electrospraying**
N.E. Rahmani-Manglano[1], A. Guadix[1], C. Jacobsen[2], I.S. Chronakis[2], E.M. Guadix[1], P.J. Garcia-Moreno*[1,2], *[1]University of Granada, Spain, [2]Technical University of Denmark, Denmark*

[P2.3.19] **Effects of electrochemical antioxidant properties of oregano (*Origanum vulgare* L.) and impact of fortification on the health-enhancing properties and sensory attributes of bread**
M. Ligaj[1], J. Kobus-Cisowska[2], A. Mikolajczak-Ratajczak[1], O. Szczepaniak[2], M. Przeor[2], D. Kikut-Ligaj[1], D. Szymanowska[2], M. Jarzebski*[1], *[1]Poznan University of Economics and Business, Poland, [2]Poznan University of Life Sciences, Poland*

Poster Session 3
Thursday, 19 September - 13:15-14:45
Giralda

FOOD STRUCTURE

[P3.1.1] **Thermal and mineral sensitivity of oil-in-water emulsions stabilised using lentil protein isolates**
L. Alonso-Miravalles*, J.A. O'Mahony, *University College Cork, Ireland*

[P3.1.2] **Rheological evaluation of wheat flour containing functional ingredients with health benefits**
T. Bojnanska*, D. Urminska, A. Vollmannova, J. Musilova, J. Bystricka, *Slovak University of Agriculture, Slovakia*

[P3.1.3] **Changes in lactose-free milk due to the addition of different lactase preparations before ultra-high-temperature treatment**
R. Bottiroli*[1,2], E. Aprea[1], A.D. Troise[2], E. Betta[1], V. Fogliano[3], P. Vitaglione[2], F. Gasperi[1], *[1]Edmund Mach Foundation, Italy, [2]University Federico II of Naples, Italy, [3]Wageningen University & Research, The Netherlands*

[P3.1.4] **Effect of ripening conditions on the production of camel milk butter**
I. Mtibaa[1], H. Attia[1], M. Ayadi[1], S. Danthine*[2], *[1]Ecole Nationale d'Ingénieurs de Sfax, Tunisia, [2]Université de Liège, Belgium*

[P3.1.5] **Evaluation of methods for Clostridium tyrobutyricum spores disruption and detection by real time PCR in milk.**
M. Esteban*[1], P. Marcos[1], J.P. Navarro[1], P. Galán-Malo[2], L. Mata[2], M.D. Pérez[1], L. Sánchez[1], *[1]Instituto Agroalimentario de Aragón (IA2) (Universidad de Zaragoza-CITA), Spain, [2]ZEULAB S.L., Spain*

[P3.1.6] **Fractionation and characterization of glycated soy protein isolate linked to surface activity**
J. Feng*, B.A. Mogol, K. Schroën, V. Fogliano, C.C. Berton-Carabin, *Wageningen University, The Netherlands*

[P3.1.7] **Effect of edible coating treatments and bacterial cellulose wrap on the quality of vacuum packaged beef primal cuts**
S.T.G. Gedarawatte*[1], M.L. Johns[2], J.T. Ravensdale[1], G.A. Dykes[1], R. Coorey[1], *[1]Curtin University, Australia, [2]University of Western Australia, Australia*

[P3.1.8] **Compositional, physicochemical and sensorial properties of commercial plant-based yogurts**
N. Grasso*, L. Alonso-Miravalles, J.A. O'Mahony, *University College Cork, Ireland*

[P3.1.9] **Influence of agglomerate breakage on the bulk handling and rehydration properties of agglomerated dairy powders**
R. Hazlett*[1,2], C. Schmidmeier[1,2], J.A. O'Mahony[1,2], *[1]University College Cork, Ireland, [2]Dairy Processing Technology Centre, Ireland*

[P3.1.10] **High CO_2 short-term treatment to preserve quality and volatiles profile of fresh-cut artichokes during cold storage**
I. Capotorto[1], V. Innamorato*[2,3], M. Cefola[1], S. Cervellieri[3], V. Lippolis[3], F. Longobardi[2], B. Pace[1], *[1]National Research Council of Italy Foggia, Italy, [2]University of Bari, Italy, [3]National Research Council of Italy Bari, Italy*

[P3.1.11] **The effect of ultrasound and steam explosion treatment on physico-chemical properties and enzymatic hydrolysis of rice bran fibre.**
N.A. Ismail*[1,2], J. Zhao[1], *[1]University of New South Wales, Australia, [2]Universiti Malaysia Terengganu, Malaysia, [3]Ministry of Higher Education, Malaysia*

[P3.1.12] **The effect of cooking technique on quality characteristics of cooked rice during storage**
D. Jeong, H. Chung, Y. Jeong*, *Department of Food and Nutrition, Chonnam National University, Republic of Korea*

[P3.1.13] **Enhancement of flavonoid and carotenoid content of *Citrus junos* (Yuzu) juice by underwater shockwave pretreatment with low-hardness silicone**
E. Kuraya*[1], O. Higa[1], A. Touyama[1], A. Yasuda[2], S. Itoh[1], *[1]National Institute of Technology, Okinawa College, Japan, [2]OS Design Co. Ltd., Japan*

[P3.1.14] **Structural characterization of maize kernel toasted by microwave and traditional pot**
N. Lara*[1,2], J. Chango[1], O. Campaña[1], K. Collantes[1], K. Vizuete[3], A. Debut[3], J. Ruales[1], *[1]Universidad Central del Ecuador, Ecuador, [2]Escuela Politécnica Nacional, Ecuador, [3]Universidad de las Fuerzas Armadas – ESPE, Ecuador*

[P3.1.15] **Study on the effect of steaming on the aromatic and pro-health properties of *Momordica charantia***
M. Lubinska-Szczygeł*, A. Różańska, T. Dymerski, J. Namieśnik, *Gdańsk University of Technology, Poland*

[P3.1.16] **Sensory, rheology and aroma profiles of low-gluten pumpernickel bread**
M.A. Majcher*, D. Olszak, A. Makowska, K. Szudera-Konczal, D. Piasecka-Kwiatkowska, H. Jelen, *Poznan University of Life Sciences, Poland*

[P3.1.17] **Assessment of health-beneficial potential of edible gastropod (Rapana venosa) from the Black Sea**
V. Panayotova, A. Merdzhanova, D.A. Dobreva, K. Peycheva, L. Makedonski*, *Medical University of Varna, Bulgaria*

[P3.1.18] **Total amino acid and fatty acid composition of Spirulina (Arthrospira spp.) food supplements from the Slovenian market**
J. Masten*[1,2], N. Ogrinc[1,2], *[1]Jožef Stefan Institute, Slovenia, [2]Jožef Stefan International Postgraduate School, Slovenia*

[P3.1.19] **Do puroindolines affect enzymatic lipid hydrolysis or the impact thereof on loaf volume in bread making?**
S. Melis*[1], B.C. Verbauwhede[1], J. Van de Vondel[1], W.R. Meza Morales[2], J.A. Delcour[1], *[1]KU Leuven, Belgium, [2]University of Liège – Gembloux Agro-Bio Tech, Belgium*

[P3.1.20] **Evaluation of the effect of red propolis on edible coatings for grapes (crimson)**
C. Filgueiras[1,2], F. Fakhouri[1,3], V. Garcia[1], J. Velasco[3], R. Oliveira*[2], *[1]Federal University of Grande Dourados, Brazil, [2]Campinas State University, Brazil, [3]Universidade Politecnica de Catalunya, Spain*

[P3.1.21] **Effect of steam oven cooking on carotenoids and tocopherols in orange cauliflower (*Brassica oleracea* var. *botrytis* L.)**
A. Nartea[1], F. Grifa[1], A. Giardinieri[1], M. Balzano[1], E. Bartolucci[1], D. Fiorini[2], D. Pacetti*[1], N.G. Frega[1], *[1]Polytechnic University of Marche, Italy, [2]University of Camerino, Italy*

[P3.1.22] **Structure resolution at the molecular level of the MFGM: a chemical vision of the digestive kinetics in the new-born**
A. Pérez-Gálvez*[1], F. Visioli[2], J. Fontecha[3], *[1]Instituto de la Grasa (CSIC), Spain, [2]Instituto IMDEA Alimentación, Spain, [3]Instituto de Investigación en Ciencias de la Alimentación, Spain*

[P3.1.23] **Hempseed proteins: Processing and functionality**
A. Pihlanto*, M. Nurmi, N. Pap, *Natutral Resource Institute Finland, Finland*

[P3.1.24] **Association colloids in rapeseed oil and their effect on lipid autoxidation in the presence of ferulic and sinapic acid**
E. Rokosik*, A. Siger, M. Rudzinska, P. Siejak, K. Dwiecki, *Poznan University of Life Sciences, Poland*

[P3.1.25] **The effect of chokeberry juice addition on raspberry juice aroma and pro-health properties**
A. Różańska*, M. Lubinska-Szczygeł, T. Dymerski, J. Namieśnik, *Gdańsk University of Technology, Poland*

[P3.1.26] **Effect of high pressure processing to extend the shelf life of a functional acorn beverage**
R. Sardão*[1,2], E. Alexandre[1,2], J. Saraiva[1], M. Pintado[2], *[1]University of Aveiro, Portugal, [2]Catholic University of Portugal/Porto, Portugal*

[P3.1.27] **Impact of insufficient ventilation during post-harvest ripening on the flavour of mangoes (*Mangifera indica*)**
T. Lehner, B. Siegmund*, *Graz University of Technology, Austria*

[P3.1.28] **Effect of enzyme de-esterified pectin on the complex coacervation with pea protein isolate under different mixing conditions**
P.K.S. Pillai[1], B. Morales[2], A.K. Stone*[1], L. Wicker[2], M.T. Nickerson[1], *[1]University of Saskatchewan, Canada, [2]Louisiana State University, USA*

[P3.1.29] **Influence of starter culture on volatile compounds in "Moravsky bochnik" cheese**
M. Sykora*, E. Vitova, *Brno University of Technology, Czech Republic*

[P3.1.30] **Mapping the nutritional quality and antioxidant capacity of carob pods (*Ceratonia siliqua*) for different food applications**
Y. Chamata, M. El Hajj, I. Toufeili*, *American University of Beirut, Lebanon*

[P3.1.31] **Characterization of volatile compounds of Iberian Red Deer (Cervus elaphus hispanicus) meat cooked by two different methods**
C. Vivanco*, L. Moran, L.J.R. Barron, N. Aldai, *University of the Basque Country (UPV/EHU), Spain*

[P3.1.32] **Industrial bread dough texture and rheological properties during storage time under different preservation methods**
H. Ferreira[1], R. Pinheiro*[1], *[1]Escola Superior de Tecnologia e Gestão, Instituto Politécnico de Viana do Castelo, Portugal, [2]Centro de Engenharia Biológica, Universidade do Minho, Portugal*

[P3.1.33] **Influence of calcium-alginate particles addition to milk on rennet curd formation and structure**
K. Trifkovic*, T. Guinee, T. Beresford, *Teagasc Food Research Centre, Ireland*

[P3.1.34] **Effect of heat treatment on degradation products of camel milk proteins**
C. D'Costa[1], H. Mohamed*[1], A. Kamal-Eldin[1], S. Ghnimi[1], *[1]United Arab Emirates University, United Arab Emirates, [2]University of Lyon, France*

[P3.1.35] **Quality of hydrocolloid fortified camel milk yoghurt**
M. Mbye*, B. Sobti, H. Seraidy, A. Kamal-Edin, *United Arab Emirates University, United Arab Emirates*

FOOD AUTHENTICATION AND TRACEABILITY

[P3.2.1] **Label-free quantitative proteomic comparison of metabolic protein fractions in old and modern wheat Italian genotypes by a shotgun approach**
A. Di Francesco[1], V. Cunsolo*[1], R. Saletti[1], B. Svensson[2], V. Muccilli[1], P. De Vita[3], S. Foti[1], *[1]University of Catania, Italy, [2]Technical University of Denmark, Denmark, [3]3CREA Research Centre for Cereal and Industrial Crops (CREA-CI), Italy*

[P3.2.2] **Tracing of genetically modified foods by multiplex PCR technology**
N. Datukishvili*[1,2], T. Kutateladze[2], I. Gabriadze[2], B. Vishnepolsky[2], K. Bitskinashvili[1], M. Karseladze[2], *[1]Ilia State University, Georgia, [2]I.Beritashvili Center of Experimental Biomedicine, Georgia*

[P3.2.4] **Trace elements and machine learning for Brazilian beef traceability**
E. Fernandes*[1], G. Sarriés[1,2], M. Bacchi[1], Y. Mazola[1], C. Gonzaga[1], S. Sarriés[1], *[1]University of São Paulo, Brazil, [2]University of São Paulo, Brazil*

[P3.2.5] **UHPLC-MS/MS fingerprinting of wine characteristic compounds profiles combined with multivariate analysis for wine authentication approaches**
E-I. Geana*[1], V. Artem[2], C. Apetrei[3], *[1]National R&D Institute for Cryogenics and Isotopic Technologies – ICSI Rm., Romania, [2]Research Station for Viticulture and Oenology Murfatlar, Romania, [3]Dunarea de Jos" University of Galati, Romania*

[P3.2.6] **Assessing the use of linear and nonlinear chemometric tools coupled to metabolomics to trace the origin of Brazilian specialty coffees**
P.I. Monteiro[1], J.S. Santos[1], O.Y. Rodionova[2,3], A. Pomerantsev[2,3], E.S. Chaves[4], N.D. Rosso[1], D. Granato*[1], *[1]UEPG, Brazil, [2]Semenov Institute of Chemical Physics RAS, Russia, [3]Branch of Institute of Natural and Technical Systems RAS, Russia, [4]UFSC, Brazil*

[P3.2.7] **Discriminative study of geographical origin for *Lentinula edodes* mushroom by stable isotope ratios and orthogonal projection to latent structure-discriminant analysis**
S.Y. Kim*, Y.J. Yang, Y.J. An, C. Kwon, M. Shamsuzzaman, I.M. Chung, S.H. Kim, *Konkuk University, Republic of Korea*

[P3.2.8] **Authentication of organic, pesticide-free, and conventional rice (*Oryza sativa* L.) using compound-specific isotope analysis**
C. Kwon*, Y.J. An, S.Y. Kim, Y.J. Yang, M.F. Ahmed, S.H. Kim, I.M. Chung, *Konkuk University, Republic of Korea*

[P3.2.9] **Determination of the geographical and botanical origin of hops (Humulus lupulus L.)**
M. Ocvirk*[1], I.J. Košir[1], N. Ogrinc[2], M. Nečemer[3], *[1]Slovenian institute of hop research and brewing, Slovenia, [2]Josef Stefan institute, Slovenia, [3]Josef Stefan institute, Slovenia*

[P3.2.10] **Geographical origin of Italian apples based on Strontium isotope ratio and multi-element analysis**
A. Aguzzoni[1], M. Bassi[2], E. Pignotti*[2], F. Scandellari[1], P. Robatscher[2], W. Tirler[3], M. Tagliavini[1], *[1]University of Bolzano, Italy, [2]Laimburg Research Centre, Italy, [3]Eco-Research srl, Italy*

[P3.2.11] **Classification of Czech white wines using combined chemometric approaches**
J. Porizka*, P. Divis, *Brno University of Technology, Czech Republic*

[P3.2.12] **Evaluation of δ13C and δ2H values using GC-IRMS with SPME method for authenticity studies**
L. Strojnik*[1,2], F. Camin[3], N. Ogrinc[1,2], *[1]Jožef Stefan Institute, Slovenia, [2]Jožef Stefan International Postgraduate School, Slovenia, [3]Fondazione Edmund Mach, Italy*

[P3.2.13] **Geographical discrimination of organic milk using stable isotope ratios and chemometric analysis: A case study in Korea**
Y.J. Yang*, Y.J. An, C. Kwon, S.Y. Kim, M.R. Hasan, I.M. Chung, S.H. Kim, *Konkuk University, Republic of Korea*

[P3.2.14] **Untargeted metabolomic study on milk geographic origin discrimination**
D. Zhu*[1], B. Kebede[2], G. Chen[1], A. Hayman[1], K. McComb[1], R. Frew[1], *[1]University of Otago, New Zealand, [2]Chinese Academy of Agricultural Sciences, China*

NUTRITION & OTHER

[P3.3.1] **Influence of calcium fortification on physicochemical properties of whey protein concentrate solutions enriched in alpha-lactalbumin**
G. Barone*[1], C. Moloney[2], J. O'Regan[2], A. Kelly[1], J. O'Mahony[1], *[1]School of Food and Nutritional Sciences, University College Cork, Ireland, [2]Nestlé Development Centre Nutrition, Ireland*

[P3.3.2] **Chemical characterization and functional properties of the lyophilized mucilage of coffee**
D. Bernardi*, A. Mates, R. De Oliveira, *University of Campinas, Brazil*

[P3.3.3] **Red beetroot's metabolic profiling: Biomarkers related to plant development, production year, juice processing and its human assumption**
G. Conta*[1], O. Giampaoli[1], G. Capuani[1], F. Sciubba[1], A. Tomassini[1], M.E. Di Cocco[1], E. Brasili[2], G. Giorgi[3], W. Aureli[3], A. Micchelli[2,4], *[1]Sapienza University of Rome, Italy, [2]Sapienza University of Rome, Italy, [3]R&D Azienda Agricola Mario Aureli, Ortucchio (AQ), Italy, [4]Sapienza University of Rome, Italy*

[P3.3.4] **Screening of alternative systems for the extraction of isothiocyanates from watercress**
E.R. Coscueta*[1], C.A. Reis[2], M.M. Pintado[1], *[1]Portuguese Catholic University, Portugal, [2]University of Porto, Portugal*

[P3.3.5] **Functional properties of the kefir beverage produced using traditional starter and combined starter including *Propionibacterium freudenreichii***
I.V. Rozhkova[1], A.V. Begunova[1], O.A. Glazunova[2], O.S. Savinova[2], T.V. Fedorova*[2], *[1]Federal State Budgetary Scientific Institution "All-Russian Research Institute of Dairy Industry", Russia, [2]A.N. Bach Institute of Biochemistry, Research Centre of Biotechnology of the Russian Academy of Sciences, Russia*

[P3.3.6] **Changes provoked on lipids of two corn varieties by nixtamalization and tortilla preparation. A study by ^{1}H NMR**
J. Alberdi-Cedeño[1], M. Molina[2], M.L. Ibargoitia[1], M.D. Guillén*[1], *[1]Basque Country University UPV/EHU, Spain, [2]CICATA-IPN, Mexico*

[P3.3.7] **An overview on cyclopropane fatty acids in foods: Origin, role in food authentication and occurrence in humans**
V. Lolli*, M. Dall'Asta, D. Del Rio, A. Caligiani, *University of Parma, Italy*

[P3.3.8] **Surface properties of nonionic surfactant solutions at high sugar concentration**
F. Mustan*[1], N. Politova-Brinkova[1], Z. Vinarov[1], S. Tcholakova[1], D. Rossetti[2], P. Rayment[2], *[1]Sofia University, Bulgaria, [2]Unilever, UK*

[P3.3.9] **Comparison of enhancement of immune activity of red ginseng and Phellinus linteus mycelium extract**
H.J. Park*, K.J. Kim, J.A. Lee, M.J. Kim, S.S. Roh, *DaeguHaany University, Republic of Korea*

[P3.3.10] **REFRESH food waste compositional database - FoodWasteEXplorer**
H. Pinchen*[1], B. Koroušic Seljak[2], D. Torkar[2], T. Eftimov[2], G. Ispirova[2], A. Mantur-Vierendeel[3], P. Finglas[1,3], *[1]Quadram Insitute Bioscience, UK, [2]Jozef Stefan Institute, Slovenia, [3]EuroFIR AISBL, Belgium*

[P3.3.11] **Production of high-protein hydrolysates from Alphitobius diaperinus and Hermetia illucens larvae with different commercial proteases**
S. Sforza*[1], G. Leni[1], L. Soetemans[1,2], J. Jacobs[3], S. Depraetere[3], N. Gianotten[4], L. Bastiaens[2], A. Caligiani[1], *[1]University of Parma, Italy, [2]Flemish Insitute for Technological Research, Belgium, [3]Circular Organics, Belgium, [4]Protifarm, The Netherlands*

[P3.3.12] **Buckwheat as a source of nutritional valuable proteins and essential elements in gluten-free diet**
D. Urminska*, M. Chnapek, A. Vollmannova, J. Bystricka, J. Musilova, T. Bojnanska, *Slovak University of Agriculture, Slovakia*

[P3.3.13] **Rapeseed phospholipids based liposomes as delivery system of lactoferrin, a prebiotic protein**
D. Vergara*, C. Shene, *Universidad de La Frontera, Chile*

[P3.3.14] **Development and validation of an ELISA technique to determine amandin and its application to detect almond in processed foods**
I. Segura[1,2], A. Civera[1], A.P. Tobajas*[1], P. Galán-Malo[2], L. Mata[2], P. Razquin[2], L. Sánchez[1], M. Calvo[1], M.D. Pérez[1], *[1]University of Zaragoza, Spain, [2]ZEULAB S.L., Spain*

BIOACTIVE COMPOUNDS

[P3.4.1] Expansion of the eBASIS database; composition of bioactive compounds in foods
J. Plumb[1], A. Durazzo[2], M. Lucarini[2], E. Camilli[2], M. Traka[1], P. Finglas[1], H. Pinchen*[1], *[1]Quadram Institute Bioscience, UK, [2]Centro di ricerca CREA - Alimenti e Nutrizione, Italy*

[P3.4.2] Fermentation by *Rhizopus oligosporus* as a tool in improving some nutritional aspects of faba bean
K. Polanowska*, A. Grygier, M. Kuligowski, M. Rudzinska, J. Nowak, *Poznan University of Life Sciences, Poland*

[P3.4.3] The composition and oxidative stability of cold pressed and supercritical extracted raspberry oils, and the effect of strawberry leaf extracts on their stability
A. Prescha*[1], M. Grajzer[1], I. Fecka[1], E. Rój[2], H. Grajeta[1], *[1]Wroclaw Medical University, Poland, [2]New Chemical Syntheses Institute, Poland*

[P3.4.4] Use of Fructooligosaccharides from Blue Agave in craft beer production
C.N. Quiroz-Reyes*[1], P. Lopez-Perea[1], I.S. Perez-Jaime[1], E. Ronquillo-de Jesus[1], J.D. Figueroa-Cardenas[1], *[1]Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del Instituto Politécnico Naciona, Mexico, [2]Universidad Politécnica De Francisco I. Madero, Mexico, [3]Centro de Investigación y de Estudios Avanzados, Mexico*

[P3.4.5] Tesjua (*Conostegia xalapensis*): An endemic Mexican fruit from "Huasteca hidalguense" as a potential antioxidant source
C.N. Quiroz-Reyes*[1], M.A. Aguilar-Méndez[1], V. Hernández-Martínez[2], E. Ronquillo de Jesus[3], P. Gónzalez-Azpeitia[3], *[1]Instituto Politécnico Nacional, Mexico, [2]Secretaría de Pueblos y Barrios Originarios y Comunidades Indígenas Residentes, Mexico, [3]Universidad Politécnica de Francisco I. Madero, Mexico*

[P3.4.6] The effect of wheatgrass juice addition on the nutritional quality of different fruit and vegetable juices
S. Grubisic, M. Kristic, M. Lisjak, A. Rebekic*, *J.J.Strossmayer University of Osijek, Croatia*

[P3.4.7] Natural deep eutectic systems - versatile media for extraction and stabilization of antioxidants
D. Rente*[1], S. Rebocho[1], L. Meneses[1], A. Paiva[1,2], A.R.C. Duarte[1,2], *[1]Universidade Nova de Lisboa, Portugal, [2]Des Solutio, Avenida Tenente Valadim, Portugal*

[P3.4.8] *In vitro* gastrointestinal digestion and colonic fermentation models of an olive pomace ingredient rich in hydroxytyrosol: antihypertensive, prebiotic, antibacterial, antioxidant and antidiabetic potential
T.B. Ribeiro*[1,2], M. Veiga[1], S. Silva[1], J. Nunes[2,1], A.A. Vicente[3], M. Pintado[1], *[1]Universidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Portugal, [2]BLC3 Association – Technology and Innovation Campus, Centre R&D, Portugal, [3]Institute for Biotechnology and Bioengineering, Centre of Biological Engineering, Universidade do Minho, Portugal*

[P3.4.9] Screening protein sources for the production of antidiabetic peptides
F. Rivero-Pino*, F.J. Espejo-Carpio, A. Guadix, E.M. Guadix, *University of Granada, Spain*

[P3.4.10] Composition and absorption of authorized natural green food colorants
I. Viera[1], I. Benito[2], A. Pérez-Gálvez[1], M. Roca*[1], *[1]Instituto de la Grasa (CSIC), Spain, [2]University Hospital Virgen Macarena, Spain*

[P3.4.11] Bioactive polyphenols in tea infusions: A multivariate study of bioaccessibility
E. Gómez-Mejía, N. Rosales-Conrado*, M.E. León-González, Y. Madrid, *Complutense University of Madrid, Spain*

[P3.4.12] Study by 1H NMR of the effect of the enrichment with alpha-tocopherol on the oxidative stability and the profile of the oxidation compounds of virgin olive oil submitted to frying temperature
S. Del Caño-Ochoa, A. Ruiz-Aracama*, M.D. Guillén, *University of the Basque Country (UPV/EHU), Spain*

[P3.4.13] Recovery of rutine onto N-vinylimidazole (Vim) based copolymeric hydrogels: Equilibrium and kinetic models
S. Şahin*[1], E. Elhussein[1], S. Emik[1], M. Erdem[2], *[1]Istanbul University-Cerrahpaşa, Turkey, [2]Anadolu University, Turkey*

[P3.4.14] Effect of the extract of tea roots (*camellia sinensis*) on the recognition memory of aged rats
K. Saito*[1,2], N. Nakamura[2], H. Kametani[3], *[1]School of Food and Nutritional Sciences, University of Shizuoka, Japan, [2]Tea Science Center, University of Shizuoka, Japan, [3]Saitama Institute of Technology, Japan*

[P3.4.15] Development of active structures based on zein and sage extract by electrospinning vs solvent casting
A. Salevic*[1], S. Levic[1], M. Pantic[1], D. Stojanovic[2], V. Pavlovic[1], P. Uskokovic[2], V. Nedovic[1], *[1]University of Belgrade, Serbia, [2]University of Belgrade, Serbia*

[P3.4.16] Hemp-extracted cannabidiol: Activation and *in vitro* anticancer effect
A.R. Petrovici[1], N. Simionescu[1], V. Paraschiv[2], M. Pinteala[1], M. Silion*[1], *[1]"Petru Poni" Institute of Macromolecular Chemistry, Romania, [2]SC OVVA IASI SRL, Romania*

[P3.4.17] Chemical characterization of biscuits prepared with bioprocessed soybean meal
N.M.B. Barreto, D. Sandôra, A.A.E. Pereira, M. Monteiro, D. Perrone, F.O. Silva*, *Federal University of Rio de Janeiro, Brazil*

[P3.4.18] **Combined effects of parsnip fermented juice and hawthorn extract in refrigerated meat. Chemical and microbiological aspects**
G. Ștefan*, C. Papuc, C. Predescu, G.V. Goran, *University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania*

[P3.4.19] **The fate of cranberry and chokeberry pomace bioactives in meat products during in vitro gastrointestinal digestion**
L. Tamkute;*, M. Pukalskiene;, P.R. Venskutonis, *Kaunas university of technology, Lithuania*

[P3.4.20] **In vivo anti-diabetic activity of geraniin from rambutan rind.**
J.B.L. Tan*, H.S. Cheng, S.H. Ton, K.A. Kadir, *Monash University Malaysia, Malaysia*

[P3.4.21] **Characterization of the caffeoylquinic acid derivatives and the acylated anthocyanins of I*pomoea batatas* L. Lam purple variety (purple sweet potato): flower, leaves, stem and root**
A. Torres*[1], F. Basurto[2], A. Navarro[1], *[1]Facultad de Quimica, UNAM, Mexico, [2]Instituto de Biología, UNAM, Mexico*

[P3.4.23] **Extremely high elasticity of emulsions, stabilized by *yucca schidigera* saponins**
S. Tsibranska-Gyoreva*[1], S. Tcholakova[1], K. Golemanov[1], N. Denkov[1], E. Pelan[2], S. Stoyanov[2], *[1]Sofia University, Bulgaria, [2]2Unilever Research & Development Vlaardingen, The Netherlands*

[P3.4.24] **Pulsed electric field as a pre-treatment in ultrasound assisted extraction of polyphenols from fresh rosemary and thyme**
K. Tzima*[1,2], D.K. Rai[1], J.G. Lyng[2], N.P. Brunton[2], *[1]Teagasc Ashtown Food Research Centre, Ireland, [2]University College Dublin, Ireland*

[P3.4.25] **Optimization of an oil-in-water emulsion enriched with omega-3 PUFAs for lipid protection and curcumin vehiculization by multi-response surface methodology**
J.A. Vellido-Perez*[1], C. Rodriguez-Remacho[1], J.M. Ochando-Pulido[1], E. Brito-de la Fuente[2], A. Martinez-Ferez[1], *[1]University of Granada, Spain, [2]Innovation & Development Center, Fresenius Kabi Deutschland GmbH, Germany*

[P3.4.26] **Antioxidant properties of pecan shell and kernel walnut (Carya illinoinensis) in vitro, in a model food system, and their viability in human cancer cell lines.**
J. Villasante*[1], L. Kaur[1], I. Meton[2], M.P. Almajano[1], *[1]UPC, Spain, [2]UB, Spain*

[P3.4.27] **Chestnut (*Castanea sativa* M.) flour and chia (*Salvia hispanica* L) oil emulsion gel as partially fat-replacers in pork burger formulation**
M. Viuda-Martos*, R. Lucas-Gonzalez, E. Sayas, J.A. Perez-Alvarez, J. Fernández-López, *Miguel Hernandez University, Spain*

[P3.4.28] **White lupin as a promising food source of bioactive compounds with health benefit**
A. Vollmannova*, J. Bystricka, J. Musilova, T. Bojnanska, D. Urminska, I. Tirdilova, *Slovak University of Agriculture in Nitra, Slovakia*

[P3.4.29] **Stabilization of apple juice by adding ecologically obtained extract of residual apples**
H. Withouck*, A. Boeykens, K. Vynckier, J. Verbeke, J. Cobbaert, M. Vanden Broucke, *Odisee University College, Belgium*

[P3.4.30] **Fructo- and galacto-oligosaccharides purification: the hard step**
O. Figueira[1], G.N. Martins*[1], A. Gomez-Zavaglia[2], P.C. Castilho[1], *[1]Centro de Química da Madeira - Universidade da Madeira, Portugal, [2]Center for Research and Development in Food Cryotechnology (CIDCA, CCT-CONICET), Argentina*

[P3.4.31] **Release of polyphenols during cocoa heating in an innovative hot plate reactor**
J. Alean*[1,2], F. Chejne[2], C. Valdes[2], G. Marrugo[2], A. Alzate[2], B. Rojano[2], *[1]Universidad de La Guajira, Colombia, [2]Universidad Nacional de Colombia, Colombia*

[P3.4.31] **Pectin-decorated magnetite nanoparticles as both iron delivery systems and protective matrices for probiotic bacteria**
F. Ghibaudo[1], E. Gerbino[1], G.J. Copello[2], V. Campo Dall' Orto[2], A. Gomez-Zavaglia*[1], *[1]Center for Research and Development in Food Cryotechnology (CIDCA CCT Conicet), Argentina, [2]Department of Analytical Chemistry and Physical Chemistry, Faculty of Pharmacy and Biochemistry, University of Buenos Aires, Chemistry and Drug Metabolism Institute (IQUIMEFA, CONICET), Argentina, Argentina*

[P3.4.32] **Pectin-decorated magnetite nanoparticles as both iron delivery systems and protective matrices for probiotic bacteria**
F. Ghibaudo[1], E. Gerbino[1], G.J. Copello[2], V. Campo Dall' Orto[2], A. Gomez-Zavaglia*[1], *[1]Center for Research and Development in Food Cryotechnology (CIDCA CCT Conicet), Argentina, [2]University of Buenos Aires, Chemistry and Drug Metabolism Institute (IQUIMEFA, CONICET), Argentina*