

## ORAL PROGRAM

Sunday, 30 October 2016			
11.00-19:00	<b>Registration</b>   Room:		
Room	Diamond		
14.30-15.45	<b>Author Workshop</b>		
Room	Grand Ballroom		
16.00-16.15	<b>Opening Remarks &amp; Introduction to Food Chemistry</b> Gordon Birch, University of Reading, UK		
16.15-16.45	<b>[K01] Food safety challenges and opportunities in the era of big data</b> John O'Brien, Nestle Research Centre, Switzerland		
16.45-17.15	<b>[K02] Emerging bioactives compounds in food – chemistry, analysis and health</b> Fereidoon Shahidi, Memorial University of Newfoundland, Canada		
17.15-18.00	<b>Poster Viewing</b>   Room: Winter Garden		
18.00-19.00	<b>Welcome Drinks Reception</b>   Room: Winter Garden		
Monday, 31 October 2016			
Room	Grand Ballroom		
	<b>Plenary Session 2: Chemical reactions, food quality and health</b> Session Chair:		
08.30-09.00	<b>[K03] Process structure function relations for fruit and vegetable based food systems processed by high pressure based technologies</b> Marc Hendrickx, University of Leuven, Belgium		
09.00-09.25	<b>[INV01] Food polysaccharide-protein interactions and their role in food structure</b> Laurie Melton, University of Auckland, NZ		
09.25-09.50	<b>[INV02] The role of lipid-water interfaces on lipid oxidation chemistry</b> Eric Decker, University of Massachusetts, USA		
09.50-10.15	<b>[INV03] Colloidal and interfacial mechanisms underpinning fat digestion</b> Peter Wilde, Institute of Food Research, UK		
10.15-10.40	<b>[INV04] Crystallinity and amorphous state of sugars and polyols: Consequences on their stability and processability</b> Mohamed Mathlouthi, Association AVH, Reims, France		
10.40-11.10	<b>Coffee Break</b>   Room: Winter Garden		
Rooms	Grand Ballroom	Ruby	Diamond
	<b>Session 1: Chemical reactions, food quality and health</b> Session Chair:	<b>Session 2: Food structure, food quality and health</b> Session Chair:	<b>Session 3: Emerging non-nutrient bioactives in food - chemistry, metabolism and health</b> Session Chair:
11.10-11.30	<b>[O1.1] High performance thin layer chromatography: Determination of oligomeric proanthocyanidins during different chocolate manufacturing stages</b> V. Pedan*, C. Weber, T. Do, N. Fischer, E. Reich, S. Rohn ZHAW, Switzerland	<b>[O2.1] In situ synthesis of polar lipids in whippable food emulsions</b> M.D. Golding*, S. Noor, K. Goh, P. Janssen, S.J. Lee Massey University, New Zealand	<b>[O3.1] Identification of anti-diabetic and anti-obesity peptides from food source using a bioinformatics-assisted approach: Case study - pinto bean bioactive peptides</b> C.Y. Gan*, Y.Y. Ngoh Universiti Sains Malaysia, Malaysia

11.30-11.50	<p><b>[O1.2] Study of posttranslational modifications in proteins during food processing using tandem mass spectrometry with collision-induced, electron-transfer and higher-energy collisional dissociation</b> I. Rombouts*<sup>1</sup>, M.A. Lambrecht<sup>1</sup>, B. Lagrain<sup>1</sup>, K.A. Scherf<sup>2</sup>, S.C. Carpentier<sup>1</sup>, P. Koehler<sup>2</sup>, J.A. Delcour<sup>1</sup> <sup>1</sup>KU Leuven, Belgium, <sup>2</sup>DFA fuer Lebensmittelchemie, Germany</p>	<p><b>[O2.2] Assessing carbohydrates in food: development and improvement of methods as prerequisite for assuring quality in food analysis</b> I. Vrasidas <i>Eurofins Food Testing Netherlands, The Netherlands</i></p>	<p><b>[O3.2] A flavoromics approach to investigating relationships between wine sensory properties and volatile profiles</b> E. Sherman*<sup>1,2</sup>, D.G. Greenwood<sup>1,2</sup>, S.G. Villas-Bôas<sup>1</sup>, H. Heymann<sup>3</sup>, J.F. Harbertson<sup>4</sup>, O. Fiehn<sup>3</sup> <sup>1</sup>University of Auckland, New Zealand, <sup>2</sup>Plant &amp; Food Research, New Zealand, <sup>3</sup>University of California, Davis, USA, <sup>4</sup>Washington State University, USA</p>
11.50-12.10	<p><b>[O1.3] Protein carbonylation mechanisms: Metal-catalysed oxidation vs. Glycosylation</b> M. Estévez*<sup>1</sup>, C. Luna<sup>1</sup>, D. Morcuende<sup>1</sup> <sup>1</sup>University of Extremadura, Spain, <sup>2</sup>Servicio Extremeño de Salud, Spain</p>	<p><b>[O2.3] Dissolution phenomena of spray dried powders by single particle approach</b> D. Karampalis*<sup>1</sup>, H. Cao<sup>1</sup>, J. Caragay<sup>2</sup>, Y. Ding<sup>1</sup>, S. Bakalis<sup>1</sup> <sup>1</sup>University of Birmingham, UK, <sup>2</sup>Procter &amp; Gamble Newcastle Innovation Centre, UK</p>	<p><b>[O3.3] Pectin from food waste: A new source of potentially prebiotic oligosaccharides</b> S. Sforza*<sup>1</sup>, S. Baldassarre<sup>1</sup>, N. Babbar<sup>1,2</sup>, A. Caligiani<sup>1</sup>, B. Prandi<sup>1</sup>, S. van Roy<sup>2</sup>, M. Gatti<sup>1</sup>, K. Elst<sup>1</sup> <sup>1</sup>University of Parma, Italy, <sup>2</sup>Flemish Institute for Technological Research, Belgium</p>
12.10-12.30	<p><b>[O1.4] Protein modification by polyphenols through Michael addition: Cysteine residues are kinetically preferred targets</b> Y. Li<sup>1,2</sup>, S. Jongberg<sup>1</sup>, M.J. Davies<sup>1</sup>, M.L. Andersen<sup>1</sup>, M.N. Lund*<sup>1</sup> <sup>1</sup>University of Copenhagen, Denmark, <sup>2</sup>South China University of Technology, China</p>	<p><b>[O2.4] Raman spectroscopy and X-Ray investigations of anhydrous milk fats according the temperature</b> A. Lambert*<sup>1</sup>, F. Bougrioua<sup>1</sup>, O. Abbas<sup>2</sup>, M. Courty<sup>3</sup>, M. El Marssi<sup>4</sup>, V. Faivre<sup>5</sup>, S. Bresson<sup>1</sup> <sup>1</sup>University of Picardie Jules Verne, France, <sup>2</sup>Wallon Agricultural Research Centre (CRA-W), Belgium, <sup>3</sup>University Paris-SUD, France</p>	<p><b>[O3.4] Bioactives from berry pomace: Their isolation, characterisation and application</b> P.R. Venskutonis <i>Kaunas University of Technology, Lithuania</i></p>
<b>12.30-14.00</b>	<b>Lunch &amp; Poster Session   Room: Winter Garden</b>		
Room	Grand Ballroom		
	<b>Plenary Session 3: Emerging non-nutrient bioactives in food - chemistry, metabolism and health</b> Session Chair:		
14.00-14.30	<b>[K04] Generation of bioactive peptides during food processing and its relevance for health</b> Fidel Toldrá, <i>Instituto de Agroquímica y Tecnología de Alimentos (CSIC), Spain</i>		
14.30-14.55	<b>[INV05] Benefits and potential risks of dietary isothiocyanates on cancer prevention</b> Yongping Bao, <i>University of East Anglia, UK</i>		
14.55-15.20	<b>[INV06]</b> Mairead Kiely, <i>University College Cork, Ireland</i>		
15.20-15.45	<b>[INV07]</b> John van Camp, <i>University of Ghent, Belgium</i>		
<b>15.45-16.15</b>	<b>Coffee Break &amp; Poster Session   Room: Winter Garden</b>		

Rooms	Grand Ballroom	Ruby	Diamond
	<b>Session 4: Chemical reactions, food quality and health</b> <i>Session Chair:</i>	<b>Session 5: Food authenticity and integrity</b> <i>Session Chair:</i>	<b>Session 6: Emerging non-nutrient bioactives in food - chemistry, metabolism and health</b> <i>Session Chair:</i>
16.15-16.35	<b>[O4.1] Temperature, pH, and dilution affect glucosinolate hydrolysis to isothiocyanates in Brassicaceae plants</b> F.S. Hanschen* <sup>1</sup> , R. Klopsch <sup>1</sup> , T. Oliviero <sup>2</sup> , M. Schreiner <sup>1</sup> , R. Verkerk <sup>2</sup> , M. Dekker <sup>2</sup> , <sup>1</sup> Leibniz Institute of Vegetable and Ornamental Crops Großbeeren/Erfurt e.V., Germany, <sup>2</sup> Wageningen University, The Netherlands	<b>[O5.1] Non-destructive sensing for food reassurance</b> X. zou* <sup>1</sup> , M. Povey <sup>1</sup> <sup>1</sup> Jiangsu University, School of Food and Biological Engineering, China, <sup>2</sup> University of Leeds, School of Food Science and Nutrition, UK	<b>[O6.1] Impact of pectin properties on lipid digestion under simulated gastrointestinal conditions</b> M. Espinal-Ruiz <sup>1</sup> , L-P. Restrepo-Sánchez <sup>1</sup> , D.J. McClements <sup>2,3</sup> , C-E. Narváez-Cuenca* <sup>1</sup> <sup>1</sup> Universidad Nacional de Colombia, Colombia, <sup>2</sup> University of Massachusetts Amherst, USA, <sup>3</sup> King Abdulaziz University, Saudi Arabia
16.35-16.55	<b>[O4.2] Quantitative determination of total N<sup>ε</sup>-(1-Carboxymethyl)-L-Lysine as an indicator of Maillard reactions during storage of skim milk powders by isotope dilution ESI-LC-MS/MS</b> K. Aalaei* <sup>1</sup> , I. Sjöholm <sup>1</sup> , M. Rayner <sup>1</sup> , E. Tareke <sup>2</sup> <sup>1</sup> Lund University, Sweden, <sup>2</sup> Food for Health Science Centre, Sweden	<b>[O5.2] On-line detection of volatile mineral oil aromatic hydrocarbon (MOAH) food contaminants by proton-transfer-reaction time-of-flight mass spectrometry (PTR-TOFMS)</b> J. Beauchamp* <sup>1</sup> , E. Zardin <sup>1</sup> , M. Grünbaum <sup>1,2</sup> , R. Fengler <sup>1</sup> , L. Gruber <sup>1</sup> , A. Buettner <sup>1</sup> <sup>1</sup> Fraunhofer IVV, Germany, <sup>2</sup> Friedrich-Alexander Universität Erlangen, Germany	<b>[O6.2] Effect of storage on the phenolic profile of Saladin × Iceberg recombinant inbred population</b> S. Lignou* <sup>1</sup> , C. Wagstaff <sup>1</sup> , M-J. Oruna-Concha <sup>1</sup> , B. Radha <sup>1</sup> , P. Hunter <sup>2</sup> , A. Hambidge <sup>3</sup> , A. Graceson <sup>2</sup> , G. Barker <sup>3</sup> , P. Hand <sup>2</sup> , J. Monaghan <sup>2</sup> et al <sup>1</sup> University of Reading, UK, <sup>2</sup> Harper Adams University, UK, <sup>3</sup> University of Warwick, UK
16.55-17.15	<b>[O4.3] Thermo-oxidation of phytosteryl/-stanyl fatty acid esters: Identification of novel acyl chain oxidation products</b> S. Wocheslander* <sup>1</sup> , W. Eisenreich <sup>1</sup> , V. Lander <sup>2</sup> , K.H. Engel <sup>1</sup> <sup>1</sup> Technische Universität München, Germany, <sup>2</sup> Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, Germany	<b>[O5.3] Antibodies and bioconjugates for immunoanalysis of chemical residues and contaminants in food</b> J.V. Mercader* <sup>1</sup> , A. Abad-Fuentes <sup>1</sup> , E. Ceballos-Alcantarilla <sup>2</sup> , C. Agulló <sup>2</sup> , A. Abad-Somovilla <sup>2</sup> <sup>1</sup> IATA-CSIC, Spain, <sup>2</sup> University of Valencia, Spain	<b>[O6.3] Pressurized hot water extraction and chemometric fingerprinting of flavonoids from Bidens pilosa by UPLC-tandem mass spectrometry</b> S. Gbashi* <sup>1,3</sup> , P.B. Njobeh <sup>1</sup> , P.S. Steenkamp <sup>2</sup> , N.E. Madala <sup>1</sup> <sup>1</sup> University of Johannesburg, South Africa, <sup>2</sup> Council for Scientific and Industrial Research (CSIR), South Africa, <sup>3</sup> University of Mkar, Nigeria
17.15-17.35	<b>[O4.4] Essence creation and characterization from a heirloom tomato (Garden Gem) variety</b> Y. Zhu*, H. Klee, P. Sarnoski University of Florida, USA	<b>[O5.4] Enrofloxacin incorporated in white cabbage inhibits the growth of Escherichia coli</b> G. Langenkämper* <sup>1</sup> , H. Ibrahim Aroud <sup>2,1</sup> , C. Schwake-Anduschus <sup>1</sup> , M. Grote <sup>3</sup> , G. Scherz <sup>2</sup> , J. Stahl <sup>2</sup> , S. Mielke-Kuschow <sup>2</sup> , M. Kietzmann <sup>2</sup> <sup>1</sup> Max Rubner-Institut, Germany, <sup>2</sup> Stiftung Tierärztliche Hochschule Hannover, Germany, <sup>3</sup> Universität Paderborn, Germany	<b>[O6.4] Phenolic profile of fruit and vegetable agro-industrial by-products using non-targeting analysis by UPLC-Q-TOF-MS</b> M.S.L. Ferreira* <sup>1</sup> , S.G. Moreira <sup>2</sup> , E.C.B.A. Gonçalves <sup>1</sup> , M.G.B. Koblitz <sup>1</sup> , L.C. Cameron <sup>1</sup> <sup>1</sup> Federal University of State of Rio de Janeiro, Brazil, <sup>2</sup> Federal Institute of Rio de Janeiro, Brazil

17.35-17.55	<b>[O4.5] Kinetic modelling of acrylamide formation in French fries with variable maltose content</b> D.P. Balagiannis* <sup>1</sup> , J.K. Parker <sup>1</sup> , J. Higley <sup>2</sup> , G. Smith <sup>2</sup> , B.L. Wedzicha <sup>3</sup> , D.S. Mottram <sup>1</sup> <sup>1</sup> University of Reading, UK, <sup>2</sup> ConAgra Foods, USA, <sup>3</sup> University of Leeds, UK	<b>[O5.5] Development of high temperature oxygen ventilation method for assessing quality and stability of edible oils</b> L. Chia-Ling* <sup>1</sup> , C. Si-Chiu <sup>2</sup> , C. Yu-Wei <sup>1</sup> <sup>1</sup> Department of Food Science, National Taiwan Ocean University, Taiwan, <sup>2</sup> Koyaka Biotechnology Corporation, Taiwan	<b>[O6.5]</b>
<b>19.00-22.00 Gala Dinner (optional - tickets can be purchased)</b>			
<b>Tuesday, 01 November 2016</b>			
Room	Grand Ballroom		
	<b>Plenary Session 4: Novel approaches in food safety and integrity along the food chain</b> Session Chair:		
08.30-09.00	<b>[K05] The effect of processing and the food matrix on the allergenicity of food</b> Clare Mills, University of Manchester, UK		
09.00-09.25	<b>[INV08] MoniQA – International Association for Monitoring and Quality Assurance in the Total Food Supply</b> Roland Poms, MoniQA, Austria		
09.25-09.50	<b>[INV09] Integrative predictive modeling for food safety and quality – Tools and applications</b> Cristina Silva, Universidade Católica Portuguesa, Portugal		
09.50-10.15	<b>[INV10] If a food is not authentic, what is it?</b> Richard Cantrill, AOCS, USA		
<b>10.15-10.45</b>	<b>Coffee Break &amp; Poster Session   Room: Winter Garden</b>		
Rooms	Grand Ballroom	Ruby	Diamond
	<b>Session 7: Chemical reactions, food quality and health</b> Session Chair:	<b>Session 8: Food authenticity and integrity</b> Session Chair:	<b>Session 9: Food structure, food quality and health</b> Session Chair:
10.45-11.05	<b>[O7.1] Mechanistic study of interactions between volatile thiols and nonvolatile wine compounds</b> P. Rigou* <sup>1</sup> , L. Dellac <sup>1</sup> , A. Bloem <sup>2</sup> , C. Saucier <sup>2</sup> <sup>1</sup> UMR 1083 Supagro Université de Montpellier, France, <sup>2</sup> Université de Montpellier, France	<b>[O8.1] The identification of manuka honey: A new approach to determine authenticity and integrity</b> J.M. Stephens* <sup>1</sup> , G. Prijic <sup>1</sup> , J. Bong <sup>1</sup> , B. Lin <sup>1</sup> , K.M. Loomes <sup>1,2</sup> <sup>1</sup> University of Auckland, New Zealand, <sup>2</sup> University of Auckland, New Zealand	<b>[O9.1] Effect of nanoparticulated whey protein-to-alginate ratio on in vitro gastric digestion</b> G. Koutina*, C.A. Ray, R. Lametsch, R. Ipsen University of Copenhagen, Denmark
11.05-11.25	<b>[O7.2] Effect of sodium chloride on <math>\alpha</math>-dicarbonyl compounds and 5-hydroxymethyl-2-furfural formations from glucose under caramelization conditions – A multiresponse kinetic modeling approach</b> T. Kocadagli*, V. Gökmen Hacettepe University, Turkey	<b>[O8.2] Fast and cost-efficient fish identification based on a species-specific protein fingerprint determined by MALDI-TOF mass spectrometry</b> A. Stahl*, G. Rimkus, U. Schröder Intertek Food Services GmbH, Germany	<b>[O9.2] Citrus pectin as a natural polyelectrolyte allows for the stabilization of stimuli-responsive emulsions</b> U.S. Schmidt*, H.P. Schuchmann Karlsruhe Institute of Technology, Germany
11.25-11.45	<b>[O7.3] The effect of ageing conditions on the physicochemical, phytochemical and bioactivity of Hibiscus sabdariffa (Roselle) Wine</b> I. Ifie, P. Ho, G. Williamson, L.J. Marshall* University of Leeds, UK	<b>[O8.3] Masked mycotoxins and blood: perhaps masks no longer stay - The strange case of zearalenone-14-glucoside</b> L. Dellafiora*, G. Galaverna, C. Dall'Asta University of Parma, Italy	<b>[O9.3] Lactoferrin/<math>\beta</math>-lactoglobulin heteroprotein system: Interactions, coacervation and encapsulation potentiality.</b> A.L. Chapeau <sup>1</sup> , P. Hamon <sup>1</sup> , T. Croguennec <sup>1</sup> , D. Poncelet <sup>2</sup> , S. Bouhallab* <sup>1</sup> <sup>1</sup> INRA Agrocampus ouest, France, <sup>2</sup> ONIRIS CNRS, France

11.45-12.05	<b>[O7.4] Understanding fat, protein and saliva impact on aroma release from flavoured ice creams.</b> S.I.F.S. Martins* <sup>1</sup> , A-M. Williamson <sup>2</sup> , C. Ayed <sup>3</sup> , E. Guichard <sup>3</sup> <sup>1</sup> Unilever R&D Vlaardingen, The Netherlands, <sup>2</sup> Unilever R&D Colworth, UK, <sup>3</sup> INRA, France	<b>[O8.4] Impact of different forage types (grass, grass/clover and TMR) on the sensory quality and volatile profile of bovine milk in Ireland</b> H. Faulkner* <sup>1,3</sup> , T.F. O'Callaghan <sup>1,3</sup> , S. McAuliffe <sup>2</sup> , D. Hennessy <sup>2</sup> , C. Stanton <sup>1</sup> , M.G. O'Sullivan <sup>3</sup> , J.P. Kerry <sup>3</sup> , K.N. Kilcawley <sup>1</sup> <sup>1</sup> Department of Food Biosciences, Teagasc Food Research Centre, Ireland, <sup>2</sup> Animal & Grassland Research and Innovation Centre, Ireland, <sup>3</sup> University College Cork, Ireland	<b>[O9.4] Bioaccessibility of toxic and essential elements in raw and cooked commercial seafood species available in European markets</b> R.N. Alves* <sup>1</sup> , A.L. Maulvault <sup>1,2</sup> , V.L. Barbosa <sup>1</sup> , M. Fernandez-Tejedor <sup>4</sup> , A. Tediosi <sup>5</sup> , M. Kotterman <sup>6</sup> , F.H.M. van den Heuvel <sup>7</sup> , J. Robbens <sup>8</sup> , J. Fernandes <sup>9</sup> , R.R. Rasmussen <sup>10</sup> et al <sup>1</sup> Portuguese Institute for the Sea and Atmosphere (IPMA, I.P.), Portugal, <sup>2</sup> Interdisciplinary Centre of Marine and Environmental Research (CIIMAR), Portugal, <sup>3</sup> MARE – Marine and Environmental Sciences Centre, Portugal, <sup>4</sup> Marine Monitoring, Institute of Agriculture and Food Research & Technology (IRTA), Spain, <sup>5</sup> Aeiforia Srl, Italy, <sup>6</sup> IMARES, The Netherlands, <sup>7</sup> Hortimare, The Netherlands, <sup>8</sup> Institute for Agricultural and Fisheries Research (ILVO), Belgium, <sup>9</sup> LAQV-REQUIMT, Portugal, <sup>10</sup> National Food Institute, Denmark
12.05-12.35	<b>[O7.5]</b>	<b>[O8.5] New parameters to assess extra virgin olive oils quality</b> D. Fiorini*, M.C. Boarelli, P. Conti, G. Sagratini, G. Caprioli, R. Gabbianelli, D. Fedeli, M. Ricciutelli <i>University of Camerino, Italy</i>	<b>[O9.5] In vitro approaches to model in-mouth salt and aroma release of model cheese systems</b> A. Syarifuddin, A.C. Mosca, C. Septier, I. Andriot, E. Semon, T. Thomas-Danguin, C. Salles* <i>INRA, France</i>
12.35-12.55	<b>[O7.6]</b>	<b>[O8.6] Voltammetric electronic tongue coupled with unsupervised and supervised chemometric approaches for objective quality assessment of black pepper</b> K. Tahri, M. Bougrini, B. Bouchikhi, N. El bari* et al, <i>Faculty of Sciences of Moulay Ismail University of Meknes, Morocco</i>	<b>[O9.6] Understanding the role of sodium in biscuit foods</b> C. Ayed*, M. LIM, W. Macnaughtan, R. Linforth, I.D. Fisk <i>University of Nottingham, UK</i>
<b>12.55-14.30</b>	<b>Lunch &amp; Poster Session   Room: Winter Garden</b>		
Room	Grand Ballroom		
	<b>Plenary Session 5: Sustainable food security and health - current and future perspectives</b> <i>Session Chair:</i>		
14.30-15.00	<b>[K06] Food, diet and health: The past, the present, the future</b> Hannelore Daniel, <i>Technische Universität München (TUM), Germany</i>		
15.00-15.25	<b>[INV11]</b> Keith Waldron, <i>Institute of Food Research, Norwich, UK</i>		
15.25-15.50	<b>[INV12] Delivering on EU food safety and nutrition in 2050 – Future challenges and policy preparedness</b> Franz Ulberth, <i>European Commission JRC-IRMM, Belgium</i>		
15.50-16.10	<b>[O10.1] Safety evaluation of substances proposed for use as food additives in the European Union (EU)</b> D. Battacchi, A. Christodoulidou, P. Colombo, F. Lodi, F. Pizzo, A.M. Rincon*, C. Roncancio-Peña, C. Smeraldi, S. Tasiopoulou, A. Tard, <i>European Food Safety Authority, Italy</i>		
16.10-16.30	<b>Closing Remarks &amp; Awards</b>		
16.30	<b>End of Conference</b>		