**POSTER PRESENTATIONS**

**Poster Session One -Tuesday 3rd June 1700-18.30**

**1.Interaction Between Chañar Brea Gum and Prosopis Flexuosa Gum**

Alba Benuzzi(1), Franco Tonelli(2), Martin Masuelli(3)

(1) Área de Química Física, Departamento de Química, Facultad de Química, Bioquímica y Farmacia, Universidad Nacional de San Luis, Argentina.

(2) FICES-Universidad Nacional de San Luis, San Luis, Argentina.

(3) Instituto de Física Aplicada (INFAP-CONICET-UNSL)- Área de Química Física, Departamento de Química, Facultad de Química, Bioquímica y Farmacia, Universidad Nacional de San Luis, Ejercito de los Andes 950-San Luis, Argentina.

**2. Molecular predictors of macroscopic foam functionality of soy proteins**

J Purrini1, J Yang1  and E van der Linden1

1Laboratory of Physics and Physical Chemistry of Foods, Wageningen University and Research, Bornse Weilanden 9, 6708, WG Wageningen, the Netherlands

**3.Same as Meat? – Rheology as a Tool for Simulating the Digestion of Meat and Meat Substitutes in the Gastrointestinal Tract**C. Küchenmeister-Lehrheuer1, Gabriela I. Saavedra Isusi1, U.S. van der Schaaf2 **1** Thermo Fisher Scientific, Pfannkuchstraße 10-12, D-76185 Karlsruhe, Germany ([Cornelia.Kuechenmeister@thermofisher.com](mailto:Cornelia.Kuechenmeister@thermofisher.com); gabriela.saavedraisusi@thermofisher.com)

2 Chair for Food Process Engineering, Institute of Process Engineering in Life Sciences, Karlsruhe Institute of Technology, Gottfried-Franz-Str. 3, D-76131 Karlsruhe, Germany([ulrike.schaaf@kit.edu](mailto:ulrike.schaaf@kit.edu))

**4.Improving the Functional Properties of Soy Protein Isolate via Enzymatic Deamidation with Protein Glutaminase**

Kevin Tan1 and Qi Lin1 1Abbott Nutrition Research and Development Pacific Asia, 20 Biopolis Way, Level 9, Singapore 138668

**5.Optimisation of plant-based milk alternatives through the use of specific pea protein fractions**

Juliane Brühan, Henrike Höber, Klara Gabriele Barduhn and Stephan Drusch, Technical University of Berlin, Department of Food Technology and Materials Science, Königin-Luise-Str. 22, 14195 Berlin, Germany

**6.The Effect of Fish Protein Hydrolysate *Krytopterus Spp* On Body Weight, Total Protein and Albumin Level In *Rattus Novergicus* Stunting Models**

Hanis Kusumawati Rahayu 1 \* [](https://orcid.org/0000-0003-1363-3678), Siti Khotimah 2 [](https://orcid.org/0000-0002-3070-8216) Ika Fikriah3 [](https://orcid.org/0000-0002-3788-8512) Mulawarman University, Samarinda, Indonesia.

**7.Functionalization of commercial pea and fava bean protein ingredients intended for acid gelation by preheating**

Xia 1, Mario Barra 1, Lilia Ahrné 1, \*Section of Ingredient and Dairy Technology, Department of Food Science, University of Copenhagen, Rolighedsvej 26, 1958 Frederiksberg, Copenhagen, Denmark

**8.Transformation of Microcrystalline Cellulose into Functional Pickering Particles via Deep Eutectic Solvent and Ultra-High-Pressure Homogenization**

Lingxin You 1 2, Benoît Marcolini 1, Jérôme Bour 1, Yves Fleming 1, Peter Fischer 2, Christos Soukoulis 1

1 Luxembourg Institute of Science and Technology (LIST), 5 avenue des Hauts-Fourneaux, Esch-sur-Alzette L-4362, Luxembourg 2 ETH Zurich, Institute of Food, Nutrition and Health, 8092 Zürich, Switzerland

**9.Properties of heat-induced gels from binary mixture of pea, soy and rapeseed proteins**

Fangxin Lyu, Jennifer Rauhöft, Martina Klost and Stephan Drusch Technische Universität Berlin, Faculty III Process Sciences, Institute for Food Technology and Food Chemistry, Department of Food Technology and Food Material Science, Straße des 17. Juni 135, 10623 Berlin, Germany

**10.Impact of chlorogenic acid or essential oils of carrageenan-alginate edible films on structural, functional and release properties.**

P. Pišonić1, F. Debeaufort2,3, D. Klepac4, V. Stulić1, M. Ščetar1, N. Benbettaieb2,3 and M. Kurek1 1University of Zagreb, Faculty of Food Technology and Biotechnology, Pierottijeva, 10000 Zagreb, Croatia 2Univ. Bourgogne-Franche Comté, Institut Agro Dijon, University of Burgundy, Inrae, Joint unit UMR PAM Food Processing and Microbiology & MP2, Esplanade Erasme, Dijon, France

3University of Burgundy, Institute of Technology, BioEngineering dpt., Blvd Dr Petitjean, Dijon, France 4University of Rijeka, Faculty of Medicine, Braće Branchetta 20, 51000 Rijeka, Croatia

**11.Release of allyl isothiocyanate from antifungal hydrogels based on sodium alginate and β-cyclodextrin inclusion complexes**

C. Muñoz-Shugulí1,2\*, F. Rodríguez Mercado2, M.J. Galotto2, N. Benbettaieb3,4, F. Debeaufort3,4 1 Escuela Superior Politécnica de Chimborazo (ESPOCH), Faculty of Science, EC060106, Riobamba, Ecuador. 2 University of Santiago of Chile (USACH), Packaging Innovation Center (LABEN), 9170201, Santiago, Chile. 3 University of Burgundy, Institute of Technology, Dpt. BioEngineering, Blvd Dr. PetitJean, 21000 Dijon France 4 University of Bourgogne Franche-Comté, L’Institut AgroDijon, INRAé, Joint Unit 1517 Food Processing and Microbiology, 1 esplanade Erasme, 21000, Dijon, France.

**12.Adhesion properties of Lacticaseibacillus rhamnosus GG to microalgal proteins**

J Fortuin1,2, P Grysan1, M Iken3 and C Soukoulis1 1Luxembourg Institute of Science and Technology (LIST), 5 avenue des Hauts Fourneaux, L4362, Esch-sur-Alzette, Luxembourg 2Food Quality and Design Group (FQD), Wageningen University and Research (WUR), 6708 NL Wageningen, The Netherlands 3PM International AG, Schengen, Luxembourg

**13**. **Success and failure in mayonnaise preparation in the kitchen [1]**

Mahdiyeh Ghaffari a, Arjen Bot b,c,Rogier Brussee d, Gerjen H. Tinnevelt a, Jeroen J. Jansena (a)Radboud University, Institute for Molecules and Materials, Analytical Chemistry, Nijmegen, the Netherlands (b)Unilever Foods Innovation Centre, Wageningen, the Netherlands (c) Laboratory of Physics and Physical Chemistry of Foods, Department of Agrotechnology and Food Sciences, Wageningen University and Research, Wageningen, the Netherlands (d) Jheronimus Academy of Data Science, ‘s Hertogenbosch, the Netherlands

**14. Influence of the Corona surface treatment on antioxidant-PLA films coated with gelatine-based layer incorporating different phenolic compounds.**

C. Offei1, C. Poulain1, N. Benbettaieb1,2 and F. Debeaufort1,2 1Univ. Bourgogne-Franche Comté, Institut Agro Dijon, University of Burgundy, Inrae, Joint unit UMR PAM Food Processing and Microbiology & MP2, Esplanade Erasme, Dijon, France 2University of Burgundy, Institute of Technology, BioEngineering dpt., Blvd Dr Petitjean, Dijon, France,

**15**.**Exploring germination-induced changes in the composition, protein properties, functionality, and oleosome behaviour of soybeans.**

Arthur Baak1, Costas Nikiforidis2, Jack Yang1 1Laboratory of Physics and Physical Chemistry of Foods, Wageningen University and Research, Bornse Weilanden 9, 6708WG, Wageningen, the Netherlands

2Biobased Chemistry and Technology, Wageningen University and Research, Wageningen. Bronland 9, 6708 WG, Wageningen

**16.Development of a chromatographic profiling method for the analysis of heteroexopolysaccharides in yoghurt**

A Furch1, C Nachtigall2, A M Wagemans2, H Rohm2, D Jaros2 and D Wefers1 1Insitute of Chemistry, Food Chemistry, Martin Luther University Halle-Wittenberg, 06120, Halle (Saale), Germany 2Chair of Food Engineering, Institute of Natural Materials Technology, Technische Universität Dresden, 01062, Dresden, Germany

17. **Sustainable Pectin Extraction from Wet Apple Pomace: Physicochemical and Structural Characterization, Water Holding Capacity**

Jingwei Liu1,2, Xin Jin2, Jack Yang1, Jinfeng Bi2 and Erik van der Linden1, 1 Laboratory of Physics and Physical Chemistry of Foods, Wageningen University, Wageningen, The Netherlands, 2 Institute of Food Science and Technology, Chinese Academy of Agricultural Sciences (CAAS) / Key Laboratory of Agro-Products Processing, Ministry of Agriculture and Rural Affairs, Beijing, 100193, PR China

18. **The Use of Agarose as a Gelator in Oil Solidification Processes: A Review**

O. Paroń1, J. Harasym1, 1Department of Biotechnology and Food Analysis, Wroclaw University of Economics and Business, Komandorska 118 Street, 53-345 Wrocław, Poland

19. **The process of solidifying different types of oil (rapeseed, pumpkin, hemp) using agarose as a single oleogelator**

O. Paroń1, J. Harasym1 *1Department of Biotechnology and Food Analysis, Wroclaw University of Economics and Business, Komandorska 118 Street, 53-345 Wrocław, Poland*

20. **Effect of hydrostatic pressure in the thickening and emulsifying properties of citrus pomace.**

S Bobadilla, J A Castillo, M Espert, A Salvador and T Sanz *Instituto de Agroquímica y Tecnología de Alimentos (IATA-CSIC)* *Avenida Agustín Escardino 7, 46980-Paterna (Valencia, Spain)*

21. **Exploring the impact of Supercritical CO2 on protein stability in crowded environment – a model system**

M Justin1, A Lerbret1 and C Loupiac1, 1University Bourgogne Franche-Comté, Institute AgroDijon, UMR PAM A02.102, 21000 Dijon, France

22. **Developing Strategies for the Production of Potato Protein Aerogels**

Ana Catarina Leitea, Ricardo N. Pereiraa,b, Rui M. Rodriguesa,ba CEB – Centre of Biological Engineering, of Minho, Campus de Gualtar, 4710-057 Braga, Portugal , b LABBELS – Associate Laboratory, 4710-057 Braga/Guimarães, Portugal

23. **Effect of exopolysaccharides on the processing properties of Einkorn wheat**

Denisse Bender1, Clemens Mazelle1, Stefano D’Amico2, Vera Fraberger1, Konrad Domig11Institute of Food Science, Department of Biotechnology and Food Science, University of Natural Resources and Life Sciences, Vienna, Vienna, Austria, 2Institute for Animal Nutrition and Feed, AGES – Austrian Agency for Health and Food Safety, Spargelfeldstraße 191, 1220 Vienna

24. **Evaluation of thickening effect of *sesbania* gum and carboxymethyl *sesbania* gum**

Xiaojia Bian1, Ning Tang1, Yongqiang Cheng1, Jasper Landman2 1Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China, 2Wageningen Univ, Lab Phys & Phys Chem Foods, Bornse Weilanden 9, NL-6708 WG Wageningen, Netherlands

25. **Development of protein-polysaccharide complex-based emulsions and emulsion-gels for food applications.**

Kazuhiro Maeda1, Keiji Goto1, Makoto Nakauma1 and Takahiro Funami1, 1 San-Ei Gen F.F.I., Inc., 1-1-11, Sanwa-cho, Toyonaka, Osaka 561-8588 JAPAN

26. **Effect of pH and heating on the physicochemical, interfacial and emulsifying properties of hemp seed protein isolates**

Davide ODELLI1\*, Lingxin YOU1,2, Jennyfer FORTUIN1,3 and Christos SOUKOULIS1, 1Environmental Research and Innovation (ERIN) Department, Luxembourg Institute of Science and Technology (LIST), 5 avenue des Hauts Fourneaux, Esch-sur-Alzette, L4362, LUXEMBOURG , 2 ETH Zurich, Institute of Food, Nutrition and Health, 8092 Zurich, Switzerland, 3Food Quality and Design Group, Wageningen University and Research, 6708 NL, Wageningen, the Netherlands

27. **Impact of Serish root gum on the rheological, tribological, and sensory characteristics of non-dairy low-fat coffee creamers**

Ferdows Pourabdollah1, Seyed Mohammad Ali Razavi\*1, 1Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box: 91775-1163, Mashhad, Iran

28. **Intelligent hybrid aerogel of sage seed gum-zein protein containing pomegranate peel anthocyanin: Fabrication and characterization**

Atefeh Farahmand, Seyed Mohammad Ali Razavi, Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box 91775-1163, Mashhad, Iran

29. **Solubilisation of galactans from the red seaweed *Pyropia columbina* during processing and their impact on the rheological properties of suspensions**

A Souto-Prieto1,2, A Cobos1, T Ferreiro2, Rivas M3, Abuin-Arias L2, P Lopez-Sanchez4, 1Department of Analytical, Chemistry, Nutrition and Food Science, University of Santiago de Compostela, Lugo 27002, Spain2Dairy Products and Food Technology Centre (APLTA), Universidade de Santiago de , Compostela, Lugo, 27002, Spain, 3Department of Food Technology, Marine Research Institute IIM-CSIC, Rúa de Eduardo Cabello, Vigo, 36208, Spain, 4Area de Infraestructuras de Investigación, Universidade de Santiago de Compostela, Santiago de Compostela 15782, Spain

**30.Intelligent hybrid aerogel of sage seed gum-zein protein containing pomegranate peel anthocyanin: Fabrication and characterization**

Atefeh Farahmand, Seyed Mohammad Ali Razavi, *Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box 91775-1163, Mashhad, Iran*

**31.The impact of pH-induced electrostatic interactions on the properties of lysozyme amyloid fibrils-WPI composite gel**

H Khalesi1, K Nishinari2, R Kadkhodaee3\* and Y Fang1\*, Department of Food Science and Technology, School of Agriculture and Biology, Shanghai Jiao Tong University, Shanghai 200240, China, 2 Glyn O. Phillips Hydrocolloid Research Centre, School of Food and Biological Engineering, Hubei University of Technology, Wuhan, 430068, China, 3 Department of Food Physics, Research Institute of Food Science and Technology (RIFST), Mashhad, Iran

32.**Structural Modification of Lentinan from *Lentinula edodes* Through Submerged Fermentation**

SZ Razavi1,2, Y Brummer1, R Verma3, P Lee Wing3, IJ Joye2, Q Wang1, SW Cui1, 1 Guelph Research and Development Centre, Agriculture and Agri-Food Canada, Guelph, ON, Canada, 2 Department of Food Science, University of Guelph, Guelph, ON, Canada, 3 The Food Development Group, Richmond Hill, ON, Canada

**33.Facile method to deliver naringenin in functional foods using basil seeds gum water-soluble extract.**

Ruwanthi Premathilaka12\*, Matt Golding12, Jaspreet Singh12, Ali Rashidinejad2\*, 1School of Food technology and Natural Sciences, Massey University, Private Bag 11222, Palmerston North 4442, New Zealand, 2Riddet Institute, Massey University, Private Bag 11222, Palmerston North 4442, New Zealand

**34.Effects of polyphenols with different hydroxyl content on the structure, physicochemical properties and *in vitr***o **anaerobic fermentation of Cyperus esculentus starch-polyphenol V-type complex**

Yanfen Yu1, Mengqi Jian1, Minjie Ye1, Yang Qiao1,Bo Xu1, Yongqiang Cheng2 and Jing Gan1, 1College of Life Science, Yantai University, Yantai, Shandong 264000, China., 2Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China.

**35**.**Enzymatic degradation of Pickering protein-based microgels – a strategy to induce demulsification**

Gloria Hernandez1,2, Brent S. Murray2, David Harbottle1, Anwesha Sarkar2, 1 School of Chemical and Process Engineering, University of Leeds, UK., 2 Food Colloids and Bioprocessing Group, School of Food Science and Nutrition, University of Leeds, UK Woodhouse, Leeds LS2 9JT, UK

**36.Origins of polysaccharide conformation and viscoelasticity in miscible heterogeneous solvent**

Pallab Kumar Borah1,2, Johannes Hunger3, Daniela Russo4, Christopher Garvey1, Gleb Yakubov2

1Heinz Maier-Leibnitz Zentrum, Technical University of Munich, Lichtenbergstraße 1, 85748, Germany, 2Soft Matter Biomaterials and Biointerfaces, School of Biosciences, University of Nottingham, Nottingham, LE12 5RD, UK, 3Molecular Spectroscopy Department, Max-Planck-Institut for Polymer Research, Ackermannweg 10, 55128, Mainz, Germany, 4Consiglio Nazionale delle Ricerche & Istituto Officina dei Materiali, Italy & Institut Laue-Langevin, Grenoble, France

**37. Formulation of Spice Oleoresin Emulsions using Natural Emulsifiers and Stabilizing Agents**

Selvakumar Murugesan, Gowtham Palanisamy, N Sai Prasanna, Trivikram Nallamilli, KSMS Raghavarao*,* Department of Chemical Engineering, Indian Institute of Technology Tirupati, Tirupati - 517619, Andhra Pradesh, India.

**38**. **3D Printing for Nutrient-Enriched Gluten-Free bio-inks**

Eftychios Apostolidis, Evgenia N. Nikolaou, Evangelia D. Karvela, Athina Stergiou, Eirini K. Nikolidaki, Vaios T. Karathanos, Department of Nutrition and Dietetics, Harokopio University of Athens, Greece

**39. Evaluation of physicochemical and rheological properties of bread containing beta-glycans from different sources.**

MC Kanata1, E Karvela1, Athanasios Ampeliatis2, AE Yanni and VT Karathanos1, 1 Laboratory of Chemistry-Biochemistry-Physical Chemistry of Foods, Department of Nutrition and Dietetics, Harokopio University, 17671 Athens, Greece. 2 ELBISCO S.A., Industrial and Commercial Food Company, 21st Km Marathonos Avenue, 19009 Pikermi, Greece.

**40.** **Effects of Flour Particle Size and Botanical Origin on the Physicochemical Properties of Bread and the Glycemic, Insulinemic and Appetite Responses of Healthy Adults.**

MC Kanata1, S Koroyannaki1,2, N Tentolouris2, VT Karathanos1 and AE Yanni1, 1Laboratory of Chemistry-Biochemistry-Physical Chemistry of Foods, Department of Nutrition and Dietetics, Harokopio University, 17671 Athens, Greece., 2First Department of Propaedeutic Internal Medicine, Medical School, National and Kapodistrian University of Athens, Laiko General Hospital, 15772 Athens, Greece.

**41. New-Age Tofu – Understanding the Influence of Different Structures on Plant Protein Gels**

M Király1, E Scholten1, M Habibi1, J Yang1, 1Physics and Physical Chemistry of Foods Chair Group, Wageningen University & Research, Bornse Weilanden 9 (Building 118), 6708 WG Wageningen, the Netherlands

**42. Effects of oat beta-glucans enriched white wheat bread on mildly hypercholesterolemic subjects with overweight/obesity following a hypocaloric dietary plan**

KM Makriyanni 1,2, S Koroyannaki 1,2, MC Kanata 1, E Athanasοpoulou 2, VT Karathanos 1, A Kokkinos 2 and AE Yanni 1, 1 Department of Nutrition and Dietetics, Harokopio University of Athens, Greece

2 1st Department of Propaedeutic and Internal Medicine, Laiko General Hospital, Athens Medical School, Athens, Greece

**43. The impact of Moderate Electric Fields on amyloid fibril aggregate formation**

R Leala, RM Rodriguesa,b and RN Pereira a,b, a CEB - Centre of Biological Engineering, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal   
b LABBELS—Associate Laboratory, 4710-057 Braga/Guimarães, Portugal

**44.** **Soybean Peptide Interferes with Type 2 Diabetic Osteoporosis by Inhibiting Ferroptosis through the MAPK/ECM/SLC7A11/GPX4 Pathway**

Y Wang1, M Chu1,M Q Jian1, M J Ye1, Y Qiao1,B Xu1, Y Q Cheng2 and J Gan1, 1College of Life Science, Yantai University, Yantai, Shandong 264000, China. 2Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China.

**45. Glycyrrhiza flavone promotes osteoblast proliferation and differentiation by activating RUNX2 via PI3K/AKT signaling pathway**

H D Chu, Z Liang, J R Xu, Z H Wang, G Li, J Gan\* and B Xu\*, Center for Mitochondria and Healthy Aging, College of Life Sciences, Yantai University of China, Yantai 264005, China

46. **Research on the texture and antioxidant properties of model protein-hydrocolloid-salt emulsions**

J. Rychlicka-Rybska(1), D.Krokosz(1) , A. Pudło (2) , W. Kopeć(2)**,** (1)Regis Ltd., ul. Walerego Sławka 3a, 30-633 Kraków, Poland, [rychlicj@regis.com.pl](mailto:rychlicj@regis.com.pl)(2)Department of Functional Food Products , , Faculty of Biotechnology and Food Science, Wrocław University of Environmental and Life Science 51-630 Wrocław, Poland,

**47. Developed of bio-based coatings with barrier properties applied on recycled polyethylene and biopolymer using an ultrasonic spray coating**

Ana Gabriela Azevedo1\*, Ana Isabel Bourbon1, Graça Brotas2, Tiago Filipe2, Pablo Fucinos1, Lorenzo Pastrana1 and Miguel Cerqueira1, 1 INL - International Iberian Nanotechnology Laboratory, Av. Mestre José Veiga s/n 4715-330, Braga, Portugal, 2 Silvex - Indústria de Plásticos e Papéis, S.A., Rua das Camélias nº 7, 2130-233, Benavente, Portugal

**48. Characterization of *Moringa oleifera* exudate polysaccharide**

Louis M. Nwokocha\*,1, Zulia A. Abdulsalam1, Kate E. Nwokocha2 1Department of Chemistry, University of Ibadan, Ibadan, Nigeria,2Department of Biochemistry, University of Ibadan, Ibadan, Nigeria

**49.** **Brewing yeast disintegration for protein release by horizontal disk milling.**

S Gezgin1, J Bauer2, M Sonntag2, B Brem2, C Langkraer2, J Martin2, G Kaiser1, L de Souza1, L Szántó1, E Moukhina1, M Baunach3, T Kurz3, S Küspert1 and F Rummel1, 1NETZSCH-Gerätebau GmbH, 95100 Selb, Germany,, -Feinmahltechnik GmbH, 95100 Selb, Germany

**FLASH 1. Modeling of extrusion process to reduce allergenicity in snack with greek nuts**

Evgenia N. Nikolaou, Evangelia D. Karvela, Eftychios Apostolidis, Vaios T. Karathanos, Department of Nutrition and Dietetics, Harokopio University of Athens, Greece POSTER-FLASH

**FLASH 2. Tuning functional properties by starch by a combination of enzymatic treatment and infrared processing**

Semwal, Jyotiab & Meera, M.S.a ,*a Department of Grain Science and Technology, CSIR- Central Food Technological, Research Institute, Mysore 570020, Karnataka, India* *b School of Food Science and Nutrition, University of Leeds, Leeds, UK POSTER-FLASH*

**FLASH 3. Impact of Heat Treatment on the Molecular Interactions of Pea Protein Fractions**

J H Seibt1,2, M A Schulz2, C S Hundschell1,2, A M Wagemans1,2, 1Chair of Food Engineering, Institute of Natural Material Technology, Technical University Dresden, Bergstr. 120, 01069 Dresden, Germany

2Department of Food Biosciences, Institute of Food Technology and Food Chemistry, Technical University Berlin, Straße des 17. Juni 135, 10623 Berlin, Germany POSTER-FLASH

**FLASH 4. Driving pea and whey protein hydrolysis towards the development of hybrid beverages with improved foamability**

G Di Filippo1, N Innocente1, S Melchior2 and S Calligaris1, 1 Department of Agricultural, Food, Environmental and Animal Sciences, University of Udine, Italy, 2 Department of Human Sciences and Promotion of the Quality of Life, San Raffaele University, Rome, Italy POSTER-FLASH

**FLASH 5. Effects of polyphenols with different hydroxyl content on the structure, physicochemical properties and *in vitr***o **anaerobic fermentation of Cyperus esculentus starch-polyphenol V-type complex**

Y F Yu1, M Q Jian1, M J Ye1, Y Qiao1,B Xu1, Y Q Cheng2 and J Gan1, 1College of Life Science, Yantai University, Yantai, Shandong 264000, China. 2Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China. POSTER-FLASH

**FLASH 6. Production of sugar reduced ice cream by incorporation of inulin and low viscous carrot soluble dietary fibre**

E.Thorenz1, B. Bürgel1, R. Morales-Medina1, L. J. Wagner2, M. Bunzel2, S. Drusch1, 1Technische Universität Berlin, Institute of Food Technology and Food Chemistry, Department of Food, Technology and Material Science, Königin-Luise-Straße 22, 14195 Berlin, Germany, 2Karlsruhe Institute of Technology, Department of Food Chemistry and Phytochemistry, Adenauerring 20, 76131 Karlsruhe, Germany POSTER-FLASH

**FLASH 7. Preparation of dietary fibre from soybean hulls and its application as fat replacer in low-fat ice cream**

Huiling Yan a1, Xiangyu Liu a1, Wenjing Zhang a, Zhaoxiang Ma a, Shanan Chen a, Hui Zhang a, Jie Xiaob, Elke Scholtenc, Yuan Li a,\*, a Research Center of Food Colloids and Delivery of Functionality, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing, 100083, China.

b Guangdong Provincial Key Laboratory of Nutraceuticals and Functional Foods, College of Food Science, South China Agricultural University, Guangzhou, 510642, China., *C Physics and Physical Chemistry of Foods, Wageningen University, Bornse Weilanden 9, 6708 WG, Wageningen, the Netherlands POSTER-FLASH*

**FLASH 8. Sex-based differential digestibility of emulsions: A study into the digestion of edible emulsions stabilized by different emulsifiers**

Mijal Perez1, Leehen Mashiah1, Eden Beck1, Carmit Shani Levi 1, Uri Lesmes 1, \*Department of Biotechnology and Food Engineering, Technion – Israel Institute of Technology, Haifa, Israel POSTER-FLASH

**Poster Session Two Thursday 5th June 1700-18.30**

**50**. **Tribological model system testing of glycerol-water solutions as additives for consumer products.**

G Redpath1, S Marsh2, F Rummel3 and S Küspert3, 1School of Chemical Engineering, University of Birmingham, B15 2 TT, United Kingdom, 2NETZSCH Thermal Instruments UK, Ltd., Wolverhampton West Midlands WV10 7FE, United Kingdom, -Gerätebau GmbH, 95100 Selb, Germany

**51**. **Impact of production technology of bio-based coating emulsion and its application on kraft paper for food-contact packaging**

Vieira, J.M.1,2, Martins, J.T.1,2, Lüdtke, F.L.1,2, Coelho, M.S.3, Correia, J.3, Almeida, B.3, Teixeira, J.A.1,2, Vicente, A.A.1,2, 1 CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal, 2 LABBELS –Associate Laboratory, Braga/Guimarães, Portugal, 3 RAIZ - Forest and Paper Research Institute, Aveiro, Portugal

**52**. **On the impact of rapeseed phenolic compounds on the rapeseed protein gelation**

Sybren J.M. Zondervana,b, Johannes H. Bittera, Atze Jan van der Gootb, Julia K. Kepplerb, Constantinos V. Nikiforidisa, *a Biobased Chemistry and Technology, Wageningen University & Research*, *b Food Process Engineering, Wageningen University & Research*

53. **Food derived protein amyloid-like fibrils and their characterization**

Buse N. Gürbüz1,2; Lorenzo M. Pastrana1; Ricardo N. Pereira2,3; Miguel A. Cerqueira1, 1International Iberian Nanotechnology Laboratory - Av. Mestre José Veiga, Braga 4715-330, Portugal, 2Centre of Biological Engineering, Minho University, 4710-057 Braga, Portugal, 3 LABBELS - Associate Laboratory, Guimarães, Braga, Portugal

**54.Study on physical properties and gelation mechanism of mixed gelatin gels at varying storage times**

Shingo Matsukawa1, Kaede Takatsuno1, Yoko Nitta2, and Catherine Taylor Nordgård3, 1Department of Food Science and Technology, Tokyo University of Marine Science and Technology, 4-5-7 Konan, Minato-ku, Tokyo 108-8477, Japan, 2Natural Science Division, Ochanomizu University, 2-1-1 Otsuka, Bunkyo-ku, Tokyo, 112-8610, Japan, 3 NOBIPOL, Department of Biotechnology and Food Science, Norwegian University of Science and Technology, NTNU, Norway

**55**. **Gelation of gellan induced by trivalent and monovalent cations studied by NMR and particle tracking**

C. Hu, X. Yang, S. Matsukawa, Department of Food Science and Technology, Tokyo University of Marine Science and Technology, 4-5-7 Konan, Minato-ku, Tokyo 108-8477, Japan

**56**. **Effects of Incubation Time of Plasma Activated Water (PAW) Combined Annealing for the Modification of Functional Properties of Potato Starch**

Gebremedhin Gebremariam Gebremical1\*, Silvia Tappi1,2, Romolo Laurita3, Filippo Capelli3, Federico Drudi1, Santina Romani1,2, Pietro Rocculi1,2 *1Department of Agricultural and Food Sciences, University of Bologna, Piazza Goidanich, 6047522 Cesena, Italy*,*2Interdepartmental Centre for Agri-Food Industrial Research, University of Bologna, Via Q. Bucci 336, 47522 Cesena, Italy*, *3Department of Industrial Engineering (DIN), University of Bologna, Via Terracini 24, Bologna, Italy*

**57. Chitosan active coatings incorporating cloisite for improved PLA packaging film**

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**58.** **Corncob Cellulose Microspheres for Targeted Probiotic Delivery and Gut-Targeted Therapy**

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**59. Metal ions drive the directional self-assembly of glycyrrhetinic acid into a multifunctional sustained-release supramolecular hydrogel**

Zhang Hui

**60.Tannia starch: functional and structural characterisation**

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**61.Induction of whey protein fibrillar structures through high-temperature ohmic heating**

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**62.** **Plant Proteins and Their Non-Protein Components: Understanding Their Interplay with Different Starch Types during Hydrothermal Processing**

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**63. Enhancing Technological and Nutritional Value of Pea Protein Concentrate through Subcritical Water Hydrolysis**

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**64.Effect of freeze-thaw process on the SAOS and LAOS properties of reconstituted Aloe vera gel powder**

Shokoufeh Taziki Shams-Abadi, Mariam Abdul Rahman, Samira Dehghani and Seyed Mohammad Ali Razavi, 1Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box: 91775-1163, Mashhad, Iran

**65.Novel functional hydrocolloids from New Zealand ferns: Effects of environmental and processing parameters**

Felicia Z.W. Peh1\*, Kelvin K. T. Goh1 & Lara Matia-Merino1 1 School of Food Technology and Natural Sciences, Massey University, Palmerston North, New Zealand

**66.Hemicellulose and xylooligosaccharides from olive stones: an innovative source for food applications**

Francesca Trevisiol1, Niccolò Renoldi1, Asja Brovedani1, Marilena Marino1, Clara Comuzzi1, Hana Maleej2, Nadia Innocente1, Sonia Calligaris1**,** 1Department of Agri-Food, Environmental and Animal Sciences, University of Udine, Udine, Italy**,** 2University of Gabes, Faculty of Sciences of Gabes, Laboratory of Biodiversity and Valorization of Arid Areas Bioresources (BVBAA), LR16ES36, Faculty of Sciences, Erriadh 6072, Gabes, Tunisia

**67.Discovering novel emulsion-based functional foods: Use of black fig pectic compounds with grape seed polyphenols**

M Buyuk1, A Yemenicioglu1, 1İzmir Institute of Technology, Food Engineering Dept., Laboratory of Food Chemistry and Biochemistry, İzmir 35433, Türkiye***.***

**68**. **Leguminous forages as sustainable bioresources of industrially relevant galactomannans: The case of red clover (*Trifolium pratense L.*) seed gum**

L. You, J. Fortuin, D. Odelli, C. Soukoulis, Luxembourg Institute of Science and Technology, 5 avenue des Hauts Fourneaux, L-4362 Belval, Luxembourg

69. **Enhancing the aqueous extraction of sunflower seed proteins by addition of NaCl or ultrasound treatment**

Giovanna VERDE, Norbert RAAK, Department of Food Science, University of Copenhagen, 1958 Frederiksberg C, Denmark

**70.Carrageenan and waxy corn starch mixture: an innovative stabilizer for custard desserts stability**

Razieh Kashi, Seyed Mohammad Ali Razavi, Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box: 91775-1163, Mashhad, Iran

**71.Molecular Interactions and Gelation Dynamics in Alginate-Protein Bioinks: Towards Plant-Based Alternatives**

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**72.Carboxymethylcellulose (CMC) incorporation to edible bigel based on gelatin-sunflower oil: The effect on physicochemical and structural properties**

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**73.Towards tailoring the viscoelasticity of liquid-liquid interfaces in emulsions: understanding phospholipid-protein interactions at the oil-water interface**

Kerstin Risse1, Jean-Luc Bridot2, Sabrina Bäther3, Leonard Sagis4, Stephan Drusch1, 1 Technische Universität Berlin, Faculty III Process Sciences, Institute of Food Technology and Food Chemistry, Department of Food Technology and Food Material Science, Straße des 17. Juni 135, 10623 Berlin, Germany, 2 Teclis Scientific, Civrieux-d'Azergues, 69380, France, 3 Institute of Natural Materials Technology, Chair of Food Engineering, Technical University Dresden, Bergstraße 120, 01069 Dresden, Germany, 4Laboratory of Physics and Physical Chemistry of Foods, Wageningen University, Bornse Weilanden 9, 6708WG Wageningen, The Netherlands

**74.Soybean Peptide Interferes with Type 2 Diabetic Osteoporosis by Inhibiting Ferroptosis through the MAPK/ECM/SLC7A11/GPX4 Pathway**

Yan Wang1, Ming Chu1,Mengqi Jian1, Minjie Ye1, Yang Qiao1,Bo Xu1, Yongqiang Cheng2 and Jing Gan1

1College of Life Science, Yantai University, Yantai, Shandong 264000, China. 2Beijing Key Laboratory of Functional Food from Plant Resources, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China.

**75**. **The formation mechanism and** **applications of α-La@cAMP hydrogel**

Pengcheng Du1, Xing Li1,Xiangyu Liu1, Zhaoxiang Ma1, Yuan Li1 *1Research Center of Food Colloids and Delivery of Functionality, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing 100083, China*

**76.Oral co-polymeric nano gels for targeted** **dapagliflozin delivery against colon cancer**

Samaa Abdullahand Rana Talal Abu-Hwaij

College of Pharmacy, Amman Arab University, Amman 11953, Jordan POSTER

**77.Marine polysaccharide-based edible film as an alternative to plastic packaging: Preparations, applications and recent advances**

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**78.The impact of deposition architecture in enhancing the barrier properties of polylactic acid films**

Ana Isabel Bourbon1, Antía Lestido-Cardama1,2, Miguel Cerqueira1, Ana Gabriela Azevedo1, Eugenia Núñez3 and Lorenzo Pastrana1, 1INL, International Iberian Nanotechnology Laboratory, Av. Mestre José Veiga s/n, 4715-330 Braga, Portugal, 2Department of Analytical Chemistry, Nutrition and Food Science, Faculty of Pharmacy, University of Santiago de Compostela, Campus Vida, 15782 Santiago de Compostela, Spain, 3Food Safety and Preservation Department, Institute of Agrochemistry and Food Technology (IATA-CSIC), Valencia, Spain

**79. Exploring meltable high-protein cheese analogue formulated using canola protein, waxy corn starch, and** **coconut oil: impact of heating condition and formulation composition**

Amir Vahedifara, Jianping Wua, a Department of Agricultural, Food and Nutritional Science, University of Alberta, Edmonton, AB, Canada T6G 2P5

**80. Opportunity of pulsed electric fields technology (PEF) to fabricate dysphagia friendly chickpea flour-based** **gels**

F Drudi1, J King2,3, S Leong2,3, I Oey2,3, U Tylewicz1,4, 1Department of Agricultural and Food Sciences (DISTAL), University of Bologna, Piazza Goidanich 60, 47521, Cesena, Italy , 2Interdepartmental Centre for Industrial Agri-Food Research (CIRI), University of Bologna, Via Quinto Bucci 336, 47521, Cesena, Italy , 3Department of Food Science, University of Otago, PO BOX 56, Dunedin, 9054, New Zealand, 4Riddet Institute, Private Bag 11 222, Palmerston North, 4442, New Zealand

**FLASH 9. Development of Novel Bigels Fortified with Carrot Pomace**

Nujamee Ngasakul1\*, Michaela Freyová1, Ali Kozlu1, Diana K. Baigts Allende1, and Iveta Klojdová1 1DRIFT-FOOD Center, Faculty of Agrobiology, Food and Natural Resources, Czech University of Life Sciences Prague, Prague 16500, Czech Republic POSTER-FLASH

**FLASH 10. Fostering the protein transition by hybrid food structures: the case study of gels made by milk whey and pea proteins**

Sofia Melchior1, Giulia Di Filippo2, Roberta Pratolino2, Nadia Innocente2, Sonia Calligaris2 1Department of Human Sciences and Promotion of the Quality of Life, San Raffaele University, Via Val Cannuta 247, 00166 Rome, Italy, 2Department of Agricultural, Food, Environmental and Animal Sciences, University of Udine, Italy POSTER-FLASH

**FLASH 11. Towards an understanding of the structuring mechanisms of 3D printed flour-based matrices**

C Dumoulin1, C Leverrier1, S Berland1, C Michon1 and G Almeida1, 1 Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, 91120, Palaiseau, France POSTER-FLASH

**FLASH 12**. **Interaction networks of ulvan-based mixed systems**

CNS Darko 1, S Humayun 1, AD Premarathna 1, B Agyei-Tuffour 2 NJ Goosen 3, R Tuvikene 1

1 School of Natural Sciences and Health, Tallinn University, Narva mnt 29, 10120, Estonia, 2,Department of Materials Science and Engineering, University of Ghana, Annie Jiagge Rd. Legon-Accra, Ghana , 3 Department of Chemical Engineering, Stellenbosch University, Private Bag XI, Stellenbosch 7602, South Africa POSTER-FLASH

**FLASH 13. Influence of molecular weight on the anti-adhesion bioactivity of exopolysaccharides from Leuconostoc mesenteroides against enterotoxigenic Escherichia coli**

TE Pramudito1,3, C Klostermann1, EJ Smid2, HA Schols1 1Laboratory of Food Chemistry, Wageningen University & Research, P.O. Box 17, 6700 AA Wageningen, the Netherlands 2Food Microbiology, Wageningen University & Research, the Netherlands 3Faculty of Biotechnology, Atma Jaya Catholic University of Indonesia, Indonesia POSTER-FLASH

**FLASH 14. Generic behavior of pulse proteins in making foam**

Penghui Shen1, Solange Ha1,2, Jinfeng Peng3, Jasper Landman1, Leonard M.C. Sagis1, 1 Laboratory of Physics and Physical Chemistry of Foods, Wageningen University, Bornse Weilanden 9, 6708 WG Wageningen, The Netherlands, 2 Laboratory of Food Process Engineering, Wageningen University, Bornse Weilanden 9, 6708 WG Wageningen, The Netherlands, 3 Danone global Research & Innovation, Utrecht, The Netherlands POSTER-FLASH

**FLASH 15. Exploitation of protein-pectin-polyphenol interactions for stabilization of reduced-oil white bean aquafaba vegan mayonnaise**

Ada Ata1 Miray Büyük1& Ahmet Yemenicioğlu1\*, 1 Department of Food Engineering, Faculty of Engineering, İzmir Institute of Technology POSTER-FLASH

**FLASH 16. Formulation of CNC/WPI Complexes for Enhanced Surface Properties and Pickering Emulsion Stabilization**

Eda Yildiz 1,2, Zeynep Altintas 11 Division of Bioinspired Materials and Biosensor Technologies, Institute of Materials Science,Faculty of Engineering, Kiel University, 24143 Kiel, Germany1Department of Food Engineering, Middle East Technical University, 06800 Ankara, Turkey POSTER-FLASH

**FLASH 17. Valorizing agricultural waste: Utilizing corn plant leftover to grow yeast biomass, as a potential source of sustainable protein**

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**FLASH 18 .Microstructural and Diffusive Characterization of Calcium Alginate Hydrogels**

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**FLASH 19. Utilisation of pectin from fermented cabbage waste in jam production**

F Cebeci1 and T Erten1, 1Department of Nutrition and Dietetics, Faculty of Health Sciences, Bayburt University, Bayburt 69000, Türkiye POSTER-FLASH

**FLASH 20. Hydrocolloids for enhanced gelation and colloidal stability of precision fermentation-derived β-lactoglobulin**

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**FLASH 21 .Encapsulation of Blackberry Extract by Basil Seed Gum- Whey Protein Concentrate Nanoemulsion**

Samin Sadeghi, Seyed Mohammad Ali Razavi and Maryam Nadi, Center of Excellence in Native Natural Hydrocolloids of Iran, Ferdowsi University of Mashhad, PO Box: 91775-1163, Mashhad, Iran POSTER-FLASH

**FLASH 22 .α-Lactalbumin Nanotube as a Novel Delivery System for Food Bioactive Compounds**

Jipeng Zhang, Xin Li, Yu Yuan, Zekun Li, Xing Li, Xiangyu Liu, Bin Liu, Yuan Li\* Research Center of Food Colloids and Delivery of Functionality, College of Food Science and Nutritional Engineering, China Agricultural University, Beijing, 100083, China. POSTER-FLASH

**FLASH 23. Chitosan-Genipin Immobilisation System for *Alcalase*: Targeted Modifications in Sodium Caseinate Hydrolysate**

M.C. Mazzocato1, J.C. Jacquier1, 1School of Agriculture and Food Science, Institute of Food and Health, University College Dublin (UCD), Belfield, D04 V1W8 Dublin, Ireland. POSTER-FLASH

**FLASH 24. Consumer Acceptance of Resveratrol-Loaded Crackers and Cookies Aiming at Functional Food Development.**

Pedro. M. Silva1,2,3, Miguel A. Cerqueira3 , Lorenzo Pastrana3, Manuel A. Coimbra4 , Antonio A. Vicente1,2, Filip Van Bockstaele5, Daylan Tzompa-Sosa5, Koen Dewettinck5, 1 – Centre of Biological Engineering (CEB), Campus de Gualtar, University of Minho, 4710-057 Braga, Portugal, 2 – Associate Laboratory (LABBELS), Braga/Guimarães, Portugal3 – International Iberian Nanotechnology Laboratory (INL), Av. Mestre José Veiga, 4715-330 Braga, Portugal, 4 – LAQV/REQUIMTE, Department of Chemistry, University of Aveiro, 3810-193 Aveiro, Portugal, 5 – Food Structure and Function (FS&F) Research Group, Department of Food Technology, Safety and Health, Faculty of Bioscience Engineering, Ghent University, Ghent, Belgium POSTER-FLASH