



Tuesday, 11th October 2022

12:00-
13:40

Conference welcome and Session 1

Rene Floris, Fred van de Velde

12:10-12:35 [KN01]

Optimising flavour and mouthfeel aspects of plant protein ingredients and plant-based foods

Els de Hoog

NIZO food research, Ede, The Netherlands

12:35-12:40 Q&A

12:40-12:55 [O01]

Improving lubrication and functional properties of native plant proteins by microgelation for optimal sensory and fat-replacement food applications

Ben Kew, Evan Liams, Melvin Holmes, Anwasha Sarkar

University of Leeds, Leeds, UK

12:55-13:00 Q&A

13:00-13:15 [O02]

Fermentation for texture and flavor development in plant-based cheese

Carmen Masia^{1,2}, Poul Erik Jensen¹, Saeed Rahimi Yazdi³

¹University of Copenhagen, Copenhagen, Denmark. ²Chr. Hansen A/S, Hørsholm, Denmark. ³Chr Hansen A/S, Hørsholm, Denmark

13:15-13:20 Q&A

13:20-13:35 [O03]

Influence of multifunctional strains of lactic acid bacteria on the techno-functional, microbiological, and sensory properties of a lentil-based yoghurt alternative

Theresa Boeck¹, Lilit Ispiryani¹, Andrea Hoehnel¹, Niamh Ahern¹, Francisco C. Almeida¹, Alice Jaeger¹, Aylin W. Sahin¹, Emanuele Zannini¹, Elke K. Arendt^{1,2}

¹School of Food and Nutritional Sciences, University College Cork, Cork, Ireland. ²APC Microbiome Ireland, University College Cork, Cork, Ireland

13:35-13:40 Q&A

13:40-
14:10

Refreshment break

14:10-
14:50

Young Scientist Programme

Rene Floris, Emma Teuling

14:10-14:15 [YSP.01]

Development of plant-based fermentation media for the production of a vegan *L. plantarum* starter culture

Jannis Bulla¹, Jonas Teichmann², Doris Jaros², Harald Rohm²

¹Institute of Natural Materials Technology, Chair of Food Engineering, TU Dresden, Dresden, Germany. ²Institute of Natural Materials Technology, Chair of Food Engineering, Dresden, Germany

14:15-14:20 [YSP.02]

Assessment of chemical modifications on the reduction of the allergenic potential of legume and new plant-based proteins: the effectiveness of the enzymatic hydrolysis for allergy reduction

Luisa Calcinai¹, MariaGiulia Bonomini¹, Ilaria Puxeddu², Stefano Sforza¹, Tullia Tedeschi¹

¹Department of Food and Drug, University of Parma, Parma, Italy. ²Immuno-allergology Unit, Clinical and Experimental Medicine, University of Pisa, Pisa, Italy

14:20-14:25 [YSP.03]

Dispersion of zein into pea protein for cohesiveness and viscoelasticity in plant-based food analogues

Oguz Kaan Ozturk¹, Andres Munoz Salgado², Osvaldo Campanella², Bruce Hamaker¹

¹Purdue University, West Lafayette, USA. ²Ohio State University, Columbus, USA

14:25-14:30 [YSP.04]

Interactions between proteins, phytic acid and calcium in Fava Bean ingredients

Tiffany Amat¹, Rémi Saurel¹, Ali Assifaoui¹, Christophe Schmitt²

¹Institut Agro, Dijon, France. ²Nestlé, Lausanne, Switzerland

14:30-14:35 [YSP.05]

Potential of redcurrant protein as an emulsifier in oil-water-emulsions

Larissa Vivienne Sankowski, Luise Hennig, Stephan Drusch, Monika Brückner-Gühmann

Technische Universität Berlin, Berlin, Germany

14:35-14:40 [YSP.06]

Dry fractionation of legumes: Effect of relative humidity and oil content

R.G.A. Politiek^{1,2}, J.K. Keppler¹, M.E. Bruins², M.A.I. Schutyser¹

¹Wageningen University & Research, Wageningen, The Netherlands. ²Wageningen Food & Biobased Research, Wageningen, The Netherlands

14:50-16:00	<p>Session 2 Rene Floris, Emma Teuling</p> <p>14:50-15:15 [KN02] Plant protein-derived enzymatic digests as bioactive agents for the prevention and treatment of human chronic diseases <u>Rotimi Aluko</u> <i>University of Manitoba, Winnipeg, Canada</i> 15:15-15:20 Q&A</p> <p>15:20-15:35 [O04] Plant protein fibre blends for targeted nutrition of older adults – Optimization of amino acid compositions, <i>in-vitro</i> digestibility and sensory profiles <u>Susanne Naumann-Gola</u> <i>Fraunhofer Institute for Process Engineering and Packaging IVV, Freising, Germany</i> 15:35-15:40 Q&A</p> <p>15:40-15:55 [O05] Effect of enzymatic hydrolysis on the stability of UHT treated faba bean protein emulsion <u>Malik Adil Nawaz</u>¹, Roman Buckow², Hema Jegasothy¹, Regine Stockmann¹ ¹CSIRO, Melbourne, Australia. ²The University of Sydney, Sydney, Australia 15:55-16:00 Q&A</p>
16:00-16:45	<p>Academic Publishing Workshop with Morgane Dagot, Publisher - Food Science</p>
<p>Wednesday, 12th October 2022</p>	
12:00-13:30	<p>Session 3 Rene Floris, Renske Janssen</p> <p>12:00-12:25 [KN03] Chemical reactions affecting application of plant proteins <u>Jean-Paul Vincken</u> <i>Wageningen University, Wageningen, The Netherlands</i> 12:25-12:30 Q&A</p> <p>12:30-12:45 [O06] Biopurification – microbial conversions to improve the quality of plant proteins <u>Herwig Bachmann</u>^{1,2}, Avis Nugroho², Saskia van Schalkwijk¹, Ann Stijnman¹, Wilma Wesselink¹, Simon Jacobs¹, Hernando Suarez¹, Emma Teuling^{1,3}, Kerensa Broersen¹ ¹NIZO, Ede, The Netherlands. ²VU University, Amsterdam, The Netherlands. ³HAS University of Applied Sciences, 's-Hertogenbosch, The Netherlands 12:45-12:50 Q&A</p> <p>12:50-13:05 [O07] Wholistic biorefinery of different pea varieties as alternative protein source <u>Busra Gultekin Subasi</u>¹, Diana Bengtsson², Bitu Forghani¹, Mehdi Abdollahi¹ ¹Chalmers University of Technology, Gothenburg, Sweden. ²Lantmännen Lantbruk, Svalov, Sweden 13:05-13:10 Q&A</p> <p>13:10-13:25 [O08] New approaches to improving techno-functionality of plant protein food ingredients <u>Rewati Bhattarai</u>¹, Stuart Johnson^{1,2} ¹Curtin University, Perth, Australia. ²Ingredients by Design Pty Ltd, Lesmurdie, Australia 13:25-13:30 Q&A</p>
13:30-14:00	<p>Refreshment break</p>
14:00-15:30	<p>Session 4 Renske Janssen, Fred van de Velde</p> <p>14:00-14:25 [KN04] Gelling and structuring of protein melts in extruder cooling dies: Models and observations <u>Michael Beyrer</u> <i>University of Applied Sciences of Western Switzerland, Sion, Switzerland</i> 14:25-14:30 Q&A</p> <p>14:30-14:45 [O09] Enzymatic modification of plant protein concentrates for increased fibrillation during high-moisture extrusion processing <u>Pinja Pöri</u>, Anni Nisov, Kaisu Honkapää, Nesli Sozer <i>VTT Technical Research Centre of Finland, Espoo, Finland</i> 14:45-14:50 Q&A</p> <p>14:50-15:05 [O10] Morphometric properties in 3d of textured proteins: influence of ingredient-process interactions, its implications on product functionality and application performance <u>Marjorie Welchoff</u> <i>Ingredion Incorporated, Bridgewater, NJ, USA</i></p>

15:05-15:10 Q&A

15:10-15:25 [O11]

Rheological properties and extrudability of hemp protein ingredients as influenced by the extraction method

Luca Amagliani¹, Benedetta Fanesi², Guilherme de Oliveira Reis¹, Claudine Bovay¹, Christophe Schmitt¹

¹Nestlé Research, Lausanne, Switzerland. ²Università Politecnica delle Marche, Ancona, Italy

15:25-15:30 Q&A

15:30-16:00

Refreshment break

16:00-17:00

Poster session 1

Wednesday, 13th October 2022

12:00-13:00

Poster session 2

13:00-14:30

Session 5

Emma Teuling, Fred van de Velde

13:00-13:25 [KN05]

The role of proteolysis on the structure and functionality of plant proteins

Juliana Leite Nobrega de Moura Bell

University of California at Davis, Davis, USA

13:25-13:30 Q&A

13:30-13:45 [O12]

A systematic study on the impact of the isoelectric precipitation process on the physical properties and protein composition of soy protein isolates

Diete Verfaillie^{1,2}, Frederik Janssen², Geert Van Royen¹, Arno Wouters²

¹Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Melle, Belgium. ²KU Leuven, Leuven, Belgium

13:45-13:50 Q&A

13:50-14:05 [O13]

Ultrasound-assisted extraction of protein from potato trimmings and the impact thereof on protein structure and functionality

Ben Van den Wouwer^{1,2,3}, Kristof Brijs^{2,3}, Katleen Raes¹

¹Ghent University, Ghent, Belgium. ²KU Leuven, Leuven, Belgium. ³Leuven Food Science and Nutrition Research Centre (LForCe), Leuven, Belgium

14:05-14:10 Q&A

14:10-14:25 [O14]

Texturing fermented emulsion gels from soy protein: how droplet-stabilization affect the gel's microstructure, rheology and tribology

Gabriela Saavedra Isusi^{1,2}, Domenica Paz Puga², Ulrike S. van der Schaaf²

¹Thermo Fischer Scientific, Karlsruhe, Germany. ²Karlsruhe Institute of Technology, Karlsruhe, Germany

14:25-14:30 Q&A

14:30-15:00

Refreshment break

15:00-16:50

Young Scientist Award Ceremony, Session 5 (continued) & Conference close

Rene Floris, Fred van de Velde

15:15-15:30 [O15]

Impact of pea storage protein fractions and their ratio on functionality and nutritional quality

Holly Husband, B. Pam Ismail

University of Minnesota, St. Paul, USA

15:30-15:35 Q&A

15:35-15:50 [O16]

Plant protein-based foods - known plant sources but new microbiological risks?

Alina Kyrylenko, Robyn Eijlander, Marjon Wells-bennik

NIZO, Ede, The Netherlands

15:50-15:55 Q&A

15:55-16:10 [O17]

Sustainable meat alternatives: Probing interactions of potato protein and fungal hyphae composites

Mary Okeudo¹, Brent Murray¹, Simon Connell¹, Rammile Ettelaie¹, Stewart Radford², Anwesha Sarkar¹

¹University of Leeds, Leeds, UK. ²Marlow Foods, Stokesley, UK

16:10-16:15 Q&A

16:15-16:40 [KN06]

Vegan protein sources: trends and developments in new protein sources

Fred van de Velde¹, Renske Janssen^{1,2}, Emma Teuling^{1,2}

¹NIZO, Ede, The Netherlands. ²HAS University of Applied Sciences, 's-Hertogenbosch, The Netherlands

16:40-16:45 Q&A