

Oral Programme

Sunday 1 October 2017	
17:00-19:00	Registration Lobby
19:00-20:00	Welcome Drinks Reception Bar Dug Out
Monday 2 October 2017	
08:30-09:00	Refreshment Break Foyer 1+2 & Athene A
Room	Athene BC Topic: <i>Fundamental Understanding of Dairy Ingredients</i> Session Chair: <i>John Lucey University of Wisconsin-Madison, USA</i>
09:00-09:10	Conference Welcome: Fred van de Velde <i>NIZO, The Netherlands</i>
09:10-09:45	[KN01] Milk proteins: Controlling product-processing interactions for ingredient functionality <i>Thom Huppertz, NIZO, The Netherlands / South Dakota State University, USA</i>
09:45-10:05	[O01] Acid-induced gelation of casein: Impact of maillard reaction-based glycoconjugation and protein cross-linking <i>M. Hannß, N. Hubbe, T. Henle, Technische Universität Dresden, Germany</i>
10:05-10:25	[O02] Naturally-derived surface active block copolymers using casein fractions <i>Z. Atamer¹, A. Kessler², T. Schubert¹, J. Hinrichs¹, J. Weiss², ¹University of Hohenheim, Soft Matter Science and Dairy Technology, Germany, ²University of Hohenheim, Food Physics and Meat Science, Germany</i>
10:25-10:45	[O03] Use of ³¹P NMR and FTIR to investigate the structure and stability of micellar casein during heat treatment <i>M. Boiani^{1,2}, M. Fenelon¹, R.J. FitzGerald², P. Kelly¹, ¹Teagasc Food Research Centre, Ireland, ²University of Limerick, Ireland</i>
10:45-11:15	Refreshment Break Foyer 1+2 & Athene A
Room	Athene BC Chair: <i>Thom Huppertz NIZO, The Netherlands / South Dakota State University, USA</i>
11:15-12:00	Young Scientists Presentations
11:15-11:20	[YSP01] Morphology development during sessile single droplet drying of milk-based components and maltodextrin <i>E.M. Both, R.M. Boom, M.A.I. Schutyser, Wageningen University, The Netherlands</i>
11:22-11:27	[YSP02] Enzymatic crosslinking of milk proteins: Identification of reactive sites in casein micelles using de novo sequencing <i>A. Dürasch¹, S. Machill¹, E. Brunner¹, T. Henle¹, ¹Technische Universität Dresden, Germany</i>
11:29-11:34	[YSP03] Evaluation of meso-scale structural properties of renneted milk gels during syneresis and under induced osmotic pressure gradients <i>M.E. Keck¹, A.H.J. Paterson¹, J.E. Bronlund¹, J.P. Hindmarsh¹, J.S. McLeod², ¹Massey University, New Zealand, ²Hilmar Cheese Company, USA</i>
11:36-11:41	[YSP04] Properties of cultured milk produced from milk with different milk protein genotypes <i>I.A. Ketto¹, S.B. Skeie¹, J. Narvhus¹, R.B. Schüller¹, J. Øyaas², A-G. Johansen^{1,3}, ¹Faculty of Chemistry, Biotechnology and Food Science, Norwegian University of Life Sciences, Norway, ²TINE Meieriet Tunga, Norway, ³TINE SA R&D, Norway</i>
11:43-11:48	[YSP05] Dry heat treatment of whey protein isolate with low methoxyl pectin to improve heat stability of protein in solution and o/w emulsion <i>A.D. Setiowati¹, P. Van der Meeren¹, ¹Ghent University, Belgium</i>
11:50-11:55	[YSP06] Effects of lactose-free whey protein concentrate application on nutritional and rheological aspects of greek yogurts <i>A. Transfeld da Silva, J. Lima, P. Reis, M. Passos, C.G. Baumgartner, C.C.H. Krüger, L.M.B. Cândido, Federal University of Paraná, Brazil</i>
12:00-12:30	[INV01] 3D Printing of Cheese <i>Alan Kelly, University College Cork, Ireland</i>

12:30-14:00	Lunch and Poster Session 1 Foyer 1+2 & Athene A
Room	Athene BC Topic: Fractionation of Dairy Ingredients Session Chair: Todor Vasiljevic, Victoria University, Australia
14:00-14:35	[KN02] Utilising Protein Aggregation and Separation Technology for Generation of Dairy Ingredients Mark Fenelon, Teagasc, Ireland
14:35-14:55	[O04] Isolation and characterization of κ-casein/whey protein particles from heated milk protein concentrate and role of κ-casein in whey protein aggregation S.J. Gaspard ^{1,2} , M.A. Auty ¹ , A.L. Kelly ² , J.A. O'Mahony ² , A. Brodtkorb ¹ , ¹ Teagasc, Ireland, ² University College Cork, Ireland
14:55-15:15	[O05] Technical-scale extraction of bovine α-, β- and κ-casein from micellar casein T. Schubert ¹ , R. Boom ² , J. Hinrichs ¹ , Z. Atamer ¹ , ¹ University of Hohenheim, Soft Matter Science and Dairy Technology, Germany, ² Wageningen University, Laboratory of Food Process Engineering, The Netherlands
15:15 -15:45	Refreshment Break Foyer 1+2 & Athene A
Room	Athene BC Topic: Enzymatic Modification in Ingredient Manufacture Session Chair: Alan Kelly, University College Cork, Ireland
15:45-16:20	[KN03] Lactose and lactose-derived oligosaccharides: Structure function relationships for biological activities Michael Gänzle, University of Alberta, Canada
16:20-16:40	[O06] Enzymatically cross-linked sodium caseinate for enrichment of acid milk gels N. Raak ¹ , P. Geißler ¹ , Y. Penke ¹ , H. Rohm ¹ , D. Jaros ¹ , ¹ Technische Universität Dresden, Germany
16:40-17:00	[O07] Functional properties of milk protein isolate and its associated enzymatic hydrolysates G. Ryan ^{1,2} , A.B. Nongonierma ^{2,3} , J. O'Regan ¹ , R.J. FitzGerald ² , ¹ Nestlé, Ireland, ² University of Limerick, Ireland, ³ Food for Health Ireland, Ireland
17:00-17:20	[O08] Physicochemical properties of whey protein enzymatic hydrolysates generated at 5 and 50°C M. Dermiki ^{1,2} , N. McCarthy ^{2,3} , R.J. FitzGerald ^{1,2} , ¹ University of Limerick, Ireland, ² Dairy Processing Technology Center, Ireland, ³ Teagasc Food Research Centre, Ireland
18:30-22:00	Conference dinner – ticket holders only Landgoed Hotel Groot Warnsborn
Tuesday 3 October 2017	
08:30-09:00	Refreshment Break Foyer 1+2 & Athene A
Room	Athene BC Topic: Digestion and Biofunctionality Session Chair: Thom Huppertz, NIZO, The Netherlands / South Dakota State University, USA
09:00-09:35	[KN04] Modulating digestion and satiety with dairy ingredients Alan Mackie, University of Leeds, UK
09:35-09:55	[O09] Homogenisation and heat treatment of milk affect in vitro gastric digestion A.I. Mulet-Cabero ^{1,2} , A. Brodtkorb ¹ , M. Fenelon ¹ , P. Wilde ² , A. Mackie ³ , ¹ Teagasc Food Research Centre, Ireland, ² Institute of Food Research, UK, ³ University of Leeds, UK
09:55-10:15	[O10] In vitro digestion of prebiotic carbohydrates added to milk using a rat intestinal enzyme preparation A. Ferreira-Lazarte ¹ , A. Mackie ^{2,3} , A-I. Mulet-Cabero ² , N. Rigby ^{2,3} , A. Montilla ¹ , A. Olano ¹ , M. Villamiel ¹ , ¹ Instituto de Investigación en Ciencias de la Alimentación, CIAL (CSIC-UAM), Spain, ² Institute of Food Research, UK, ³ School of Food Science and Nutrition, UK
10:15-10:35	[O11] Quantification of β-casomorphin-7 release from bovine β-casein variants by multiple reaction monitoring after <i>Ex Vivo</i> gastrointestinal digestion T.T. Le ¹ , T. Asledottir ^{1,2} , B. Petrat-Melin ¹ , N.A. Poulsen ¹ , T. Devold ^{1,2} , G. Vegarud ^{1,2} , L.B. Larsen ¹ , ¹ Aarhus University, Denmark, ² Norwegian University of Life Sciences, Norway
10:35-11:05	Refreshment Break Foyer 1+2 & Athene A
Room	Athene BC
11:05-11:15	Young Scientist Award Ceremony
Room	Athene BC

	<i>Topic: Processing of Dairy Ingredients</i> <i>Session Chair: Mark Fenelon, Teagasc, Ireland</i>
11:15-11:50	[KN05] Understanding, predicting and controlling dairy ingredient powder functionality Seamus A. O'Mahony, <i>University College Cork, Ireland</i>
11:50-12:10	[O12] Cheese age, dairy ingredients and drying temperature: Effect on hydration properties of cheese powders D. Felix da Silva ¹ , R. Godkin ¹ , F. Larsen ¹ , A. Hougaard ¹ , R. Ipsen ¹ , ¹ <i>Copenhagen University, Denmark</i>
12:10-12:30	[O13] An original way to produce functional particles by dry heating whey proteins E. Schong ¹ , M.H. Famelart ¹ , ¹ <i>Agrocampus Ouest, France</i>
12:30-14:00	Lunch and Poster Session 2 Foyer 1+2 & Athene A
13:00-13:30	Tour of Sports Centre, Papendal
Room	Athene BC <i>Topic: Processing of Dairy Ingredients continued</i> <i>Session Chair: David Everett, Dairy Innovation Institute, USA</i>
14:00-14:20	[O14] Stability of whey protein isolate during lab and pilot scale heat treatment A. Brodtkorb ¹ , S.K. Kanniganti ¹ , A. Buggy ¹ , J.A. O'Mahony ² , K.H. Mok ³ , J.Y. Kim ³ , M. Fenelon ¹ , ¹ <i>Teagasc Food Research Centre, Ireland</i> , ² <i>University College Cork, Ireland</i> , ³ <i>Trinity College Dublin, Ireland</i>
14:20-14:40	[O15] Formation and structure of insoluble particles in reconstituted model infant formula powders O. Toikkanen ^{1,2} , M. Outinen ² , L. Malafronte ² , O.J. Rojas ¹ , ¹ <i>Aalto University, Finland</i> , ² <i>Valio Ltd., Finland</i>
14:40-15:00	[O16] Effect of sweet whey powder addition before or after spray drying on the physical, thermal and hydration properties of cheese powders D. Felix da Silva ¹ , D. Tziouri ¹ , R. Mandrup Nielsen ¹ , R. Ipsen ¹ , A. Bygvrå Hougaard ¹ , ¹ <i>Copenhagen University, Denmark</i>
15:00-15:20	[O17] Control of the texture of oil-in-water emulsions by modulating interfacial composition in complex systems containing whey protein aggregates, caseins and non-heated whey proteins T. Loiseleux ¹ , C. Garnier ¹ , T. Croguennec ¹ , V. Beaumal ¹ , C. Jonchere ¹ , M. Anton ¹ , A. Riaublanc ¹ , ¹ <i>INRA, France</i>
15:20-15:50	Refreshment Break Foyer 1+2
Room	Athene BC <i>Topic: Dairy Ingredient Functionality in Applications</i> <i>Session Chair: René Floris, NIZO, The Netherlands</i>
15:50-16:25	[KN06] Milk protein ingredient functionality: Linking ingredient properties to in-product functionality John A. Lucey, <i>University of Wisconsin-Madison, USA</i>
16:25-16:45	[O18] Dairy ingredients in protein bars Inge Gazi, Fred van de Velde, Thom Huppertz, <i>NIZO, The Netherlands</i>
16:45-17:05	[O19] The effect of dairy ingredient processing on the microstructure and texture of cream cheese L. Ong, S.E. Kentish, S.L. Gras, <i>The University of Melbourne, Australia</i>
17:05-17:15	Closing remarks
18:00-22:00	Barbeque <i>Grand Café</i>
Wednesday 4 October 2017	
	NIZO visit and tour
08:30	Tour 1 - Coach to depart from lobby at Papendal Hotel
09:45	Tour 2 - Coach to depart from lobby at Papendal Hotel
11:30	Tour 1 - Coach departs from NIZO to Ede-Wageningen Train Station
12:45	Tour 2 - Coach departs from NIZO to Ede-Wageningen Train Station