



List of conferences

Monday June 7



LIVE PROGRAM

7:45 am (EDT)

Welcoming Remark

Gilles **Froment**, Senior Vice-President, Government & Industry Relations, Lactalis Canada
 Sylvie **Turgeon**, Ph.D., professeure titulaire, Université Laval Chercheur du Centre de recherche STELA (INAF)

Welcome by IDF President

Piercristiano **Brazzale**, President, FIL-IDF, International Dairy Federation

Session A

Microbial ecology: Starters, adjunct and indigenous microbiota

8:10 am

KEYNOTE

Analysis of cheese microbiomes highlights contributions to multiple aspects of quality

Prof **Paul Cotter**, Ph.D., Head of Food Biosciences, Teagasc Food Research Centre Moorepark, Cork, Ireland

8:40 am

CONFERENCES

Matching starter phenotype to functionality for low salt Cheddar cheese production based on viability, permeability, autolysis and enzyme release characteristics in model systems.

Martin **Wilkinson**¹, Yanachkina Palina¹, Doolan Imelda¹, Gisele LaPointe²

¹ University of Limerick Ireland, ² University of Guelph Canada

Bacteriophages on the cheese surface: what diversity and what ecological role?

Eric **Dugat-Bony**¹, Thomas Paillet¹, Julien Lossouarn², Marie-Agnès Petit², Stéphane Chaillou²

¹ Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ² Université Paris-Saclay, INRAE, AgroParisTech, Micalis Institute, F-78352, Jouy-en-Josas, France

9:15 am

Q&A SESSION



9:35 am

STUDENT COMPETITION

Thomas **Paillet** France Isolation and characterization of phage-host couples from Epoisses cheese rind

Zheng **Zhao** Canada Antifungal lactic acid bacteria for use in dairy fermentations

Hatice Ebrar **Kirtil** Turkey Filamentous fungi of Turkish mold-ripened cheeses and genetic characteristics of *Penicillium roqueforti* strains

Marie-Pier **B.Vigneux** Canada Impact of adding sodium caseinate on rennet-induced coagulation of reverse osmosis milk concentrates

Bozhao **Li** Ireland Suitability of a novel camel (*Camelus dromedarius*) chymosin as a coagulant for Cheddar cheese

Imène **Ferroukhi** FRANCE Investigating alternative salting methods to reduce the salt content in blue-veined cheese



LIVE PROGRAM

Session B

Ripening, flavor and cheese authenticity

10:35 am

KEYNOTE

Chemical characterisation of cheese varieties

Ylva Margareta Ardö, PhD., Professor emerita in dairy technology, Department of Food Science, University of Copenhagen, Denmark

11:15 am

CONFERENCES

Effect of plasmin on casein hydrolysis and textural properties of a model cheese during ripening

Huifang **Cai**¹, Etske Bijl², Elke Scholten¹, Guido Sala¹

¹ Physics and Physical Chemistry of Foods, Wageningen University, the Netherlands, ² Dairy Science and Technology Group, Food Quality and Design, Wageningen University, the Netherlands

Is it possible to differ Grana Padano PDO cheese from generic hard cheeses through DNA metabarcoding and DNA metafingerprinting of the cheese microbiota?

Miriam **Zago**¹, Tommaso Bardelli², Lia Rossetti¹, Nelson Nazzicari¹, Barbara Bonvini¹, Flavio Tidona¹, Domenico Carminati¹, Giorgio Giraffa¹

¹ CREA - Research Centre for Animal Production and Aquaculture, ² CREA - Research Centre for Plant Protection and Certification

11:45 am

Q&A SESSION

Wednesday June 9



LIVE PROGRAM

7:45 am ([EDT](#))

Word of the agricultural minister of Canada

Ms. minister Marie-Claude **Bibeau**

Session C

Cheese Technology: Process eco-efficiency and innovative approaches

8:00 am

KEYNOTE

An overview on new designer cheeses: from specialized starters to personalized cheeses

Valérie Gagnaire, PhD., and **Gwénaél Jan**, PhD., senior researchers based at INRAE, Science et Technologie du Lait et de l'Œuf, at Rennes in France.

8:30 am

CONFERENCES

Rennet-induced coagulation of milk: new insights into age-old problems

Thom **Huppertz**¹

¹ FrieslandCampina

Extending the performance shelf-life of LMPS Mozzarella cheese using high stretching temperatures in a novel waterless cooker

Erin Aversa¹, Selvarani **Govindasamy-Lucey**², Mark Johnson², John Jaeggi², John Lucey²

¹ University of Wisconsin-Madison, ² Center for Dairy Research, University of Wisconsin-Madison

9:05 am

Q&A SESSION



9:30 am

STUDENT COMPETITION

Hasitha **Priyashantha** Sweden NIR-hyperspectral imaging enables rapid and non-destructive characterization of long-ripening cheeses based on maturity

Beate **Björgan** Effect of scalding temperature on sensory and biochemical properties in a “Manchego-type” goat milk cheese.

Shamim **Hossain** India Casein Content: A better quality index for Cheddar cheese than its age for selecting the optimum blend for processed cheese

Ran **Feng** Denmark Residence time in the cooker-stretcher influences mozzarella cheese composition and structure

Anne Katrine **Laursen** Danmark Modification of texture and microstructure in cow and buffalo milk paneer, by thermal treatment and milk fat content



LIVE PROGRAM

10:30 am

Word of the FIL-IDF Canada President

Catherine Tokarz, president, FIL-IDF Canada

Welcome by IDF Director General

Caroline **Emond**, director general, International Dairy Federation

10:50 am

Session C - Continued

Cheese Technology: Process eco-efficiency and innovative approaches

3D printing for cheese: evaluation as process technology and consumer product

Megan M. **Ross**¹, Shane V. Crowley¹, Mary B. McCarthy¹, Alan P. Morrison¹, Alan M. Collins¹, Jorge Oliveira¹, Suzanne Crotty¹, Alan L. Kelly¹

¹ University College Cork

Eye formation in experimental Swiss-type cheeses ripened in plastic films with varying CO₂-permeability

Walter Bisig¹, Dominik Guggisberg¹, Marie-Therese Fröhlich-Wyder¹, Daniel Wechsler¹

¹ Agroscope

11:25 am

Q&A SESSION

Friday June 11



LIVE PROGRAM

7:45 am ([EDT](#))

Word of the agricultural minister of Québec

Mr. minister André Lamontagne

Session D

Cheese structure and rheology

8:00 am

KEYNOTE

Using rheology to understand the melting behaviour of cheese

Professor **John A. Lucey**, Ph. D., Director of the Center for Dairy Research, University of Wisconsin-Madison, USA

8:25 am

CONFERENCES

Exopolysaccharides from *Lactococcus lactis* for tailoring cream cheese texture

Georg **Surber**¹, Thomas Spiegel^{2,3}, Bich Phuong Dang², Alan Wolfschoon Pombo^{2,4}, Harald Rohm¹, Doris Jaros¹

¹ Chair of Food Engineering, Technische Universität Dresden, 01062 Dresden, Germany, ² Kraft Foods R&D Inc./Mondelēz International, Inselkammerstr. 12–14, Unterhaching, 82008 Munich, Germany, ³ Present Address: Hochland SE, Kemptener Str. 17, 88178 Heimenkirch, Germany, ⁴ Present Address: Fliederstrasse 20, 85354 Freising, Germany

Modelling diffusion of salt in model cheese matrices using time-lapse confocal laser scanning microscopy

Prateek **Sharma**^{1,2}, JJ Sheehan¹, Juliane Floury³

¹ Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland, ² NDFS Department, Utah State University, Logan, UT-84341, USA, ³ STLO, INRA, AGROCAMPUS OUEST, 35042, Rennes, France

9:05 am

Q&A SESSION



9:35 am

STUDENT COMPETITION

Rock-Seth **AGOVA** Canada High Voltage Electrical Treatments can substantially improve the biofunctional value of whey

Adam **Cogan** Ireland The Effect of Heating of Cheddar Cheese on In-Vitro Digestion Characteristics, Calcium Functionality and Fat Structure-Function Relationships in Comparison to Unheated Cheese.

Rami **Althnaibat** Canada Glycomacropeptide Purified from Camel Milk Cheese Whey Inhibits the Adhesion of Enterotoxigenic Escherichia coli K88

Mathilde **Pimont-Farge** Canada Hydrogel formation of the self-assembling β -lactoglobulin peptide Pf1-8: Influence of the purification steps

Léa **Guinot** Canada Impact of dairy matrices in a standardized meal on the lipid digestion using in vitro static and dynamic digestion models

Hao **Ouyang** Ireland Understanding preferences for, and consumer behaviour towards, cheese among young, educated, internationally mobile Chinese consumers



LIVE PROGRAM

Session E

Innovation, functionality, nutrition and health

10:40 am

KEYNOTE

Dairy consumption and metabolic health: a focus on cheese

Eileen **Gibney**, PhD., University College Dublin, School of Agriculture and Food Science, Ireland

11:05 am

CONFERENCES

Introduction of advanced nanotechnologies in sensing systems for enhancing authenticity and quality in the dairy value chain: the case study of the EU H2020 MOLOKO project

Paolo **Bulgarelli**¹, Jeroen Peters², Mark Whatton³, Stefano Toffanin⁴

¹ Parmalat S.p.A, Italy, ² WFSR, Wageningen University & Research, Netherlands,

³ QUADRACHEM LABORATORIES LIMITED, United Kingdom, ⁴ CNR-ISMN, Italy

Health benefits of cream cheese enriched with milk polar lipids: focus on lipid metabolism, shingolipidome and associated cardiovascular risk markers

Cécile **Vors**¹, Mélanie Le Barz¹, David Cheillan¹, Annick Bernalier-Donadille², Patrice Gaborit³, Nadine Leconte⁴, Stéphanie Lambert-Porcheron⁵, Corinne Malpuech-Brugère⁶, Marie-Caroline Michalski¹

¹Univ Lyon, CarMeN laboratory, INSERM, INRAE, INSA Lyon, Université Claude Bernard Lyon 1,

²Université Clermont Auvergne, INRA, UMR 454, MEDIS, ³ACTALIA Dairy Products and Technologies, ENILIA ENSMIC, ⁴INRAE, Institut Agro, STLO (Science et Technologie du Lait et de l'Œuf), ⁵Centre de Recherche en Nutrition Humaine Rhône-Alpes, Hospices Civils de Lyon,

⁶Université Clermont Auvergne, INRAE, UNH, Unité de Nutrition Humaine, CRNH Auvergne

11:30 am

Q&A SESSION



ONLINE CONFERENCES

Session A - Microbial ecology: Starters, adjunct and indigenous microbiota

Formation of biogenic amines in raclette-type cheese by *Morganella morganii*.

Lorenz Timo **Ryser**^{1,2}, Emmanuelle Arias-Roth¹, H  l  ne Berthoud¹, C  line Delb  s³, Christophe Chassard³, R  my Bruggmann², Stefan Irmeler¹

¹Agroscope, Schwarzenburgstrasse 161, 3003 Bern, Switzerland, ²University of Bern, Interfaculty Bioinformatics Unit, Baltzerstrasse 6, 3012 Bern, Switzerland, ³Universit   Clermont Auvergne, INRAE, VetAgro Sup, Unit   Mixte de Recherche sur le Fromage, 20 c  te de Reyne, 15000 Aurillac, France

Session B - Ripening, flavor and cheese authenticity

Metabolic fingerprint of a complex food, cheese: development of extractions, uHPLC-HRMS analysis and data processing by W4M.

Sandra Teresita **Mart  n del Campo**¹, Pascale Lieben², Daniel Picque², Sophie Landaud²

¹Tecnologico de Monterrey, ²Universit   Paris-Saclay, INRAE, AgroParisTech, UMR SayFood

Malt flavour in Swiss Raclette cheese.

H  l  ne **Meng**¹, Miguel Piccand¹, Alexandra Baumeier¹, Mireille Tena Stern¹, S  bastien Dubois¹, Ueli von Ah¹, Pascal Fuchsmann¹

¹Agroscope

Stability and functional redundancy of a microbial cheese ecosystem subjected to a perturbation: presentation of several case studies.

Dominique **Swennen**¹, Gersende Gonez², Stevann Volant², Eric Dugat-Bony¹, Sandra Helinck¹, Marie-Agnès Dillies², Pascal Bonnarme¹

¹Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ²Institut Pasteur, Hub de Bioinformatique et Biostatistique – Département Biologie Computationnelle - F-75015 Paris, France

Session C - Cheese Technology: Process eco-efficiency and innovative approaches

Accelerating the migration of norbixin molecules through rennet-induced micellar casein concentrate (MCC) gels by application of an electrical field.

Ali **Alehosseini**¹, Prateek Sharma^{1,2}, Alan L. Kelly³, Jeremiah J. Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland P61 C996, ²Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT-84322-8700, USA, ³School of Food and Nutritional Sciences, University College Cork, Ireland

Applying an external electrical field to overcome calcium-induced resistance to colorant migration in model cheese matrices.

Ali **Alehosseini**¹, Prateek Sharma^{1,2}, Alan L. Kelly³, Jeremiah J. Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland P61 C996, ²Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT-84322-8700, USA, ³School of Food and Nutritional Sciences, University College Cork, Ireland

Opportunities to improve eco-efficiency in cheesemaking by the use of pressure-driven membrane separation processes.

Julien **Chamberland**¹, Scott Benoit¹, Alain Doyen¹, Manuele Margni², Michel Britten³, Yves Pouliot¹

¹Institute of Nutrition and Functional Foods (INAF), Dairy Research Center (STELA), Food Science Department, Université Laval, Québec, QC, Canada, ²CIRAIG, Polytechnique Montréal, Department of Mathematical and Industrial Engineering, Montréal, QC, H3C 3A7, Canada, ³Agriculture and Agri-Food Canada, St-Hyacinthe Research and development Center (SHRDC), St-Hyacinthe, QC, Canada

Use of Lactose Standardization and Extrusion Technology for Manufacture of Colby Cheese.

Hong Jiang¹, S. Govindasamy-Lucey¹, J. Jaeggi¹, M. Johnson¹, J. A. Lucey^{1,2}

¹Center for Dairy Research, ²University of Wisconsin-Madison

Insights into the occurrence of non-coagulating milk using genomic and proteomic approaches.

Frida Lewerentz¹, Marie Paulsson¹, Maria Glantz¹

¹Department of Food Technology, Engineering and Nutrition, Lund University

Application of Laser Induced Breakdown Spectroscopy technique for spatial distribution of salt in cheese matrices.

Prateek Sharma^{1,2}, P Casado-Gavaldà Maria³, JJ Sheehan¹, Carl Sullivan³

¹Teagasc Food Research Centre, Moorepark, Ireland, ²Utah State University, Logan, UT-84341, USA, ³School of Food Science and Environmental Health, Technical University Dublin, Ireland

Influence of different genetic polymorphisms of α s1- and κ -Casein on Havarti type cheese: Effects on cheese making, yield, ripening, and sensory quality.

Siv Skeie¹, Isaya Ketto¹, Martine Andrea Olsen¹, Øyaas Jorun², Kristine Myrer³

¹Faculty of Chemistry, Biotechnology and Food Science (KBM), Norwegian University of Life Sciences, ²TINE SA, ³Nofima

Employment of recombined milk to produce Crescenza, an Italian soft cheese.

Flavio Tidona¹, Marcello Alinovi², Francesco Locci¹, Roberta Ghiglietti¹, Salvatore Francolino¹, Gianluca Brusa¹, Lucia Monti¹, Giorgio Giraffa¹

¹Council for agricultural research and economics, ²University of Parma

The effect of cold atmospheric plasma application on the microbiological properties and free fatty acid profile of Turkish White cheese.

Nazli Turkmen¹, Farah Gonul Aydin², Bahar Onaran Acar³

¹Ankara University Faculty of Agriculture Department of Dairy Technology, ²Ankara University Faculty of Veterinary Medicine Department of Pharmacology and Toxicology, ³Ankara University Faculty of Veterinary Medicine Department of Food Hygiene and Technology

Effect of thermal treatment on cheese milk with serum protein depleted content: an evaluation of rennet coaguability, cheese composition and yield.

Xiaofeng Xia^{1,2}, John Tobin¹, Surabhi Subhir¹, Mark Fenelon¹, Paul McSweeney², Diarmuid Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland , ²School of Food and Nutritional Sciences, University College Cork, Ireland

Session D - Cheese structure and rheology

Evaluation of cheese milk pre-acidification and delayed cooling to reduce moisture migration and textural differences in 291-kg blocks of Cheddar cheese.

Claire Collins¹, Mark Johnson², Selvarani Govindasamy-Lucey², John Jaeggi², John Lucey^{1,2}

¹University of Wisconsin-Madison, ²Center for Dairy Research

Predicting shredding performance of process cheese using wear behavior and material properties.

Prateek Sharma¹, Jason D Young¹, Donald J McMahon¹

¹Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT, 84322-8700, USA

Wear behavior, microstructure and shredding performance of process cheese as influenced by age of the cheese and Tri-sodium citrate (TSC) content.

Prateek Sharma¹, Jason D Young¹, Almut H. Vollmer¹, Donald J McMahon¹

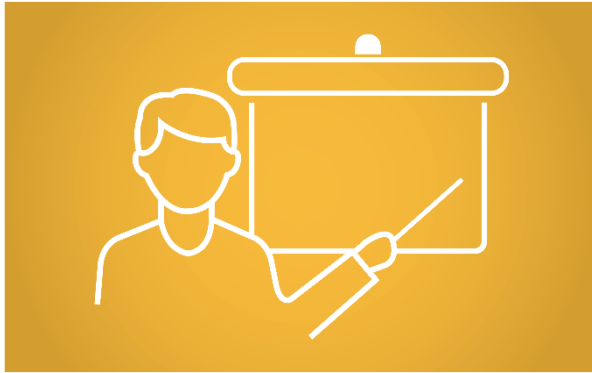
¹Department of Nutrition, Dietetics, and Food Sciences, Utah State University, 8700 Old Main Hill, Logan, UT, 84322-8700, USA

Session E - Innovation, functionality, nutrition and health

Lactobacillus plantarum WCFS1: delivering an effective probiotic strain using dairy food matrices.

Émilie Desfossés-Foucault¹, Monica Daga¹, Gulshan Arora¹

¹Biena Inc.



E-POSTER SESSION

Session A - Microbial ecology: Starters, adjunct and indigenous microbiota

Isolation and characterization of phage-host couples from Epoisses cheese rind

Thomas Paillet¹, Julien Lossouarn ², Marie-Agnès Petit², Eric Dugat-Bony¹

¹Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, F-78850, Thiverval-Grignon, France, ²Université Paris-Saclay, INRAE, AgroParisTech, Micalis Institute, F-78352, Jouy-en-Josas, France

Antifungal lactic acid bacteria for use in dairy fermentations

Zheng Zhao¹, Nuanyi Liang¹, Jonathan Curtis¹, Michael Gänzle¹

¹University of Alberta

Filamentous fungi of Turkish mold-ripened cheeses and genetic characteristics of *Penicillium roqueforti* strains

Hatice Ebrar Kirtil¹, Muhammet Arici², Banu Metin¹

¹Department of Food Engineering, Faculty of Engineering and Natural Sciences, Istanbul Sabahattin Zaim University, Istanbul, Turkey, ²Department of Food Engineering, Faculty of Chemical and Metallurgical Engineering, Yildiz Technical University, Istanbul, Turkey

Identification of *Penicillium* spp. in Turkish mold-ripened cheeses by FT-IR spectroscopy

Hatice Ebrar Kirtil¹, Nur Cebi², Rusen Metin Yildirim², Banu Metin¹, Muhammet Arici²

¹Department of Food Engineering, Faculty of Engineering and Natural Sciences, Istanbul Sabahattin Zaim University, Istanbul, Turkey, ²Department of Food Engineering, Faculty of Chemical and Metallurgical Engineering, Yildiz Technical University, Istanbul, Turkey

Exploring viable community composition of Cheddar cheese using propidium monoazide (PMA)

Zoha Barzideh¹, Gisèle LaPointe¹

¹Canadian Research institute for Food Safety, Department of Food Science, University of Guelph, Canada

The interplay between farming system and raw milk quality: development of new payment parameters of milk in the Parmigiano Reggiano cheese area

Luca Bettera¹, Elena Bancalari¹, Saverio Monica¹, Monica Gatti¹, Benedetta Bottari¹

¹University of Parma

Positive interactions between lactic acid bacteria promoted by nitrogen-based nutritional dependencies

Fanny Canon¹, Marie-Bernadette Maillard¹, Gwénaële Henry¹, Anne Thierry¹, Valérie Gagnaire¹

¹UMR STLO, INRAE, Institut Agro, F35000, Rennes, France

Development of a high-throughput qPCR system for the quantitative investigation of bacterial communities in cheese

Matthias Dreier^{1, 2}, Hélène Berthoud¹, Noam Shani¹, Daniel Wechsler¹, Pilar Junier²

¹Agroscope, Schwarzenburgstrasse 161, CH-3003 Bern, Switzerland, ²University of Neuchâtel, Rue Emile-Argand 11, CH-2000 Neuchâtel, Switzerland

Ability of thermoresistant Enterococcus faecalis to form dairy biofilms

Mérolie Gagnon^{1, 2}, Coralie Goetz^{1, 2}, Julie Jean^{1, 2}, Denis Roy^{1, 2}

¹Université Laval, ²Op+Lait

Application of the Omnilog system in efficient characterization of strains for cheese starter cultures

Molly Moritz¹

¹IFF

Influence of pH and temperature on the formation of biogenic amines and CO₂ using two lactobacilli strains on a Cheddar cheese model system

Irwin Panguripan¹, Kristen Houck², Rodrigo A. Ibáñez², Selvarani Govindasamy-Lucey², Mark E. Johnson², John A. Lucey^{1, 2}

¹Department of Food Science, University of Wisconsin-Madison. Madison, WI 53706, United States, ²Center for Dairy Research, University of Wisconsin-Madison. Madison, WI 53706, United States

High-throughput sequencing for characterization of microbial shifts throughout production and ripening of Idiazabal (ewe's raw milk) cheese

Gorka Santamarina-García¹, Igor Hernández¹, Gustavo Amores¹, Mailo Virto¹

¹Lactiker Research Group, Department of Biochemistry and Molecular Biology, Faculty of Pharmacy, University of the Basque Country UPV/EHU, Paseo de la Universidad 7, 01006 Vitoria-Gasteiz, Spain

Characterizing Bacterial Diversity in Undefined Dairy Starter Cultures

M Siddiqi¹, G LaPointe¹

¹Univeristy of Guelph

Influence of modified "cold" storage on the bacterial composition of raw milk for Provolone Valpadana PDO cheese

Miriam Zago¹, Barbara Bonvini¹, Lia Rossetti¹, Giorgia Fergonzi¹, Flavio Tidona¹, Giorgio Giraffa¹, Domenico Carminati¹

¹Research Centre for Animal Production and Aquaculture (CREA-ZA)

Session B - Ripening, flavor and cheese authenticity

Oxygen concentration influences the profiles of volatile compounds produced by different lactic acid bacteria in a curd-based medium

Solange Buchin¹, Romain Palme¹, Celine Arnould¹, Franck Dufrene¹, Sabrina Jeannin¹, Eric Beuvier¹

¹INRAE, URTAL, Poligny, France

Changes in the quality of pressed cheese produced with raw milk in response to different n-3 fatty acid supplements in the diet of dairy sheep

Delgado D.¹, **Fernández D.**¹, **Gallardo B.**², **Lavín P.**³, **Mantecón A.R.**³ and **Manso T.**²

¹Estación Tecnológica de la Leche, ITACYL, Junta de Castilla y León, Palencia, Spain ita-delfueda@itacyl.es

²Área de Producción Animal. ETS de Ingenierías Agrarias. Universidad de Valladolid. 34004 Palencia, Spain.

³Instituto de Ganadería de Montaña (CSIC-ULE). 24346 Grulleros, León, Spain.

Impact of fat content on eye formation in cheese

Marie-Therese Fröhlich-Wyder¹, Walter Bisig¹, Dominik Guggisberg¹, Daniel Wechsler¹, Ernst Jakob¹

¹Agroscope, Bern, Switzerland

Identification of key odorants in smear-ripened semi-hard cheese

Valérie Gagnaire¹, Marie-Bernadette Maillard¹, Sébastien Lê², Anne Thierry¹

¹INRAE, ²Institut Agro

New solutions for Cheddar & semi-hard cheese “flavor signature” through starter bio-diversity

Jonathan Goodwins¹, Aude Gauchard¹, Loic Pellerin¹, Anne-Sophie Lecorps¹

¹IFF

Reduction in the Brining Time in Parmigiano Reggiano Cheese Production Minimally Affects Proteolysis, with No Effect on Sensory Properties

Cecilia Loffi¹, Tullia Tedeschi², Stefano Sforza², Gianni Galaverna², Elena Bortolazzo³, Anna Garavaldi³, Valeria Musi³, Paolo Reverberi⁴

¹University of Parma - SITEIA.PARMA, Parma, Italy, ²University of Parma, Food and Drug Science Department, Parma, Italy, ³CRPA Lab, Reggio Emilia, Italy, ⁴Parmigiano Reggiano Cheese Consortium, Reggio Emilia, Italy

Changes in the lipolysis process during an extended ripening of a Mexican goat surface cheese

Rosa Vázquez-García¹, Sandra Teresita Martín-del-Campo¹, Livia Sofía Ramos-Hernández¹

¹Tecnologico de Monterrey

Formation of biogenic amines by *Lactobacillus wasatchensis* in experimental Swiss-type cheeses and related opening defects

Daniel Wechsler¹, Hélène Berthoud¹, Stefan Irmeler¹, Matthias Dreier¹, Noam Shani¹, Dominik Guggisberg¹, Reto Portmann¹, René Badertscher¹, Florian Loosli¹

¹Agroscope

Influence of the contamination level of *Lactobacillus parabuchneri* in vat milk and of the cheese making conditions on histamine formation during ripening.

Daniel Wechsler¹, H  l  ne Berthoud¹, Stefan Irmeler¹, Reto Portmann¹, Ren   Badertscher¹, Walter Bisig¹, Marie-Therese Fr  hlich-Wyder¹

¹Agroscope Switzerland

Session C - Cheese Technology: Process eco-efficiency and innovative approaches

Investigating alternative salting methods to reduce the salt content in blue-veined cheese

Imene Ferroukhi¹, Cecile Bord¹, Sylvie Alvarez², Karine Fayolle¹, Rene Lavigne³, Christophe Chassard³, Julie Mardon¹

¹Universit   Clermont Auvergne, INRAE, VetAgro Sup, UMR 545 Fromage, Lempdes, F-63370, France, ²D  partement qualit   et   conomie alimentaire, VetAgro Sup, Lempdes, F-63370, FRANCE, ³Universit   Clermont Auvergne, INRAE, VetAgro Sup, UMR 545 Fromage, 20 C  te de Reyne, Aurillac, F-15000, France

Effect of scalding temperature on sensory and biochemical properties in a “Manchego-type” goat milk cheese.

Beate Bj  rgan¹, Siv Skeie¹, Anne-Gerthe Johansen^{1,2}, Paula Varela Tomasco^{1,3}
¹NMBU, ²TINE SA, ³Nofima

Intact Casein Content: A better quality index for Cheddar cheese than its age for selecting the optimum blend for processed cheese

Shamim Hossain¹, Dushyant Chaudhary¹, Yogesh Khetra², Suresh C.T.¹, Sangita Ganguly²

¹Research Scholar, Dairy Technology, ICAR-National Dairy Research Institute, Karnal, Haryana (132001) India, ²Scientist, Dairy Technology, ICAR-National Dairy Research Institute, Karnal, Haryana (132001) India

Dairy white wastewater recovery: study of the potential reuse in cheese production

Sabine Alalam¹, Am  lie B  rub  ¹, Julien Chamberland¹, Yves Pouliot¹, Steve Labrie¹, Alain Doyen¹

¹Department of Food Sciences, Dairy Research Center (STELA), Institute of Nutrition and Functional Foods (INAF), Universit   Laval, Qu  bec, QC, Canada

Impact of adding sodium caseinate on rennet-induced coagulation of reverse osmosis milk concentrates

Marie-Pier B.Vigneux¹

¹Universit   Laval

Coagulation properties and cheese yield of ultrafiltrated cow milk

Paula Giménez¹, María Cristina Perotti¹, Guillermo George¹, Erica Hynes¹, Carina Viviana Bergamini¹

¹Instituto de Lactología Industrial - UNL/CONICET

A new cheesemaking technology using dairy powder useful to reduce the environmental impact of International trade in cheese.

Marielle Harel-Oger¹, Gilles Garric¹

¹INRAE

Preparation of processed cheese product from cow milk protein powder

Shriya Jaiswal¹, Dr. Sumit Arora², Dr. Rita Mehla³, Dr. Vivek Sharma²

¹M.Tech research scholar , ²Principal Scientist (Dairy Chemistry), ³Senior Research Fellow , Dairy Chemistry

Effect of milk somatic cell count in goat cheese production

Nazli Turkmen¹, Halit Kanca²

¹Ankara University Faculty of Agriculture Department of Dairy Technology, ²Ankara University, Faculty of Veterinary Medicine, Department of Obstetrics and Gynaecology

Application of a cascade membrane filtration process to remove serum protein and standardise the casein, lactose and calcium content of cheese milk

Xiaofeng Xia^{1,2}, John Tobin¹, Mark Fenelon¹, Paul McSweeney², Diarmuid Sheehan¹

¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland, ²School of Food and Nutritional Sciences, University College Cork, Ireland

Session D - Cheese structure and rheology

Dynamic in situ imaging of semi-hard cheese microstructure under large-strain tensile deformation: Understanding structure-fracture relationships

Prabin Lamichhane¹, Mark A. E. Auty¹, Alan L. Kelly², Jeremiah J. Sheehan¹

¹Teagasc Food Research Centre Moorepark, Ireland, ²University College Cork, Ireland

Microstructure and fracture properties of semi-hard cheese: Differentiating the effects of primary proteolysis and calcium solubilisation

Prabin Lamichhane¹, Prateek Sharma¹, Deirdre Kennedy¹, Alan L. Kelly², Jeremiah J. Sheehan¹
¹Teagasc Food Research Centre Moorepark, Ireland, ²University College Cork, Ireland

Solubility of carbon dioxide in casein matrices: Effect of pH, salt, temperature, partial pressure and moisture-to-protein ratio

Prabin Lamichhane¹, Prateek Sharma¹, Alan L. Kelly², Jens Risbo³, Fergal P. Rattray³, Jeremiah J. Sheehan¹
¹Teagasc Food Research Centre Moorepark, Ireland, ²University College Cork, Ireland, ³University of Copenhagen, Denmark

Effect of addition of konjac glucomannan and soy soluble polysaccharides on the rheological, microstructural, and syneresis properties of rennet gels

Hao Ouyang¹, Kieran Kilcawley¹, Song Miao¹, Alan Kelly², Jeremiah Sheehan¹
¹Teagasc Food Research Centre Moorepark, Ireland, ²School of Food and Nutritional Sciences, University College Cork, Ireland

Residence time in the cooker-stretcher influences mozzarella cheese composition and structure

Ran Feng¹, Sylvain Barjon¹, Franciscus Winfried J van der Berg¹, Søren Kristian Lillevang², Lilia Ahrné¹

¹University of Copenhagen, ²Arla Foods

Modification of texture and microstructure in cow and buffalo milk paneer, by thermal treatment and milk fat content

Anne Katrine Laursen¹, Lilia Ahrné¹, Tijs Albert Maria Rovers², Richard Ipsen¹

¹Department of Food Science, University of Copenhagen, Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark, ²Arla Innovation Centre, Arla Foods, Agro Food Park 19, DK-8200, Aarhus-N, Denmark

The rheological properties of rennet gels depend on the divalent cation distribution in the casein micelles

Julien Bauland^{1, 2}, Marie-Hélène FAMELART¹, Fanny GUYOMARC'H¹, Romain JEANTET¹, Said BOUHALLAB¹, Thomas CROGUENNEC¹

¹STLO, INRAE, Institut Agro, 35042, Rennes, France, ²CHR-HANSEN, 2970 Hoersholm, Denmark

Impacts of curd washing on the development of the functional properties of Raclette cheese
Émilien Delorme^{1, 2}, Benoît Paysant², Philippe Trossat², Yves Gaüzère³, Éric Beuvier¹, Christine Achilleos¹

¹INRAE-URTAL, Poligny (39), FR, ²ACTALIA Pôle Expertise Analytique, Poligny (39), FR, ³ISBA-ENILBIO, Poligny (39), FR

Determination of Cheese Volume, Density and Texture of Soft Cheeses

Zlatan Sarić¹, Nermina Hasanbasic², Miroљjub Barac³

¹Dairy Science Profesor, ²Student Food Science, ³Biochemistry Profesor

Microstructure and rheological properties of processed cheese spread with curdlan and scleroglucan as fat mimetics

Aleksandra Florczuk¹

¹University of Warmia and Mazury in Olsztyn

Session E - Innovation, functionality, nutrition and health

Glycomacropeptide Purified from Camel Milk Cheese Whey Inhibits the Adhesion of Enterotoxigenic Escherichia coli K88

Rami Althnaibat¹, Michael Gänzle², Heather Bruce²

¹PhD student at University of Alberta, ²University of Alberta

Impact of dairy matrices in a standardized meal on the lipid digestion using in vitro static and dynamic digestion models

Léa Guinot^{1,2}, Laurie-Ève Rioux^{1,2}, Steve Labrie^{1,2}, Michel Britten^{1,2,3}, Sylvie Turgeon^{1,2}

¹Institute of Nutrition and Functional Foods (INAF), ²Dairy Science and Technology Research Centre (STELA), ³Agriculture and Agri-Food Canada

Understanding preferences for, and consumer behaviour towards, cheese among young, educated, internationally mobile Chinese consumers

Hao Ouyang¹, Bozhao Li², Mary McCarthy³, Song Miao¹, Kieran Kilcawley¹, Mark Fenelon¹, Alan Kelly², Jeremiah Sheehan¹

¹Teagasc Food Research Center Moorepark, Ireland, ²School of Food and Nutritional Science, University College Cork, Ireland, ³Department of Food Business and Development, University College Cork, Ireland

Consumer insights on vegetable substitutes to cheese

Corinne Amblard¹, Cécile Bord¹, Estelle Petit², Laura Zerbini²

¹Université Clermont Auvergne, INRAE, VetAgro Sup, UMRIF, F-63370, Lempdes, France, ²Institut Paul Bocuse Research Center, France

Bioactive peptides in Parmigiano Reggiano cheese: ripening, microorganisms and gastrointestinal digestion shaping a treasure.

Benedetta Bottari¹, Vincenzo Castellone¹, Barbara Prandi¹, Elena Bancalari¹, Tullia Tedeschi¹

¹università di Parma

Risk assessment of alimentary transmission of tick-borne encephalitis viruses from goats to humans by means of milk and milk products in Swiss alpine regions

Jan-Erik Ingenhoff¹, Marc Mühlemann¹, Rahel Ackermann-Gäumann², Dominik Moor³, Thomas Berger¹

¹Research Group Risk Evaluation and Risk Mitigation, Swiss Reference Laboratory for Milk and Milk Products, Agroscope, Berne, Switzerland, ²Spiez Laboratory, Federal Office for Civil Protection, Spiez, Switzerland, ³Swiss Reference Laboratory for Foodborne Viruses, Federal Food Safety and Veterinary Office, Berne, Switzerland

Variations in the biochemical and functional properties of industrial low-moisture part-skim mozzarella during 4 months of storage at 4°C

Chak Ming To¹, Lien Vermeir¹, Barbara Kerkaert², Dirk Van Gaver², Paul Van der Meeren¹, Tim Guinee³

1Ghent University, 2Milcobel CV, 3Teagasc Food Research Centre Moorepark

Screening of lactic acid bacteria based on their reduction kinetics

Edouard Munier^{1,2}, Hélène Licandro¹, Solange Buchin², Christine Achilleos², Franck Dufrene², Eric Beuvier², Rémy Cachon¹

¹Univ. Bourgogne Franche-Comté, AgroSup Dijon, PAM UMR A 02.102, Food Biotech and Innovation Team, F-21000 Dijon, France, ²INRAE, URTAL, 39800, Poligny, France

Galactose Reduction in Cheddar Produced with Mesophilic and Thermophilic Starter Culture Blend

James Musetti¹

¹Cheese Technology Application Scientist

New picture analysis method for cheese browning evaluation.

Mikael Pianfetti¹, Florence Pailler¹, Fabien Buret¹

¹IFF

Melting of cheese: a comparison between microwave heating and oven heating

Liesbeth van der Meulen¹, Tong Li², Kelly Muijlwijk¹, Thom Huppertz²

¹FrieslandCampina, ²FrieslandCampina, Wageningen University & Research

Milk processing resulting in low and high content of β -casein in cheese milk

Justyna Żulewska¹, Jarosław Kowalik¹, Justyna Tarapata¹, Adriana Łobacz¹, Bogdan Dec¹

¹Univeristy of Warmia and Mazury in Olsztyn