


IDF International Cheese Science and Technology Symposium 2020 Program

Monday June 1, 2020 - Novalait Techno Forum		
9:00 – 12:00	Showcasing of research results in dairy production and processing	
Lunch		
13:45 – 16:15	Plenary conferences and workshops	
16:30	IDF Cheese 2020 Opening Ceremony Wine and Cheese with Novalait Techno Forum	
Tuesday, June 2, 2020		
2 tracks - IDF Cheese Science and Technology and Artisan Cheesemakers Workshop		
8:30	Welcome remarks Ballroom – 2 nd floor	Artisan Cheesemakers Workshop
8:45	<p style="text-align: center;">Session A</p> <p style="text-align: center;">Cheese Microbial Ecology : Starters, Adjunct and Indigenous Microbiota</p> <p>Multiomics to unravel microbe-flavour relationships in cheese Keynote : Dr. Paul Cotter, Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork</p> 	Montmagny Room Lower level
9:35	<p>Matching starter phenotype to functionality for low salt Cheddar cheese production based on viability, permeability, autolysis and enzyme release characteristics in model systems.</p> <p>Palina Yanachkina¹, Imelda Doolan¹, Gisèle LaPointe², <u>Martin Wilkinson</u>¹</p> <p>¹Department of Biological Sciences, University of Limerick, Casteletroy, Limerick, Ireland ²Department of Food Science, University of Guelph, ON, Canada</p>	
10:00	<p>Bacteriophages on the cheese surface: what diversity and what ecological role?</p> <p><u>Eric Dugat-Bony</u>¹, Thomas Paillet¹, Julien Lossouarn², Marie-Agnès Petit², Stéphane Chaillou²</p> <p>¹Université Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, Thiverval-Grignon, France ²Université Paris-Saclay, INRAE, AgroParisTech, Micalis Institute, Jouy-en-Josas, France</p>	
10:25	BREAK AND POSTER SESSION	



11:00	<p>Functional strain redundancy and phage resistance diversity in Swiss cheese starter cultures</p> <p><u>Vincent Somerville</u>^{1,2}, H�el�ene Berthoud¹, Remo Schmidt¹, Hans-Peter Bachmann¹, Ueli von Ah¹, Philipp Engel²</p> <p>¹Agroscope, Liebefeld, Switzerland ²University of Lausanne, Switzerland</p>	
11:25	<p>Genome analysis of eight <i>Geotrichum candidum</i> strains shows its potential for ripening specialty cheeses.</p> <p>Vincent Perkins¹, Marie-H�el�ene Lessard¹, �Eric Dugat-Bony³, Michel Frenette², <u>Steve Labrie</u>¹</p> <p>¹Department of Food Sciences and Nutrition, STELA Dairy Research Centre, Institute of Nutrition and Functional Foods (INAF), Universit� Laval, QC, Canada ²Oral Ecology Research Group (GREB), Faculty of Dental Medicine, and Department of Biochemistry, Microbiology and Bioinformatics, Faculty of Science and Engineering, Universit� Laval, QC, Canada ³Universit� Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, Thiverval-Grignon, France</p>	
11:50	<p>Stability and functional redundancy of a microbial cheese ecosystem subjected to a perturbation: presentation of several case studies</p> <p><u>Pascal Bonnarme</u>¹, Dominique Swennen¹</p> <p>¹Universit� Paris-Saclay, INRAE, AgroParisTech, UMR SayFood, Thiverval-Grignon, France</p>	
12:15	Lunch & Poster Session	
13:30	<p style="text-align: center;">Session B</p> <p style="text-align: center;">Cheese Technology: Process Eco-Efficiency and Innovative Approaches</p> <p style="text-align: center;">Ballroom, 2nd Floor</p> <p>Overview of new designer cheese - from specialized starters to personalized cheeses</p> <p>Keynote : Dr. Val�rie Gagnaire, UMR Science & Technologie du Lait et de l'Oeuf, Agrocampus Ouest, France</p> <p style="text-align: center;"></p>	<p style="text-align: center;">Artisans Cheesemakers Workshop</p> <p style="text-align: center;">Montmagny Room Lower Level</p>
14:20	<p>Use of lactose standardization and extrusion technology for manufacture of Colby cheese</p> <p><u>Selvarani Govindasamy-Lucey</u>¹, H. Jiang¹, J. Jaeggi¹, M. Johnson¹, J.A. Lucey¹</p> <p>¹ Center for Dairy Research</p>	
14:45	<p>Extending the performance shelf-life of LMPS Mozzarella cheese using high stretching temperatures in a novel waterless cooker</p> <p><u>Erin K. Aversa</u>¹, S. Govindasamy-Lucey², M. E. Johnson², J. J. Jaeggi², J. A. Lucey^{1,2}</p> <p>¹University of Wisconsin-Madison ²Center for Dairy Research</p>	
15 :10	<p>Effect of thermal treatment on cheese milk with serum protein depleted content: an evaluation of rennet coaguability, cheese composition and yield</p> <p><u>Xiaofeng Xia</u>^{1,2}, John Tobin¹, Mark Fenelon¹, Paul McSweeney², Jeremiah Sheehan¹</p> <p>¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland ²School of Food and Nutritional Science, University College Cork, Ireland</p>	



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15:35	BREAK AND POSTER SESSION	
16:05	A new cheesemaking technology using dairy powder useful to reduce the environmental impact of International trade in cheese M. Harel-Oger ¹ , A. Thierry ¹ , T. Croguennec ¹ , R. Jeantet ¹ , <u>Gilles Garric</u> ¹ ¹ INRAE AgroCampus Ouest	
16:30	Adjusting pH and homogenization as alternative to addition of emulsifying salt during production of cream cheese powder <u>Denise Felix da Silva</u> ¹ , Richard Ipsen ¹ , Anni Bygvrå Hougaard ¹ ¹ University of Copenhagen	
16:55	End of Day 1 Scientific Sessions	
FREE EVENING		

Wednesday, June 3, 2020 - AM

1 track – IDF Cheese Science and Technology Symposium

Session B (cont'd) Cheese Technology: Process Eco-Efficiency and Innovative Approaches Ballroom, 2nd Floor	
8:30	<p>Optimisation of quark cheese manufacture using a two-stage filtration process</p> <p><u>Sara Mohamed Gaber</u>¹, Anne-Grethe Johansen^{1,2}, Tove Gulbrandsen Devold¹, Elling-Olav Rukke¹, Siv Borghild Skeie¹</p> <p>¹Faculty of Chemistry, Biotechnology and Food Science (KBM), Norwegian University of Life Sciences (NMBU), 5003, N-1432 Ås, Norway ²TINE SA R&D, 7 Kalbakken, 0901 Oslo, Norway</p>
8:55	<p>Eye formation in experimental Swiss-type cheeses ripened in plastic films with varying CO₂-permeability</p> <p><u>Walter Bisig</u>¹, Dominik Guggisberg¹, Marie-Therese Fröhlich-Wyder¹, Ernst Jakob¹, Daniel Wechsler¹</p> <p>¹Agroscope - Food Microbial Systems</p>
9:20	<p>Rennet-induced coagulation of milk: new insights into age-old problems</p> <p><u>Thom Huppertz</u>^{1,2}</p> <p>¹FrieslandCampina, The Netherlands ²Wageningen University, The Netherlands</p>
9:45	<p>Opportunities to improve eco-efficiency in cheesemaking by the use of pressure-driven membrane separation processes</p> <p>Julien Chamberland¹, Scott Benoit¹, Alain Doyen¹, Manuele Margni³, Michel Britten², <u>Yves Pouliot</u>¹</p> <p>¹STELA Dairy Research Center, INAF, Université Laval ²CRDSH, Agriculture and Agri-Food Canada, ³Polytechnique Montréal, CIRAI</p>
10:10	<p>BREAK AND POSTER SESSION</p>
10:40	<p>Fresh cheese made from concentrated milk: tailoring the calcium content from milk retentates by means of microfiltration to modulate the bitter taste</p> <p><u>Johannes Schäfer</u>¹, Jörg Hinrichs¹</p> <p>¹University of Hohenheim, Soft Matter Science and Dairy Technology</p>
11:05	<p>Application of laser induced breakdown spectroscopy technique for spatial distribution of salt in cheese matrices</p> <p><u>Prateek Sharma</u>¹, Maria Casado-Gavaldà², Jeremiah J. Sheehan¹, Carl Sullivan²</p> <p>¹Teagasc Food Research Centre, Moorepark, Fermoy, Co. Cork, Ireland ²School of Food Science and Environmental Health, Technical University Dublin, Ireland</p>
11:30	<p>NIR-hyperspectral imaging enables rapid and non-destructive characterization of long-ripening cheeses based on maturity</p> <p><u>Hasitha Priyashantha</u>¹, Annika Höjer², Åse Lundh¹, Monika Johansson¹, Gun Bernes³, Paul Geladi³, Mårten Hetta³</p> <p>¹Swedish University of Agricultural Sciences, Uppsala, Sweden ²Norrmejerier Ek för., Umeå, Sweden ³Swedish University of Agricultural Sciences, Umeå, Sweden</p>
11:55	<p>Lunch & Poster Session</p>

Wednesday, June 3, 2020 - PM

2 tracks – IDF Cheese Science and Technology and [IDF-Canada Dairy Outlook](#)

13:30	<p align="center">IDF CHEESE 2020 – Session C</p> <p align="center">Ripening, Flavor and Cheese Authenticity</p> <p>Ballroom, 2nd Floor</p> <p>Chemical characterization of cheese varieties – A review</p> <p>Keynote: Dr. Ylva Ardö, Copenhagen University, Department of Food Science</p>	<p align="center">IDF-Canada Dairy Outlook Montmagny Room Lower Floor</p>
14:05	Flash presentations – Titles to come	
14:25	<p>Malt flavour in Swiss Raclette cheese</p> <p><u>Yi Hélène Meng</u>¹, Miguel Piccand¹, Alexandra Baumeyer¹, Mireille Tena Stern¹, Sébastien Dubois¹, Ueli von Ah¹, Pascal Fuchsmann¹</p> <p>¹Agroscope</p>	
14:50	<p>Influence of different genetic polymorphisms of αs1- and κ-Casein on Havarti type cheese: Effects on cheese making, yield, ripening, and sensory quality</p> <p>Isaya Appelesy Ketto¹, Martine Andrea Olsen¹, Jorun Øyaas³, Kristine S. Myhrer², <u>Siv B. Skeie</u>¹</p> <p>¹Faculty of Chemistry, Biotechnology and Food Science (KBM), Norwegian University of Life Sciences (NMBU), Norway ²Norwegian Institute of Food and Aquaculture Research (NOFIMA), Norway ³TINE SA, Postboks, Oslo, Norway.</p>	
15:15	BREAK AND POSTER SESSION	
15:45	<p>Uncovering the flavor potential of <i>Lactococcus lactis</i> subsp. <i>cremoris</i> in Cheddar cheese-making</p> <p><u>Kirsten Kastberg Moeller</u>¹, Thomas Janzen¹</p> <p>¹Chr. Hansen A/S, Denmark</p>	
16:10	<p>Identification of key odorants in smear-ripened semi-hard cheese</p> <p><u>Valérie Gagnaire</u>¹, Marie-Bernadette Maillard¹, Sébastien Lê², Anne Thierry¹</p> <p>¹UMR1253 Science et Technologie du Lait et de l’Oeuf, INRAE, Agrocampus Ouest, Rennes ²Applied Mathematics Department, Agrocampus Ouest, Rennes</p>	
16 :35	<p>Metabolomic assessment of a Gouda-type cheese unravels batch-to-batch variations during ripening</p> <p><u>Hannes Decadt</u>¹, Stefan Weckx¹, Luc De Vuyst¹</p> <p>¹Research Group of Industrial Microbiology and Food Biotechnology (IMDO), Faculty of Sciences and Bioengineering Sciences, Vrije Universiteit Brussel, Brussels, Belgium</p>	
17:00	End of Day 2 Scientific Sessions	
18: 30 Banquet and Show		

Thursday, June 4, 2020 - AM

2 tracks – IDF Cheese Science and Technology and [IDF-Canada Dairy Outlook](#)

8:30	<p>Joint talk: IDF Canada Dairy Outlook + IDF Cheese Science and Technology Ballroom, 2nd Floor</p> <p>Dairy: a key part of a sustainable diet?</p> <p>Keynote : Thomas Mulcair, Université de Montréal Invited Professor, Department of Political Science, Lawyer, Former leader of the New Democratic Party of Canada</p>	
9:20	<p>IDF CHEESE 2020 – Session D Cheese Structure and Rheology</p> <p>Using casein chemistry and rheological methods to both design and monitor cheese performance</p> <p>Keynote : Dr. John Lucey, University of Wisconsin, Madison, USA</p>	<p>IDF-Canada Dairy Outlook Montmagny Room Lower Floor</p>
10:10	<p>Dynamic in situ imaging of semi-hard cheese microstructure under large-strain tensile deformation: Understanding structure-fracture relationships</p> <p>Prabin Lamichhane^{1,2}, Mark A.E. Auty¹, Alan L. Kelly², Jeremiah J. Sheehan¹ ¹Teagasc Food Research Centre Moorepark, Ireland ²University College Cork, Ireland</p>	
10:35	<p>BREAK AND POSTER SESSION</p>	
11:05	<p>Effect of plasmin on casein hydrolysis and textural properties of a model cheese during ripening</p> <p>Huifang Cai^{1,2}, Etske Bijl², Elke Scholten¹, Guido Sala¹ ¹Physics and Physical Chemistry of Foods, Wageningen University, the Netherlands ²Dairy Science and Technology Group, Food Quality and Design, Wageningen University, the Netherlands</p>	
11:30	<p>Addition of calcium and magnesium chloride as a simple way to vary mineral composition of casein micelle - Effect on enzymatic coagulation</p> <p>Julien Bauland^{1,2}, Marie-Hélène Famelart¹, Saïd Bouhallab¹, Romain Jeantet¹, Sébastien Roustel², Marc Faiveley², Thomas Croguennec¹ ¹STLO-Science et Technologie du Lait et de l'Oeuf ²CHR-HANSEN</p>	
11:55	<p>Evaluation of cheese milk pre-acidification and delayed cooling to reduce moisture migration and textural differences in 291-kg blocks of Cheddar cheese</p> <p>Claire Collins¹, Mark Johnson², Selvarani Govindasamy-Lucey², John Jaeggi², John Lucey^{1,2} ¹University of Wisconsin-Madison ²Center for Dairy Research</p>	
12:20	<p>Lunch & Posters</p>	

Thursday, June 4, 2020 – PM IDF Cheese Science and Technology Symposium

<p>IDF CHEESE 2020 Session E - Functionality, Nutrition and Health & Session F – Innovation and Consumer-Centric Approach</p>	
13:30	<p>Dairy consumption and metabolic health: a focus on cheese Keynote : Dr. Eileen Gibney, University College Dublin, Institute of Food and Health, Ireland</p> 
14:20	<p>Selecting 2-in-1 probiotic dairy starter bacteria to develop functional probiotic cheeses <u>Gwénaél Jan</u>¹, Benoit Foligné², Fillipe Luiz Rosa do Carmo³ ¹STLO, INRA, Agrocampus Ouest, Rennes, France ²Univ. Lille, Inserm, CHU Lille, Lille Inflammation Research International Center, France ³Departamento de Genética, Ecologia e evolução, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Minas Gerais Brasil</p>
14 :45	<p>Focus group studies to determine specific preferences for and attitudes towards cheeses by young, educated, international mobile Chinese consumers <u>Hao Ouyang</u>^{1,2}, Bozhao Li², Mary McCarthy³, Song Miao¹, Kieran Kilcawley¹, Alan Kelly², Jeremiah J. Sheehan¹ ¹Teagasc Food Research Center Moorepark, Ireland, ²School of Food and Nutritional Sciences, University College Cork, Ireland ³Department of Food Business and Development, University College Cork, Ireland</p>
15 :10	<p>BREAK AND POSTER SESSION</p>
15:30	<p>Histamine producing <i>Lactobacillus casei</i> in different salt content Cheddar cheeses at two temperatures of ripening <u>Cleide O. de A. Møller</u>¹, Fergal P. Rattray¹ ¹University of Copenhagen</p>
15:55	<p>Impacts of trade liberalization in Canada's supply managed dairy industry <u>Scott Biden</u>¹, Alan Ker¹, Stephen Duff² ¹University of Guelph ²OMAFRA</p>
16:20	<p>Survival of <i>Listeria monocytogenes</i> and <i>Staphylococcus aureus</i> in Cheddar cheese curds <u>Kalyani Mohan</u>¹, Gisele LaPointe¹, Arthur Hill¹ ¹Department of Food Science, University of Guelph, ON, Canada</p>
16:45	<p>Closure address</p>
<p>Free evening</p>	
<p>Friday June 5, 2020 - IDF Cheese Science and Technology Symposium</p>	
AM	<p>Technical Visits:</p>
Lunch	<p>#1: STELA Dairy research Centre and INAF and Le Grand Marché de Québec</p>
PM	<p>#2: Agropur Cooperative headquarters, R&D and state-of-the-art Distribution Centres #2: Charlevoix Terroir Region – Visit of two farmstead factories</p> <ul style="list-style-type: none"> • Parc des Chutes-Montmorency
<p>cont'd...</p>	



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- [Laiterie de Charlevoix](#)
- [Maison d'affinage Maurice Dufour](#)

End of symposium