



CANADIAN FOOD ENGINEERING CONFERENCE'26

Pre-conference workshop: **MAY 13, 2026**

Conference: **MAY 14-15, 2026**

Post-conference tour: **MAY 16, 2026**



University of Guelph, Guelph, ON, Canada

PROGRAM AGENDA





May 13, 2026 Wednesday

Time	Description	Location
9:00 am - 4:00 pm	Pre Conference Workshop Smart Food Engineering Systems AI Systems and Computational Tools for Food Processing, Product Innovation, Nutrition, and Sensory Optimization	RICH 3504

May 14, 2026 Thursday

Time	Description	Location
8:00 am - 9:00 am	Registration	Engineering Atrium
9:00 am - 9:15 am	Opening Ceremony	Engineering Atrium
9:15 am - 10:45 am	Keynote Talks	Engineering Atrium
10:45 am - 11:00 am	Canadian Institute of Food Engineering (CIFE) Launch	Engineering Atrium
11:00 am - 11:10 am	Coffee break	Engineering Atrium
11:10 am - 12:10 pm	Panel Discussion	Engineering Atrium
12:10 pm - 1:15 pm	Buffet Lunch	University Club - UC 5th Floor
1:15 pm - 3:15 pm	Poster Sessions	Engineering Atrium
3:15 pm - 3:30 pm	Coffee Break	
3:30 pm - 5:00 pm	Workshop	RICH 3504

May 15, 2026 Friday

Time	Description	Location
8:00 am - 8:30 am	Breakfast and Networking	Peter Clark Hall (University Center)
8:30 am - 10:00 am	Keynote Talks	Peter Clark Hall
10:00 am - 12:00 pm	Food Innovation Exchange (FIX) (Food Industry Exhibition)	Peter Clark Hall
12:00 pm - 1:00 pm	Buffet Lunch	University Club - UC 5th Floor
1:00 pm - 3:00 pm	Scientific Sessions- Four parallel sessions	Rozanski Hall
3:00 pm - 3:15 pm	Coffee Break	
3:15 pm - 5:00 pm	Scientific Sessions- Four parallel sessions	Rozanski Hall
6:00 pm - 8:30 pm	Multicultural Show & Award Banquet	Summerlee Science Complex Atrium

May 16, 2026 Saturday

Post conference tour to Niagara Falls, Niagara on-the-Lake, and wineries



MAY 13, 2026 WEDNESDAY

PRE-CONFERENCE WORKSHOP

9:00 am - 4:00 pm

Smart Food Engineering Systems

AI Systems and Computational Tools for Food Processing, Product Innovation, Nutrition, and Sensory Optimization

WORKSHOP SPEAKER

Dr. Srimathi Kannan

Founder and CEO

CloudAspirers LLC

New England (MASS)

Massachusetts Farm Fresh Multi-Sensory Nutrition Education
USA

For details please visit: <https://cfeconference.ca/pre-conference-workshop>



MAY 14, 2026 THURSDAY

KEYNOTE SPEAKERS

Donald Boucher

Director General, Sector Development and Analysis Directorate
Agriculture and Agri-Food Canada

Dr. V.M. Balasubramaniam

Koehler-Ayres Professor of Food Processing:
Sustainable Food Manufacturing System
University of Georgia, USA

Dr. Michael Ngadi

James McGill Professor
McGill University, Canada

Dr. KSMS Raghavarao

Professor
Indian Institute of Technology (Tirupati), India



PANEL DISCUSSION

Plant Protein Foods in Canada:

Processing Innovations, Regulatory Realities, and Market Opportunities

PANEL CHAIR

Dr. Kevin M. Keener

Barrett Family Chair in Sustainable Food Engineering
University of Guelph, Canada

PANEL EXPERTS

Dr. Amanda J. Wright

Director - Human Nutraceutical Research Unit
University of Guelph, Canada

Dr. Mahesh Sivakumar

Senior Program Manager - Agriculture and Food Innovation
Alberta Innovates, Canada

Dr. Erica Shelley

Executive Director
Ontario Organic, Canada

Bill Belias

President
Ergonex, Inc., USA.

Dr. Vasanthakumar Narayanan

CEO
Nanosyntex, Inc., Houston, Texas USA



WORKSHOP

Design of Experiments for Food Engineers

WORKSHOP SPEAKER

Dr. Senthilkumar Thirupathi

Industry Research Chair

University of Prince Edward Island



MAY 15, 2026 FRIDAY

KEYNOTE SPEAKERS

Dr. Digvir S Jayas

President and Vice-Chancellor
University of Lethbridge, Canada

Dana McCauley

Chief Executive Officer
Canadian Food Innovation Network

Melissa Kardaras

Director, Market and Industry Services
Agriculture and Agri-Food Canada

Dr. Stéphane Godbout

President

Canadian Society for Agricultural and Biosystems Engineering/La
Société Canadienne de Génie Agroalimentaire et de Bioingénierie
(CSABE/SCGAB)



POSTER SESSIONS

Theme: Food Chemistry and Nutrition

Sl. No./ID	Description
1. (16)	Influence of Lipid Source in Coffee on Sensory Acceptability and Gastrointestinal Responses Serena Iannucci (Serena Iannucci)*; Jessica Christie-Connolly (University of Guelph); Wanyi Luo (University of Guelph); Niloufar Rafiee Tari (University of Guelph); Sana Tasawar (University of Guelph); Amy Tucker (University of Guelph); Amanda J. Wright (University of Guelph)
2. (2)	Oat-Protein Peptide Ameliorates Cognitive Impairment via Mediating Gut-Bran Axis in mice Dr-Hamad Rafique (Shaanxi Normal University)*
3. (42)	Effect of high hydrostatic pressure on hybrid protein (whey:soy) interactions in presence of chaperone-like protein Lu Xue (University of Guelph)*; Biniam Kebede (University of Guelph); Sampathkumar Balamurugan (Agriculture and Agri-Food Canada); Alice Marciniak (University of Guelph)
4. (49)	Clean-Label Protein Engineering for Food Products: Triboelectrostatic Separation and Functional Blending of Oat and Yellow Pea Proteins Justin Joseph (University of Saskatchewan)*; Dr Venkatesh Meda (University of Saskatchewan); Obiora Agu Samuel (University of Saskatchewan)
5. (67)	Encapsulated Polyphenols as a Potential Bio-Based Strategy for Plant Disease Protection Taveena Jindal (University of Guelph)*
6. (103)	Fatty Acid Composition of Common Edible Oils: A Comparative Review Cavin Varun Suresh Kumar (National Institute of Food Technology, Entrepreneurship and Management-Thanjavur, India), Heartwin Amaladhas Pushpadass (ICAR-National Dairy Research Institute, India) and F. Magdaline Eljeeva Emerald (ICAR-National Dairy Research Institute, India)

Theme: Food Packaging and Storage

Sl. No./ID	Description
7. (68)	Impact of Edible Coating Treatments on the Postharvest Quality and Shelf Life of Pears and Bell Peppers Reshma Krishnan (University of Guelph)*
8. (78)	Green Packaging Technology: An Innovative Approach to Meat Preservation and Sustainability Sharad Bhattarai (South Dakota state university)*
9. (81)	Soyhull Cellulose-Protein Composite Films as a Sustainable Alternative to Plastic Food Packaging Sumi Regmi (South Dakota State University)*
10. (82)	Novel Biodegradable Films from the Binary Mixtures of Alfalfa Cellulosic Residue and Carrageenan: Toward Sustainable Packaging Material Innovation Sandeep Paudel (South Dakota State University)*
11. (106)	Biodegradable Polymers-Based Food Packaging. Myra Mead (University of Guelph)*, Alice Corfa (University of Guelph), Ehsan Pesaranhajiabbas (University of Guelph), Manjusri Misra (University of Guelph), Amar K. Mohanty (University of Guelph)
12. (107)	Selective Laser Sintering (SLS) of Polyhydroxybutyrate for Sustainable Food Packaging Applications: Powder Reuse and Processing Optimization Thomas Karlovich (University of Guelph)*, Malik Hassan (University of Guelph), Manjusri Misra (University of Guelph), Amar Mohanty (University of Guelph)



Theme: Food Processing, Quality and Safety

Sl. No./ID

Description

13. (3) **Chemically Modified Indian Teff (*Eragrostis tef*) Starch Biofilms: Quality Maintenance and Shelf-Life of Grapes**
Ramandeep Kaur*; Sukhcharn Singh; CS Riar
(Sant Longowal Institute of Engineering and Technology)
14. (6) **Effects of Cold Atmospheric Plasma on Microbial Inactivation, Post-Treatment Growth and Quality Changes of Mechanically Fluidized Maize Flour**
Gebremedhin Gebremariam Gebremical (BOLOGNA UNIVERSITY)*
15. (7) **Non-Destructive Determination of Rice Aging Biomarkers Using Hyperspectral Imaging Coupled with Advanced Chemometric Modeling**
Ganjahalli Vani (INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI)*; Subir Kumar Chakraborty (ICAR-Central Institute of Agricultural Engineering, Bhopal)
16. (8) **A Machine Learning integrated fluorescence-based approach for the detection of microplastics in food systems**
Rayhana J S (CSIR-National Institute for Interdisciplinary Science and Technology, India)*; Raja V (CSIR-National Institute for Interdisciplinary Science and Technology, India); Anandharamakrishnan C (CSIR-National Institute for Interdisciplinary Science and Technology, India)
17. (12) **Optimizing Gas Flow Dynamics in Dielectric Barrier Discharge (DBD) Plasma Activated Water: Decoupling Energy Input from Efficacy for Fresh Produce Sanitization**
Tejaswi Boyapati (South Dakota State University)*
18. (14) **Thermal Inactivation Kinetics of Salmonella and Listeria monocytogenes and Their Surrogates under Controlled Temperature and Relative Humidity Conditions for Drying and Roasting Processes**
Rajesh Dangal (South Dakota state University)*
19. (25) **Optimization of reciprocating agitation thermal processing for better quality retention in canned sweet corn and peas**
Spandana Krishnappa (Mc Gill University)*
20. (26) **Evaluation of heat penetration parameters in reciprocating agitation thermal processing of canned peas and sweet corn and establishment of process times for commercial sterilization**
Manish Bairwa (McGill University)*
21. (44) **Enhancing Protein Functionality of Pulses through Tribo-Electrostatic Separation (TES)**
Sahar Zamani (University of Saskatchewan)*; Ganapathy Subramanian Meenakshi Sundaram (University of Saskatchewan); Obiora S Agu (University of Saskatchewan); Venkatesh Meda (University of Saskatchewan); Lifeng Zhang (University of Saskatchewan)
22. (50) **Sustainable Organic Rice Cultivation and Processing in Northern Ontario: A Model for Innovation and Community Empowerment**
Simon Egbedimame (DON CRYSTAL RICE INC)*
23. (58) **Infrared Thermography Combined with Machine Learning for Non-Destructive Internal Quality Evaluation of Chicken Eggs**
Ashutosh Pathare (University of Prince Edward Island)*

Theme: Food Processing, Quality and Safety

Sl. No./ID	Description
24. (59)	An Integrated Classical Vision and Deep Learning Approach for Severity-Based Defect Grading in Frozen French Fries Using Simulated Fries Proxy Benchmarking Kaushik Raja Bengahalli Kundu Raja (University of Prince Edward Island)*; Mariya Punnapadam (Charlottetown Rural High School); Divyanth Loganathan Girija (Cornell University); Senthilkumar Thirupathi (University of Prince Edward Island)
25 (60)	Continuous-Flow Aqueous Two-Phase Extraction of R-Phycoerythrin from Dry Biomass of Gracilaria corticata in a Millifluidic Channel Vaishali Saraswat (Indian Institute of Technology Tirupati)*
26. (79)	Temperature–Moisture Dependence of Dielectric Properties of Faba Bean Seeds at Industrial Radio-Frequency Bands Oladimeji Azeez (University of Saskatchewan); Suka Thangaraju (University of Saskatchewan)*; Oon-Doo Baik (University of Saskatchewan)
27. (97)	Impact of Fermentation and Solvents Selection on the Bioactive Compounds and Antioxidant Potency of Hyacinth Beans-Based Beverage Formulation Syed Muhammad (South China University of Technology)*
28. (5)	Comparative Evaluation of Moisture Content Measurement Techniques for Food Quality and Safety Assessment in Fresh Beetroot Abubakar Sani Ali (University of Lincoln)*
29. (104)	Decontamination of <i>Salmonella spp.</i> and <i>Bacillus</i> Spores on Food Contact Surface Using High Voltage Plasma-Activated Water (HV-PAW) Li Lu (University of Western Ontario)*, Wei Cao (University of Guelph), Chunnan Li (University of Guelph; Jilin Ginseng Academy, Changchun University of Chinese Medicine, China), Himashree Ponrajan (University of Guelph), Bertina Do (University of Guelph), Kevin M. Keener (University of Guelph)
30. (105)	Disinfection of <i>Bacillus atrophaeus</i> (BA) spores on food contact surfaces using high voltage atmospheric cold plasma (HVACP) treatment Jia Lu (McMaster University), Wei Cao (University of Guelph), Kevin M. Keener (University of Guelph)

Theme: IoT, Big Data, Blockchain and AI in Food Supply Chain

Sl. No./ID	Description
31. (1)	Integrating Explainable AI and FTIR Spectroscopy for On-Site Detection of Sudan (IV) Adulteration in Red Chilli Powder Dilpreet Singh (Sant Longowal Institute of Engineering and Technology)*
32. (75)	Spectral Characterization of GM and Non-GM Soybeans Using FTIR Spectroscopy Shubhneet Kaur (University of Guelph)*
33. (83)	Revolutionizing Food Systems: Integrating AI, Big Data, Blockchain, and IoT Sophia Sadiq (University of Guelph)*
34. (98)	CFIA Food Recall Analytics Suite: Machine Learning for Recall Severity Prediction and Brand Association Discovery Muhammad Tameem Mughal (University of Guelph)*, Meenakshi P L (University of Guelph), Sri Vigna Hema V (University of Guelph), Manickavasagan Annamalai (University of Guelph)



Theme: Food Waste Valorization and By-product Utilization

Sl. No./ID	Description
35. (17)	Upcycling Fruit and Vegetable processing waste into functional materials Ashoka Gamage (University of Peradeniya)*
36. (18)	Identification of a Bacterial Culture for Dairy-Fed Bioelectrochemical Systems Kaitlyn Root (University of Guelph)*; Ryan Clemmer (University of Guelph); Bassim Abbassi (University of Guelph); Gregory Higgins (University of Guelph); Sarah Donald (University of Guelph); Gisele LaPointe (University of Guelph)
37. (20)	Utilization of Cassava Processing Waste for Circular Bioeconomy Ashoka Gamage (University of Peradeniya)*
38. (29)	Utilization of excess skim milk through inclusion in cattle feed Sabrina Martineau (University of Guelph)*
39. (40)	Matrix-Specific Protein Fractionation of Rennet, Acid, and Acid-Heat Cheese Whey Using Bentonite Clay Silvia Niewiadomski (University of Guelph)*
40. (54)	Nutrient-Driven Control of Carotenoid Production in Red Yeast Using Precision Fermentation Sakshi Manikpuri (University of Guelph)*, Guneet Kaur (University of Guelph)
41. (55)	Development of Banana Peel Powder-Fortified Cakes: A Sustainable Approach to Enhancing Nutritional Quality, Bioactive Properties, and Starch Digestibility Minhaj Uddin (Chattogram Veterinary and Animal Sciences University)*
42. (61)	Graphitization of Argo-residue Based Biocarbon for Supercapacitor Applications Hugh MacFarlane (University of Guelph)*; Singaravelu Vivekanandhan (V.H.N.S.N); Manjusri Misra (University of Guelph); Amar Mohanty (University of Guelph); Arturo Rodriguez (University of Guelph)
43. (70)	Optimization of Bacterial Nanocellulose Production from Dairy Waste via SCOBY Fermentation and Evaluation for CO₂ Adsorption Alma Joby (University of Guelph)*
44. (90)	Development and Characterization of Protein-polysaccharide complex to encapsulate Bioactive compounds Hrishikesh Patil (University of Guelph)*

MAY 15, 2026 FRIDAY



SCIENTIFIC SESSION - I

Rozanski 105, 01:00 pm – 14:45 pm

Theme: Food Chemistry and Nutrition

Chair : Dr. Ashutosh Singh

ID	Description	Time
22	Comparative Evaluation of Antioxidant Activity and Catechin Profile of Oolong Tea from Different Geographical Origins Sushant Kaushal (National Pingtung University of Science and Technology)*	13:00 - 13:15
34	Precision Fermentation Strategies for Elevated Amino Acid Profiles in Mycoprotein Himashree Ponrajan (University of Guelph)* , Guneet Kaur (University of Guelph)	13:15 - 13:30
38	INFOGEST-Guided Screening of Fully Dilutable Lecithin SMEDS for Time-Dependent Probiotic Intestinal Adhesion Juan Doratt-Mendoza (University of Toronto/Agriculture and Agri-Food Canada)*	13:30 - 13:45
69	Folic Acid Degradation in Multiple Fortified Salt Aiman Fatima (University of Toronto)*	13:45 - 14:00
86	Mechanistic effects of acid strength and aging time on structure-property relationships during the development of stable cold water-soluble dry bean starch Prudhvi Pasumarthi (University of Guelph)*	14:00 - 14:15
87	Limiting Retrogradation Effect of White Navy Bean Starch by Modification with Acid Hydrolysis and Heat-Moisture Treatments Alexander Ratsamany (University of Guelph)*	14:15 - 14:30
11	Assessment of nutritional and quality characteristics of breads prepared from sugar beet-wheat composite flours Maham Saeed (University of Karachi); Marium Shaikh (University of Karachi)*; Tahira Mohsin Ali (University of Karachi); Saqib Arif (University of Karachi)	14:30 - 14:45



SCIENTIFIC SESSION - II

Rozanski 106, 01:00 pm – 03:00 pm

Theme: **Food Chemistry and Nutrition/Food Packaging and Storage**

Chair : **Dr. Guneet Kaur**

ID	Description	Time
80	Development and Pilot Scale Demonstration of Encapsulated Ferric Pyrophosphate Premixes for Double and Multiple Fortified Salt Diana Teichman (University of Toronto)*	13:00 - 13:15
89	Profiling of Navy Bean Protein Extracts: Effects of Dehulling and Enzyme-Assisted Processing Md. Junaeid Khan*; Sindhu Chaudhary; Amanat Ali; Annamalai Manickavasagan (University of Guelph)	13:15 - 13:30
10	Investigation on the impact of packaging material and storage on the migration of microplastics into crystal salt ANAKHA K B (CSIR - NATIONAL INSTITUTE FOR INTERDISCIPLINARY SCIENCE AND TECHNOLOGY (NIIST))*; Raja V (CSIR-NIIST); Anandharamakrishnan C (CSIR-NIIST)	13:30 - 13:45
13	Superhydrophobic and Antibacterial Soy Protein Films via Bioinspired Surface Engineering and Nanofiber Integration Haitao Wang (Dalian Polytechnic University)*	13:45 - 14:00
66	Compatibilized PBAT/Wood Biocarbon Biocomposites for Sustainable Food Packaging Application Ikechukwu Okonkwo*; Ehsan Pesaranhajiabbas; Manjusri Misra; Amar Mohanty (University of Guelph)	14:00 - 14:15
74	Development of High-Performance Biodegradable PBAT/PLA and PBSA/PBAT Blend Films through Uniaxial Orientation for Food Packaging Applications Debarshi Nath Debarshi Nath*; Matias Menossi; Ehsan Pesaranhajiabbas; Manjusri Misra; Amar Mohanty (University of Guelph)	14:15 - 14:30
85	Curcumin as a Food-Derived Bioactive: Inhibition of 5-Alpha Reductase and Antiproliferative Effects in a Rodent Model of Benign Prostatic Hyperplasia Imaobong Christopher Etti (University of Uyo)*	14:30 - 14:45
95	Impact of High intensity ultrasound assisted modification of Brewer's spent grain protein concentrate on functional, structural, thermal and digestibility properties. Panoth Abhirami, C K Sunil*, Ashish Rawson, D V Chidanand, N Venkatachalapathy (National Institute of Food Technology, Entrepreneurship and Management-Thanjavur, Tamil Nadu, India)	14:45 - 15:00



SCIENTIFIC SESSION - III

Rozanski 107, 01:00 pm – 14:45 pm
Theme: Food Processing, Quality and Safety

Chair : Dr. R Muthukumar

ID	Description	Time
21	Use of microfluidization to modulate interactions between milk and pea proteins and application of the hybrid system to produce non-fat yogurt Siyu Liu (University of Guelph)*	13:00 - 13:15
30	Surface charge characteristics of pulse materials in the Tribo-Electrostatic Separation Process Ganapathy Subramanian Meenakshi Sundaram*; Roghayeh Najafi; Obiora Agu; Lifeng Zhang; Venkatesh Meda (University of Saskatchewan)	13:15 - 13:30
31	Impact of Thermal Processing on Parvalbumin Allergenicity and Protein Structure in Atlantic Salmon Predrag Sunjka (McGill University)*; Jiayong Huang (McGill University); Vijaya Raghavan (McGill University)	13:30 - 13:45
64	Comparison of Freeze Drying and Spray Drying for Iron Microencapsulation in Food Fortification Naayaab Nagree (University of Toronto)*	13:45 - 14:00
102	Assessment of the biological functionality and bioaccessibility of GABA in Lactobacillus plantarum NCTC 13644 fermented apple pomace after invitro stimulated digestion Chinyere G. Udea*, Alberto Fiorea, Jonathan Wilkina, Adilia Lemos a. (Department of Food Science and Technology Abertay University, Scotland)	14:00 - 14:15
9	Impact of thermal processing on nutrition retention and functional properties of Bauhinia variegata for sustainable food engineering applications Prof. Dr. Saghir Ahmed Sheikh (Hamdard University, Karachi); Assoc. Prof. Dr. Aasia Akbar Panhwar (Department of Biological Systems Engineering 460 Henry Mall Madison); Parkash Meghwar (Hamdard University Karachi)*	14:15 - 14:30
32	Techno-Functional and Molecular Changes in Chickpea Subjected to Microwave and Infrared Treatments Pabitra Das (University of Saskatchewan)*	14:30 - 14:45



SCIENTIFIC SESSION - IV

Rozanski 108, 01:00 pm – 03:00 pm

Theme: **Food Processing, Quality and Safety**

Chair : **Dr. Roopesh Mohandas Syamaladevi**

ID	Description	Time
45	Reduction of Anti-nutritional Factors in Faba beans using RF-Treatment and Its Impact on Protein and Techno functional Properties Suka Thangaraju (University of Saskatchewan)*	13:00 - 13:15
48	Flour Particle Size and Ultrasound Pretreatment: Impact on Structure and Functionality of Pea Protein Isolates CHINWENDU EZE (McGill University)*	13:15 - 13:30
51	Commercial plant-based burgers: Amino acid profile and contributions to acrylamide (AA) formation during cooking Chinaza Arinzechukwu (University of Guelph)*	13:30 - 13:45
52	High-Efficiency Plate Evaporation in Food Processing: Comparison with Tubular Falling/Rising Film or Forced Circulation Systems Kiran Paithankar (Alfa Laval Inc.)*	13:45 - 14:00
62	Enzyme-assisted purification and characterization of proteins from Chilean granado beans Christiana E. Anih (University of Toronto)*; Bradley Saville (University of Toronto); Lubna Mobin (University of Toronto); Sonu Sharma (University of Toronto); Levente Diosady (University of Toronto)	14:00 - 14:15
65	Separation and characterization of plant-based proteins from Canadian beans Sonu Sharma (University of Toronto)*; Christiana Anih (University of Toronto); Bradley Saville (University of Toronto); Levente Diosady (University of Toronto)	14:15 - 14:30
36	Process Optimization of Tribo-Electrostatic Separation for Sustainable Protein Fractionation Roghayeh najafi (University of Saskatchewan)*; Obiora Agu (University of Saskatchewan); Zhang Lifeng (University of Saskatchewan); Venkatesh Meda (University of Saskatchewan)	14:30 - 14:45
39	Techno-Economic Evaluation of High-Pressure Processing for Fruit Juice Production Under Grid and Renewable Electricity Scenarios Parnia Nikkhah (university of saskatchewan)*; Ganesh Meenakshi Sundarama (university of saskatchewan); Obiora Agu (university of saskatchewan); Venkatesh Meda (university of saskatchewan); Edmund Mupondwa (Agriculture and Agri-Food Canada, Government of Canada)	14:45 - 15:00



SCIENTIFIC SESSION - V

Sl. No./ID

Rozanski 105, 3:15 pm – 5:00 pm

Theme: **Food Waste Valorization and By-product Utilization**

Chair : **Dr. Daniel Onwude**

ID	Description	Time
99	A dynamic physics-driven lifecycle model for the global transcontinental fruit supply chain Dr. Daniel Onwude (University of Guelph)*	15:15 - 15:30
37	Nanofiltration of Deproteinated Cheese Whey for the Recovery of Lactose Trevor Smith (University of Guelph)*; Anthony Heebner (University of Guelph); Alice Marciniak (University of Guelph); Bassim Abbassi (University of Guelph)	15:30 - 15:45
41	Machine Learning-Guided Bioprocess for Production of Functional Rhamnolipid Biosurfactants Makary Nasser (uofg)*; Rahul Barbhuiya (University of Guelph); Guneet Kaur (University of Guelph); Ashutosh Singh (University of Guelph)	15:45 - 16:00
47	From Date Fruit Waste to Probiotic Production: An Integrated By-product Valorization Strategy for Low-Cost, Animal-Free Culture Media Manideep Pabba (Khalifa University)*; Fawzi Banat (Khalifa University)	16:00 - 16:15
4	Nanoemulsion-Based Delivery of Fermented Phytochemicals for Sustainable Fungal Disease Management Muyideen Bamidele*; Maria Liliana Flores-López; Ana Verónica Charles-Rodríguez; Lorenzo Pastrana Castro ; Olga Berenice Álvarez Pérez; Mónica Lizeth Chavez-González; Jose Sandoval Cortes; Cristobal N. Aguilar	16:15 - 16:30
15	Sustainable Oil Extraction from Bitter Melon Seeds (<i>Momordica charantia</i> L.) using Emerging Thermal and Non-Thermal Technologies Mohan Naik (University of Horticultural Sciences, Bagalkot, Karnataka)*; Venkatachalapathy Natarajan (National Institute of Food Technology, Entrepreneurship and Management, Thanjavur (NIFTEM-T), Tamil Nadu); Ashish Rawson (National Institute of Food Technology, Entrepreneurship and Management, Thanjavur (NIFTEM-T), Tamil Nadu)	16:30 - 16:45
19	Superstructure Optimization of Side-Stream Valorization in Hybrid Pea Protein Fractionation: An Eco-Efficiency Approach Derrick Allotey (McGill University)*; Ebenezer Kwofie (McGill University)	16:45 - 17:00



SCIENTIFIC SESSION - VI

Rozanski 106, 03:10 pm – 05:00 pm

Theme: **Food Waste Valorization and By-product Utilization**

Chair : **Dr. SD Jacob Muthu**

ID	Description	Time
23	Industrial Prospects of Biohydrogen Production for a Net-Zero Energy Transition SD Jacob Muthu (University of Regina)*	15:15 - 15:30
53	Integrated Zero Liquid Discharge (ZLD) Systems for Water Recovery in Food Processing Kiran Paithankar (Alfa Laval Inc.)*	15:30 - 15:45
57	Production and Characterization of Liquid Smoke from Lignocellulosic Biomass Using a Compact Food-Grade Pyrolysis Reactor Kishanthini Kailaivasan (Wayamba University of Sri Lanka)*	15:45 - 16:00
76	Application of Bentonite Adsorption for the Removal and Fractionation of Protein from Acid Whey Anthony Heebner (University of Guelph)*; Alice Marciniak (University of Guelph); Bassim Abbassi (University of Guelph)	16:00 - 16:15
84	Valorization of carbohydrate rich fraction of pea (CRFP) by product for fried coated fish nuggets: Fractional effects on batter pickup, moisture dynamics, texture, and color development Christopher Etti (University of Guelph)*	16:15 - 16:30
93	Valorization of Cold-Pressed Canola Meal Proteins: Linking Extraction Techniques to Bioactivity and Protein Composition Sindhu Chaudhary*(University of Guelph), Md. Juaneid Khan (University of Guelph), Annamalai Manickavasagan (University of Guelph)	16:30 - 16:45



SCIENTIFIC SESSION - VII

Rozanski 107, 3:15 pm – 5:00 pm

Theme: IoT, Big Data, Blockchain and AI in Food Supply Chain

Chair : Dr. Ashwani Tiwari

ID	Description	Time
101	ML/AI on Food Safety Dr. Ashwani Tiwari (Canadian Food Inspection Agency)*	15:15 - 15:30
43	Accelerating the Design of Soilless Growing Media Using Machine Learning Pranjali Suresh Sagar (University of Guelph)*	15:30 - 15:45
72	Deep Learning-Based SE-Attention for Fruit Freshness Classification Fatemeh Shirazi (Guelph University, Yazd University)*	15:45 - 16:00
73	Digital Twin Technology for Potato Storage: Concept and Challenges Seerangurayar Thirupathi (University of Prince Edward Island)*; Senthilkumar Thirupathi (University of Prince Edward Island)	16:00 - 16:15
77	Development of real-time food safety monitoring framework to detect Undeclared allergen(peanut) contamination in wheat flour using Near Infrared Spectrometry (NIRS), IoT, and AI Siva Peddareddigari (University of Guelph)*; Manickavasagan Annamalai (University of Guelph)	16:15 - 16:30
88	Improving detection of Listeria monocytogenes in Queso fresco using Generative Adversarial Network (GAN) augmented NIR spectral analysis Meenakshi P L (University of Guelph)*	16:30 - 16:45
92	OrgBerryChain: Blockchain-based traceability system for the organic strawberry supply chain Sri Vigna Hema V* (University of Guelph), Muhammad Tameem M (University of Guelph), Manickavasagan Annamalai (University of Guelph)	16:45 - 17:00



SCIENTIFIC SESSION - VIII

Rozanski 108, 3:15 pm – 4:45 pm

Theme: **Food Processing, Quality and Safety/
IoT, Big Data, Blockchain and AI in Food Supply Chain**

Chair : Dr. Manjusri Misra

ID	Description	Time
100	Enzymatic Conversion of Ginseng Saponins into Compound K Using Mushroom Mycelia-Derived Enzymes Jitendra Upadhyaya (School of Agriculture, Sudurpaschim University, Mahendranagar, Nepal)*	15:15 - 15:30
71	Multimodal AI-Driven Digital and Ultrasound Imaging for Intelligent Quality Assessment of French Fries Nikashini Thirugnanam (University of Prince Edward Island)*; Senthilkumar Thirupathi (University of Prince Edward Island)	15:30 - 15:45
94	Cloud-Based Deep Learning Framework for Automated Maple Syrup Grading Ahmed B. Mahmood (University of Guelph)*,Awatif Al-Taha (University of Guelph), Manickavasagan Annamalai (University of Guelph), Donald Mercer (University of Guelph) Mahmood Badr (University of British Columbia)	15:45 - 16:00
95	Machine learning based detection of mastitis using and N acetyl beta D glucosaminidase enzyme from milk sample R Muthukumar (SRM Institute of Engineering & Technology, India)*	16:00 - 16:15
93	Green-Synthesized Silver Nanoparticle Amperometric Sensor for Acrylamide Detection in Fried Plantain Chips Sruthi P. S. (National Institute of Food Technology, Entrepreneurship and Management, Thanjavur, India), Shanmugasundaram Saravanan* (National Institute of Food Technology, Entrepreneurship and Management, Thanjavur, India)	16:15 - 16:30
28	Illumination Optimization for Nutmeg Defect Detection Using a Custom-Built Machine Vision System: A Comparison of Blue and White LED Lighting AMANULLA AHAMED (UNIVERSITY OF PERADENIYA)*	16:30 - 16:45

AWARD BANQUET & MULTICULTURAL SHOW

Venue: Summerlee Science Complex Atrium

Bharathanatyam – Ishwarya

Classical Dance – Guelph Tamil Girls

Kummi: Traditional Folk Dance – Guelph Tamil Boys

Bhangra Dance – Ranpreet & Team

Latin & Indian Fusion – Isha Vinod Chopra

Classical Instruments - Meenakshi & Team

Star Dance - Malvika, Sakshi and Taveena

Song – Andrea & Team

Musical Feast – Christopher Etti & Team



MAY 16, 2026 SATURDAY

POST CONFERENCE TOUR

Post conference tour to Niagara Falls, Niagara on-the-Lake, and wineries

For details please visit: <https://cfeconference.ca/Tour>

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