



# 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	<b>Pre Conference Workshop</b> <b>Smart Food Engineering Systems</b> 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	<b>Registration</b>	Engineering Atrium
9:00 am - 9:15 am	<b>Opening Ceremony</b>	Engineering Atrium
9:15 am - 10:45 am	<b>Keynote Talks</b>	Engineering Atrium
10:45 am - 11:00 am	<b>Canadian Institute of Food Engineering (CIFE) Launch</b>	Engineering Atrium
11:00 am - 11:10 am	<b>Coffee break</b>	Engineering Atrium
11:10 am - 12:10 pm	<b>Panel Discussion</b>	Engineering Atrium
12:10 pm - 1:15 pm	<b>Buffet Lunch</b>	University Club - UC 5th Floor
1:15 pm - 3:15 pm	<b>Poster Sessions</b>	Engineering Atrium
3:15 pm - 3:30 pm	<b>Coffee Break</b>	
3:30 pm - 5:00 pm	<b>Workshop</b>	RICH 3504

## May 15, 2026 Friday

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

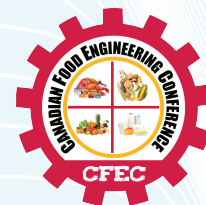
Director, Market and Industry Services  
Agriculture and Agri-Food Canada

**Dr. Stéphane Godbout**

President

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

**MAY 14, 2026 THURSDAY**



## **POSTER SESSIONS**

**Theme: Food Chemistry and Nutrition**

**Sl. No./ID**

**Description**

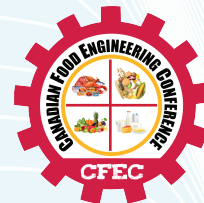
1. (16) **Influence of Lipid Source in Coffee on Sensory Acceptability and Gastrointestinal Responses**  
Serena Iannucci (Serena Iannucci)\*; Jessica Christie-Connolly (University of Guelph); Wanyi Luo (University of Guelph); Niloufar Rafiee Tari (University of Guelph); Sana Tasawar (University of Guelph); 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)\*



## Theme: Food Processing, Quality and Safety

Sl. No./ID

Description

11. (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)
12. (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)\*
13. (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)
14. (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)
15. (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)\*
16. (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)\*
17. (25) **Optimization of reciprocating agitation thermal processing for better quality retention in canned sweet corn and peas**  
Spandana Krishnappa (Mc Gill University)\*
18. (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)\*
19. (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)
20. (50) **Sustainable Organic Rice Cultivation and Processing in Northern Ontario: A Model for Innovation and Community Empowerment**  
Simon Egbedimame (DON CRYSTAL RICE INC)\*
21. (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
22. (59)	<b>An Integrated Classical Vision and Deep Learning Approach for Severity-Based Defect Grading in Frozen French Fries Using Simulated Fries Proxy Benchmarking</b> 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)
23. (60)	<b>Continuous-Flow Aqueous Two-Phase Extraction of R-Phycoerythrin from Dry Biomass of <i>Gracilaria corticata</i> in a Millifluidic Channel</b> Vaishali Saraswat (Indian Institute of Technology Tirupati)*
24. (79)	<b>Temperature–Moisture Dependence of Dielectric Properties of Faba Bean Seeds at Industrial Radio-Frequency Bands</b> Oladimeji Azeez (University of Saskatchewan); Suka Thangaraju (University of Saskatchewan)*; Oon-Doo Baik (University of Saskatchewan)
25. (97)	<b>Impact of Fermentation and Solvents Selection on the Bioactive Compounds and Antioxidant Potency of Hyacinth Beans-Based Beverage Formulation</b> Syed Muhammad (South China University of Technology)*
26. (5)	<b>Comparative Evaluation of Moisture Content Measurement Techniques for Food Quality and Safety Assessment in Fresh Beetroot</b> Abubakar Sani Ali (University of Lincoln)*
27. (104)	<b>Decontamination of <i>Salmonella spp.</i> and <i>Bacillus</i> Spores on Food Contact Surface Using High Voltage Plasma-Activated Water (HV-PAW)</b> 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)
28. (105)	<b>Disinfection of <i>Bacillus atrophaeus</i> (BA) spores on food contact surfaces using high voltage atmospheric cold plasma (HVACP) treatment</b> 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
29. (1)	<b>Integrating Explainable AI and FTIR Spectroscopy for On-Site Detection of Sudan (IV) Adulteration in Red Chilli Powder</b> Dilpreet Singh (Sant Longowal Institute of Engineering and Technology)*
30. (75)	<b>Spectral Characterization of GM and Non-GM Soybeans Using FTIR Spectroscopy</b> Shubhneet Kaur (University of Guelph)*
31. (83)	<b>Revolutionizing Food Systems: Integrating AI, Big Data, Blockchain, and IoT</b> Sophia Sadiq (University of Guelph)*
32. (98)	<b>CFIA Food Recall Analytics Suite: Machine Learning for Recall Severity Prediction and Brand Association Discovery</b> 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
33. (17)	<b>Upcycling Fruit and Vegetable processing waste into functional materials</b> Ashoka Gamage (University of Peradeniya)*
34. (18)	<b>Identification of a Bacterial Culture for Dairy-Fed Bioelectrochemical Systems</b> 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)
35. (20)	<b>Utilization of Cassava Processing Waste for Circular Bioeconomy</b> Ashoka Gamage (University of Peradeniya)*
36. (29)	<b>Utilization of excess skim milk through inclusion in cattle feed</b> Sabrina Martineau (University of Guelph)*
37. (40)	<b>Matrix-Specific Protein Fractionation of Rennet, Acid, and Acid-Heat Cheese Whey Using Bentonite Clay</b> Silvia Niewiadomski (University of Guelph)*
38. (54)	<b>Nutrient-Driven Control of Carotenoid Production in Red Yeast Using Precision Fermentation</b> Sakshi Manikpuri (University of Guelph)*; Guneet Kaur (University of Guelph)
39. (55)	<b>Development of Banana Peel Powder-Fortified Cakes: A Sustainable Approach to Enhancing Nutritional Quality, Bioactive Properties, and Starch Digestibility</b> Minhaj Uddin (Chattogram Veterinary and Animal Sciences University)*
40. (61)	<b>Graphitization of Argo-residue Based Biocarbon for Supercapacitor Applications</b> 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)
41. (70)	<b>Optimization of Bacterial Nanocellulose Production from Dairy Waste via SCOBY Fermentation and Evaluation for CO<sub>2</sub> Adsorption</b> Alma Joby (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**

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



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



## **SCIENTIFIC SESSION - III**

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

**Chair : Dr. D Muthukumar**

<b>ID</b>	<b>Description</b>	<b>Time</b>
9	<b>Impact of thermal processing on nutrition retention and functional properties of Bauhinia variegata for sustainable food engineering applications</b> 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)*	13:00 - 13:15
21	<b>Use of microfluidization to modulate interactions between milk and pea proteins and application of the hybrid system to produce non-fat yogurt</b> Siyu Liu (University of Guelph)*	13:15 - 13:30
30	<b>Surface charge characteristics of pulse materials in the Tribo-Electrostatic Separation Process</b> Ganapathy Subramanian Meenakshi Sundaram*; Roghayeh Najafi; Obiora Agu; Lifeng Zhang; Venkatesh Meda (University of Saskatchewan)	13:30 - 13:45
31	<b>Impact of Thermal Processing on Parvalbumin Allergenicity and Protein Structure in Atlantic Salmon</b> Predrag Sunjka (McGill University)*; Jiayong Huang (McGill University); Vijaya Raghavan (McGill University)	13:45 - 14:00
32	<b>Techno-Functional and Molecular Changes in Chickpea Subjected to Microwave and Infrared Treatments</b> Pabitra Das (University of Saskatchewan)*	14:00 - 14:15
64	<b>Comparison of Freeze Drying and Spray Drying for Iron Microencapsulation in Food Fortification</b> Naayaab Nagree (University of Toronto)*	14:15 - 14:30
102	<b>Assessment of the biological functionality and bioaccessibility of GABA in Lactobacillus plantarum NCTC 13644 fermented apple pomace after invitro stimulated digestion</b> Chinyere G. Udea*, Alberto Fiorea, Jonathan Wilkina, Adilia Lemos a. (Department of Food Science and Technology Abertay University, Scotland)	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
36	<b>Process Optimization of Tribo-Electrostatic Separation for Sustainable Protein Fractionation</b> Roghayeh najafi (University of Saskatchewan)*; Obiora Agu (University of Saskatchewan); Zhang Lifeng (University of Saskatchewan); Venkatesh Meda (University of Saskatchewan)	13:00 - 13:15
39	<b>Techno-Economic Evaluation of High-Pressure Processing for Fruit Juice Production Under Grid and Renewable Electricity Scenarios</b> 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)	13:15 - 13:30
45	<b>Reduction of Anti-nutritional Factors in Faba beans using RF-Treatment and Its Impact on Protein and Techno functional Properties</b> Suka Thangaraju (University of Saskatchewan)*	13:30 - 13:45
48	<b>Flour Particle Size and Ultrasound Pretreatment: Impact on Structure and Functionality of Pea Protein Isolates</b> CHINWENDU EZE (McGill University)*	13:45 - 14:00
51	<b>Commercial plant-based burgers: Amino acid profile and contributions to acrylamide (AA) formation during cooking</b> Chinaza Arinzechukwu (University of Guelph)*	14:00 - 14:15
52	<b>High-Efficiency Plate Evaporation in Food Processing: Comparison with Tubular Falling/Rising Film or Forced Circulation Systems</b> Kiran Paithankar (Alfa Laval Inc.)*	14:15 - 14:30
62	<b>Enzyme-assisted purification and characterization of proteins from Chilean granado beans</b> 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)	14:30 - 14:45
65	<b>Separation and characterization of plant-based proteins from Canadian beans</b> Sonu Sharma (University of Toronto)*; Christiana Anih (University of Toronto); Bradley Saville (University of Toronto); Levente Diosady (University of Toronto)	14:45 - 15:00



## SCIENTIFIC SESSION - V

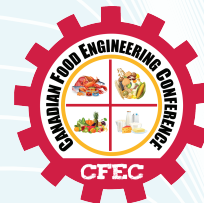
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Rozanski 105, 3:15 pm – 5:00 pm

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

Chair : **Dr. Daniel Onwude**

ID	Description	Time
99	<b>A dynamic physics-driven lifecycle model for the global transcontinental fruit supply chain</b> Dr. Daniel Onwude (University of Guelph)*	15:15 - 15:30
15	<b>Sustainable Oil Extraction from Bitter Melon Seeds (<i>Momordica charantia</i> L.) using Emerging Thermal and Non-Thermal Technologies</b> 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)	15:30 - 15:45
19	<b>Superstructure Optimization of Side-Stream Valorization in Hybrid Pea Protein Fractionation: An Eco-Efficiency Approach</b> Derrick Allotey (McGill University)*; Ebenezer Kwofie (McGill University)	15:45 - 16:00
37	<b>Nanofiltration of Deproteinated Cheese Whey for the Recovery of Lactose</b> Trevor Smith (University of Guelph)*; Anthony Heebner (University of Guelph); Alice Marciniak (University of Guelph); Bassim Abbassi (University of Guelph)	16:00 - 16:15
41	<b>Machine Learning-Guided Bioprocess for Production of Functional Rhamnolipid Biosurfactants</b> Makary Nasser (uofg)*; Rahul Barbhuiya (University of Guelph); Guneet Kaur (University of Guelph); Ashutosh Singh (University of Guelph)	16:15 - 16:30
47	<b>From Date Fruit Waste to Probiotic Production: An Integrated By-product Valorization Strategy for Low-Cost, Animal-Free Culture Media</b> Manideep Pabba (Khalifa University)*; Fawzi Banat (Khalifa University)	16:30 - 16:45
4	<b>Nanoemulsion-Based Delivery of Fermented Phytochemicals for Sustainable Fungal Disease Management</b> 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	16:45 - 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	<b>Industrial Prospects of Biohydrogen Production for a Net-Zero Energy Transition</b> SD Jacob Muthu (University of Regina)*	15:15 - 15:30
53	<b>Integrated Zero Liquid Discharge (ZLD) Systems for Water Recovery in Food Processing</b> Kiran Paithankar (Alfa Laval Inc.)*	15:30 - 15:45
57	<b>Production and Characterization of Liquid Smoke from Lignocellulosic Biomass Using a Compact Food-Grade Pyrolysis Reactor</b> Kishanthini Kailaivasan (Wayamba University of Sri Lanka)*	15:45 - 16:00
76	<b>Application of Bentonite Adsorption for the Removal and Fractionation of Protein from Acid Whey</b> Anthony Heebner (University of Guelph)*; Alice Marciniak (University of Guelph); Bassim Abbassi (University of Guelph)	16:00 - 16:15
84	<b>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</b> Christopher Etti (University of Guelph)*	16:15 - 16:30
90	<b>Development and Characterization of Protein-polysaccharide complex to encapsulate Bioactive compounds</b> Hrishikesh Patil (University of Guelph)*	16:30 - 16:45
93	<b>Valorization of Cold-Pressed Canola Meal Proteins: Linking Extraction Techniques to Bioactivity and Protein Composition</b> Sindhu Chaudhary*(University of Guelph), Md. Juaneid Khan (University of Guelph), Annamalai Manickavasagan (University of Guelph)	16:45 - 17:00



## 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	<b>ML/AI on Food Safety</b> Dr. Ashwani Tiwari (Canadian Food Inspection Agency)*	15:15 - 15:30
43	<b>Accelerating the Design of Soilless Growing Media Using Machine Learning</b> Pranjali Suresh Sagar (University of Guelph)*	15:30 - 15:45
72	<b>Deep Learning-Based SE-Attention for Fruit Freshness Classification</b> Fatemeh Shirazi (Guelph University, Yazd University)*	15:45 - 16:00
73	<b>Digital Twin Technology for Potato Storage: Concept and Challenges</b> Seerangurayar Thirupathi (University of Prince Edward Island)*; Senthilkumar Thirupathi (University of Prince Edward Island)	16:00 - 16:15
77	<b>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</b> Siva Peddareddigari (University of Guelph)*; Manickavasagan Annamalai (University of Guelph)	16:15 - 16:30
88	<b>Improving detection of Listeria monocytogenes in Queso fresco using Generative Adversarial Network (GAN) augmented NIR spectral analysis</b> Meenakshi P L (University of Guelph)*	16:30 - 16:45
92	<b>OrgBerryChain: Blockchain-based traceability system for the organic strawberry supply chain</b> 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
93	<b>Green-Synthesized Silver Nanoparticle Amperometric Sensor for Acrylamide Detection in Fried Plantain Chips</b> 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)	15:15 - 15:30
100	<b>Enzymatic Conversion of Ginseng Saponins into Compound K Using Mushroom Mycelia-Derived Enzymes</b> Jitendra Upadhyaya (School of Agriculture, Sudurpaschim University, Mahendranagar, Nepal)*	15:30 - 15:45
28	<b>Illumination Optimization for Nutmeg Defect Detection Using a Custom-Built Machine Vision System: A Comparison of Blue and White LED Lighting</b> AMANULLA AHAMED (UNIVERSITY OF PERADENIYA)*	15:45 - 16:00
71	<b>Multimodal AI-Driven Digital and Ultrasound Imaging for Intelligent Quality Assessment of French Fries</b> Nikashini Thirugnanam (University of Prince Edward Island)*; Senthilkumar Thirupathi (University of Prince Edward Island)	16:00 - 16:15
94	<b>Cloud-Based Deep Learning Framework for Automated Maple Syrup Grading</b> 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)	16:15 - 16:30
95	<b>Machine learning based detection of mastitis using and N acetyl beta D glucosaminidase enzyme from milk sample</b> R Muthukumar (SRM Institute of Engineering & Technology, India)*	16:30 - 16:45

# **AWARD BANQUET & MULTICULTURAL SHOW**

**Venue:** Summerlee Science Complex Atrium

**Bharathanatyam** – Ishwarya

**Classical Dance** – Guelph Tamil Girls

**Kummi: Tradional 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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