



RESEARCH THAT RESONATES
AUGUST 17-21, 2014 | MONTREAL, CANADA

IUFoST 17th WORLD CONGRESS OF
FOOD SCIENCE AND TECHNOLOGY & EXPO

PRELIMINARY
DETAILED
PROGRAM

VERSION: JUNE 19, 2014

Saturday, August 16, 2014

08:00 – 17:00 Pre-Congress Workshop: Aflatoxin Management

- 08:30 Introduction - Setting the Stage**
- 09:00 Evidence-based strategies for reducing the health impacts of aflatoxin/fumonisin exposure in high exposure regions**
David Miller, Canada
- 09:30 Rapid testing and regulating for mycotoxin concerns: A perspective from Africa.**
Gordon Sheppard, South Africa
- 10:00 Technologies to reduce the aflatoxins load in peanuts**
Manjeet Chinnan, USA
- 10:30 Break**
- 11:00 The Brazilian perspective on aflatoxins**
Martha Taniwaki, Brazil
- 11:30 (Talk TBC)**
- 12:00 Lunch**
- 13:00 Impact of aflatoxins on health in Africa**
Gordon Sheppard, South Africa
- 13:30 (Talk TBC)**
- 14:00 (Talk TBC)**
- 14:30 (Talk TBC)**
- 15:00 Extension of processing technologies to reduce the level of aflatoxins in peanuts and upgrade detoxified products in Ghana, Burkina Faso, Uganda, Kenya and Rwanda – A CGIAR Proposal**
Walter Spiess, Germany
- 15:30 Break**
- 16:00 Discussion session to build a framework for the development of a project proposal based on Walter Spiess and report back to the General Assembly**
Facilitator
Lucia Anelich, South Africa
- 17:00 Program Concludes**
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Sunday, August 17, 2014

07:00 – 18:00 Registration Open

08:45 - 17:00 IUFoST Working Groups

08:45 – 12:30 IUFoST Young Scientists and Students Workshop

14:00 – 17:00 Workshop on “New Horizons for Fats and Oils in the Health Marketplace”

14:00 Overview and Introductions

*Patricia Kearney, President, PMK Associates, member Harvard Business School
Food Policy Committee, PAPSAC*

14:05 Better-For-You Foods - It’s Just Good Business

Hank Cardello, Director, Hudson Institute’s Obesity Solutions Initiative

14:35 A New Perspective on the Latest Nutrition Science on Fats and Oils

Dr. Peter Jones, Director, Richardson Centre for Functional Foods and Nutraceuticals

15:05 Consumer Attitudes and Behaviors Towards Fats, Oils and Better-For-You Foods

Rhonda Ryan, Oil Market Leaders for Omega-9 Oils, Dow AgroSciences

15:35 Exploring New Functional Uses and Applications for Fats and Oils

Steve Robbins, Research Coordinator for Richardson Oilseed Limited

16:05 Demands for New Applications in the Marketplace

Asim Syed, Director, Applications R&D for Omega-0 Oils, Dow AgroSciences

16:35 Panel Discussion

17:00 Program Concludes

17:30 - 18:30 Opening Ceremonies

18:30 - 21:00 Welcome Reception in Exhibit Hall

Monday, August 18, 2014

08:00 - 08:15 Induction of Fellows

08:15 - 09:00 Plenary: IUFoST Distinguished LecturerBrian Keating, CSIRO

09:00 - 10:00 Coffee Break

09:15 - 09:45 Moderated Poster Sessions 1-8 (in Exhibit Hall)**Food Safety – Allergens****Food Safety - Microbiological, Physical and chemical Safety of Agricultural Products and Processed Foods****Food Health - Food Bioactive-Matrix Interactions****Sustainability – General****Processing - Emerging Technologies (HPP, PEF, Ozone, PL/UV, etc.)****Processing - Thermal Processing, Minimal Processing and Hurdle Technology****Chemistry - Additives and Ingredients****Chemistry - Detecting Food Adulteration****Chemistry - Food Bioactives: Identification, Characterization and Efficacy**

10:00 - 12:10 Concurrent Session 1.1: Food Processing-European Food Engineering Highlights (EAFE)

10:00 - 12:10 Concurrent Session 1.2: Food Health-Food Bioactives, Nutraceuticals and Functional Food Ingredients (ISNFF)

10:00 - 12:10 Concurrent Session 1.3: Food Safety - Microbiological, Physical and Chemical Safety of Agricultural Products and Processed Foods Part I

Microbiological, physical and chemical safety of agricultural products and processed foods

Joseph Scimeca
Cargill, Inc., United States

Pathogenic and commensal *E. coli* from irrigation water show potential in transmission of Extended Spectrum and AmpC β -lactamases determinants to lettuce contaminants

Patrick Njage; Elna Buys
University of Pretoria, Pretoria, Gauteng, South Africa

Dietary Acrylamide Exposure of Kenyan Population: Case Study of Potato Crisps Consumers in Nairobi

George Abong¹; Jackline Ogolla¹; Bruno De Meulenaer²; Michael Okoth¹; Jackson Kabira³; Jasper Imungi¹; Paul Karanja⁴; Liesbeth Jacxsens²
¹University of Nairobi, Nairobi, Nairobi (NBO), Kenya; ²University of Ghent, Ghent, GH, Belgium; ³National Potato Research Center, Limuru, Central (C), Kenya; ⁴Jomo Kenyatta University of Agriculture and Technology, Nairobi, Nairobi (NBO), Kenya

Alive and well in low-moisture conditions - what we can learn about *Cronobacter sakazakii* using RNA sequencing and transposon-directed insertion site sequencing

Qiongqiong Yan¹; Matthew McCusker¹; Marta Martins¹; Karsten Hokamp²; Carsten Kröger³; Gopal Gopinath⁴; Christopher Grim⁴; Ben Tall⁴; Séamus Fanning¹
¹University College Dublin, Dublin, Ireland; ²Trinity College Dublin, Dublin, Ireland; ³University of Liverpool, Liverpool, United Kingdom; ⁴US-Food and Drug Administration, Washington D.C., MD, United States

Monitoring Codex Food Hygienic Principles at School Feeding Caterers in Trinidad, W. I.

Neela Badrie¹; Inteaz Alli²; Sophia Balfour¹
¹University of the West Indies, St. Augustine, Trinidad and Tobago; ²McGill University, Ste-Anne- de-Bellevue, QC, Canada

Inhibition of *Campylobacter jejuni* on Fresh Chicken Breasts by K-Carrageenan/Chitosan-Based Coating Containing Allyl Isothiocyanate or Oriental Mustard Extract

Amin Olaimat; Yuan Fang; Richard Holley
University of Manitoba, Winnipeg, MB, Canada

10:00 - 12:10 Concurrent Session 1.4: Potential Regulatory Issues - Food Labeling and Health Claims

(Title TBC)

Dirk Jacobs
Codex Food Labeling Committee

Current Status of Nutrition and Health Claims in Europe

Hans Verhagen
National Institute for Public Health and the Environment (RIVM), The Netherlands, Bilthoven, Netherlands

Recent Development in Health Canada's Regulation of Food Health Claims

William Yan
Bureau of Nutritional Sciences, Health Canada, Ottawa, ON, Canada

Functional Foods and Health Claims: How Health Canada Measures Up

Sara Zborovski
Davis LLP, Toronto, ON, Canada

FDA Regulatory Updates

Colin A. Barthel
Food and Drug Administration, Centre For Food Safety and Applied Nutrition, Washington, DC, United States

Substantiating Food Health Relationships for Health Claims in Australia and New Zealand

Marion Healy; Claire Larter; Judy Cunningham; Michelle Fraser; Dorothy Mackerras
Food Standards Australia New Zealand, Barton, ACT, Australia

10:00 - 12:10 Concurrent Session 1.5: Industrially-Relevant Products and Issues - Bakery Products: Innovative Ingredients & Processes

Developments in improving the quality of gluten-free bread made from non-wheat cereals through modification of their starch and protein properties

John Taylor
Department of Food Science, University of Pretoria, Hatfield, Pretoria, South Africa

Baking up Great Plant Trials

Carol Finlan
Dealers Ingredients, Brampton, ON, Canada

Application of FT-NIR spectroscopy and electronic nose in on-line monitoring of dough proofing

Madhuresh Dwivedi; Navneet Singh Deora; Aastha Deswal; H N Mishra
Indian Institute of Technology Kharagpur, Kharagpur, West Bengal, India

Effect Of Processing Methods On The Physico -Chemical Composition And Functional Properties Of African Walnut (Tetracarpidium CONOPHRUM) Seed Flour

Lucretia Barber; Juliet Emelike; Simeon Achinehwu
Rivers State University Of Science And Technology, Port Harcourt, Rivers, Nigeria

Profile Of Phenolic Compounds And Antioxidant Activity Of Breads Incorporated With Guava Flour

Mabel Lago¹; Felipe Rios¹; Vanessa Castelo-Branco²; Juliana Nunes³; Mariana Monteiro¹

¹Nutrition Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; ²Chemistry Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; ³Nutrition School, Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, Brazil

Approach To Characterization Of Physical And Chemical Properties Of Gliadin Dispersions

Nayelli Hernandez-Espinosa; Juan Alfredo Salazar-Montoya; Emma Gloria Ramos Ramirez
Cinvestav- Ipn, Mexico City, Df, Mexico

(Title TBC)

Derick Rousseau

Effect of structure and concentration of gelator on organogels properties: A Rheological and Small-Angle X-ray spectroscopy study

Miguel Cerqueira¹; Luiz Fasolin²; Carolina Picone²; Lorenzo Pastrana³; Rosiane Cunha⁴; António Vicente¹

¹Centre of Biological Engineering, University of Minho, Braga, Portugal;

²Department of Food Engineering, Faculty of Food Engineering, University of Campinas, Campinas, SP, Brazil; ³Biotechnology Group, Department of Analytical Chemistry and Food Science, University of Vigo, Ourense, Spain;

⁴Department of Food Engineering, Faculty of Food Engineering, University of Campinas, Campinas, Brazil

Alternative routes to oil structuring: Wax-based oleogels, polymer oleogels and HIPE gels

Ashok Patel

Ghent University, Gent, België, Belgium

Double emulsions as encapsulation systems for stabilization and target delivery of bioactives

Heike P. Schuchmann; Anna Schuch; Richard Bernewitz

Karlsruhe Institute of Technology KIT, Karlsruhe, Germany

Diffusion of macromolecules in cheeses is affected by solute size and cheese structure: a Fluorescence Recovery After Photobleaching (FRAP) approach.

Juliane Flourey¹; Anne-Laure Chapeau²; Juliana Valle Costa Silva³; Anne Thierry³; Valérie Gagnaire⁴

¹UMR INRA AGROCAMPUS OUEST Science and Technology of Milk and Eggs, RENNES, France; ²ESA Group, Higher education and research in agriculture, food science and markets, ANGERS, France; ³INRA, UMR1253, Science and Technology of Milk and Eggs, RENNES, France; ⁴INRA, Rennes, France

Strategies for improving the flavour of low-fat and recombined milk cheese: a colloid structural approach

David Everett¹; Kalpana Kathriarachchi¹; Dawisa Paiboonsiri²; Haotian Zheng¹

¹Riddet Institute and University of Otago, Dunedin, New Zealand; ²University of

Otago, Dunedin, New Zealand

12:10 - 12:40 Lunch

12:40 - 13:25 Moderated Poster Sessions 10-18:

Food Safety - Yeast, Fungi, and other Fungal Metabolites

Food Safety - Microbiological, Physical and Chemical Safety of Agricultural Products and Processed Foods

Food Health - Gut Health, Fibre and Pre-Biotics

Processing - Food Process/Package Modeling

Processing - Emerging Technologies (HPP, PEF, Ozone, PL/UV, etc.)

Chemistry - Food Structure and Functionality

Chemistry - Additives and Ingredients

Chemistry - Food Bioactives: Identification, Characterization and Efficacy

Food Nanotechnology - General

13:30 - 15:00 Concurrent Session 2.1: Food Nanotechnology - Potential benefits of nanotechnology with respect to food, nutrition, and health (ICSU)

13:30 - 15:00 Concurrent Session 2.2: ICMSF- Role of Microbial Testing in the context of Risk Management Based on Book 8

13:30 - 15:00 Concurrent Session 2.3: Convergent Innovation - Bridging Technologies to Innovation Through the Whole of Society Affordable Food, Health, Healthcare

(Title TBC)

Prabhu Pingali
Founding Director Cornell-Tata Initiative Agriculture-Nutrition

(Title TBC)

Klaus Kraemer

Changing trends in dietary pattern and implications to food and nutrition security in ASEAN

Jan Mei Soon¹; E Siong Tee²

¹Universiti Malaysia Kelantan, Jeli, Kelantan, Malaysia; ²Nutrition Society of Malaysia, Kuala Lumpur, Malaysia

Food Fortification Programmes in Developing Countries in Perspective: What can we learn?

Adelodun Kolapo¹; Morenike Sanni²

¹The Polytechnic, Ibadan, Nigeria; ²Ajayi Crowther University, Oyo, Nigeria

13:30 - 15:00 Concurrent Session 2.4: Food and Health - Nutrigenomics

(Title TBC)

Ahmed El Sohemy

Effect of High-fat Diet on Hepatic Proteomics of Hamsters

Chia-Feng Kuo¹; Ya-Lin Lin¹; Chen-Chung Liao²

¹Shih Chien University, Taipei, Taiwan; ²Yang-Ming University, Taipei, Taiwan

Neurotrophic effects of soy peptides in senescence-accelerated mice

13:30 - 15:00 Concurrent Session 2.4: Food and Health - Nutrigenomics

Shigeru Katayama¹; Motohiro Maebuchi²; Tomoko Ishijima³; Yuji Nakai³;
Keiko Abe³; Soichiro Nakamura¹

¹Shinshu University, Nagano, Japan; ²Fuji Oil Co., Ltd., Osaka, Japan; ³Tokyo University, Tokyo, Japan

Studies on the mung bean proteins-supplemented macaroni II. Nutritional, sensorial and biological evaluations

Fawzy El-Soukkary¹; Magdy Zaghloul¹; Sobhy Afify¹; Anwar Hammam²
¹faculty of Agric., Minia Univ., Minia Egypt, El-Minia, Egypt; ²Manager of the Central Restaurant, Sohag University, Sohag, Egypt, Sohag, Egypt

13:30 - 15:00 Concurrent Session 2.5: Processing - Food Process/Package Modeling

Consider a Spherical Cow: Physics-Based Complementing Experiment-Based Research and Education

Ashim Datta
Cornell University, Ithaca, NY, United States

Fluid Dynamic Study on Spout Elevation of a Gas-Particle Spouted Fluidization Bed in Microwave-Vacuum Dryer

Guangyuan Jin¹; Min Zhang¹; Zhongxiang Fang²; Zhengwei Cui¹
¹Jiangnan University, Wuxi, China; ²Curtin University, Bentley, Australia

Experimental And Numerical Assessments Of Migration From A Novel Clay/Polymer Nanocomposite Packaging

Jen-Yi Huang¹; Yu Yuan Chieng²; Xu Li²; Weibiao Zhou¹
¹Food Science and Technology Programme, Department of Chemistry, National University of Singapore, Singapore, Singapore; ²Institute of Materials Research and Engineering, Agency for Science, Technology and Research, Singapore, Singapore

Reducing food product development cost using meta-analysis and modeling.

Samuel Mercier¹; Sébastien Villeneuve²; Martin Mondor²; Christine Moresoli³; Bernard Marcos⁴
¹Sherbrooke University, Sherbrooke, Québec, Canada; ²Agriculture and AgriFood Canada, Saint-Hyacinthe, QC, Canada; ³Waterloo University,

Waterloo, ON, Canada; ⁴Sherbrooke University, Sherbrooke, QC, Canada

13:30 - 15:00 Concurrent Session 2.6: Chemistry - Food Structure and Functionality II

Protein-polysaccharide interactions from fundamentals to food functionality: the case of acidified milk systems

Sylvie L. Turgeon¹; Xuan Thang Le¹; Marie-Claude Gentès²; Leila Arfaoui¹; Daniel St-Gelais²

¹STELA, INAF/Laval University, Québec, Qc, Canada; ²STELA, INAF/Laval University and Food Research and Development Centre, Agriculture and Agri-Food Can, St-Hyacinthe, Qc, Canada

Characterisation of Wheat Gluten and its Sub fractions using SEM, DSC and FTIR

Vandana Chaudhary; Bhupender Singh Khatkar
Guru Jambheshwar University of Science and Technology, Hisar, Haryana, India

Characterization of some properties of starches isolated from *Dioscorea dumetorum* (bitter Yam) grown in Nigeria

Folasade Adeboyejo¹; Kolawole Falade²

¹National Horticultural Research Institute, NIHORT, Nigeria, Ibadan, OY, Nigeria; ²University of Ibadan, Ibadan, OY, Nigeria

Relationship between thermal and swelling power of some native starches

Loreto Muñoz; Jose Miguel Aguilera; Angel Leiva; Franco Pedreschi
Pontificia Universidad Catolica de Chile, Santiago, Chile

13:30 - 15:00 Concurrent Session 2.7: Industrially-Relevant Products and Issues - What's in a Label? Trends in Minimal Ingredients, Probiotics & Natural Preservatives

Top 10 Trends 2014

Lu Ann Williams
Innova Market Insights; University Dunarea de Jos of Galati, Romania, Romania

13:30 - 15:00 **Concurrent Session 2.7: Industrially-Relevant Products and Issues - What's in a Label? Trends in Minimal Ingredients, Probiotics & Natural Preservatives**

Cognitive Economics of Food: Valuing Halal/Kosher

Aurora Saulo¹; Batool Batalvi²; Howard Moskowitz³; Nadejda Livshits⁴
¹University of Hawaii at Manoa, Honolulu, Hawaii, United States; ²SB&B Marketing Research, Toronto, ON, Canada; ³iNovum, New York, NY, United States; ⁴Moskowitz Jacobs, Inc., White Plains, NY, United States

Surface Response Methodology applied to verify enzymatic activity after Lactase and Transglutaminase treatment during Diet Strawberry Ice Cream production and effects on Ice Crystal Size Distribution

Celeide Pereira¹; Mirelle Sifroni Farias¹; Fabiana Ourique¹; Leonel Vinicius Constantino²; Valdelucia Maria Alves De Souza Grinevicius¹; Carla Adriana Pizarro Schmidt³; André Wüst Zibetti¹; Pedro Luiz Manique Barreto¹; Suzana Lucy Nixdörf⁴; Rozangela Curi Pedrosa¹; Ernani Sebastião Sant'anna¹
¹Federal University of Santa Catarina, Florianópolis, Santa Catarina, Brazil; ²Londrina State University, Londrina, Paraná, Brazil; ³Federal Technological University of Paraná, Medianeira, Paraná, Brazil; ⁴State University of Londrina, Londrina, Paraná, Brazil

Partially Hydrogenated Oils and Risk: Assessing the Scientific Evidence

DeAnn Liska¹; Chad Cook¹; P. Courtney Gaine²; Ding Ding Wang³
¹Biofortis Clinical Research, Addison, IL, United States; ²ILSI North America, Washington, DC, United States; ³Tufts University, Boston, MA, United States

15:00 - 15:30 **Coffee Break**

15:30 - 17:00 **Concurrent Session 3.1: Food Nanotechnology - Nano-Enabled Food Processing and Packaging**

Detection, quantification and release profile of engineered nanoparticles from polymer-clay nanocomposites in solid-liquid interfaces

Maria Rubino
School of Packaging, Michigan State University, East Lansing, MI, United States

15:30 - 17:00 Concurrent Session 3.1: Food Nanotechnology - Nano-Enabled Food Processing and Packaging

States

Toxic Response of Cells Associated with the GI Tract to Silver Nanoparticle Exposure and Ability of Bio-fluid Components to Mediate the Observed Toxicity

Anna Murphy; Kate Sheehy; Alan Casey; Gordon Chambers
Dublin Institute of Technology, Dublin, Ireland

Assessment and quantification of the migration behaviour of nanosilver in commercial and non-commercial food packaging materials

Ralf Greiner; Birgit Hetzer
Max Rubner-Institut, Federal Research Institute of Nutrition and Food,
Karlsruhe, Germany

Development of food contact surfaces with nanoscale topography: impact on bacterial attachment and biofilm formation

Yifan Cheng¹; Carmen Moraru²; Diana Borca-Tasciuc³; Shuyi Wang³; Guoping Feng⁴
¹Cornell University, Ithaca, NY, United States; ²Cornell University, ITHACA, NY, United States; ³Rensselaer Polytechnic Institute, Troy, NY, United States; ⁴Cornell University, Ithaca, New York, United States

15:30 - 17:00 Concurrent Session 3.2: Sustainability: Introduction

(Title TBD)

John McDermott

Sustainability and Nutrition : two sides of the same coin?

Anne Roulin¹; Karen Cooper¹; Namy Espinoza-Orias²
¹Nestlé, Vevey, Switzerland; ²Nestlé Research Centre, Lausanne, Switzerland

Adaptation of existing initiatives for improving Food Security in the development of Emergency Feeding Systems as part of the Disaster Relief component of the related IUFoST Task Force

15:30 - 17:00 Concurrent Session 3.2: Sustainability: Introduction

Albert McGill
Future for Food, Melbourne, VIC, Australia

15:30 - 17:00 Concurrent Session 3.3: Chemistry - Detecting Food Adulteration

(Title TBC)

Bob Hanner
University of Guelph, DNA barcodes involving seafoods, Canada

An overview of a new method for detection of adulterants in food

Theodore Labuza
Department of Food Science and Nutrition, University of Minnesota,
Minneapolis, MN, United States

Quantification of tampering by adding whet to fluid milk using artificial neural networks and Raman spectroscopy

Maria Jose Bell¹; Roney Rocha²; Igor Paiva²; Marco Antonio Furtado³; Virgilio Anjos³

¹Universidade Federal de Juiz de Fora, São Pedro, Juiz de Fora-MG, Brazil;

²Universidade Federal de Juiz de Fora, Juiz de Fora, Juiz de Fora-MG, Brazil;

³Universidade Federal de Juiz de Fora, Juiz de Fora, MG, Brazil

Multiplex Polymerase Chain Reaction-Restriction Fragment Length Polymorphism Assay for the Detection of Five Haram Meat Species

Md. Equb Ali¹; Md. Abdur Razzak²; Sharifah Bee Abd Hamid³

¹University of Malaya, Kuala Lumpur, Kuala Lumpur, Malaysia; ²University of

Malaya, Kuala Lumpur, Kuala Lumpur, Malaysia; ³University of Malaya,

Kuala Lumpur, Kuala Lumpur, Malaysia

15:30 - 17:00 Concurrent Session 3.4: Convergent Innovation - Consumer Insights, Whole-System Innovation & Interventions for Accelerated Obesity & NCDs Prevention & Control

15:30 - 17:00 Concurrent Session 3.4: Convergent Innovation - Consumer Insights, Whole-System Innovation & Interventions for Accelerated Obesity & NCDs Prevention & Control

How Nutrition Labels Affect Consumer Food Choice

Thomas Shultz
Department of Psychology and School of Computer Science, McGill University,
Montreal, QC, Canada

(Title TBC)

Marc Giroux
Metro Inc., Montreal, Qc, Canada

Prevalence And Determinants Of Obesity Among Affluent School Going Adolescents

Anita Malhotra¹; Ashu Aggarwal²
¹Lakshmibai College (University of Delhi), New Delhi, India; ²Indira Gandhi National Open University, Delhi, India

Testing a Social Marketing Model for Affordable and Improved Nutrition: A Focused Ethnographic Study for a Private-Public Partnership in Ghana.

Nii Addy; Nana Ackatia-Armah
McGill University, Faculty of Management, Montreal, QC, Canada

15:30 - 17:00 Concurrent Session 3.5: Industrially-Relevant Products and Issues - Sodium and Sugar Reduction

Sodium Reduction and Replacement in Food: perspective and challenges

Steve Labrie
Laval University, Quebec, Qc, Canada

Proteinases of *Lactobacillus helveticus* and their distinct capability to hydrolyze s1 and -caseins at different NaCl concentrations: from in vitro experiments to Swiss-type cheeses

Valerie Gagnaire¹; Xavier Lecomte²; Nicolas Pinon³; Romain Richoux⁴; Lydie Aubert Frogerais⁴; Marine Nurdin⁴; Jessica Warloulzel⁴; Jean-René Kerjean⁴; Anne Thierry³
¹INRA, Rennes, France; ²Université de Lorraine, URAFPA, Vandoeuvre-lès-

Nancy, France; ³INRA, UMR1253, Science et Technologie du Lait et de l'Œuf, Rennes, France; ⁴Actalia, Rennes, France

Health Benefits beyond Sugar Replacement

Peter Decock

Cargill R&D Centre Vilvoorde, Vilvoorde, Belgium

Using the entire fruit's flour of mesquite (*Prosopis alba*) in the development of muffins with high concentration of fiber and reduced sugar

Abel Gonzalez-Galan¹; Angelita Duarte²; Joelma Pereira³; Fausto De Lima-Junior³; Leticia Dias Dos Santos⁴

¹bromatology And Nutrition Lab. Pharmacy And Biochemistry Faculty.

Universidad Autonoma Gabriel Rene, Santa Cruz De La Sierra, Sc, Bolivia;

²chemistry Department, Universidade Federal De Lavras, Lavras, Mg, Brazil;

³food Science Department, Universidade Federal De Lavras, Lavras, Mg, Brazil;

⁴universidade Federal Do Triangulo Mineiro, Uberaba, Mg, Brazil

15:30 - 17:00 Concurrent Session 3.6: Consumer Behavior and Sensory Evaluation - Global Trends in Products and Consumer Behavior

PR, Social Media and the New Food Landscape: Forces and factors shaping consumers' food preferences and eating behavior

Jordan L. Lebel

John Molson School of Business, Montreal, Qc, Canada

Market Drivers: Leading-Edge Food Attributes for Boosting Global Food & Beverage Sales

A. Elizabeth Sloan

Sloan Trends, Inc., Escondido, CA, United States

Dimensions of innovation: social representations in the postharvest initiative of fish fortification in Catanduanes island, Luzon, Philippines

Jimmy Masagca¹; Minerva Morales¹; Delia Sorra²; Aurora Araojo²; Meda Mercado³; Ma. Cecilia Tiu²; Ma. Luz Floralde²

¹Catanduanes State University, Virac, CAT, Philippines; ²Catanduanes State University, Virac, Catanduanes, Philippines; ³ Catanduanes State University, Virac, Catanduanes, Philippines

Maintaining and building trust in the global food supply in an increasingly troubled world

Daryl Lund¹; David Schmidt²; Junshi Chen³; Lowell Catlett⁴; Nigel Sunley⁵; Josephine Wills⁶; Patrick Wall⁷; Andy Benson²

¹University of Wisconsin, Madison, WI, United States; ²International Food Information Council and Foundation, Washington, DC, United States; ³China Center for Food Safety Risk Assessment, Beijing, China; ⁴New Mexico State University, Las Cruces, NM, United States; ⁵Sunley Consulting, Johannesburg, South Africa; ⁶European Food Information Council, Brussels, Belgium;

⁷University of Dublin, Dublin, Ireland

15:30 - 17:00 Concurrent Session 3.7: Processing - Thermal Processing, Minimal Processing and Hurdle Technology

Thermal Processing – The Journey from Appertisation to High Pressure Sterilization

Hosahalli Ramaswamy
McGill University, Montreal, Qc, Canada

Modulation of papaya wine and durian wine flavor compound formation by yeasts

Christine Pin Rou Lee

High moisture extrusion cooking of pea protein isolate: Effect of cooking temperature on the protein composition and protein-protein interactions.

Raffael Osen; Simone Toelstede; Peter Eisner; Ute Schweiggert-Weisz
Fraunhofer Institute for Process Engineering and Packaging, Freising, Germany

Heat transfer coupled with enzyme inactivation in the processing of pre-cooked frozen cruciferous vegetables

Noemi Elisabet Zaritzky¹; John Perez²; Santos Victoria³; Alicia Califano⁴
¹facultad Ingenieria Unlp And Cidca (Unlp- Conicet), La Plata, Buenos Aires, Argentina; ²cidca, La Plata, Argentina; ³facultad Ingenieria Unlp And Cidca (Unlp- Conicet), La Plata, Argentina; ⁴cidca, La Plata, Argentina

17:00 - 17:10 Travel Break

17:10 - 19:00 IUFoST Industry Leader Summit

Tuesday, August 19, 2014

07:15 - 08:00 Canadian Institute of Food Science and Technology (CIFST) AGM

08:00 - 08:15 Canadian Spotlight

08:15 - 09:00 Plenary Lecture

Consumer liking by innovative solutions through responsive networking

Marcel Paques, FrieslandCampina Research, FrieslandCampina Innovation Centre, AE, Wageningen, The Netherlands

09:00 - 10:00 Coffee Break

09:15 - 09:45 Moderated Poster Sessions 19- 27:

Food Safety - Microbiological, Physical and Chemical Safety of Agricultural Products and Processed Foods

Food Health - Gut Health, Fiber and Pre-Biotics

Chemistry – General

Processing - Packaging: MAP, Material Properties, Biodegradable/Edible Films

Processing - Emerging Technologies (HPP, PEF, Ozone, PL/UV, etc.)

Food Health - Food Bioactive-Matrix Interactions

Chemistry - Additives and Ingredients

Chemistry - Food Structure and Functionality

Sustainability - General

10:00 - 12:10 Concurrent Session 4.1: Food Nanotechnology - Nanodelivery Systems for Improved Food Safety and Human Health

(Title TBC)

Harjinder Singh
Massey University, Palmerston North, New Zealand

Fabrication of curcumin loaded nanoparticles for enhancing anti-colorectal cancer activity

Panisa Udompornmongkol; Been-Huang Chiang
Institute of Food Science and Technology, National Taiwan University, Taipei, Taiwan

Chemical stability and release of lutein and alpha-tocopherol delivered with polymeric nanoparticles under conditions relevant to food use

Carlos Astete; Toni Borel; Lacey Simon; Meecha Whaley; Cristina Sabliov
Louisiana State University, Baton Rouge, LA, United States

Self-assembled nanoparticles based on case and its potential application as - carotene carrier

chenguang liu; yu Yu
Ocean University of China, Qingdao City, China

Nano Carriers for Nutraceuticals in Food System

Hyun Jin Park
Korea University, Seoul, Korea, Republic of

Photocatalytic Nanocoatings as a New Tool to Ensure Food Safety

Yen-Con Hung¹; Veerachandra Yemmireddy¹; Yiping Zhao²; Pradip Basnet²
¹University of Georgia, Griffin, Georgia, United States; ²University of Georgia, Athens, Georgia, United States

10:00 - 12:10 Concurrent Session 4.2: Industrially-Relevant Products and Issues - Post-Harvest Technologies, Quality and Safety of Fruits and Vegetables Part I

Emerging technologies to meet consumer preference, acceptance and needs

Dietrich Knorr

Germany

Pre-storage UV-C treatment for long term fresh carrots conservation

Niankan Kouassi¹; Ronan Corcuff²; Russell Tweddell³; Dominique Michaud³; Joseph Arul²

¹Department of Food Science and Nutrition and Horticultural Research Centre, Université Laval, Quebec, Quebec, QC, Canada; ²Department of Food Science and Nutrition and Horticultural Research Centre, Université Laval, Quebec, Québec, QC, Canada; ³Horticultural Research Centre, Université Laval, Quebec, Quebec, Canada, G1V 0A6, Québec, QC, Canada

Recent Developments in the High-Quality Drying with Energy Saving Characteristics for Fruits and Vegetables

Min Zhang¹; Arun Mujumdar²; Huizhi Chen¹

¹Jiangnan University, Wuxi, China; ²Hong Kong University of Science & Technology, Hong Kong, China

Application of starter cultures in traditional cocoa fermentation to improve the quality of cocoa beans

Kwaku Tano-Debrah¹; Samuel Sefa-Dedeh¹; Dennis S. Nielsen²; Mogens Jakobsen²; Patrick C Aculey³; Esther Sakyi-Dawson¹; Frank Asante⁴

¹University of Ghana, Legon-Accra, Ghana; ²Copenhagen University, Copenhagen, Denmark; ³Cocoa Research Institute of Ghana, New Tafo, Ghana; ⁴Cocoa Processing Company, Tema, Ghana

SHELF-LIFE AND CONSUMER PREFERENCE FOR BRAZILIAN PEACHES (*Prunus persica* (L.) Bastch) CLARIFIED JUICES

Ricardo Lemos Sainz¹; João Luiz Vendrusculo²

¹Instituto Federal de Educação, Ciência e Tecnologia Sul-rio-grandense, Pelotas, RS, Brazil; ²Embrapa, Pelotas, RS, Brazil

Controlled application of abiotic stresses to enhance quality, glucosinolates and phenolic compounds in broccoli (*Brassica oleracea* var. *Italica*) during cold storage

Arturo Duarte Sierra¹; Minty Thomas¹; Dominique Michaud¹; Charles Forney²; Joseph Arul¹

¹Department of Food Science and Nutrition and Horticultural Research Centre, Université Laval, Quebec, QC, Canada; ²Agriculture and Agri-Food Canada, Kentville, NS, Canada

10:00 - 12:10 Concurrent Session 4.3: Consumer Behavior and Sensory Evaluation - Diet, Health and the Consumer

The Sensory Properties of Foods and Health

Richard Mattes
Purdue University, West Lafayette, IN, United States

Development Of A Lacto-Vegetarian Yoghurt By Incorporating "Kitul" (Caryota Urens) Pith Flour Stabilizer As A Gelatin Substitute

Janaka Wickramasinghe
Faculty of Agriculture, University of Peradeniya, Peradeniya, CP, Sri Lanka

South African metropolitan consumers' health-related beliefs and use of vegetables

Daleen Van der Merwe¹; Magdalena Bosman²; Ellis Susanna³; Johann C Jerling⁴
¹School for Physiology, Nutrition and Consumer Sciences, North-West University, Potchefstroom Campus, Potchefstroom, South Africa; ²African Unit for Transdisciplinary Health Research, North-West University, Potchefstroom Campus, Potchefstroom, South Africa; ³Statistics and Operational Research, North-West University, Potchefstroom Campus, Potchefstroom, South Africa; ⁴Centre of Excellence in Nutrition, North-West University, Potchefstroom Campus, Potchefstroom, South Africa

Use Of Functional Foods In Non Communicable Disease Management

Anoma Chandrasekara; Nelum Dharshani
Wayamba University of Sri Lanka, Makandura, Gonawila, North Western, Sri Lanka

Emergency food: Nutri-bars and humanitarian emergencies.

Syeda Mahvish Zahra¹; Syed Ali Ausajah Zaidi²; Sarfraz Hussain¹; Muhammad Nadeem¹; Tahir Mehmood Qureshi¹; Syed Muhammad Askari³; Syeda Mehwish Fatima Zaidi⁴; Syed Mujtaba Haider⁵; Ayesha Rafique¹; Farhat Rashid¹
¹institute Of Food Science And Nutrition, University Of Sargodha, Sargodha, Pakistan; ²pakistan Air Force Base, Islamabad, Pakistan; ³university Of Engineering And Technology, Lahore, Pakistan; ⁴pns Hospiatal, Karachi, Pakistan; ⁵Pakistan Air Force Base, Jacobabad, Pakistan

Consumer acceptability of provitamin A-biofortified amahewu, a non-alcoholic maize based beverage

Eric Amonsou¹; Temitope Deborah Awobusuyi¹; Muthulisi Siwela²; Oluwatosin Ijabadeniyi¹; Unathi Kolanisi²

¹durban University Of Technology, Durban, South Africa; ²university Of Kwazulu-Natal, Durban, South Africa

10:00 - 12:10 Concurrent Session 4.4: Innovation through Collaboration - Opportunities & Challenges Facing the Food Industry and Academia in Addressing Future Needs

Enhancing Collaboration between the Food Industry & Academia

Robert Fisher
Fisher Consulting Partners, LLC, Morrison, CO, United States

Key to Building Successful R&D Links Between Academia and the Food Industry

R. Paul Singh
University of California - Davis, Davis, CA, United States

Augmentation of the US Department of Agriculture National Nutrient Database: A Public-Private Partnership on "Branded Food Products Database for Public Health"

Eric Hentges
ILSI North America, Washington, DC, United States

The Food and Beverage National Plan: a strategical program for Brazil.

Luis Madi
Institute of Food Technology ITAL, Campinas, SP, Brazil

Innovation in the agrofood sector in the center region of Portugal - an integrated strategy.

Luís Andrade¹; Claudia Domingues²
¹Polytechnic Institute of Castelo Branco, Castelo Branco, Castelo Branco, Portugal; ²Inovcluster, Castelo Branco, Castelo Branco, Portugal

Innovating on the Academic Research Model - How Client Driven Applied Research Reaps Returns for Small and Medium Sized Food and Beverage Companies

Amy Proulx; Nigel Corish
Canadian Food and Wine Institute Research Centre at Niagara College, Niagara

on the Lake, Ontario, Canada

10:00 - 12:10 Concurrent Session 4.5: Convergent Innovation - Integrated Solution to Hunger, Stunting and Anemia and Neglected Diseases of the Poor

(Title TBC)

Saibal Ray

(Title TBC)

Phil Donne
CEO, Danone

Rice fortified with iron, zinc, thiamine and folic acid improves nutritional status of preschool children

Ceres Mattos Della Lucia¹; Helena Maria Pinheiro Sant'Ana²; Sylvia do Carmo Castro Franceschini²; Hércia Stampini Duarte Martino²; Kellen Cristina da Cruz Rodrigues²; Laura Luiza Menezes Santos²

¹Federal University of Espírito Santo, Alegre, Espírito Santo, Brazil; ²Federal University of Viçosa, Viçosa, Minas Gerais, Brazil

Sourcing Phenolics from Apple Juice Industrial Waste

Vincent Candrawinata¹; John Golding²; Paul Roach¹; Costas Stathopoulos¹

¹University of Newcastle, Ourimbah, NSW, Australia; ²DPI NSW, Ourimbah, NSW, Australia

Human in vivo antidiabetic potentials of yellow pumpkin ice cream (YPIC) containing lecithin was reduced in the presence of lactoferrin observed in Driyorejo Health Center, Indonesia

Indah Epriliati

Department of Food Technology and Human Nutrition, Widya Mandala Surabaya Catholic University, Surabaya, Indonesia

A New Metrics of Food Processing to address under diet related disease across the development continuum: The NOVA System

Jean-Claude Moubarac

Centre for Epidemiological Studies in Health and Nutrition, University of São

Paulo, São Paulo, Brazil

10:00 - 12:10 Concurrent Session 4.6: Food and Health - Gut Health, Fibre and Pre-Biotics

Potential of wheat bran dietary fiber as a carrier of phenolics and its prebiotic activity

Aynur Gunenc¹; Farah Hosseinian²

¹1125 Colonel By Drive, Ottawa, ON, Canada; ²Carleton University, Ottawa, ON, Canada

Identification and characterization of surface layer proteins from lactobacilli

Shu-Ming Gao; Jun Meng; Rong-Rong Lu
Jiangnan University, Wuxi, Jiangsu, China

Gastrointestinal hormones modulation after double-blind interventional study with unavailable carbohydrates

Eliana B Giuntini¹; Fabiana AH Sarda¹; MCY LUI²; FM Lajolo¹; Elizabete W Menezes¹

¹School of Pharmaceutical Sciences of University of Sao Paulo, Sao Paulo, SP, Brazil; ²BRF SA, Sao Paulo, SP, Brazil

Nutritional value and health benefits of edible marine seaweeds from Malaysia

Patricia Matanjun¹; Suhaila Mohamed²; Noordin Mohamed Mustapha²; Kharidah Muhammad²; Pei Teng Chan¹

¹Universiti Malaysia Sabah, Kota Kinabalu, SABAH, Malaysia; ²Universiti Putra Malaysia, Serdang, SELANGOR, Malaysia

Development of Heat-Stable Complex with Prebiotic Properties for Bakery Fruit Fillings

Janna Cropotova

Practical Scientific Institute of Horticulture and Food Technology, Chisinau, CH, Moldova, Republic of

10:00 - 12:10 **Concurrent Session 4.7: Processing - Emerging Technologies (HPP, PEF, Ozone, PL/UV, etc.)**

(Title TBC)

Marc Hendrickx
Laboratory of Food Technology Member of the Leuven Food Science and Nutrition Research Center (LFoRC), Belgium

Innovative sterilization technologies for increased consumer safety and product quality

Kai Reineke
Vanuatu

An Innovative Process Using Supercritical Carbon Dioxide Technology to Prepare Liposomal Nanovesicles

Lisha Zhao; Feral Temelli
University of Alberta, Edmonton, AB, Canada

High pressure inactivation kinetics of bromelain in pineapple (*Ananas comosus* L.) puree

Snehasis Chakraborty; P Srinivasa Rao; H N Mishra
Indian Institute of Technology Kharagpur, Agricultural and Food Engineering Department, West Bengal, India

3D food printing

Kjeld van Bommel¹; Jerome Diaz²; Martijn Noort²; Peter Briër¹; Jolanda Henket¹; Mara Berkhout¹
¹TNO, Eindhoven, Netherlands; ²TNO, Zeist, Netherlands

10:00 - 12:10 **Concurrent Session 4.8: Potential Regulatory Issues - Food Traceability/Authenticity**

Challenges of Regulating Food Authenticity and Controlling Adulteration

Francis Busta
Emeritus Professor and Head of Department of Food Science and Nutrition, and Emeritus Director of Na, Saint Paul, MN, United States

10:00 - 12:10 Concurrent Session 4.8: Potential Regulatory Issues - Food Traceability/Authenticity

Fast detection and authentication of processed poultry meat using near infrared spectroscopy

Douglas Fernandes Barbin¹; Cintia Midori Kaminishikawahara¹; Adriana Lourenco Soares¹; Danielle Cristina Barreto Honorato¹; Elza Iouko Ida¹; Massami Shimokomaki²

¹State University of Londrina, Londrina, Brazil; ²Federal Technological University of Parana, Londrina, Brazil

Screening Of Penicillin And Aminoglycoside In Therapeutic Drugs Used In Milk-Producing Animals Employing Ultrahigh Performance Liquid Chromatography Diode Array Detector

Alessandra Miranda Cabral; Maria de Fátima Vitória de Moura; Djalma Ribeiro da Silva; Alciney Miranda Cabral

Federal University of Rio Grande do Norte, Natal, RN, Brazil

12:10 - 12:40 Lunch

12:40 - 13:25 Moderated Poster Sessions 28 - 36:

Food Safety - Microbes, Virology, Parasites and other Infectious Agents

Food Health – Nutrigenomics

Processing - Food Process/Package Modeling

Processing - Thermal Processing, Minimal Processing and Hurdle Technology

Chemistry - Food Structure and Functionality

Chemistry - Food Bioactives: Identification, Characterization and Efficacy

Industrially-Relevant Products and Issues – General

Consumer Behavior – General

Sustainability – General

13:30 - 13:45 Canadian Spotlight

13:45 - 14:40 Plenary Lecture: Bernhard Van Langerich

Connected Innovation: The Power of Many

Bernhard van Langerich
General Mills

14:40 - 16:10 Concurrent Session 5.1: Global Visions for the role of Food Science and Technology to meet Societal and Technological Challenges. (IAFoST) Dedicated to the memory of Dr. Joseph Hulse Part I

14:40 - 16:10 Concurrent Session 5.2: Sustainability - Evolution of Consumption and Shaping of Future Food Systems

Food and Nutrition Security and Interactions with Environmental Change

John Ingram
Environmental Change Institute, University of Oxford, Oxford, United Kingdom

Avoiding food waste along the entire value chain

Christian Detrois
Nestlé Research, Lausanne, Switzerland

14:40 - 16:10 Concurrent Session 5.2: Sustainability - Evolution of Consumption and Shaping of Future Food Systems

Product Standardization and Development of Commercializable Packages for Botswana's Priority Indigenous Food Technologies

Selalelo Mpotokwane; Keitirele Walker; Sarah Matenge; Gloria Molefe; Thamiso Magowe
National Food Technology Research Centre - Botswana, Kanye, Botswana

Application of value chain analysis to fish by-product processing scenarios

Dagmara Head¹; Alphonsus Utioh¹; Lee Anne Murphy²
¹Food Development Centre, Portage la Prairie, MB, Canada; ²Manitoba Agri-Health Research Network, Winnipeg, MB, Canada

14:40 - 16:10 Concurrent Session 5.3: Food and Health - Aboriginals, First Nations and Indigenous Topics

(Title TBC)

Harriet Kuhnlein
Anacortes, Washington, United States

Revival of traditional food: gathotan flour for the making of various gluten-free noodles

Umi Purwandari
Universitas Trunojoyo Madura, Kamal, Jawa Timur, Indonesia

Lipid content and fatty acid analyses of the Jamaican ackee (*Blighia sapida*) fruit

Andrea Goldson; Donna Minott
University of the West Indies, Kingston, Jamaica

EFFECTS OF PROCESSING METHODS ON NUTRIENT RETENTION OF YELLOW YAM (*DIOSCOREA CAYENENSIS*) PRODUCTS

Oladejo Adepoju
University of Ibadan, Ibadan, Nigeria, Ibadan, OYO STATE, Nigeria

14:40 - 16:10 Concurrent Session 5.4: Potential Regulatory Issues - Contaminants in Foods

(Title TBC)

Samuel Godefroy
Canada

A Study Of The Potential Migration Of Components Between Foodstuffs And Their Wooden Packaging

Daliena Ludosky¹; Florence Fricoteaux¹; Mark Irle²; Florence Aviat³; Damien Erre¹; Alain Copinet¹
¹grespi-Esireims, Reims, Sélectionnez Un Département / État, France; ²esb, Nantes, France; ³oniris-Umr1014 Secalim, Nantes, France

Determination of Bisphenol A in soft drinks

Marisa Padula¹; Mary Angela Favaro Perez¹; Jozeti Gatti¹; Daniela Daniel²
¹Institute of Food Technology - ITAL, Campinas, SP, Brazil; ²Agilent Technologies Brasil Ltda, Barueri, SP, Brazil

14:40 - 16:10 Concurrent Session 5.5: Chemistry - Additives and Ingredients

Emerging Trends in Choline Containing Supplements and Food Ingredients

Jonathan Curtis
Dept. of Agricultural, Food and Nutritional Science, University of Alberta,
Edmonton, AB, Canada

Production of microalga carotenoid pigments for health food applications: Biomass production, pigment characterization and analyses of biological activities

Ranga Rao Ambati
Insitute of Ocean and Earth Sciences, Petaling Jaya, SELANGOR, Malaysia

Application of Conjugated Linoleic Acid-lysine Complex in Fortification of Beverages

Sara KoohiKamali
Department of Food Science & Technology, Faculty of Agriculture, Shahr-e-Qods Branch, Islamic Azad U, Tehran, Iran

Chemistry and functionality of normal and high amylose maize modified with stearic acid

Naushad Mohammad Emmambux¹; Obiro Cuthbert Wokadala²; Fidelis CK Ocloo³

¹University of Pretoria, Pretoria 0028, South Africa; ²University of Pretoria, Pretoria, South Africa; ³University of Pretoria, Pretoria, South Africa

14:40 - 16:10 Concurrent Session 5.6: Processing - Packaging: MAP, Material Properties, Biodegradable/Edible Films

Innovation for Food Packaging

Kit Yam

Department of Food Science, Rutgers University, New Brunswick, NJ, United States

Effect Of Stability Of Film Forming Suspensions In Physical Properties Of Films Based On Alginate, Caseinate And Lemongrass Oil

Silvia Matiacevich; Margarita Miranda; Natalia Riquelme
Universidad de Santiago de Chile, Santiago, Chile

Thermocromic behavior to flexible tape based on methylcellulose and polydiacetylenes vesicles

Cristiane Patrícia Oliveira¹; Nilda de Fátima F. Soares²; Taíla Veloso de Oliveira²; Eber Antonio A. Medeiros²

¹Universidade Estadual do Sudoeste da Bahia, Itapetinga, BA, Brazil;

²Universidade Federal de Viçosa, Viçosa, MG, Brazil

Structural, mechanical and functional characteristics of films produced using potato starch and gallic acid

Junchao Zhang; Victor H. Alvarez; Marleny D. A. Saldaña
University of Alberta, Edmonton, AB, Canada

14:40 - 16:10 Concurrent Session 5.7: Food Safety - Microbiological, Physical and Chemical Safety of Agricultural Products and Processed Foods Part II

14:40 - 16:10 Concurrent Session 5.7: Food Safety - Microbiological, Physical and Chemical Safety of Agricultural Products and Processed Foods Part II**Evaluation of Food-Relevant Chemicals in ToxCast**

Agnes Forgacs¹; Jui-Hua Hsieh²; Keith Houck³

¹ILSI North America, Technical Committee on Food and Chemical Safety, Washington, DC, United States; ²National Institute of Environmental Health Sciences, Research Triangle Park, NC, United States; ³U.S. Environmental Protection Agency, Research Triangle Park, NC, United States

Steady chemiluminescence of immobilized N-(4-Aminobutyl)-N-ethylisoluminol for detection of chloramphenicol based on flowerlike gold nanostructures and magnetic nanoparticles

Liling Hao; Zhouping Wang

Synergetic Innovation Center of Food Safety and Nutrition, School of Food Science and Technology, Ji, Wuxi, Jiangsu Province, China

Phenotypic and genotypic toxin and antimicrobial resistance traits of *Staphylococcus aureus* isolates from China

Xianming Shi; Yanping Xie; Jie Xu; Minghui Song; Chunlei Shi

MOST-USDA Joint Research Center for Food Safety and National Key Lab of Microbial Metabolism, Shangh, Shanghai, China

Evaluation of the efficacy of commercial sanitizers against *S. aureus* isolated from dairy environment

Susana C. A. dos Santos¹; Sarah H. I. Lee²; Gabriela Y. Botelho²; Jessica M. Santello²; Bruna L. Gonçalves²; Bruna A. Ferrari²; Célia Quincas¹; Carlos A. F. Oliveira²

¹Universidade do Algarve, Faro, Portugal; ²FZEA/Universidade de São Paulo, Pirassununga, SP, Brazil

16:10 - 16:30 Coffee Break

16:30 - 18:00 Concurrent Session 6.1 (Special Session): Global Visions for the role of Food Science and Technology to meet Societal and Technological Challenges (IAFoST) Dedicated to the memory of Dr. Joseph Hulse Part II

16:30 - 18:00 **Concurrent Session 6.2 (Special Session): Food Fortification and International Development**

16:30 - 18:00 **Concurrent Session 6.3 (Special Session): Reserved**

16:30 - 18:00 **Concurrent Session 6.4 (Special Session): European Research (EFFoST)**

16:30 - 18:00 **Concurrent Session 6.5 (Special Session): Concurrent Session 6.5 (Special Session): Global Hot Topics in Nutrition, Health and Wellness (IUNS)**

16:30 - 18:00 **Concurrent Session 6.6 (Special Session): Enhancing the Potential of Food Science and Technology Careers Towards an Innovative and Sustainable Food Chain (ISEKI)**

18:00 - 19:00 **Poster Reception**

Wednesday, August 20, 2014

08:00 - 09:30 Plenary: Partners in Food Solutions Panel

Improving Food Security and Nutrition in Africa - A Look At an Innovative Public-Private Partnership

Partners in Food Solutions Panel

09:30 - 10:00 Coffee Break

10:00 - 12:10 Concurrent Session 7.1: Food Processing - Nonthermal energy input food processing - the state of the engineering sciences (ISFE)

10:00 - 12:10 Concurrent Session 7.2: Food and Health - Food Bioactive-Matrix Interactions Part I

(Title TBC)

Rick Ostlund

The association of tea polyphenols onto caseinate-stabilized oil-water interfaces and their colloidal behaviour during acidificationSomayeh Sabouri; Milena Corredig
University of Guelph, Guelph, ON, Canada**Simultaneous separation of two flaxseed protein hydrolysate fractions with respective anti-diabetic and anti-hypertensive activities**Laurent BAZINET¹; Alain DOYEN¹; Chibuiké UDENIGWE²; Patricia MITCHELL¹; André MARETTE¹; Rotimi ALUKO²¹Université Laval, Québec, QC, Canada; ²University of Manitoba, Winnipeg, MB, Canada

Effects of Green Tea Catechins on Glycaemic Potential of Bread: an *in vitro* digestibility study

Royston Goh¹; Victoria K. Ananingsih¹; Jing Gao¹; Viren Ranawana²; Jeyakumar Henry²; Weibiao Zhou¹

¹National University of Singapore, Singapore 117543, Singapore; ²Singapore Institute of Clinical Science, Singapore 117609, Singapore

Combined treatment of pancreatic tumour cells with capsaicin and polyphenols reduces tumour growth and potentiates chemotherapy in a xenograft mouse model

Sandrine Dabernat

Université de Bordeaux, Bordeaux, Canada

A potential immune-stimulating Health Benefit of wheat arabinoxylan for Foods

Weili Li; Shuangyue Zhang; Man Fadel; Chris Smith; Weili Li
Manchester Metropolitan University, Manchester, United Kingdom

10:00 - 12:10 Concurrent Session 7.3: Industrially-Relevant Products and Issues - Post-Harvest Technologies, Quality and Safety of Fruits and Vegetables Part II

Food Irradiation: Science in Action

Richard Wiens

Nordion, Ottawa, ON, Canada

DEVELOPMENT OF IMMOBILIZED ENZYME BASED SYSTEM FOR PRODUCTION OF HIGH FRUCTOSE SYRUP FROM INULIN

Balwinder Singh; Ram Sarup Singh; Munish Puri
Punjabi University, Patiala, Patiala, Punjab, India

Food Application of Carotenoids with Special Reference to Microalgae

Ranga Rao Ambati¹; Ravishanakar G.A.²; Sarada R³; Siew Moi Phang⁴

¹Institute of Ocean and Earth Sciences, Kuala Lumpur, Selangor, Malaysia; ²C.D. Sagar Centre for Life Sciences, Dayanand Sagar Institutions, Kumaraswamy Layout, Bangalore-560078, Karnataka, India; ³Central Food technological Research Institute, Mysore, Karnataka, India; ⁴Institute of Ocean and Earth Sciences, Kuala Lumpur, Malaysia

The effect improved and traditional smoking on the storage life and nutritional quality of cat, croaker and sardine fishes.

EUNICE ODOH¹; EUNICE ODOH²; GREGORY ONWUKA²

¹Department of Food Science and Technology, College of Applied Food Science and Tourism, Michael Okpa, UMUAHIA, ABIA, Nigeria; ²MICHAEL OKPARA UNIVERSITY OF AGRICULTURE UMUDIKE, UMUAHIA, ABIA, Nigeria

Combined effect of the UV-C light and active packaging with citral and carvacrol on baby arugula leaves

Cielo Char¹; Ruth Luna²; Alejandra Machuca²; Victor Hugo Escalona²

¹Agroindustry and Enology Department. Fac. Agricultural Sciences. University of Chile., Santiago, Chile; ²Postharvest Studies Center, Agronomic Sciences Faculty, University of Chile, Santiago, Chile

Promoting Food Security and Enhancing Small Farmers' Income through Value-added Processing of Lesser-known and Under-utilized Indigenous Fruits

Charles Aworh

University of Ibadan, Ibadan, OYO, Nigeria

10:00 - 12:10 Concurrent Session 7.4: Potential Regulatory Issues - Harmonization of Regulations

Harmonization of Food Regulations

Huub Lelieveld

Global Harmonization Initiative, Netherlands

International standards and related recommendations that facilitate domestic and international trade in good quality and safe foods

John Lupien

University of Massachusetts, Amherst, Massachusetts 01203, United States

Challenges of harmonizing the halal standards and certification: The global scenario

Sharifudin Md Shaarani; Mariam Abdul Latif

University Malaysia Sabah, School Of Food Science And Nutrition, Kota

Kinabalu, Sabah, Malaysia

**Understanding the U.S. FDA Food Safety Modernization Act (FSMA)
Proposed Rule: Preventive Controls for Human Food**

Jennifer McCreary
NSF-GFTC, Guelph, ON, Canada

**Relative validation of an alternative qualitative method according to Health
Canada's Procedure for the Development and Management of Food
Microbiological Methods.**

Yadira Tejada Saldana; Michael J. Rieder
University of Western Ontario/ Robarts Research Institute, London, ON, Canada

Average daily intake of apple calculated from various Korean diets

Min Seok Baek; Sanghoon Ko
Sejong University, Seoul, Korea, Republic of

**10:00 - 12:10 Concurrent Session 7.5: Food Safety - Microbes, Virology, Parasites and
other Infectious Agents**

Foodborne Viruses: An International Food Safety Concern

Jennifer Cannon
Center for Food Safety, University of Georgia, Griffin, GA, United States

**Identification and functional analyses of genes related to biofilm formation
in *Listeria monocytogenes* 4b G**

Xianming Shi; Yujuan Suo; Yanyan Huang; Xinna Zhu; Yonghui Chen; Yudan
Ma; Yan Cui; Dapeng Wang; Chunlei Shi
MOST-USDA Joint Research Center for Food Safety and National Key Lab of
Microbial Metabolism, Shanghai, Shanghai, China

**Mutation of a *Salmonella* serogroup-C1-specific gene abrogates O7-antigen
biosynthesis and triggers NaCl dependent motility-deficit**

Chunlei Shi¹; Xiujuan Zhou¹; Bin Liu²; Xianming Shi³
¹Shanghai Jiao Tong University, Shanghai, China; ²College of Food Science and
Engineering, Northwest A&F University, Yangling, Shaanxi, China; ³MOST-
USDA Joint Research Center for Food Safety and National Key Lab of

Microbial Metabolism, Shangh, Shanghai, China

Construction of *Escherichia coli* mutants that produce lipid A with different structures and comparison of their immune response

Biwen Wang; Yanyan Li; Xiaoyuan Wang
State Key Laboratory of Food Science and Technology, Jiangnan University,
Wuxi, Jiangsu, China

Biocontrol of *Shigella flexneri* in ground beef and *Vibrio cholerae* in seafood with bacteriophage-assisted high hydrostatic pressure (HPP) treatment

Hanie Ahmadi¹; Hanie Ahmadi²; Markus Walkling Riberio³; Hany Anany⁴;
Mansel W. Griffiths⁴
¹60 Fort York Blvd, Toronto, Ontario, ON, Canada; ²University of Guelph,
Canadian Research Institute for Food safety, Guelph, Ontario, ON, Canada;
³Canadian Research Institute for Food Safety (CRIFS), University of Guelph
& Department of Food Scienc, Guelph, ON, Canada; ⁴Canadian Research
Institute for Food Safety (CRIFS), University of Guelph, ON, Canada

Antimicrobial effects of modified chitosan-based coating containing nanoemulsion of essential oil, modified atmosphere packaging and gamma irradiation against *Escherichia coli* O157: H7 and Salmonella

Monique Lacroix¹; Renato Severino²; Giovanna Ferrari³; Khanh Dang Vu¹;
Francesco Donsi⁴; Stéphane Salmieri¹
¹INRS-Institut Armand-Frappier, Laval, QC, Canada; ²INRS-Institute Armand-
Frappier, Laval, QC, Canada; ³ProdAl Scarl-Competence Center on Agro-Food
Productions, Fisciano, SA, Italy; ⁴University of Salerno, Fisciano, SA, Italy

10:00 - 12:10 Concurrent Session 7.6: Chemistry - Food Bioactives: Identification, Characterization and Efficacy Part I

(Title TBC)

Richard Mithen
Programme leader for Bioactive Food components, Institute of Food Research
(UK), United Kingdom

Antiproliferative and antioxidant activities and mycosporine-like amino acid profiles of extracts from edible wild and cultivated Atlantic Canadian red macroalgae

Yvonne Yuan; Yasantha Athukorala; Susan Trang; Brendon Zhang; Carmen

Kwok
School of Nutrition, Ryerson University, Toronto, ON, Canada

Bioactive compounds and antioxidant capacity of Jussara (*Euterpe edulis*) fruit oil extracted with different solvents

Laís Silva¹; Vanessa Castelo-Branco¹; Mariana Monteiro²; Alexandre Torres¹; Daniel Perrone¹

¹Chemistry Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; ²Nutrition Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

A specific peptide with calcium chelating capacity from whey protein hydrolysate

Shaoyun Wang; Shunli Huang; Jing Hong; Pingfan Rao
Fuzhou university, Fuzhou, China

Bioaccessibility, in vitro antioxidant activities and in vivo anti-inflammatory activities of a purple tomato (*Solanum lycopersicum* L.)

Rong Tsao¹; Hongyan Li²; Zeyuan Deng²; Ronghua Liu¹; Steven Loewen³
¹Guelph Food Research Centre, Agriculture and Agri-Food Canada, Guelph, ON, Canada; ²State Key Lab of Food Science and Technology, Institute for advanced Study, Nanchang University, Nanchang, Jiangxi province, China; ³University of Guelph Ridgetown Campus, Ridgetown, ON, Canada

***In vitro* Evaluation of the Anti-Hyperglycemic Effects of Rooibos Tea**

Viduranga Waisundara¹; Yian Hoon Lee²

¹Institute of Fundamental Studies, Kandy, Central province, Sri Lanka;

²Temasek Polytechnic, Singapore, Singapore

10:00 - 12:10 Concurrent Session 7.7: Innovation through Collaboration - The New Wave - Open Innovation and Recent Progress in Interfacing Science, Consumer Insights, Product Development and Business Needs

(Title TBC)

Ian Roberts

Innovation in Food Science

Pam Henderson
NewEdge, Inc., Canada

Academia Roles and Necessary Paradigm Shifts for Promoting Open Innovation

Sam Saguy

The Loblaw Academy Case Study: Measuring e-Learning success of a Training Program

William Lachowdky; Romina Zanabria; Art Hill
Canadian Research Institute for Food Safety, Department of Food Science,
University of Guelph, Guelph, ON, Canada

Valorisation of rice industry by-products: the development of gluten-free bakery foods

Carrilho Laura¹; Fradinho Patricia²; Anabela Raymundo²; Isabel de Sousa²
¹ISA- Instituto Superior de Agronomia/Universidade de Lisboa, Lisboa, Portugal; ²CEER- Biosystems Engineering, Instituto Superior de Agronomia/Universidade de Lisboa, Lisboa, Portugal

Crucial steps in increasing the nutritional value of the Canadian food offer

Michele Marcotte
Agriculture and Agri-Food Canada, Ottawa, Ontario, Canada

12:10 - 12:40 Lunch

12:40 - 13:25 Moderated Poster Sessions 37 - 45:

Food Safety - Microbes, Virology, Parasites and other Infectious Agents

Food Health - Food Bioactive-Matrix Interactions

Processing - Packaging: MAP, Material Properties, Biodegradable/Edible Films

Thermal Processing, Minimal Processing and Hurdle Technology

Processing - Food Process/Package Modeling

Chemistry - Food Bioactives: Identification, Characterization and Efficacy

Chemistry - Food Structure and Functionality

Innovation Through Collaboration & Convergent Innovation

Food Nanotechnology - General

13:30 - 14:25 Plenary Lecture

Riette de Kock
University of Pretoria

14:25 - 14:40 Guinness World Record Update

14:40 - 16:10 Concurrent Session 8.1: Chemistry - Glass transitions, diffusions, mass transport (ISOPOW)

14:40 - 16:10 Concurrent Session 8.2: Industry-Relevant Products and Issues - Processing and Pulses

(Title TBC)

Mehmet Telbuk
Director, Research, Development and Innovation at Alliance Grain Traders
(AGT), Saskatoon, SK, Canada

Cigi & Pulse Canada's Pulse Flour Milling and Utilization Project: Project outcomes and important findings

Lindsay Bourre¹; Tara Loader¹; Yulia Borsuk¹; Lisa Casper²; Shannon Hood-Niefer³; Heather Maskus¹

¹Canadian International Grains Institute, Winnipeg, MB, Canada; ²Manitoba Food Development Centre, Portage La Prairie, MB, Canada; ³Saskatoon Food Centre, Saskatoon, SK, Canada

Pea protein isolates: Functional properties, food applications and recent developments.

Kevin Segall; Sarah Medina; Emilia Ring
Burcon NutraScience (MB) Corp., Winnipeg, MB, Canada

Physical properties of Bauhinia seeds

Muthulisi Siwela¹; Eric Oscar Amonsou²
¹University of KwaZulu-Natal (UKZN), Pietermaritzburg, KwaZulu-Natal, South Africa; ²Durban University of Technology, Durban, KwaZulu-Natal, South Africa

14:40 - 16:10 Concurrent Session 8.3: Processing - Predictive Microbiology, Microbial Modeling

(Title TBC)

Thomas P. Oscar

Effects of Capsule Medium and Storage Time on the Stability and Activity of Encapsulated Lactic Acid Bacteria for Yoghurt Production

Mylene Anwar¹; Roberta Lauzon²
¹Department of Food Science, Central Mindanao University, Maramag, Bukidnon, Philippines; ²Department of Food Science and Technology, Visayas State University, Visca, Baybay City, Leyte, Philippines

Whey protein film containing Microcin J25(G12Y) active against *E. coli* O157:7 and *Salmonella*

Mariana Blanco Massani¹; Fernanda Pomares²; Natalia Corbalan²; Paula Vincent²; Patricia Eisenberg¹
¹Instituto Nacional de Tecnología Industrial, San Martín, BS AS, Argentina; ²Instituto Superior de Investigaciones Biológicas - CONICET, Tucumán, Argentina

Microbial decontamination of model food powders by vacuum-steam-vacuum treatment

Josef Hörmansperger¹; Michael Beyrer²; Rudolf Schmitt²; Erich Windhab¹
¹Laboratory of Food Process Engineering, ETH Zürich, 8092 Zürich, Switzerland; ²Institute of Life Technologies, HES-SO Valais, 1950 Sion, Switzerland

14:40 - 16:10 Concurrent Session 8.4: Food Safety - Yeast, Fungi and other Fungal Metabolites

Three decades of developments in rapid methods and automation in food Microbiology with special reference to contributions of Professor Tibor Deak

Purnendu Vasavada

Professor Emeritus, Fellow - ASM, IFT, IAAP, PCV & Associates, LLC, River Falls, WI, USA / University of Wisconsin, River Falls, WI, United States

Food safety detection: Electrochemical impedance spectroscopy for detection of Fumonisin B1 in maize based on aptamer-target interactions

Xiujuan Chen; Zhouping Wang

Jiangnan University, Wuxi, JIANG SU, China

Study on Purification and Characterization of Tyrosinase from *Tricholoma giganteum* and *Agaricus bisporus*

Meihua Mo¹; Lili Xiao²; Ziyang Ma²; Hongzhuan Wu³; Dawei Liang⁴; Yan Ni²; Yaowu Wei²

¹College of Food Science, South China Agricultural University, Guangzhou, Guangdong, China; ²College of Food Science, South China Agricultural University, Guangzhou, GD, China; ³Department of Biological Sciences, Alabama State University, Montgomery, AL, United States; ⁴Department of Logistics, Guangdong Youth Career Academy, Guangzhou, GD, China

14:40 - 16:10 Concurrent Session 8.5: Convergent Innovation - Technologies, Business Models, Innovation Ecosystems, and Enabling Policy Environment for Affordable Dietary Diversity and Balance

(Title TBC)

PK Joshi

President, Firmenich (Flavor)

(Title TBC)

Louis Frenette

(Title TBC)

Gordon Bacon
Pulse Canada, Winnipeg, MB, Canada

The role of entrepreneurship education in the unification of the entities of an innovation ecosystem: a case study of a food product oriented business model

Hina Hauck¹; Jinming Fan¹; Tomas Karlsson²; Chathudina J. Liyanage³; Hans-Erik Åkerlund⁴

¹Department of Business Administration, School of Economics and Management, Lund University, Lund, Sweden; ²Management of Organizational Renewal and Entrepreneurship, Chalmers University of Technology, Gothenburg, Sweden; ³Department of Food Science and Technology, Sabaragamuwa University of Sri Lanka, Belihuloya, Sri Lanka; ⁴Department of Biochemistry and Structural Biology, Faculty of Engineering, Lund University, Lund, Sweden

14:40 - 16:10 Concurrent Session 8.6: Food and Health - Food Bioactive-Matrix Interactions Part II

Understanding the polyphenol/protein binding through a combination of Monte Carlo simulation and structure characterization

Qingrong Huang¹; Yunqi Li²

¹Rutgers University, New Brunswick, NJ, United States; ²Changchun Institute of Applied Chemistry, Changchun, JL, China

Effects of *Digitaria exilis* (Fonio) on Inflammation and Diabetes Pathogenesis

Djibril TRAORE¹; A. Lawrance²; C. French²; E. Lucas²; A.S. Ndoye¹; N. Maness¹; B.J. Stoecker²; S. Kivibidula²

¹Institut de Technologie Alimentaire, Dakar, Senegal; ²Oklahoma State University, Stillwater, United States

Extraction, modification and immune-modulating activities of cereal arabinoxylans

ZHENGXIAO ZHANG¹; CHRISTOPHER SMITH¹; WEILI LI¹; Jason Ashworth²

¹Department of Food and Tourism Management, Manchester Metropolitan University, Manchester, M15 6BG, United Kingdom; ²School of Healthcare

Science, Manchester Metropolitan University, Manchester, United Kingdom

Encapsulation and protection of bioactive components using the assemblies based on -lactoglobulin

Li Liang

Jiangnan University, Wuxi, Jiangsu, China

14:40 - 16:10 Concurrent Session 8.7: Innovation through Collaboration - Government, Academia and Industry Roles in Driving Science, Innovation and R&D for the Food Ecosystem

Horizon 2020: Fostering the competitiveness of the European Food Sector by Research and Innovation

Patrik Kolar

Research and Innovation European Commission, Brussels, Belgium

(Title TBC)

Josef Kokini

United States

The Food Chain in Germany - Facts and future challenges Model conceptions for a global development

Walter Spiess

Karlsruhe Institut für Technologie (KIT), Karlsruhe, BW, Germany

The role of an Innovation System in stimulating a nascent agri-food sector: A Case Study

Audia Barnett¹; Charles Kounkou¹; Alexander Castleton²

¹Inter-American Institute for Cooperation on Agriculture, Ottawa, Ontario, Canada; ²Carleton University, Ottawa, ON, Canada

16:10 - 16:30 Coffee Break

16:30 - 18:00 **Concurrent Session 9.1: Food and Health: The Science of Sugar and What it Means for Industry and the Consumer**

16:30 - 18:00 **Concurrent Session 9.2: Sustainability - Filling the Production Shortfall**

(Title TBC)

Mario Herraro

(Title TBC)

Bertini Catherine

Microalgae: Sustainable Food Resource

Yanqun Li¹; Min Zhong²; Xi Zhang²; Chenghui Zhang²; Xiaoyan Jiang²;
Xueqiong Hu²

¹College of Food Science and Technology, Guangdong Ocean University, Zhanjiang, Guangdong Province, China; ²College of Food Science and Technology, Guangdong Ocean University, Zhanjiang, China

Application of appropriate technologies to minimize post harvest losses and improve quality along Pastoral Beef Value Chain in developing countries; case of Kenya

Josphat Gichure; Catherine Kunyanga; Jasper Imungi
University of Nairobi, Nairobi, Kenya

16:30 - 18:00 **Concurrent Session 9.3: Chemistry - Small Angle Scattering of Foods**

Small Angle Scattering: A Natural Tool for Food Science and Technology Research

Elliot Paul Gilbert
Australian Nuclear Science and Technology Organisation, Kirrawee DC,
Australia

Puroindoline Binding to Lipid Membranes and its Role in Wheat Endosperm Texture and Plant Seed Defence

Richard Frazier¹; Luke Clifton²; Olga Florek¹; Michael Sanders¹; Rebecca Green¹

¹University of Reading, Reading, United Kingdom; ²ISIS Spallation Neutron Source, Didcot, United Kingdom

Interfacial Activity of Native vs. Charge-Reduced Clupeine in Gram-negative Model Biomembranes

Marcia English¹; Allan Paulson¹; Luke Clifton²; Olga Florek³; Rebecca Green³; Richard Frazier³

¹Dalhousie University, Halifax, NS, Canada; ²ISIS Spallation Neutron Source, Didcot, Oxfordshire, United Kingdom; ³University of Reading, Reading, United Kingdom

Small angle X-ray scattering study of carboxymethyl dextran solutions and complexes in the presence of beta-lactoglobulin

Qingrong Huang¹; Yunqi Li²; Qin Zhao³

¹Rutgers University, New Brunswick, NJ, United States; ²Changchun Institute of Applied Chemistry, Jilin Province, China; ³Rutgers University, New Brunswick, New Jersey, United States

16:30 - 18:00 Concurrent Session 9.4: Food Nanotechnology - Consumer Perception and Regulatory Developments of Nanoengineered Materials in Food

Societal responses to nanotechnology in food production. Implications for regulation and innovation

Lynn Frewer
NewCastle University, United Kingdom

Describing nanomaterials using a uniform description system: Working with IUFOST to ensure the needs of the food community are met.

John Rumble¹; Steve Freiman²; Clayton Teague³

¹R&R Data Services, Gaithersburg, MD, United States; ²Freiman Consulting, Potomac, MD, United States; ³(Retired), Gaithersburg, MD, United States

Challenges in the Risk Assessment of Engineered Nanomaterials Used in the Food Sector

16:30 - 18:00 Concurrent Session 9.4: Food Nanotechnology - Consumer Perception and Regulatory Developments of Nanoengineered Materials in Food

Ralf Greiner

Max Rubner-Institut, Federal Research Institute of Nutrition and Food,
Karlsruhe, Germany

16:30 - 18:00 Concurrent Session 9.5: Processing - Thermal Processing - Microwave & Radio Frequency Heating Applications

(Title TBC)

Tim Durance

Drying uniformity analysis of pulse-spouted microwave freeze drying banana cubes

Hao Jiang

Jiangnan University School of food science and technology, Wuxi, Jiang Su,
China

Inactivation of enzymes in foods by radio frequency heating

Kunihiko Uemura¹; Chieko Takahashi²; Isao Kobayashi²

¹National Food Research Institute, NARO, Tsukuba, Ibaraki, Japan; ²National Food Research Institute, NARO, Tsukuba, Japan

Microwave Pre-Treatment For Phenolics Extraction From Mango Peel Waste

O. Freire; L.F. Lozada; Hugo A. Martinez-Correa

Agro-Industrial Processes Research Group - GIPA, Engineering Dept.,
National University of Colombia, Palmira, Colombia

16:30 - 18:00 Concurrent Session 9.6: Consumer Behavior and Sensory Evaluation - Development of New Sensory Methodologies

Understanding Consumer Choice and Eating Behavior: Genes, Culture, Personality and Mood

16:30 - 18:00 Concurrent Session 9.6: Consumer Behavior and Sensory Evaluation - Development of New Sensory Methodologies

Beverly Tepper
Rutgers University, United States

Influence of odors function and colors symbolism in odor-color associations: a French-Lebanese-Taiwanese cross-cultural study

reine barbar¹; Yelena Maric²; Muriel Jacquot³
¹Food Science Department-Faculty of Agricultural and Food Sciences-Holy Spirit University of Kaslik, P.O.Box 446-Jounieh, Lebanon; ²Myrissi- 24-30 rue Lionnois, P.O Box 60120, 54003 Nancy Cedex, France; ³Innovative Crossmodal Interactions Modeling (InnoCIM)-ENSAIA-Université de Lorraine, 2 av. de la For, 54500 Vandoeuvre-lès-Nancy, France

Sensory properties and flavour volatiles of sugar-snap cookies made with varying levels of green tea extract

Anita Sisopha; Lisa Duizer; Abir Sarker
University of Guelph, Guelph, ON, Canada

Preferred Attribute Elicitation of Extruded Millet Snacks and Muffins

Matthew McSweeney¹; Lisa Duizer¹; Koushik Seetharaman¹; Dan Ramdath²; Massimo Marcone¹
¹University of Guelph, Guelph, ON, Canada; ²Agriculture and Agri-Food Canada, Guelph, ON, Canada

16:30 - 18:00 Concurrent Session 9.7: Convergent Innovation - Digital Technologies (ICT and BIO) and Enabling Systems for Home Nutrition, Health and Self-care through the Lifecourse

(Title TBC)

Steven A. Grover

(Title TBC)

Giovanni Battistini

16:30 - 18:00 **Concurrent Session 9.7: Convergent Innovation - Digital Technologies (ICT and BIO) and Enabling Systems for Home Nutrition, Health and Self-care through the Lifecourse**

Development of a preventive healthcare system to promote healthy lifestyles: measurement of food intake

Sarah Kuczora¹; Paul Finglas²; Carlos Ramos²; Jose Costa Requena³; Todor Ginchev³

¹Campden BRI, Chipping Campden, United Kingdom; ²EuroFIR AISBL, Brussels, Belgium; ³Aalto-Korkeakoulusaatio, Helsinki, Finland

Developing a Knowledge-based Architecture for supporting Decision-making in Multi-stakeholder Partnerships to improve Health and Nutrition: A Case from Quebec, Canada

Arash Shaban-Nejad¹; Nii A. Addy²

¹McGill University, Department of Epidemiology and Biostatistics, Montreal, Quebec, Canada; ²McGill University, Faculty of Management, Montreal, QC, Canada

19:00 - 23:00 **Social Evening Event**

Thursday, August 21, 2014

08:40 - 10:30 Concurrent Session 10.1: Food Processing - Life-cycle Analysis, Eco Efficiency (CIRAIG)

08:40 - 10:30 Concurrent Session 10.2: Sustainability - Avoiding Losses from Current Production Levels

(Title TBC)

Roger Beachy

(Title TBC)

George Ooko

Weather, Climate and Food Security: A Geophysical Perspective

Tom BEER¹; Albert McGill²

¹Centre for Australian Weather and Climate Research, Aspendale, VIC, Australia; ²IUFoST, Melbourne, VIC, Australia

Emerging innovations for a significant reduction of food losses and waste: A review

Stephane Guilbert¹; Barbara Redlingshöfer²

¹INRA, 34060 Montpellier Cedex 1, France; ²INRA, Paris, France

TBD

Yimin Wei

08:40 - 10:30 Concurrent Session 10.3: Food Safety - Allergens

The Development and Utilization of Thresholds

Steve Taylor
Food Allergy Research & Resource Program, Department of Food Science &
Technology, University of Neb, Lincoln, NE, United States

Impact of Food Processing and Food Matrix Composition on Peanut Allergens Digestibility and Allergenicity by a Dynamic in Vitro Digestion System.

Lamia L'Hocine¹; Mélanie Pitre¹; Hervé Bernard²; Yves Arcand¹; Isabelle Mainville¹

¹Food Research and Development Centre, Agriculture and Agri-Food Canada, Saint-Hyacinthe, QC, Canada; ²INRA, UR496 Immuno-Allergie Alimentaire, CEA de Saclay, Gif sur Yvette, France

Food Allergenic Residues in Composts and Their Potential Contamination in Low-growing Leafy Greens and Root Crops.

Balunkeswar Nayak

School of Food and Agriculture, University of Maine, Orono, ME, United States

Mast cell-based fluorescence biosensor for rapid detection of major shrimp allergen tropomyosin Pen a1

donglei Jiang; Hui Jiang; Jian Ji; Xiulan Sun; Yinzhi Zhang

¹School of Food Science and Technology, Jiangnan University, Wuxi, JS, China;

Almond (*Prunus dulcis*) detection and quantification using a murine monoclonal antibody-based direct sandwich enzyme-linked immunosorbent assay

Changqi Liu; Guneet Chhabra; Shridhar Sathe

Florida State University, Tallahassee, FL, United States

08:40 - 10:30 Concurrent Session 10.4: Food Nanotechnology - Structure Development and Property Control

Effect of Size Reduction on Properties of Cellulose

An-I Yeh

National Taiwan University, Taiwan

Role of Hydrolysis in Heat-induced Self-Assembly of β Lactoglobulin Nanofibrils

Simon Loveday¹; Skelte Anema²; M. Andy Rao³; Harjinder Singh⁴
¹Riddet Institute, Palmerston North, New Zealand; ²Fonterra Research and Development Centre, Palmerston North, New Zealand; ³Cornell University, Geneva, New York, United States; ⁴Riddet Institute, Massey University, Palmerston North, New Zealand

Fabrication and characterization of Epigallocatechin-3-gallate Nano-carrier based on Glycosylated Casein

Shuqin Xia; Jin Xue; Xiaoming Zhang; Chen Tan; Biao Feng
State Key Laboratory of Food Science and Technology, School of Food Science and Technology, Jiangnan, Wuxi, China

Development of nanogels from oil-in-water nanoemulsions

Vivek Erramreddy; Supratim Ghosh
University of Saskatchewan, Saskatoon, SK, Canada

Assembly of Kafirin nanoparticles for nutraceutical encapsulation and Pickering emulsion stabilization

Qingrong Huang; Jie Xiao
Rutgers University, New Brunswick, NJ, United States

08:40 - 10:30 Concurrent Session 10.5: Consumer Behavior and Sensory Evaluation - Sensory of Taste Perception

The Basis of Sensory Taste Perception

David Linemeyer
Senomyx (VP Biology), San Diego, CA, United States

Glutamate accumulation by lactobacilli during bread making: A suitable tool to produce sodium reduced bread?

Michael G. Ganzle¹; Cindy J. Zhao¹; Wendy Wismer¹; Mathias Kinner²
¹University of Alberta, Dept. of Agricultural, Food and Nutritional Science, Edmonton, AB, Canada; ²ZHAW Züricher Hochschule für Angewandte Wissenschaften, Wädenswil, Switzerland

08:40 - 10:30 Concurrent Session 10.5: Consumer Behavior and Sensory Evaluation - Sensory of Taste Perception

Relative Sweetness and Sensory Characteristics of Potential Sucrose Substitute Turanose Biosynthesized Using Amylosucrase from *Neisseria polysaccharea*

Yang Kim¹; Kang-Pyo Lee²; Sang-Ho Yoo¹

¹Sejong University, Seoul, Korea, Republic of; ²Samyang Genex Corporation, Incheon, Korea, Republic of

Comparison on Four Basic Tastes Intensity and Their Binary Interactions between Electronic Tongue and Human Tongue

Huaixiang Tian¹; Tao Feng¹; Zuobing Xiao¹; Shiqing Song¹; Zhiyu Li²; Qiang Liu²; Deshou Mao²

¹Shanghai Institute of Technology, Shanghai, China; ²Flavors & Fragrance Technical Center of Hongta Tobacco (Group) Co., Ltd., Yuxi, China

Traditional Processing, Acceptability and Consumption Pattern of African locust beans (*Parkia biglobosa*) Iru in Selected Dishes in Western Nigeria

Bridget Ajagbe¹; Toyin Omilani²; Yetunde Adebayo³

¹Federal College of Education, Abeokuta, OG, Nigeria; ²Ogun State College of Health Technology, Ilese-Ijebu, OG, Nigeria; ³The Bells University, Ota, OG, Nigeria

08:40 - 10:30 Concurrent Session 10.6: Chemistry - Food Bioactives: Identification, Characterization and Efficacy II

The investigation on optimized extraction conditions, total phenolic contents and antioxidant capacities of *Gynura procumbens* and *Gynura divaricata* leaves extracts

Triwoot Phanyotha; Parunya Thiyajai; Warangkana Srichamnong; Chalat Santivarangkna; Nattapol Tangsuphoom; Uthaiwan Suttisansanee
Institute of Nutrition, Mahidol University, Phutthamonthon, Nakhon Pathom, Thailand

Current research and commercial progress on food protein derived bioactive peptides

Jianping Wu

Univ of Alberta, Edmonton, AB, Canada

08:40 - 10:30 Concurrent Session 10.6: Chemistry - Food Bioactives: Identification, Characterization and Efficacy II

Isolation of isoflavones and soyasaponins from soybean cake by semi-preparative high performance liquid chromatography

Fabricio Silva; Daniel Perrone
Chemistry Institute, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

Measurement of the Antioxidant Potential in Irradiated Pomegranate Fruit Industrial Waste: A New Direct Approach

Hafiz Muhammad Shahbaz; Jae-Jun Ahn; Eun-Joo Park; Ha-Gyeong Lim; Joong-Ho Kwon
School of Food Science and Biotechnology, Kyungpook National University, Daegu, Korea, Republic of

Carotenoid and volatile compounds in yellow trifoliate yam tuber

Olufunmilola Adunni Abiodun¹; Rahman Akinoso²; Bolanle Akinwande³
¹University of Ibadan, Osogbo, Osun State, Nigeria; ²University of Ibadan, Ibadan, Nigeria; ³Ladoke Akintola University of Technology, Ogbomosho, Nigeria

08:40 - 10:30 Concurrent Session 10.7: Convergent Innovation - Technologies, Metrics, Systems and Enabling Policy for Affordable Nutrition, Health, and Healthcare

(Title TBC)

David Buckridge
Medical Informatics McGill

(Title TBC)

Paul Donato
Minister of Health, Aruba

Convergent Innovation for Agriculture, Nutrition, and Health: Harnessing the Power of 21st Century Information and Communication Technology to Fill Institutional Voids

Vardhini Jhaveri

McGill Center for Convergence of Health and Economics; CGIAR-IFPRI India,
Montreal, QC, Canada

Bridging Convergent Innovation and Collective Action to Metrics and Analytics: The Drink it up Multi-Stakeholder Partnership

Karen Watson¹; Yu Ma²

¹Drink-Up Project, Canada; ²Business Economics & Law, Albert School of Business, Edmonton, AB, Canada

A Management Flight Simulator tool to improve economic performance of nutrition-sensitive food innovation and enabling policy environment to address the double burden

Jeroen Struben

Desautels Faculty of Management, McGill University, Montreal, QC, Canada

10:30 - 11:00 Coffee Break

11:00 - 12:30 Plenary Panel: Food Security Initiatives Summit

Future Collaborative Research Needs

12:30 - 13:00 Closing Ceremony & Awards

13:30 - 14:30 IUFoST General Assembly
