

# EFFoST2022 Conference - Oral Programme

**Monday 7 November 2022**

08:30 - 18:00 Registration in the Atrium of AVIVA Stadium							
Room			Lansdowne Room   Level 2		Vavasour Suite   Level 2		
09:00 - 10:30			Young EFFoST Day 2022		NTP Session 1: Opening Session EFFoST / IFT-NPD & Sustainability of Food Supply for the future through Innovative Non-thermal Technologies Chairs: James Lyng and Dolores O'Riordan		
09:00 - 09:25			08:45 - 09:00 <b>Welcome &amp; Introduction of Young EFFoST Day programme</b>		<b>(N1.1)</b> <b>Opening Address</b> J. Antonio Torres, 2021-22 Chair of Nonthermal Processing Division & School of Engineering and Sciences, Tecnológico de Monterrey, México		
09:25 - 09:50			09:00 - 10:00 <b>Opening session: Shaping the Production of Sustainable, Healthy Foods for the Future</b> Chair: Prof. Kevin O'Connor Dr Pamela Byrne, Chief Executive Officer at <i>Food Safety Authority Ireland</i>		<b>(N1.2)</b> <b>Sustainability of Food Supply for the future through Innovative Non-thermal Technologies</b> Anet Režek Jambrak, <i>University of Zagreb, Croatia</i>		
09:50 - 10:10					<b>(N1.3)</b> <b>Impact of Pulsed Electric Field (PEF) on Vegetable Processing: Case Study on Carrot Processing</b> Arisa Thamsuaidee, <i>Elea Technology GmbH, Germany</i>		
10:10 - 10:30			10:00 - 10:30 Networking activity: "Speed dating" to get to know other researchers		<b>(N1.4)</b> <b>Enhancement of wheat dough functional properties by non-thermal plasma treatment of wheat flour</b> Muhammad Jehanzaib Khan, <i>LTSM, Germany</i>		

In this programme, only the presenters of the abstracts are mentioned. The online book of abstracts acknowledges all authors.



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10:30 - 11:00			10.30-10.45 Refreshment Break		Refreshment Break		
11:00 - 12:00			Young EFFoST Day 2022, continued		NTP Session 2: Sustainability of Food Supply for the future through Innovative Non-thermal Technologies (continued) Chairs: Uta Schnabel and J. Antonio Torres		
11:00 - 11:15			10:45 - 11:30 Job reality & career path insights: Talks by representatives from industry, academia and non-profit organizations on their career path and advice to young researchers.		(N2.1) The impact of pulsed electric field pre- treatment on convective and vacuum drying of strawberries Aleksandra Matys, University of Life Sciences, Poland		
11:15 - 11:30			Chair: Tara Hughes Speakers: - Aoife Marie Murphy, Kerry, Ireland - Nessa Noronha, Food for Health Ireland, Ireland - Alan Kelly, University College Cork, Ireland - Ciarán Forde, Wageningen University & Research, the Netherlands		(N2.2) Effect of cold plasma on physicochemical properties of gum arabic and its microencapsulation with oil Sonal Chaple, University College Dublin, Ireland		
11:30 - 11:45			11:30 - 12:00 Panel discussion with representatives from industry, academia and non-profit organisations		(N2.3) Impact of high-pressure processing on qualitative and quantitative attributes of fresh pumpkin Rohini Dhenge, University di Parma, Italy		
11:45 - 12:00			12:00 - 12:10 Close of Young EFFoST Day 2022		(N2.4) Ultrasound-assisted extraction and polymer- based encapsulation of phycoerythrin from Phorphyridium purpureum Shaba Noore, University College Dublin, Ireland		
12:00 - 13:00			12.10-13.00 Lunch		Lunch		

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Room	President Suite   Level 2	Vavasour Suite   Level 2		
<b>13:00 - 14:00</b>	<b>EFFoST Welcome &amp; Opening Session</b> Chairs: Dolores O’Riordan and James Lyng	<b>NTP Special Session 3: Emerging Non-thermal Processing Technology - Case Studies</b> Chair: Paula Bourke and Juan A. Cárcel		
13:00 - 13:15	<b>Welcome to the 36th EFFoST International Conference</b> <ul style="list-style-type: none"> <li>Hugo de Vries, President of the EFFoST Board</li> <li>Dolores O’Riordan and James Lyng, Conference Chairs, <i>University College Dublin, Ireland</i></li> <li>Orla Feely, Vice-President for Research, Innovation and Impact, <i>University College Dublin, Ireland</i></li> </ul>	13:00 - 13:30 <b>(N3.1)</b> <b>Plasma</b> Masja Nierop Groot, <i>Wageningen Food &amp; Biobased Research, the Netherlands</i> Uta Schnabel, <i>Leibniz Institute Plasma Science and Technology, Germany</i>		
13:15 - 13:30	<b>Welcome to Dublin, Ireland</b> Minister Martin Heydon, <i>Minister of State with responsibility for Research and Development, Farm Safety, and New Market Development</i>			
<b>13:30 - 14:00</b>	<b>Plenary Session 1: Future proofing the agri-food industry</b> Chairs: Dolores O’Riordan and James Lyng			
13:30 - 14:00	<b>(PL1.1)</b> <b>Food Vision 2030: its development, conclusions and implementation in a fast changing world</b> Tom Arnold, <i>Irish Government’s Special Envoy for Food Systems, Ireland</i>	13:30 - 14:00 <b>(N3.2)</b> <b>Ultrasound</b> Gállego-Juarez, <i>Pusonics, Spain</i> Jose Garcia Perez, <i>Universitat Politècnica de València, Spain</i>		

Room	President Suite   Level 2	1872 Room   Level 3	Lansdowne Room   Level 2	Havelock Suite   Level 4	Vavasour Suite   Level 2	Special session room 442   Level 4	
14:00 - 15:45	<b>Session 1: Enhancing the sensory appeal of food</b> Chairs: Verena Mittermeier-Klessinger and Ciarán Forde	<b>Session 2: The role of the Internet of Things in the food chain</b> Chairs: Peter Fryer and Gianpiero Pataro	<b>Session 3: Sensor technology to enhance food quality</b> Chairs: Nora O'Shea and Colm O'Donnell	<b>Session 4: Supporting consumer choices and preferences: technologies to help consumers make informed decisions</b> Chairs: Klaus Grunert and Maeve Henchion	<b>NTP Session 4: Role of non-thermal technologies in future foods from alternative sources for an increasing global population</b> Chairs: Marco Faieta and Lilia Neri	<b>Workshop: Upload your scientific work to an open repository</b> Chair: Edward Sliwinski	
14:00 - 14:25	<b>(KN1.1)</b> <b>The role of sensory consumer and community research in designing foods for healthy sustainable diets</b> Lisa Methven, <i>University of Reading, United Kingdom</i>	<b>(KN2.1)</b> <b>The Internet of Things for Food</b> Sjaak Wolfert, <i>Wageningen University, Netherlands</i>	<b>(KN3.1)</b> <b>Development of process analytical technology (PAT) tools for enhanced quality and safety in food processing</b> Colm O'Donnell, <i>University College Dublin, Ireland</i>	<b>(KN4.1)</b> <b>Consumer interest in healthy sustainable diets and the role of tools supporting food choice</b> Wim Verbeke, <i>Universiteit Gent, Belgium</i>	<b>(N4.1)</b> <b>Role of non-thermal technologies in future foods from alternative sources for an increasing global population</b> Jan Van Impe, <i>KU Leuven, Belgium</i>	During this 2-hour hands-on and interactive workshop, we will guide you through the world of Open Science and, specifically, how to upload your research to an open repository (Zenodo). The work shop will cover: - the basics of Open and FAIR principles - how to upload your work on Zenodo, step by step - how to publicize, advertise and raise awareness about your work.	
14:25 - 14:45	<b>(O1.2)</b> <b>High Molecular Weight Polymers as Natural Aroma Modulators in Red Wine</b> Anna Maria Gabler, <i>Technical University of Munich, Germany</i>	<b>(O2.2)</b> <b>A first approach to the modelling of Cleaning-In-Place processes using Machine Learning methods</b> Estefania Lopez-Quiroga, <i>University of Birmingham, United Kingdom</i>	<b>(O3.2)</b> <b>Contactless characterization of potato drying by using air-coupled ultrasound</b> Virginia Sánchez Jiménez, <i>Universitat Politècnica de València, Spain</i>	<b>(O4.2)</b> <b>Social Media and Social Amplification of Risk – Consumer Reactions to Food Recall Reporting</b> Sean Tanner, <i>University College Cork, Ireland</i>	<b>(N4.2)</b> <b>Nonthermal processes for the valorisation of yeast biomass</b> George Dimopoulos, <i>National Technical University Of Athens, Greece</i>		
14:45 - 15:05	<b>(O1.3)</b> <b>Neuroscience tools to predict more appealing forms for senior population</b> Ana Baranda Gonzalez, <i>Basque Research and Technological Alliance, Spain</i>	<b>(O2.3)</b> <b>Simulating a part of the industrial chain in VR</b> Russell Galea, <i>University of Malta, Malta</i>	<b>(O3.3)</b> <b>Chemometric models for rice sourdough fermentations based on fluorescence spectroscopy</b> Viktoria Zettel, <i>University Of Hohenheim, Germany</i>	<b>(O4.3)</b> <b>Transformative change towards more sustainable and healthy diets for all-An outline of the SusHealth project</b> Vasilis Grigoriadis, <i>Queen's University Belfast, United Kingdom</i>	<b>(N4.3)</b> <b>Recovery of bioactive compounds from fruit juice waste streams by industrial Ultrasound Assisted Extraction</b> Loic Carvalho, <i>Abertay University, United Kingdom</i>	Presentations by Edward Sliwinski, Katherine Flynn, Emilie Weynants, and Luis Mayor	
15:05 - 15:25	<b>(O1.4)</b> <b>Lactic acid bacteria fermentation of chickpeas flour for gluten-free breadmaking: sensory and physico-chemical modifications</b> Marcello Alinovi, <i>Università di Parma, Italy</i>	<b>(O2.4)</b> <b>Real Time Anomaly Detection in Cold Chain Transportation using IoT Technology</b> James Gillespie, <i>Ulster University, United Kingdom</i>	<b>(O3.4)</b> <b>Evaluation of sensor performance for smart home applications to analyze bakery products</b> Katrin Mathmann, <i>University of Applied Sciences, Austria</i>	<b>(O4.4)</b> <b>Using Near Infrared Spectroscopy (NIRs) to Help Consumer's Food Choices</b> Zeyneb Guneyusu, <i>Hacettepe University, Turkey</i>	<b>(N4.4)</b> <b>Continuous recovery of valuable ingredients from microbial production systems by pulsed electric fields</b> Felix Schottroff, <i>University of Natural Resources and Life Sciences (BOKU), Austria</i>		
15:25 - 15:45	<b>(O1.5)</b> <b>Dynamic sensory, emotional and rheological characterization of a functional vanilla ice cream</b> Ricardo Isaías, <i>University of Porto, Portugal</i>	<b>(O2.5)</b> <b>Development of intelligent packaging to monitor food degradation and reduce food waste.</b> Laura Carballido, <i>Institut Agro, France</i>	<b>(O3.5)</b> <b>Quality evaluation of processed meats using rapid and/or non-invasive sensors and machine learning algorithms</b> Ahmed Rady, <i>Teagasc, Ireland</i>	<b>(O4.5)</b> <b>Decarbonisation in food supply chain: a review of current European initiatives</b> Sepideh Jafarzadeh, <i>Sintef Ocean, Norway</i>	<b>(N4.5)</b> <b>Optimization of bioactive compounds from marigold flower using ultrasound-assisted extraction by response surface methodology</b> Kitipong Assatarakul, <i>Chulalongkorn University, Thailand</i>		

15:45 - 16:15 Refreshment Break   Atrium and Presidents Terrace							
Room	President Suite   Level 2	1872 Room   Level 3	Lansdowne Room   Level 2	Havelock Suite   Level 4	Vavasour Suite   Level 2		
16:15 - 18:00	<b>Session 5: Food toxicology and allergenicity</b> Chairs: Gemma Kinsella and Kim Miller	<b>Session 6: Techniques to enhance energy efficiency &amp; minimise environmental impact</b> Chairs: Brijesh Tiwari and Ajay Menon	<b>Session 7: Modelling, its role in quality by design</b> Chairs: Ferruh Erdoğan and Catherine Renard	<b>Session 8: Bioactives and secondary metabolites: generation and characterisation</b> Chairs: Nessa Noronha and Jesus Frias	<b>NTP Special Session 5: Consumer perception and regulatory considerations in relation to non-thermal technologies</b> Chair: Alan Kelly and Fiona Lalor		
16:15 - 16:40	<b>(KN5.1)</b> <b>From mice to mouse: Developments in toxicological and allergenicity risk assessments</b> Rhodri Evans, <i>Exponent, United Kingdom</i>	<b>(KN6.1)</b> <b>Defining what type of industry will provide sustainable and healthy future foods</b> Wayne Martindale, <i>University of Lincoln, United Kingdom</i>	<b>(KN7.1)</b> <b>The role of digital tools in quality food design and sustainability</b> Francesco Marra, <i>Universita Degli Studi Di Salerno, Italy</i>	<b>(KN8.1)</b> <b>The potential of protein hydrolysates to support immune health</b> Christine Loscher, <i>Dublin City University, Ireland</i>	16:15 - 17:15 <b>(N5.1)</b> <b>Consumer perception of non thermal technologies</b> • Mary McCarthy, <i>University College Cork, Ireland</i> • Maeve Henchion, <i>Teagasc, Ireland</i> • Klaus Grunert, <i>Aarhus University, Denmark</i> • Diána Bánáti, <i>University of Szeged, Hungary</i> • John Casey, <i>Donworth Capital Foods</i>		
16:40 - 17:00	<b>(O5.2)</b> <b>Occurrence of regulated and emerging mycotoxins in raw milk: a Portuguese case-study</b> Marta Leite, <i>University Of Coimbra, Portugal</i>	<b>(O6.2)</b> <b>Process Development for Biofilm-Based Production of Nutraceuticals from Microalgae</b> Gamze Er, <i>LSTME Busan, South Korea</i>	<b>(O7.2)</b> <b>A multidimensional heat and mass transfer study of coffee roasting in spouted bed roasters</b> Mark Al-Shemmeri, <i>University Of Birmingham, United Kingdom</i>	<b>(KN8.2)</b> <b>Metabolomics – how it can contribute to developments to underpin a healthy, sustainable diet</b> Lorraine Brennan, <i>University College Dublin, Ireland</i>			
17:00 - 17:20	<b>(O5.3)</b> <b>Tracing radiolabeled pesticides to investigate their fate during food processing</b> Mark Buecking, <i>Fraunhofer IME, Germany</i>	<b>(O6.3)</b> <b>Eat the box too... insects biomass growth and plastic biodegradation</b> Emmanouil Tsochatzis, <i>Aarhus University, Denmark</i>	<b>(O7.3)</b> <b>Bread baking modeling: towards the development of new baking strategies</b> Safia Bedre-dine, <i>Inrae, Ur Opaale, France</i>	<b>(O8.3)</b> <b>Enrichment of DPP-IV inhibitory peptides in quinoa for the treatment of type II diabetes mellitus</b> Magdalena Holzer, <i>Technical University of Munich, Germany</i>			
17:20 - 17:40	<b>(O5.4)</b> <b>Comparative risk assessment study on bisphenol A (BPA) through meat products</b> Xin Wang, <i>University College Dublin, Ireland</i>	<b>(O6.4)</b> <b>Driving towards net-zero carbon under climate change: Modelling energy use for dairy manufacturing and distribution</b> Maria Ioanna Malliaroudaki, <i>University of Nottingham, United Kingdom</i>	<b>(O7.4)</b> <b>Numerical modelling of soluble gas stabilization process as a tool toward full-scale industrialization</b> Sara Esmaeilian, <i>NTNU, Norway</i>	<b>(O8.4)</b> <b>Fish processing byproducts: A sustainable source of bioactive peptides</b> Khawaja Muhammad Imran Bashir, <i>German Engineering Research and Development Center, South Korea</i>	17:15 - 18:00 <b>(N5.2)</b> <b>Regulatory considerations of non thermal technologies</b> Pat O'Mahony, <i>FSAI, Ireland</i> Rhodri Evans, <i>Exponent, Ireland</i> Joe Dunne, <i>Food Safety Consultant, Ireland</i> Liam Murphy, <i>HPP Tolling, Ireland</i>		

17:40 - 18:00	<b>(O5.5)</b> <b>Safety Assessment of Novel Foods from the Biorefinery of Olive, Grape, and Nut By-products</b> Maame Ekoa Manful, <i>Technological University Dublin, Ireland</i>	<b>(O6.5)</b> <b>Evaluation of meat industry's environmental impact via LCA: Current state and future/ alternative perspectives for sustainability</b> Vasiliki Oikonomopoulou, <i>National Technical University Of Athens, Greece</i>	<b>(O7.5)</b> <b>Investigation of integral stereoselectivity of lipase on triacylglycerol of varying fatty acids</b> Yoonseok Choi, <i>Seoul National University, South Korea</i>	<b>(O8.5)</b> <b>How do phenolic compounds affect bioactive peptide formation from casein digestion in vitro?</b> Aytul Hamzalioglu, <i>Hacettepe University, Turkey</i>			
18:00 - 20:00	<b>Welcome Reception   Atrium and the Mezzanine</b>						

## Tuesday 8 November 2022

<b>Room</b> President Suite   Level 2							
08:30 - 10:00	<b>Plenary Session 2: Meeting the future challenges of the food industry</b> Chairs: Dolores O'Riordan and James Lyng						
08:30 - 09:00	<b>(PL2.1)</b> <b>Meeting the future challenges of the food industry</b> Mark Christal, <i>Enterprise Ireland, Ireland</i>						
09:00 - 09:30	<b>(PL2.2)</b> <b>'Better Living through Sensory'; Using Sensory Cues to Moderate Eating Behaviour, Food Intake and Health</b> Ciarán Forde, <i>Wageningen University, the Netherlands</i>						
09:30 - 10:00	<b>(PL2.3)</b> <b>Future of healthy, environmentally sustainable and desirable diets: guidelines, industry and consumers</b> Jennie Macdiarmid, <i>University of Aberdeen, United Kingdom</i>						
10:00 - 10:30	<b>Refreshment Break   Poster Session 1   Atrium and Presidents Terrace</b>						
<b>Room</b>	<b>President Suite   Level 2</b>	<b>1872 Room   Level 3</b>	<b>Lansdowne Room   Level 2</b>	<b>Havelock Suite   Level 4</b>	<b>Vavasour Suite   Level 2</b>	<b>Special session room 442   Level 4</b>	<b>Special session room 441   Level 4</b>
10:30 - 12:35	<b>Session 9: Identifying and preparing for emerging food safety risks</b> Chairs: Enda Cummins and Elena Zand	<b>Session 10: Consumers' attitudes to processed foods and desire for clean labels</b> Chairs: Wim Verbeke and Diána Bánáti	<b>Session 11: Innovative and novel sustainable food processes</b> Chairs: Robert Sevenich and Lilia Ahrné	<b>Session 12: Formulation of foods to enhance their sustainability and/or nutritional value</b> Chair: Dolores O'Riordan and Christoph Hartmann	<b>NTP Special Session 6: Emerged Non-thermal Processing Technology - Commercial Case studies</b> Chairs: James Lyng and Carmen Moraru	<b>Special Session: Filling knowledge gaps on alternative proteins to accelerate the dietary shift</b> Chair: Paul Vos	<b>Special Session: Improving Sustainability in Food Processing using Moderate Electric Fields (MEF) for Process Intensification - MEFPROC</b> Chair: Juan A. Cárcel and Francesco Marra
10:30 - 10:55	<b>(KN9.1)</b> <b>Identifying and preparing for emerging food safety risks</b> Patrick Wall <i>University College Dublin, Ireland</i>	<b>(KN10.1)</b> <b>Consumer inferences from production and processing characteristics: A barrier to a more sustainable food production?</b> Klaus Grunert, <i>Aarhus University, Denmark</i>	<b>(KN11.1)</b> <b>Innovative and Novel Sustainable Food Processing and Challenges</b> Ferruh Erdoğdu, <i>Ankara University, Turkey</i>	<b>(KN12.1)</b> <b>Food design challenges: balancing sustainability, nutrition and circularity</b> Milena Corredig, <i>Aarhus University, Denmark</i>	10:30 - 11:05 <b>(N6.1)</b> <b>Ultraviolet</b> Robert Axon, <i>UVTGLOBAL, United Kingdom</i> Steve O'Brien, <i>UVTGLOBAL, United Kingdom</i> Jaromir Bilek, <i>Jenton International, United Kingdom</i>	<b>(S01.1)</b> <b>GIANT LEAPS towards healthy and sustainable future diets by filling knowledge gaps on alternative proteins</b> Paul Vos, <i>Wageningen University &amp; Research, the Netherlands</i>	10:30 - 10:50 <b>(S02.1)</b> <b>Evaluation of Moderate Electric Field (MEF) for pasteurization of pork sausages in a conductive casing</b> Tesfaye Bedane, <i>University College Dublin, Ireland</i>

10:55 - 11:15	<b>(O9.2)</b> <b>Coagulase Negative Staphylococci: a Potential Reservoir of Antibiotic Resistant Genes in the Pork Meat Chain</b> Maria João Fraqueza, <i>Centre for Interdisciplinary Research in Animal Health, Portugal</i>	<b>(O10.2)</b> <b>The Interplay of Food Labels &amp; Dietary Motivation on Product Health Ratings and Purchase Intentions</b> Paul Naughton, <i>Edinburgh Napier University, United Kingdom</i>	<b>(O11.2)</b> <b>Rotary drum heat pump drying as alternative to malt processing</b> Gisandro Carvalho, <i>Esalq-usp/oniris, France</i>	<b>(O12.2)</b> <b>Incorporating zinc into provitamin A, quality protein maize and normal maize hybrids</b> Maryke Labuschagne, <i>University of the Free State, South Africa</i>		<b>(S01.2)</b> <b>NextGenProteins: Bioconversion of Underutilized Resources into Next Generation of Proteins for Food and Feed</b> Marie Shrestha, <i>ttz Bremerhaven, Germany</i>	10:50 - 11:10 <b>(S02.2)</b> <b>Moderate Electric Fields (MEF) application during the extraction of oleuropein from olive leaves</b> Juan A. Cárceles, <i>Universitat Politècnica De València, Spain</i>
11:15 - 11:35	<b>(O9.3)</b> <b>A prospective study of antibiotic resistance in the food chain</b> Cristina Díaz-Martínez, <i>University Of Cordoba, Spain</i>	<b>(O10.3)</b> <b>Consumer perception and willingness to try new food products produced by new food technologies</b> Ana Frias, <i>University Of Port, Portugal</i>	<b>(O11.3)</b> <b>Ultra-high-pressure homogenization (UHPH) in the preparation of spray-dried functional emulsion: application in dairy-based products</b> Fatemeh Aghababaei, <i>Universitat Autònoma Barcelona (UAB), Spain</i>	<b>(O12.3)</b> <b>In vitro digestion/fermentation of olive oil by-products debittered with lactobacilli and functionalized with Lactiplantibacillus plantarum</b> Andrea Gianotti, <i>Università di Bologna, Italy</i>	11:05 - 11:50 <b>(N6.2)</b> <b>High pressure processing</b> Mario Gonzalez, <i>Hiperbaric, Spain</i>	<b>(S01.3)</b> <b>PROFUTURE Project - Microalgae Protein Ingredients for the Food and Feed of the Future</b> Fabio Fanari, <i>Institute of Agrifood Research and Technology (IRTA), Spain</i>	11:10 - 11:30 <b>(S02.3)</b> <b>Improvement of ferrocyclase activity by using power ultrasound</b> Jose Vicente Garcia Perez, <i>Universitat Politècnica De València, Spain</i>
11:35 - 11:55	<b>(O9.4)</b> <b>Enhancing the safety and quality of marinated small pelagic fish</b> Boutheina Bessadok, <i>Institut National Des Sciences Et Technologies De La Mer, Tunisia</i>	<b>(O10.4)</b> <b>Impact of organic apple puree processing on consumer's perceived value and purchase intentions</b> University Angers, <i>Itab / Granem, France</i>	<b>(O11.4)</b> <b>Exploiting the potential of electrohydrodynamic drying as a green alternative for batch-mode drying of foods</b> Kamran Iranshahi, <i>ETH Zurich, Empa, Switzerland</i>	<b>(O12.4)</b> <b>Oleosomes: natural oil droplets for dairy alternatives - studied by lubrication behaviour (tribology)</b> Jack Yang, <i>Wageningen University &amp; Research, the Netherlands</i>		<b>(S01.4)</b> <b>SUSINCHAIN: Sustainable Large-Scale Production and Consumption of Insect Proteins in Europe</b> Teun Veldkamp, <i>Wageningen University &amp; Research, the Netherlands</i>	11:30 - 11:50 <b>(S02.4)</b> <b>Model validation, design, implementation and real-time process control of a continuous flow ohmic heater</b> Oluwaloba Oluwole-ojo, <i>Sheffield Hallam University, United Kingdom</i>
11:55 - 12:15	<b>(O9.5)</b> <b>A factory layout and associated food hazards in open food processing facilities, a review</b> Mahsa Pakdel, <i>Norwegian University of Science and Technology, Norway</i>	<b>(O10.5)</b> <b>Microbial cultures to extend the shelf-life of packaged fresh meat: the attitude of Australian consumers</b> Peter Torley, <i>RMIT University, Australia</i>	<b>(O11.5)</b> <b>Lipase-catalyzed synthesis of multi-functional erythorbyl ricinoleate with high emulsifying activity</b> Inwoo Park, <i>Seoul National University, South Korea</i>	<b>(O12.5)</b> <b>How does starch affect wheat bread crumb structure during baking and cooling?</b> Heliciane Clement, <i>Inrae, France</i>	11:50 - 12:35 <b>(N6.3)</b> <b>Pulsed Electric Fields</b> Stefan Toepfl, <i>ELEA Technology, Germany</i> Mike Kempkes, <i>Diversified Technologies, United States of America</i>	<b>(S01.5)</b> <b>Smart Protein for a Changing World. Emerging outcomes from an H2020 EU project</b> Theresa Böck, <i>University College Cork, Ireland</i>	11:50 - 12:10 <b>(S02.5)</b> <b>Assessment of MEF processing potentiality in vegetable based dressing sauce</b> Francesco Marra, <i>University of Salerno, Italy</i>
12:15 - 12:35	<b>(O9.6)</b> <b>Broad-spectrum antimicrobial coatings for food safety</b> Fiora Artusio, <i>École Polytechnique Fédérale de Lausanne, Switzerland</i>	<b>(O10.6)</b> <b>A consumer exploration of the awareness, understanding and perception of plant-based meat alternatives (PBMA)</b> Rebecca Murray, <i>Queen's University Belfast, United Kingdom</i>	<b>(O11.6)</b> <b>High-pressure-intensified pasteurization of orange juice to inactivate Alicyclobacillus acidoterrestris spores and investigation of quality changes.</b> Robert Sevenich, <i>Technische Universität Berlin, Germany</i>	<b>(O12.6)</b> <b>Increasing the fermentable dietary fibre content of bread by addition of accessible cellulose</b> Karel Thielemans, <i>KU Leuven, Belgium</i>		<b>(S01.6)</b> <b>U-Protein and ValPro Path</b> Ewen Mullins, <i>Teagasc Food Research Centre, Ireland</i>	12:10 - 12:30 <b>Panel Discussion</b>
12:35 - 13:45	<b>Lunch   Poster Session 1   Atrium and Presidents Terrace</b>					12:50 - 13:15   Special session room 442 <b>Scientist careers in industry - How to be a subject matter expert in corporate organizations</b> Christoph Hartmann, <i>Nestlé, Switzerland</i> <i>Session sponsored by Nestlé</i>	
	<b>Pop-up session: Are you aware of what you are eating?   Atrium</b> By the EFFoST Working group on Sustainable Food Systems						

Room	President Suite   Level 2	1872 Room   Level 3	Lansdowne Room   Level 2	Havelock Suite   Level 4	Vavasour Suite   Level 2	Special session room 442   Level 4	Special session room 441   Level 4
13:45 - 15:50	<b>Session 13: Bioinformatics and its role in food safety, hygienic design &amp; contamination control</b> Chairs: Hermien van Bokhorst-van de Veen and Aoife Gowan	<b>Session 14: Advances and challenges in alternative proteins</b> Chairs: Mark Fenlon and Jo Gould	<b>Session 15: Advances in food packaging to safeguard food and the environment</b> Chairs: Sharma Shubam and Song Miao	<b>Session 16: Consumer trends and responses to emerging and future foods</b> Chairs: Mary McCarthy and Roisin Burke or Lubna Ahmed	<b>NTP Session 7: How will nonthermal technologies play a part in future local and global food safety and security</b> Chairs: Maria Elena Sosa-Morales and Gustavo Barbosa Canovas	<b>Special session: The INGREEN journey from agrifood sidestream to sustainable biobased products</b> Chair: Narinder Bains	<b>Special Session: Global Harmonization Initiative - available, sustainable, healthy food for the future through networking sound science</b> Chair: Nicola Stanley and Hilde Wijngaard
13:45 - 14:10	<b>(KN13.1)</b> <b>Precision food safety - using DNA sequences to inform risk assessment</b> Seamus Fanning, <i>University College Dublin, Ireland</i>	<b>(KN14.1)</b> <b>Microalgae based production of single-cell protein</b> Maria Barbosa, <i>Wageningen University, the Netherlands</i>	<b>(KN15.1)</b> <b>Sustainable food systems: Role of food packaging</b> Begonya Marcos Muntal, <i>IRTA, Spain</i>	<b>(KN16.1)</b> <b>Understanding the individual in the food system, a science of consumers or citizens?</b> Monique Raats, <i>University of Surrey, United Kingdom</i>	<b>(N7.1)</b> <b>The past and future history of nonthermal processing of foods: fruit and vegetable based food systems</b> Marc Hendrickx, <i>KU Leuven, Belgium</i>	13:45 - 13:50 <b>Introduction to the INGREEN project</b> Narinder Bains, <i>INEUVO Ltd, United Kingdom</i>  13:50 - 14:10 <b>(S03.1)</b> <b>Innovative and sustainable cheeses obtained applying Yarrowia lipolytica previously produced using whey as substrate</b> Davide Gottardi, <i>University of Bologna, Italy</i>	13:45 - 13:50 <b>Introduction to the Global Harmonization Initiative</b> Nicola Stanley, <i>Global Harmonization Initiative, Austria</i>  13:50 - 14:10 <b>(S04.1)</b> <b>The complexity of regulations for human milk</b> John Points, <i>John Points Consulting Ltd., United Kingdom</i>
14:10 - 14:30	<b>(O13.2)</b> <b>Mechanistic modeling of the dynamics of phage attack in milk acidification for the cheese-making process</b> Michèle Bou Habib, <i>Inrae, France</i>	<b>(O14.2)</b> <b>Protein concentrates from edible insect Tenebrio molitor – development of extraction methods and techno-functional characterization</b> Luís M. Cunha, <i>University of Porto, Portugal</i>	<b>(O15.2)</b> <b>Carbon nanotube-based sensors for intelligent packaging</b> Niloufar Sharif <i>École Polytechnique Fédérale de, Lausanne, Switzerland</i>	<b>(O16.2)</b> <b>Plant-based protein: the road to sustainability? Says who?</b> Seamus O'Reilly, <i>University College Cork, Ireland</i>	<b>(N7.2)</b> <b>Non-thermal Plasma for Fresh Produce: Scaling Efficacy from Bench to Prototype/ Industry for gaseous/ liquid applications</b> Uta Schnabel, <i>Leibniz Institute for Plasma Science and Technology, Germany</i>	<b>(S03.2)</b> <b>Bio-based innovative bread obtained with pre-fermented ingredients from milling by-products</b> Lorenzo Siroli, <i>University of Bologna, Italy</i>	<b>(S04.2)</b> <b>Healthy nutrition based on food-omics data and meeting 3P (predictive, preventive and personalized) medicine expectations</b> Nadiya Boyko, <i>Uzhhorod National University, Ukraine</i>
14:30 - 14:50	<b>(O13.3)</b> <b>Characterization of Cronobacter sakazakii isolates from powdered infant formula manufacturing plants by Whole Genome Sequencing</b> Zeinabossadat Ebrahinzadeh Mousavi, <i>University College Dublin, Ireland</i>	<b>(O14.3)</b> <b>Effect of Salt Extraction on Structure and Functionality of Concentrate Pea Protein</b> Yi Zhang, <i>Aarhus University, Denmark</i>	<b>(O15.3)</b> <b>The systemic risk of contamination of recycled packaged food in circular economy</b> Hawraa Ayoub, <i>Université Paris-Saclay, France</i>	<b>(O16.3)</b> <b>Conscious and unconscious emotional perception of senior consumers towards dysphagia liquids</b> Noelia Da Quinta, <i>AZTI, Spain</i>	<b>(N7.3)</b> <b>Sublethal moderated pressure and ultrasound pre-treatments for subsequent shorter and improved whole egg pasteurization</b> Jorge Saraiva, <i>University Of Aveiro, Portugal</i>	<b>(S03.3)</b> <b>Impact of dairy by-product, cheese whey, on skin health</b> Aleksandra Augustyniak, <i>Munster Technological University, Ireland</i>	<b>(S04.3)</b> <b>Aflatoxin assessment in blood serum of rural households consuming mouldy grains in Ogun State, Nigeria</b> Eniola Oni, <i>Federal University of Agriculture, Nigeria</i>



14:50 - 15:10	<b>(O13.4)</b> Transcriptomic response of <i>Listeria monocytogenes</i> planktonic and sessile cells to plasma-activated water Paula Fernández Gómez, <i>Universidad De León, Spain</i>	<b>(O14.4)</b> Comparing the techno-functional properties of plant-based proteins obtained by dry fractionation and wet extraction Davide De Angelis, <i>University of Bari, Italy</i>	<b>(O15.4)</b> Improving the quality of ready-to-eat Atlantic salmon fillets using soluble gas stabilization (SGS) technology Anita Jakobsen, <i>Norwegian University Of Science And Technology, Norway</i>	<b>(O16.4)</b> Consumer perception of plant-based cheese and yoghurt alternatives: Estonian consumers' perspective Helen Saar, <i>Center of Food and Fermentation Technologies, Estonia</i>	<b>(N7.4)</b> Ultrasound effect on the bioactive compounds and physicochemical properties of almond beverages Maria Elena Sosa-Morales, <i>Universidad De Guanajuato, Mexico</i>	<b>(S03.4)</b> Regulatory Aspects of Novel Bio-Based Ingredients for Use in Food, Feed, Pharma, Cosmetics and Packaging Edward Sliwinski, <i>European Federation of Food Science and Technology, the Netherlands</i>	<b>(S04.4)</b> Edible insects for human consumption Diána Bánáti, <i>University of Szeged, Hungary</i>
15:10 - 15:30	<b>(O13.5)</b> The investigation of sanitizer resistance genes in <i>Listeria monocytogenes</i> isolated from different food processing facilities Yue Cheng, <i>University College Dublin, Ireland</i>	<b>(O14.5)</b> Ball milling as a tool to alter the extractability and colloidal state of oat proteins Frederik Janssen, <i>KU Leuven, Belgium</i>	<b>(O15.5)</b> Optical Cleaning Assurance for Reusable PET (re-PET) Food Packaging Samsun Nahar, <i>Loughborough University, United Kingdom</i>	<b>(O16.5)</b> Nutrient-dense, texture-modified and portion-sized hybrid meat designed for senior consumers: perception and behaviour. Clara Talens, <i>AZTI, Food Research, Basque Research and Technology Alliance (BRTA), Spain</i>	<b>(N7.5)</b> Application of pulsed light in a hurdle approach in winemaking process Gianpiero Pataro, <i>University of Salerno, Italy</i>	<b>(S03.5)</b> Life cycle perspectives of bio-based products using biomass residues as feedstock Dirk Hengevoss, <i>University of Applied Sciences and Arts Northwestern Switzerland, Switzerland</i>	<b>(S04.5)</b> Food Waste Recovery: Microwave Assisted Extraction Filiz, Hazal, <i>University of Gaziantep, Turkey</i>
15:30 - 15:50	<b>(O13.6)</b> Simulation of Microbial Survival During Fermented Sausages Production to Assess Alternative Formulation Victoria Caballero, <i>Technological University Of Dublin, Ireland</i>	<b>(O14.6)</b> Contribution of plant proteins to structure and physical stability of lean meat analogue model systems Quinten Masijn, <i>KU Leuven, Belgium</i>	<b>(O15.6)</b> Development and characterization of active packaging containing TiO <sub>2</sub> bio-nano-composite - cinnamon oil for cheese preservation Shubham Sharma, <i>Technological University, Ireland</i>	<b>(O16.6)</b> Australians perceptions towards edible insects as a future food Jessica Danaher, <i>RMIT University, Australia</i>	<b>(N7.6)</b> Application of cold plasma technology for the shelf-life extension of fish fillets: industrial scale validation George Katsaros, <i>Institute Of Technology Of Agricultural, Greece</i>	<b>Panel discussion - Impact of key results of the INGREEN project in food, feed, pharmaceuticals, cosmetics, and packaging</b> Moderator: Helena McMahon	<b>(S04.6)</b> Challenges in valorising food waste for small and medium-sized enterprises Hilde, Wijngaard, <i>The Hague University of Applied Sciences, the Netherlands</i>
15:50 - 16:20	<b>Refreshment Break   Poster Session 1   Atrium and Presidents Terrace</b> <b>GNT Young Scientist Competition   Nominees present their posters   Presidents Terrace</b>					15:55 - 16:15   Special session room 442 <b>High-pressure technologies for sustainable food production</b> Jasna Ivanovic, <i>Uhde High Pressure Technologies, Germany</i> Session sponsored by Uhde High Pressure Technologies	

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16:20 - 18:05	<b>Session 17: Emerging technologies for the rapid detection of food safety issues</b> Chairs: Shea Fanning and Anet Rezek Jambrak	<b>Session 18: Designing and producing foods to meet future challenges</b> Chair: Maria Barbosa and Felix Schottroff	<b>Session 19: Approaches to minimise water use and water waste</b> Chairs: Rachel Louise Gomes and Vasilis Valdramidis	<b>Session 20: Robotics, automation and control of food processes</b> Chairs: Nora O'Shea and Verena Wiedenmann	<b>NTP Special Session 8: Scaleup, Digital Twins and Modelling of Non-thermal Processing Technologies</b> Chair: Jesus Frias and Brijesh Tiwari	<b>Special Session: Aquaculture and Fisheries sidestream proteins and bioactives as ingredients for nutritional supplements: the AQUABIOPRO-FIT project</b> Chair: Tone Aspevik	<b>Special Session: Creating transparency from farm to fork to strengthen trust and create a healthier food system</b> Chair: Edward Sliwinski
16:20 - 16:45	<b>(KN17.1) The Evolution of Food Fraud Vulnerabilities: Beyond Melamine to Infinity</b> John Spink, <i>Michigan State University, United States of America</i>	<b>(KN18.1) Sustainable, healthy foods - an industry perspective on their production</b> Aoife Murphy, <i>Kerry, Ireland</i>	<b>(KN19.1) How can the wastewater treatment sector contribute for the sustainability of the agro-food industries?</b> Catarina Leite Amorim, <i>Universidade Catolica Portuguesa, Portugal</i>	<b>(KN20.1) Robots of the future – Collaborative Robotics &amp; 3D Printing for Food Quality &amp; Design</b> Norah O'Shea, <i>Teagasc, Ireland</i>	16:20 - 16:40  Introduction to Session and Ice breaker  Brijesh Tiwari <i>Teagasc, Ireland</i>  Jesus Frias, <i>Technological University Dublin, Ireland</i>	16:20 - 16:25 <b>Introduction to the AQUABIOPRO-FIT project</b> Tone Aspevik, <i>Nofima, Norway</i> 16:25 - 16:40 <b>(S05.1) Challenges related to the production of nutritional supplements from fish side streams</b> Silje Steinsholm, <i>Nofima, Norway</i>	<b>(S06.1) TITAN Transparency solutions for transforming the food system</b> Edward Sliwinski, <i>European Federation of Food Science and Technology, the Netherlands</i>
16:45 - 17:05	<b>(KN17.2) Spectral imaging in Food Safety: background, opportunities and limitations</b> Aoife Gowen, <i>University College Dublin, Ireland</i>	<b>(KN18.2)</b> Lorraine Moran, <i>Tirlán, Ireland</i>	<b>(O19.2) Mapping water use in food manufacture: trends and reduction opportunities</b> Peter Fryer, <i>University of Birmingham, United Kingdom</i>	<b>(O20.2) Towards Autonomous Bioprocess Control: Model-based Reinforcement Learning for the Determination of Control Policies</b> Eric Morelle, <i>Technische Universität Berlin, Germany</i>	16:40 - 17:00 <b>(N8.1) Open Science and Modelling</b> Francesco Marra, <i>Università degli Studi di Salerno, Italy</i>	16:40 - 16:55 <b>(S05.2) Fish side stream materials stimulate growth of in vitro cultured Atlantic salmon muscle cells</b> Tone-Kari K Østbye, <i>Nofima AS, Norway</i>	<b>(S06.2) Making Agritech sustainable – Agricolus for precision farming</b> Giada Mastandrea, <i>Agricolus s.r.l., Italy</i>
17:05 - 17:25	<b>(O17.3) Detection of almond traces in processed foods using electrochemical immunoplatfoms</b> Alba Civera, <i>Universidad De Zaragoza, Spain</i>	<b>(O18.3) Designing plant-based protein oleogels as potential solid fat replacers in food products</b> Annika Feichtinger, <i>Wageningen University &amp; Research, the Netherlands</i>	<b>(O19.3) On improving the sustainability tomato processing industry by minimization of water and energy consumption</b> Gianpiero Pataro, <i>University of Salerno, Italy</i>	<b>(O20.3) Development of antioxidant-rich sweet potato yoghurt using the orange-fleshed 'Bophelo' sweet potato (<i>Impomea batatas</i>)</b> Yvonne Maila, <i>University Of Limpopo, South Africa</i>	17:00 - 17:20 <b>(N8.2) Digital Twins</b> Ferruh Erdoğan, <i>Ankara University, Turkey</i>	16:55 -17:10 <b>(S05.3) Evaluation of biological properties of extracts obtained from fish side streams by innovative non-thermal techniques</b> Min Wang, <i>University of Valencia, Spain</i>	<b>(S06.3) Food safety and transparency through cutting edge DNA-based analysis methods</b> Antonio Del Casale, <i>MicroBion s.r.l., Italy</i>

17:25 - 17:45	<b>(O17.4)</b> From microscopic to macroscopic descriptions of the contamination of food by recycled papers and boards Lucas Biant, <i>INRAE, France</i>	<b>(O18.4)</b> Future cheeses produced by extrusion of renneted curds Ran Feng, <i>University Of Copenhagen, Denmark</i>	<b>(O19.4)</b> Artificial Intelligence (AI) based optimization of tank cleaning in food production Tobias Beck, <i>Friedrich-Alexander-Universität, Germany</i>	<b>(O20.4)</b> New methodological approaches to study anisotropic structures in foods using rheological and Raman spectroscopic fingerprints Julie Frost Dahl, <i>Aarhus University, Denmark</i>	17:20 - 18:00 <b>Discussion Table</b> • Mario Gonzalez Angulo, Hiperbaric, Spain • Mike Kempkes, Diversified Technologies Inc., United States of America • Jamomir Bilek, Jenton International Ltd, UK • Francesco Marra, Università degli Studi di Salerno, Italy • Colm O'Donnell, University College Dublin, Ireland • Ferruh Erdoğdu, Ankara University, Turkey	17:10 - 17:25 <b>(S05.4)</b> Fish-side stream-derived protein hydrolysates exert anti-inflammatory actions in mouse models of human diseases Christos Tsatsanis, <i>University of Crete, Greece</i>	<b>(S06.4)</b> Helping children make better dietary choices by widening their knowledge on nutrition and food science Noelia da Quinta, <i>AZTI, Basque Research and Technological Alliance (BRTA), Spain</i>
17:45 - 18:05	<b>(O17.5)</b> Selection of DNA aptamers for the detection of foodborne toxins Ricardo Olivera, <i>Instituto Nacional de Investigação Agrária e Veterinária, I.P. (INIAV,I.P.), Portugal</i>	<b>(O18.5)</b> Cooking Methods Affect Quality of 3D-Printed Vegan Burger Patties Containing Chia Mucilage-based Emulsion Gels Kezban Candoğan, <i>Ankara University, Turkey</i>	<b>(O19.5)</b> Influence of the cleaning fluid on changes in the chemical composition of food-based soils Kristin Hovorka, <i>Technische Universität Dresden, Germany</i>	<b>(O20.5)</b> Inverse graphics: from X-ray to 3D pork shoulder models Michiel Pieters, <i>KU Leuven, Belgium</i>		17:25 - 17:40 <b>(S05.5)</b> Effectiveness of AQUABIOPRO-FIT innovative nutritional supplement against depression, anxiety, and stress on healthy adult volunteers Zoi Georgiou, <i>Biagnosis, Greece</i>	<b>(S06.5)</b> Food Possibilities: A framework for an integrated approach to healthy, sustainable food behaviours across schools, communities, business and government Danielle McCarthy, <i>Queen's University Belfast, Northern Ireland</i>
						17:40 - 17:55 <b>(S05.6)</b> Environmental and socio-economic considerations within the AQUABIOPRO-FIT project Léo Staccioli and Beatriz Cassuriaga Dias, <i>ARDITEC Association, France</i>	17:55 - 18:05 Q&A
						17:55 - 18:05 Q&A	
<b>19:00 - 22:00</b>	<b>Conference Dinner   Guinness Storehouse</b> Conference dinner guests are welcome to visit the Guinness Experience between 19:00 - 20:00						

## Wednesday 9 November 2022

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Room	President Suite   Level 2	1872 Room   Level 3	Lansdowne Room   Level 2	Havelock Suite   Level 4	Vavasour Suite   Level 2	Special session room 442   Level 4	Special session room 441   Level 4
<b>08:30 - 10:35</b>	<b>Session 21: Protecting the food chain, biosecurity, food fraud and authenticity</b> Chairs: John Spink and Julie Dunne	<b>Session 22: Emerging technologies for valorising side streams, food waste &amp; by products</b> Chairs: Nigel Brunton and Cristina L.M Silva	<b>Session 23: Engineering food structures to enhance nutrient quality and bioavailability</b> Chairs: Peter Fryer and Tara Grawet	<b>Session 24: Dietary recommendations consistent with a sustainable healthy diet, current &amp; future policies</b> Chairs: Anne Nugent and Steven Mulrooney	<b>NTP Session 9: Meeting future consumer demands for quality, nutritious and healthy foods with non-thermal processing technologies</b> Chairs: Yuan Jiang and Robert Sevenich	<b>Special Session: How to make food nutrition security data FAIRer: an introduction to FNS-Cloud</b> Chair: Paul Finglas	<b>Special Session: Predictive modelling tools to evaluate the effects of climate change on food safety (PROTECT)</b> Chair: Enda Cummins
08:30 - 08:55	<b>(KN21.1)</b> <b>Latest developments in food authenticity: An overview</b> Paul Brereton, <i>QUB, United Kingdom</i>	<b>(KN22.1)</b> <b>Next Gen Meat and Dairy Products and Production</b> Roman Buckow, <i>University of Sydney, Australia</i>	<b>(KN23.1)</b> <b>Alternative proteins</b> Hadrien Delemazure, <i>Clextal, France</i>	<b>(KN24.1)</b> <b>Personalised food-based dietary guidelines to support transition to a more sustainable healthy diet.</b> Aifric O'Sullivan, <i>University College Dublin, Ireland</i>	<b>(N9.1)</b> <b>Meeting future consumer demands for quality, nutritious and healthy foods with non-thermal processing technologies</b> Diána Bánáti, <i>University of Szeged, Hungary</i>	<b>(S07.1)</b> <b>Food Nutrition Security Cloud (FNS-Cloud)</b> Paul Finglas, <i>Quadram Institute Bioscience, UK</i>	08:30 - 08:35 <b>Introduction of the PROTECT project</b> Enda Cummins, <i>University College Dublin, Ireland</i>
08:55 - 09:15	<b>(KN21.2)</b> <b>Crisis Management. What the egg scare can teach us about food crisis management?</b> Sterling Crew, <i>The Food Authenticity Network, United Kingdom</i>	<b>(O22.2)</b> <b>Sensory properties of whitefish protein solubles – can it be broth?</b> Tone Aspevik, <i>Nofima AS, Norway</i>	<b>(O23.2)</b> <b>Towards the use of protein microgels as multifunction additives</b> Siavash Soltanahmadi, <i>University Of Leeds, United Kingdom</i>	<b>(O24.4)</b> <b>AI4Food: Bringing Artificial Intelligence and Mobile Device Sensors to Health Diets</b> Sergio Romero-Tapiador, <i>Universidad Autónoma De Madrid, Spain</i>	<b>(N9.2)</b> <b>Effect of PEF pretreatment on physical and chemical properties of freeze-dried strawberries and bell peppers</b> Marianna Giancaterino, <i>University of Natural Resources and Life Sciences, Austria</i>	<b>(S07.2)</b> <b>The FNS-Cloud Food Labelling Demonstrator: Branded food composition databases - how and why to collect data?</b> Igor Pravst, <i>Nutrition Institute, Slovenia</i>	08:35 - 08:50 <b>(S08.1)</b> <b>Quantifying human exposure to Aflatoxin M1 through raw milk under climate change scenarios</b> Rhea Sanjiv Chhaya, <i>University College Dublin, Ireland</i>
09:15 - 09:35	<b>(O21.3)</b> <b>A model for consumer exposure to norovirus from oysters, based on ISO 15216-1:2017 detection.</b> Kevin Hunt, <i>University College Dublin, Ireland</i>	<b>(O22.3)</b> <b>New process for improved sensory properties of marine powders based on cod filleting residues</b> Silje Steinsholm, <i>Nofima AS, Norway</i>	<b>(O23.3)</b> <b>Does carrageenan hinder meat proteolysis? Proteomic analyses of in vitro digestions</b> Maayan Ben David, <i>Technion- Israel institute of technology, Israel</i>	<b>(O24.3)</b> <b>Dietary guidelines for health and sustainability in Europe: Guidelines vs reality</b> Marie Conway, <i>Teagasc, Ireland</i>	<b>(N9.3)</b> <b>Using High Pressure Processing to create novel protein based structures and textures</b> Carmen Moraru, <i>Cornell University, United States of America</i>	<b>(S07.3)</b> <b>Making Food data FAIR – The FNS-Cloud Nutrition &amp; Lifestyle Demonstrator</b> Eileen Gibney, <i>University College Dublin, Ireland</i>	08:50 - 09:05 <b>(S08.2)</b> <b>Assessing the impact of climatic factors on the quality and safety of raw milk</b> Styliani Roufou, <i>University Of Malta, Malta</i>
09:35 - 09:55	<b>(O21.4)</b> <b>Evaluation of different strategies to reduce the microbial load of fresh fruits and vegetables</b> Felix Schottroff, <i>University of Natural Resources and Life Sciences (BOKU), Austria</i>	<b>(O22.4)</b> <b>Innovative production of prebiotics from acid whey with a hyperthermophilic <math>\beta</math>-glucosidase from <i>Thermotoga neapolitana</i></b> Athanasios Limnaios, <i>National Technical University of Athens, Greece</i>	<b>(O23.4)</b> <b>Formulation of Glyceryl stearate-based oleogels as carriers of <math>\beta</math>-carotene: formation, characterization and in vitro digestion</b> Mohsen Ramezani, <i>University Of Lleida, Spain</i>	<b>(O24.2)</b> <b>The Adherence and Significance of Mediterranean Diet as Sustainable Healthy Dietary Pattern</b> Metin Guldaz, <i>Bursa Uludag University, Turkey</i>	<b>(N9.4)</b> <b>Role of sugars on the inactivation of polyphenoloxidase induced by cold atmospheric plasma</b> Lilia Neri, <i>University of Teramo, Italy</i>	<b>(S07.4)</b> <b>Making Diet &amp; Microbiome data FAIR – The FNS-Cloud Diet &amp; Microbiome Demonstrator</b> Maria H. Traka, <i>Quadram Institute Bioscience, United Kingdom</i>	09:05 - 09:20 <b>(S08.3)</b> <b>Predicting milk contamination under climate change scenarios</b> Lydia Katsini, <i>KU Leuven, Belgium</i>

09:55 - 10:15	<b>(O21.5)</b> <b>Identification of botanical origin of Greek honeys using UV-vis and FT-NIR spectroscopy</b> Dafni Dimakopoulou-Papazoglou, Aristotle University Of Thessaloniki, Greece	<b>(O22.5)</b> <b>Metamorphosis of Crab Shell into Butterfly Wings: Advanced Patterned Films from Food Waste</b> Russell Banta, University College Cork, Ireland	<b>(O23.5)</b> <b>How microstructure, mechanical properties and macrostructure breakdown affect gastric digestion of whey protein gels</b> Dan Liu, Wageningen University & Research, the Netherlands	<b>(O24.5)</b> <b>Findings from a systematic review of behavioural determinants relating to healthy sustainable diets.</b> Brid Bourke, University College Cork, Ireland	<b>(N9.5)</b> <b>Phenolic compound profiles and antioxidant concentrations in lettuce grown under AI developed LED light recipes</b> Gultekin Hasanaliyeva, Nottingham Trent University, United Kingdom	<b>(S07.5)</b> <b>FOODRUGS, integrating public data repositories to explore food-drug interactions</b> Enrique Carillo de Santa Paul, IMDEA Food Institute, Spain	09:20 - 09:35 <b>(S08.4)</b> <b>Multi-criteria framework to evaluate safety and environmental impacts: Application to a large dairy farm</b> Rodney Feliciano, Secalim, INRAE, Oniris, France
10:15 - 10:35	<b>(O21.6)</b> <b>White brined and hard cheeses from Epirus region in Greece: Discovering the terroir secrets</b> Athina Tzora, University Of Ioannina, Greece	<b>(O22.6)</b> <b>Functional compounds extracted from yeast lees</b> Nerea Iturmendi, Universidad Pública de Navarra, Spain	<b>(O23.6)</b> <b>Development of 3D microstructure in fried starch-water mixtures for property estimation</b> Ujjwal Verma, KU Leuven, Belgium	<b>(O24.6)</b> <b>Milk consumption among schoolchildren in Ireland</b> Ellen Greene, University College Dublin, Ireland	<b>(N9.6)</b> <b>Effects of ultrasound on off-flavour-related aroma compounds in a pea protein-based yoghurt alternative</b> Julia Matysek, Technische Universität Berlin, Germany		09:35 - 09:50 <b>(S08.5)</b> <b>Mathematical models for predicting spoilage of non-refrigerated food products due to thermophilic spore-forming bacteria</b> Ourania Misiou, Aristotle University Of Thessaloniki, Greece
							09:50 - 10:05 <b>(S08.6)</b> <b>Towards resource sustainability: Modelling fouling and cleaning in milk pasteurisation processes</b> Maria Ioanna Malliaroudaki, University of Nottingham, United Kingdom
							10:05 - 10:20 <b>(S08.7)</b> <b>Climate change challenges in the transition to an environmentally sustainable European dairy sector by 2050</b> Paola Guzmán Luna, Universidade de Santiago de Compostela, Spain
							10:20 - 10:35 <b>(S08.8)</b> <b>Microbial risk ranking as “a web-based decision support system” tool</b> Gopaiah Talari, Creme Global, Ireland
10:35 - 11:05	<b>Refreshment break   Poster Session 2   Atrium and Presidents Terrace</b>						

Room	President Suite   Level 2	1872 Room   Level 3	Lansdowne Room   Level 2	Havelock Suite   Level 4	Vavasour Suite   Level 2	Special session room 442   Level 4	Special session room 441   Level 4
11:05 - 12:50	Session 25: Novel Thermal Technologies Chair: Ferruh Erdoğan	Session 26: Emerging technologies for valorising side streams, food waste & by products Chairs: Robert Sevenich and Paola Pittia	Session 27: Formulation of foods to enhance their sustainability and/or nutritional value Chairs: Avi Shpigelman and Delphine Huc-Mathis	Session 28: Towards a food environment to satisfy sustainable healthy diets Chairs: Monique Raats and Kees de Gooijer	NTP Special Session 10: Panel Discussion on the Future of non-thermal technologies & Closing Address Moderator: Henry Jaeger	Special Session: Shaping our Future Sustainable Food Systems Chair: Hugo de Vries	Special Session: Innovations for food producers and food SMEs: How to encourage putting innovations into practice Chair: Geneviève Gésan-Guiziou
11:05 - 11:30	<b>(O25.1)</b> Electro-heating technologies for innovation in industrial applications for process safety and efficiency Ferruh Erdoğan, Ankara University, Turkey	<b>(O26.1)</b> Application of innovative technologies for valorization of biomass from house crickets Marios Psarianos, Leibniz Institute For Agricultural Engineering And Bioeconomy (ATB), Germany	<b>(O27.1)</b> Capillary suspensions for oil structuring with agri-food residues micronized via high-pressure homogenization in oil Annachiara Pirozzi, University of Salerno, Italy	<b>(KN28.1)</b> Consumer attitude toward innovative and sustainable food processing Diána Bánáti, University of Szeged, Hungary	11:05 - 12:10 <b>(N10.1)</b> • Gustavo Barbosa-Canovas, Washington State University, United States of America • Carmen Moraru, Cornell University, United States of America • Oliver Schlüter, ATB-Potsdam, Germany • Stefan Toepfl, ELEA Technologies, Germany • Jasna Ivanovic, Uhde High Pressure Technologies, Germany • Christoph Hartmann, Nestlé, Switzerland	11:05 - 11:25 <b>(S09.1)</b> European Partnerships in Food responding to Farm 2 Fork objectives Daniela Lüth, European Commission, Belgium	11:05 - 11:10 Introduction to the Session Geneviève Gésan-Guiziou, National Research Institute for Agriculture, Food and the Environment (INRAE), France
11:30 - 11:50	<b>(O25.2)</b> Digital Tools for Knowledge Transfer in MW/RF Heating of Foods Francesco Marra, University Of Salerno, Italy	<b>(O26.2)</b> Protein extraction from tomato leaves Marieke Bruins, Wageningen University & Research, the Netherlands	<b>(O27.2)</b> Processing improves physical and oxidative stability of cricket protein emulsions Xiaocui Han, University Of Helsinki, Finland	<b>(O28.2)</b> Online Food Shoppers: Pattern of behaviour and sustainability practices Claire O'Neill, Universtiy College Cork, Ireland		11:25 - 11:40 <b>(S09.2)</b> FOODPathS leading to the future Partnership Sustainable Food Systems Hugo de Vries, INRAE, France	11:10 - 11:25 <b>(S10.1)</b> Agrifood Innovation: New Needs in the FOOD 2030 Scenario Jonas Lazaro-Mojica, FoodDrinkEurope, Belgium
11:50 - 12:10	<b>(O25.3)</b> Modeling and design of Ohmic heating chambers: a computational approach Fabrizio Sarghini, University Of Naples, Italy	<b>(O26.3)</b> Split-stream processing of asparagus side-streams improves the flavour of dried asparagus food ingredients Eirini Pegiou, Wageningen University & Research, the Netherlands	<b>(O27.3)</b> Soy juice fermentation for yogurt production: how a relevant starter selection can improve it? Stéphanie Deutsch, Inrae - Umr Stlo, France	<b>(O28.3)</b> Are sustainable and healthy foods also affordable? A multivariate analysis in the Irish market Maria Dermiki, Atlantic Technological University, Ireland		11:40 - 11:55 <b>(S09.3)</b> Towards an EU network of university-driven local food ecosystems Jeroen Knol, European Federation of Food Science and Technology, the Netherlands	11:25 - 11:45 <b>(S10.2)</b> Innovative upgrades to value and packaging of small quantities of liquid food products Imca Sampers, Ghent University, Belgium and Geneviève Gésan-Guiziou, INRAE, France

12:10 - 12:30	<b>(O25.4)</b> <b>Development of an innovative-novel process approach for reduced oil fried products</b> Ozan Karatas, <i>Ankara University, Turkey</i>	<b>(O26.4)</b> <b>Chitin and chitosan extraction from edible insects: characterization and comparison between different species and by-products</b> José Carlos Ribeiro, <i>GreenUPorto/FCUP, Portugal</i>	<b>(O27.4)</b> <b>Processing-dependent nature of plant-protein polyphenol interactions: Are the interactions responsible for protein protection of polyphenols?</b> Avi Shpigelman, <i>Faculty of Biotechnology &amp; Food Engineering, Echnion, Israel</i>	<b>(O28.4)</b> <b>Exploring food choice motives of Irish consumers and their potential to drive sustainable consumption</b> Shelley Fox, <i>Atlantic Technological University, Ireland</i>	12:10 - 12:40 <b>(N10.2)</b> <b>Closing address</b> Bala Balasubramaniam, <i>Ohio State University, United States of America</i> <b>Closing Remarks</b> James Lyng and Dolores O' Riordan, <i>University College Dublin, Ireland</i>	11:55 - 12:10 <b>(S09.4)</b> <b>FOODPathS Exploring collaboration between diverse actors in a network of Food System Labs</b> Jonas Lazaro-Mojica, <i>FoodDrinkEurope, Belgium</i>	11:45 - 11:55 <b>(S10.3)</b> <b>Biotechnology tools for clean label plant-based new foods</b> Inés Echeverría, <i>Centro Nacional de Tecnología y Seguridad Alimentaria (CNTA), Spain</i>
12:30 - 12:50	<b>(O25.5)</b> <b>Conversion of Xylan to Xylose from Pistachio Shell by Microwave/CO<sub>2</sub> Assisted Hydrolysis</b> Filiz Hazal, <i>Gaziantep University, Turkey</i>	<b>(O26.5)</b> <b>Showing the opportunities of fruits by-products valorization through carbon removal technology in Central Wallis</b> Dominic Hafner, <i>dss+, Switzerland</i>	<b>(O27.5)</b> <b>Structuring biphasic systems for improved nutritional and textural properties</b> Maya Davidovich-Pinhas, <i>Technion, Israel Institute Of Technology, Israel</i>	<b>(O28.5)</b> <b>Nudging as a tool to help students make sustainable and healthy decisions at university canteen</b> Cristina Mora, <i>Università Di Parma, Italy</i>		12:10 - 12:20 <b>(S09.5)</b> <b>Stimulating short food supply chains (fruit, vegetables, traditional foods)-case study Romania</b> Denisa E. Duta, <i>National Institute of Research and Development for Food Bioresources IBA, Romania</i>	11:55 - 12:05 <b>(S10.4)</b> <b>Supporting a frozen fruit value chain of small farmers for optimising production, reducing environmental footprint and re-using data for certification and subsidies</b> Marianna Gkavrou, <i>NEUROPUBLIC SA, Greece</i>
	12:50 - 13:00 <b>Microwave and Radio frequency systems for the food industry</b> Alisa Doroshenko, <i>SAIREM, France</i>					12:20 - 12:30 <b>(S09.6)</b> <b>Embedding food safety considerations for water usage in food production systems</b> Kaye Burgess, <i>Teagasc, Ireland</i>	12:05 - 12:15 <b>(S10.5)</b> <b>A second chance for food surplus: a digital marketplace to promote circular economy and avoid food waste</b> Elisa Carloni, <i>University of Bologna, Italy</i>
						12:30 - 12:40 <b>(S09.7)</b> <b>'Soup-action' as an example of local campaign against the challenges of food systems during the pandemic.</b> Michał Janiak, <i>Institute of Animal Reproduction and Food Research, Poland</i>	12:15 - 12:25 <b>(S10.6)</b> <b>Collaborative Artificial Intelligence for Sustainable Manufacturing in the Food Industry</b> Juan S. Angarita-Zapata, <i>University of Deusto, Spain</i>
						12:40 - 12:50 <b>(S09.8)</b> <b>Synergies and value creation from losses and waste and efficient use of resources in the agri-food chain</b> Manuela Pintado, <i>Universidade Católica Portuguesa, Portugal</i>	12:25 - 12:50 <b>Round table discussion</b> Moderator: Katherine Flynn, <i>IFA – ISEKI-Food Association, Austria</i>
12:50 - 14:00	<b>Lunch   Poster Session 2   Atrium and Presidents Terrace</b>						

Room	President Suite   Level 2
14:00 - 14:30	<b>Plenary Session 3: The role of ohmics in food safety</b> Chair: Dolores O’Riordan and James Lyng
14:00 - 14:30	<b>(PL3.1)</b> <b>Bringing molecular methods to bear on food safety</b> Colin Hill, <i>University College Cork, Ireland</i>
14:30 - 15:10	<b>Plenary Session 4: Awards and announcing EFFoST2023</b> Chair: Hugo de Vries
14:30 - 15:00	<b>Awards</b> <ul style="list-style-type: none"> <li>• Lifetime Achievement Award and Science to Society Award, Hugo de Vries, President of EFFoST Board</li> <li>• EFFoST Student of the Year Awards, Hugo de Vries, President of EFFoST Board and Ralf Jakobi, <i>Cargill, Belgium</i></li> <li>• GNT Young Scientist Award, Kai Rieneke, <i>GNT Group, Germany</i></li> </ul>
15:00 - 15:10	Announcement of EFFoST2023
15:10 - 15:50	<b>Big Afternoon Break   Poster Session 2   Atrium and Presidents Terrace   Sponsored by Nestlé</b>
Room	President Suite   Level 2
15:50 - 17:20	<b>Plenary Session 5: The role of food processing in achieving healthy and sustainable diets</b> Chair: Dolores O’Riordan
15:50 - 16:00	<b>(PL5.1)</b> Gert Meijer, <i>Nestle, Switzerland</i>
16:00 - 16:10	<b>(PL5.2)</b> Ciarán Forde, <i>Wageningen University, the Netherlands</i>
16:10 - 16:20	<b>(PL5.3)</b> Liisa Lahteenmaki, <i>Aarhus University, Denmark</i>
16:20 - 16:30	<b>(PL5.4)</b> Eileen Gibney, <i>University College Dublin, Ireland</i>
16:30 - 16:40	<b>(PL5.5)</b> Lilia Ahrné, <i>University of Copenhagen, Denmark</i>
16:40 - 17:20	Plenary Discussion
17.20 - 17:30	<b>Conference Closing Remarks</b>
17:20 - 17:30	Hugo de Vries, <i>President of the EFFoST Board</i> Dolores O’Riordan and James Lyng, <i>Conference Chairs, University College Dublin, Ireland</i>