

EFFOST2020 Online Programme

Tuesday, 10 th November 2020	
10:00-10:30 CET	Welcome and Opening - Welcome by Prof. Olga Martin Belloso, EFFoST President - Opening of EFFoST 2020 by Assoc. Prof. Uri Lesmes, EFFoST 2020 Conference Chair - Tips on how to navigate the online platform to get the most of your registration
10:30-11:45 CET	Plenary Session 1: Food science, technology and health in the 21st century
10:30-10:50 CET	[PL01] Ultra-processed foods and obesity: A view from the natural world David Raubenheimer, <i>University of Sydney, Australia</i>
10:50-11:10 CET	[PL02] Understanding consumers as a trigger for food innovation Indrawati Oey, <i>University of Otago, New Zealand</i>
11:10-11:30 CET	[PL03] Research & innovation in support of the EU's farm-to-fork strategy Wim Haentjens, <i>DG Research & Innovation, Bioeconomy & Food Systems Division, European Commission</i>
11:30-11:45 CET	Panel discussion with Prof. David Raubenheimer, Prof. Indrawati Oey, Wim Haentjens and Uri Lesmes with questions from the audience
11:45-12:00 CET	Break
12:00-13:30 CET	Plenary Session 2: Agri-Food innovations and entrepreneurship
12:00-12:20 CET	[PL04] Smart and more sustainable food value chains for science-driven innovations in the food sector Alexander Mathys, <i>ETH-Zurich, Switzerland</i>
12:20-12:40 CET	[PL05] Artificial Intelligence in food innovation. Put the problem first! Christoph Hartmann, <i>Nestle, Switzerland</i>
12:40-13:00 CET	[PL06] Nanomaterials for detection and mitigation of microorganisms Esther Segal, <i>Technion, Israel</i>
13:00-13:30 CET	Creative sparks: Promising startups: 13:00-13:10 - Start up 1 - Ilan Samish, <i>Amai Proteins Ltd, Israel</i> 13:10-13:20 - Start up 2 - Eschar Ben Shitrit, <i>Redifine Meat, Israel</i> 13:20-13:30 - Start up 3 - Sharon Barak, <i>Solutum, Israel</i>
13:30-14:30 CET	Lunch Break
14:30-15:00 CET	Pub Quiz
15:00-16:10 CET	Plenary Session 3: Feeding the world today and tomorrow
15:00-15:25 CET	[PL07] Utility of the INFOGEST in vitro digestion method in the design and development of next-generation functional foods Julian D McClements, <i>University of Massachusetts – Amherst, USA</i>
15:25-15:50 CET	[PL08] Enzymatic glycerolysis converts vegetable oils into structural fats with the potential to replace palm oil in food products Alejandro Marangoni, <i>University of Guelph, Canada</i>
15:50-16:10 CET	[PL09] The future of sustainable protein production: Opportunities in alternative proteins Liz Specht, <i>Good Food Institute, USA</i>

16:10-16:20 CET	Break
16:20-17:00 CET	Awards and Closure <ul style="list-style-type: none">- EFFoST Student of the Year Awards- Highlights and summary of EFFoST2020 by Assoc. Prof. Uri Lesmes- Announcing the host of the 35th EFFoST International Conference 2021- Closing of EFFoST2020 conference by Prof Olga Martin Belloso and Assoc. Prof. Uri Lesmes- Wrap-up of event

Wednesday, 11th November 2020

09:00-10:30 CET	<p>Session 1: Optimizing foods for health and wellness Session Chair : Didier Dupont</p>	<p>Session 2: Innovations in food processing and related technologies Session Chair : Avi Shpigelman</p>	<p>Session 3: Smart and sustainable packaging and coatings Session Chair : Esther Segal</p>	<p>Session 4: Shaping food properties & novel ingredients Session Chair : Maria Semenova</p>	<p>Special Session: Valorisation of side streams Session Chair : Jeroen Knol</p>	
09:00-09:20 CET	<p>[KN O01.1] The molecular link between red meat and cancer is dietary Neu5Gc carbohydrate and serum antibodies against it Salam Bashir¹, Leopold K. Fezeu^{2,3}, Shani Leviatan Ben-Arye¹, Sharon Yehuda¹, Eliran Moshe Reuven¹, Fabien Szabo de Edelenyi², Imen Fellah-Hebia⁴, Thierry Le Tourneau⁴, Berthe Marie Imbert-Marcille⁵, Emmanuel B. Drouet⁶, Mathilde Touvier², Jean-Christian Roussel⁴, Hai Yu⁷, Xi Chen⁷, Serge Hercberg², Emanuele Cozzi⁸, Jean-Paul Soullou⁵, Pilar Galan², Vered Padler-Karavani¹ ¹Tel Aviv University, Israel. ²Cité Epidemiology and Statistics Research Center (CRESS), France. ³Nutritional Epidemiology Research Team (EREN), France. ⁴Institut du Thorax, France. ⁵Universitaire de Nantes, France. ⁶University Grenoble Alpes, France. ⁷University of California-</p>	<p>[KN O02.1] Future Protein Foods – An Australian Perspective Roman Bouckow University of Sydney, Australia</p>	<p>[KN O03.1] Development of novel peptide-based food preservations Zvika Hayouka The Hebrew University of Jerusalem, Israel</p>	<p>[KN O04.1] Food architecture: From nano- to meso scale Maya Davidovich-Pintas Technion, Israel</p>	<p>09:00-09:30 INGREEN – Finding new ways to valorise industrial side streams for use in food, feed, cosmetics and packaging Mr. Narinder Bains, iNeuvo Ltd, UK</p>	

	Davis, USA. ⁸ Padua University Hospital, Italy					
09:20-09:40 CET	<p>[O01.2] FODMAPs analysis- Theory and reality in grains and bread Kathrin Gruber¹, Katrin Bach*² ¹Management Center Innsbruck - The Entrepreneurial School, Austria, ²Management Center Innsbruck - The Entrepreneurial School, Austria - WITHDRAWN</p>	<p>[O02.2] Gas hydrate based novel micro-foaming technology Zuzana Sediva¹, Vincent Meunier², Erich Windhab¹ ¹Swiss Federal Institute of Technology Zürich (ETH), Switzerland. ²Nestlé Research, Lausanne (CH), Switzerland</p>	<p>[O03.2] Kinetic modelling of the release of volatile antimicrobial compounds for designing active packaging Nur Alim Bahmid^{1,2}, Vincenzo Fogliano¹, Jenneke Heising ¹, Matthijs Dekker¹ ¹Wageningen University and Research, The Netherlands. ²Sulawesi Barat University, Indonesia</p>	<p>[O04.2] Transglutaminase-mediated improvement of chickpea protein-based emulsions and gels Jovana Glusac¹, Ayelet Fishman² ¹Israel Institute of Technology, Israel. ²Technion-Israel Institute of Technology, Israel</p>	09:30-10:00	<p>Valorisation of side stream materials from fisheries and aquaculture – bioactivity and sensory properties Dr. Tone Aspevik, Nofima, Norway</p>
09:40-10:00 CET	<p>[O01.3] Bioaccessibility of calcium in yogurt based snacks Jing Wang, Kataneh Aalaei, Leif Skibsted, Lilia Ahrné University of Copenhagen, Denmark</p>	<p>[O02.3] Extraction of pea protein – a comparison of methods Caren Tanger, Ulrich Kulozik Technical University Munich, Germany</p>	<p>[O03.3] Active biopolymer-based edible films and coatings to improve quality and safety of fresh food products Elena Poverenov Agricultural Research Organization, Israel</p>	<p>[O04.3] Relation between polymer transitions and the temperature-dependent extensional viscosity of dough systems during thermal stabilization accessed by lubricated squeezing flow Thekla Alpers, Thomas Becker, Mario Jekle Technical University of Munich, Germany</p>		
10:00-10:20 CET	<p>[O01.4] Manufacturing personalized food products and their acceptance in a real-life military setting Martijn Noort Wageningen University & Research, The Netherlands</p>	<p>[O02.4] Effect of plasma activated water (PAW) on rocket leaves decontamination Giorgia Gozzi , Silvia Tappi , Romolo Laurita , Beatrice Cellini , Vittorio Colombo , Pietro Rocculi , Marco Dalla Rosa , Lucia Vannini</p>	<p>[O03.4] Performance of compostable bio-based packaging material for preservation of fresh fruits and vegetables Victor Rodov, Ron Porat, Bettina Kochanek, Yakov Vinokur, Haya Friedman</p>	<p>[O04.4] Influence of ultrasound during the kneading process on rye bread's dough rheology and product quality Aliena Altmann, Bastian Schöneberger, Bernhard</p>	10:00-10:30	<p>Functionalisation of pectin from different sources by Ultra High Pressure Homogenisation Ms. Milena Zdravkovic,</p>

		University of Bologna, Italy	ARO – The Volcani Center, Israel	Gatternig, Antonio Delgado Friedrich-Alexander- University Erlangen- Nuremberg, Germany	DIL German Institute of Food Technologies e.V., Germany	
10:20-10:30 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up		
10:30-11:00 CET	Break: Poster sessions and one-on-one meetings					
11:00-12:30 CET	Session 5: Engineering food digestibility Session Chair : Uri Lesmes	Session 6: Novel food sources and innovative products Session Chair : Maya Davidovich Pinhas	Session 7: Digitalization for a smarter food sector Session Chair : Francesco Capozzi	Session 8: Microbes in the food sector Session Chair : Jean-Philippe Obert	Special Session : Safeconsume – reducing food borne infection through safer consumer practices Session Chair : Anca Nicolau	Special Session: EIT Food - Alternative proteins Session Chair : Mercedes Groba
11:00-11:20 CET	[KN O05.1] Structuring foods to improve the delivery of bioactives and nutrients Didier Dupont INRAE, France	[O06.1] Shaping food future with structured meat-like alternatives Elisabeth Högg, Lisa Franke Technische Universität Berlin, Germany	[KN O07.1] Bitter or not? Predicting and monitoring taste in health and disease Masha Niv The Hebrew University, Israel	[KN O08.1] Mastering biodiversity to enable microbial solutions for better, safer and tastier food: the science behind starter culture development Jean-Philippe Obert DuPont (Danisco), France	General presentation of the project - Solveig Langsrud, Nofima, Norway	EIT Food: Europe's leading food innovation initiative, working to make the food system more sustainable, healthy and trusted - Mercedes Groba, EIT Food, UK
11:20-11:40 CET	[O05.2] A new perspective on inhibition of a-amylase by flavonoids: Time matters Adrian S. D'Costa, Nicolas Bordenave University of Ottawa, Canada	[O06.2] Process-structure-property relationships for novel texture tailoring of plant protein-based meat alternatives in high moisture Extrusion Processing Erich Windhab ¹ , Bhaskar Mitra ¹ , Eric Stirnemann ² , Lukas Böni ² ¹ Swiss Federal Institute of Technology Zürich (ETH), Switzerland. ² Planted Foods AG, Switzerland	[O07.2] Processing for optimising the health potential of fruit-based products through a systematic data mining of literature Anthony Fardet ^{1,2} , Céline Richonnet ³ , André Mazur ^{1,2} ¹ INRAE, France. ² University of Clermont Auvergne, France ³ MOM, France	[O08.2] Bioactive cow antibodies as a substitute for antibiotics: Process development and innovative applications Hans-Jürgen Heidebrecht ¹ , Michael Pfaffl ¹ , Beatrix Förster ² , Ulrich Kulozik ¹ ¹ Technical University of Munich, Germany. ² University Medical Center, The Netherlands	European consumer perceptions and practices affecting food safety - Silje Elisabeth Skuland, Oslo Metropolitan University, Norway	Mineral concentrations of organic and conventional milk in UK dairy herds - Nanbing Qi, University of Reading, UK

11:40-12:00 CET	<p>[O05.3] Chew on it: influence of oral processing behaviour on in vitro protein digestion of chicken and soy-based vegetarian chicken Yao Chen, Edoardo Capuano, Markus Stieger <i>Wageningen University & Research, The Netherlands</i></p>	<p>[O06.3] Textured soy protein scaffolds enable the generation of three-dimensional bovine skeletal muscle tissue for cell-based meat Shulamit Levenberg^{1,2}, Tom Ben-Arye^{1,3}, Yulia Shandalov¹, Shahar Ben-Shaul¹, Shira Landau¹, Yedidya Zagury¹, Iris Ianovici¹, Neta Lavon² ¹<i>Technion Institute of Technology, Israel.</i> ²<i>Aleph Farms, Israel.</i> ³<i>Good Food Institute, Israel</i></p>	<p>[O07.3] The application of combinatorial approaches and robotics technology for innovations in fermentation and fermented food products Jerome Diaz¹, Carsten Mang², Paulo de Boer³ ¹<i>Wageningen Food and Biobased Research, The Netherlands.</i> ²<i>Hamilton Bonaduz AG, Switzerland.</i> ³<i>TNO, The Netherlands</i></p>	<p>[O08.3] Impacts of food microstructure on antimicrobial efficacy and performance Li Wang, Matthijs Dekker, Jenneke Heising, Vincenzo Fogliano <i>Wageningen University, The Netherlands</i></p>	<p>Using design thinking for safer food - Antje Gønera, Nofima, Norway</p>	<p>Our nutritious protein - Stella Lignou and Nur Liana Binti Sulaiman, <i>University of Reading, UK</i></p>
12:00-12:20 CET	<p>[O05.4] Comparison of oral tribology and surface adsorption of plant and dairy proteins Evangelos Liamas, Morfo Zembyla, Efen Andablo-Reyes, Kewei Gu, Emma Krop, Ben Kew, Anwasha Sarkar <i>University of Leeds, UK</i></p>	<p>[O06.4] Utilization of high-pressure homogenization of potato protein isolate for the production of dairy-free yogurt-like fermented product Rachel Levy, Zoya Okun, Avi Shpigelman <i>Technion, Israel</i></p>	<p>[O07.4] Experimental and numerical investigation of cell disruption processes for the efficient production of food ingredients from phototrophic microalgae Christopher McHardy, Justus Knappert, Cornelia Rauh <i>Technische Universität Berlin, Germany</i></p>	<p>[O08.4] Effect of Lactobacillus sakei and Pediococcus acidilactici bioprotective cultures on microbiological quality of Turkish fermented sausages Mahide Muge Yilmaz¹, Ayla Soyer² ¹<i>University of Reading, UK</i> ²<i>Ankara University, Turkey</i></p>	<p>Education for food safety - Magda Hann, Project Assistant for e-BUG, Department of Health from Public Health England, UK</p>	<p>Valorization of rapeseed press cake towards protein ingredients: Outcome of EIT-Food PROVE and VALOCAKE projects - Nesli Sözer, <i>VTT Technical Research Centre, Finland</i></p>
12:20-12:30 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	<p>Food safety risk communication practices and networks across Europe - Joachim Scholderer, <i>Professor and Head of Academic Unit at the University of Zurich, Switzerland,</i> and Gyula Kasza, <i>Head of Department at the</i></p>	<p>Application of fungi protein in the development of sustainable and healthy food products - Esther Sanmartin, <i>AZTI</i></p>

					National Food Chain Safety Office, Hungary	
12:30-13:30 CET	Lunch Break					
13:30-15:00 CET	Session 9: Rational design of foods Session Chair : Dolores O'Riordan	Session 10: Optimization and smart resource utilization Session Chair : Jovana Glusac	Session 11: Omics in food research Session Chair : Masha Niv	Session 12: Fundamental and mechanistic food research Session Chair : Alexander Mathys	Special Session: IUFoST - What can Food Science do to Mitigate Obesity? Session Chair : Mercedes Groba	Special Session: EIT Food - Targeted Nutrition and Healthy diets Session Chair : Mercedes Groba
13:30-13:50 CET	[O09.1] Preparation of mixed micelles to protect vitamin D from degradation and improve vitamin D bioaccessibility Steven L. Mulrooney ¹ , Graham J. O'Neill ² , Dolores O'Riordan ¹ ¹ University College Dublin, Ireland. ² Technological University Dublin, Ireland	[O10.1] Selective recovery of functional compounds from bacteria using continuous pulsed electric field treatment Felix Schottroff ¹ , Jens Kastenhofer ² , Oliver Spadiuz ² , Henry Jaeger ¹ , David Wurm ² ¹ University of Natural Resources and Life Sciences (BOKU), Austria. ² TU Wien, Austria	[KN O11.1] The Foodomics contribution to design foods optimized for health: Can NMR-based digestomics add further details to food structure definition? Francesco Capozzi University of Bologna, Italy	[O12.1] The effect of pressure on the kinetics of epigallocatechin-3-gallate degradation: lessons on the impact of pressure on polyphenols degradation Hani Shkolnikov, Valeria Belochvostov, Zoya Okun, Avi Shpigelman Technion, Israel	13.30 - 13.35 Introduction V. Prakash, IUFoST President 13.35 - 13.40 - Chair/Moderator: Fereidoon Shahidi, Chair, IUFoST Scientific Council	Low Energy Electron Beam (LEEB) to inactivate viruses and microorganisms on heat sensitive raw materials without affecting quality (Buhler, DILL, VTT, Nestle) - Heidi Kotilainen, Buhler, UK
13:50-14:10 CET	[O09.2] The design of the emulsion interface influences the lipolysis kinetics under in vitro gastric conditions Marcos Ricardo Infantes Garcia, Sarah Verkempinck, Paloma Gonzales Fuentes, Tara Grauwet KU Leuven, Belgium	[O10.2] Sustainable recycling of food waste and co-products to recover bioactive compounds and phytochemicals Enrico Doria, Cinzia Calvio, Maurizia Dossena, Antonio Marra, Erlinda Rama, Elena De Toffoli, Manuela Verri, Laura Cattaneo, Camilla Moretti, Daniela Buonocore University of Pavia, Italy	[O11.2] Determination of bacterial communities of four Greek feta cheeses using 16S rRNA genome sequencing Athina Tzora , Eleftherios Bonos , Konstantina Fotou , Achilleas Karamoutsios , Eleonora Barka , Evaggelia Gouva , Ioannis Skoufos University of Ioannina, Greece	[O12.2] Elucidating carrageenan digestive fate: How carrageenan-protein interactions may affect digestive proteolysis in different target populations Shlomit David, Maayan Ben-David, Maya Magram Klaiman, Avi Shpigelman, Uri Lesmes Technion, Israel	13.40 – 14.10 Bringing Food and Nutrition Sciences together to tackle obesity Mike Gidley, Director, Centre for Nutrition and Food Sciences, Queensland Alliance for Agriculture and Food Innovation (QAAFI), Australia 14.10– 14.15 Q&A	SuReBar: Integrating innovative sugar and fibre technologies to produce sugar reduced cereal bars - Julia Rodriguez Garcia, University of Reading, UK

14:10-14:30 CET	[O09.3] Innovative breakfast kit promotes satiety in rats by reducing food intake Sara Carmo-Silva, Daniela Costa, Cláudia Almeida, Cláudia Cavadas <i>University of Coimbra, Portugal</i>	[O10.3] Impact of house cricket flour addition on rheology of rice flour gels Joanna Harasym, Agnieszka Orkusz <i>Wrocław University of Economics and Business, Poland</i>	[O11.3] Transcriptomic responses in rat intestinal tissues after ENs exposure Alessandra Cimbalo, Manuel Lozano, Guillermina Font, Manuel Alonso-Garrido, Lara Manyes <i>University of Valencia, Spain</i>	[O12.3] The fate of small molecules during food processing and digestion - the Radiokitchen approach Mark Buecking ^{1,2} , Bernd Goeckener ¹ ¹ Fraunhofer IME, Germany. ² Monash University, Australia	14.15– 14.35 Anti-obesity of food phytochemicals and beyond Yen-Chen Tung, Department of Nutrition, China Medical University, Taichung City, Taiwan 14.35– 14.40 Q&A	Oncofood-new innovative solutions for cancer patients - Stella Lignou, <i>University of Reading, UK</i>
14:30-14:50 CET	[O09.4] Cellulose microfibrils as natural thickener – Linking sensory to rheological properties of cellulose microfibrils in comparison with xanthan gum in aqueous model foods Annelies Blok ¹ , Dieuwerke Bolhuis ¹ , Krassimir Velikov ² , Markus Stieger ¹ ¹ Wageningen University, The Netherlands. ² Unilever Innovation Centre Wageningen, The Netherlands	[O10.4] Mycoprotein as novel functional ingredient: Mapping of functionality, composition and structure throughout the Quorn fermentation process Julien Lonchamp ¹ , Kelly Stewart ² , Claire Munialo ² , Laurence Evans ² , Muyiwa Akintoye ³ , Paul S. Clegg ⁴ , Nik Willoughby ² , Stephen R. Euston ² ¹ Queen Margaret University, UK. ² Heriot-Watt University, UK. ³ Quorn Foods, UK. ⁴ University of Edinburgh, UK	[O11.4] The role of compositional data in the safety assessment of novel foods by the European Food Safety Authority (EFSA) Ermolaos Ververis ^{1,2} , Reinhard Ackerl ¹ , Domenico Azzollini ¹ , Paolo Angelo Colombo ¹ , Agnès de Sesmaisons ¹ , Céline Dumas ¹ , Antonio Fernandez-Dumont ¹ , Lucien Ferreira da Costa ¹ , Andrea Germini ¹ , Tilemachos Goumperis ¹ et al ¹ European Food Safety Authority (EFSA), Italy. ² National and Kapodistrian University of Athens (NKUA), Greece	[O12.4] Structure-based approaches for bitter taste modulators discovery Fabrizio Fierro ¹ , Lior Peri ¹ , Tamir Dingjan ² , Masha Niv ¹ ¹ The Hebrew University of Jerusalem, Israel. ² Weizmann Institute of Science, Israel	14.40 – 15.00 Etiology of Obesity: A Genetically Induced Metabolic Survival Defense Due to Unhealthy Food Habits: Aerobic vs. Anaerobic Events Debasis Bagchi ^{1,2} , Bernard W. Downs ¹ , VNI Inc., USA, ² Texas Southern University, USA 15.00-15.10 Q&A	Game-based learning –innovative tools for food education and promoting a sustainable diet - Hanna-Leena Alakomi, <i>University of Reading, UK</i>
14:50-15:00 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up		HealthSnap: the cocreation of a new vending concept that freshly prepares healthy snack products - Rachel Smith, <i>University of Reading, UK</i>

15:00-15:30 CET	Break: Poster sessions and one-on-one meetings					
15:30-17:00 CET	Session 13: Foods for the ages Session Chair : Evangelos Liamas	Session 14: Processing and technology advancements Session Chair : Petros Taoukis	Session 15: Food safety and regulation Session Chair : Ermolaos Ververis	Session 16: Fundamental and mechanistic food research Session Chair : Victor Rodov	Special Session: IUFoST - Food System Transformation and the Evolving Role of Food Science Session Chair : Ian Noble	Special Session: EIT Food - Side streams Session Chair : Jayne Brookman
15:30-15:50 CET	[O13.1] Exploring the differences in texture perception of oral nutritional supplements between older and younger adults, using the temporal dominance of sensations technique Emma Regan ¹ , Emma L. Feeney ¹ , Scott C. Hutchings ² , Graham J. O'Neill ³ , Dolores O'Riordan ¹ <i>¹University College Dublin, Ireland. ²University of Melbourne, Australia. ³Technological University Dublin, Ireland</i>	[KN O14.1] When food structure is not too much to digest Tara Grauwet <i>KU Leuven, Belgium</i>	[O15.1] Scientific and legislative issues surrounding the use of microbial food cultures within the EU context Jerome Diaz ¹ , Addie Van der Sluis ² , Masja Nierop Groot ¹ <i>¹Wageningen Food and Biobased Research, WUR, The Netherlands. ²Wageningen Food and Biobased Research, WUR, The Netherlands</i>	[O16.1] How amylose molecular fine structure affects gel network formation and water-oil dynamics during the production of potato (Solanum tuberosum L.) crisps Stijn Reyniers, Nand Ooms, Kristof Brijs, Jan A. Delcour <i>Catholic University of Leuven, Belgium</i>	15.30 – 16.00 Future Food Science Ian Noble, Senior Research, Development and Quality Director, Mondelez 16.00 – 16.10 Q&A	Food Digital Marketplace for Side-streams - Tiffany Lau, University of Reading, UK
15:50-16:10 CET	[O13.2] Marine hydrolysates from by products used for protein enriched fish products Jan Thomas Rosnes ¹ , Therese Netland Østebrød ² , Aase Vorre Skuland ¹ <i>¹Nofima, Norway. ²Core, University of Stavanger, Norway</i>	[O14.2] The structure-dependent influence of high pressure processing on polyphenol-cell wall material interactions and polyphenol-polyphenol association in model systems: Possible implication to accessibility Eden Eran Nagar, Liora Berenshtein, Zoya Okun, Avi Shpigelman <i>Technion, Israel</i>	[O15.2] Prediction of the cleaning time of adhesively detaching soil layers in a channel flow with sudden expansion by CFD-simulation Hannes Köhler, Christian Golla, Jochen Fröhlich, Frank Rüdiger <i>Technische Universität Dresden, Germany</i>	[O16.2] Iron mediated flavonoid pectin interaction: A possible novel mechanism for polyphenol cell wall material interactions: Effects of flavonoid structure, pH and temperature Libi Chirug, Eden Eran Nagar, Zoya Okun, Avi Shpigelman <i>Technion, Israel</i>		Cook Clever, working with young adult consumers to create a technology solution to reduce food waste habits - Natalie Masento, University of Reading, UK

16:10-16:30 CET	<p>[O13.3] Sensory & consumer studies for developing a nostalgic new product for the elderly in Singapore Lena Ling, Lina Tan, Tong Qi Shandi Tan, Jia Yi Aw, Xuan Ping Chee <i>Nanyang Polytechnic, Singapore</i></p>	<p>[O14.3] Pulsatile crossflow filtration – towards more sustainable membrane processing Maria Weinberger, Ulrich Kulozik <i>Technical University Munich, Germany</i></p>	<p>[O15.3] Plasma Treated Water: From lab to prototype for fresh food safety Uta Schnabel^{1,2}, Joerg Stachowiak¹, Paula Bourke^{3,4}, Joerg Ehlbeck¹ ¹<i>Leibniz Institute for Plasma Science and Technology, Germany.</i> ²<i>Technological University Dublin, Ireland.</i> ³<i>University College Dublin, Ireland.</i> ⁴<i>Queens University Belfast, UK</i></p>	<p>[O16.3] Influence of the encapsulated bioactive substance crocin on the stability of solid lipid nanoparticles during processing Verena Wiedenmann, Esther Mayer-Miebach, Diana Behnlian, Elke Walz, Volker Gräf, Kathleen Oehlke <i>Max Rubner-Institut, Germany</i></p>	<p>Food Science Opportunities in traditional and transitional food systems George Ooko Abong', <i>Senior Lecturer, Chairman, Department of Food Science, Nutrition and Technology, University of Nairobi. Chairman, Food Science and Technology Platform of Kenya (FoSTeP-K)</i></p>	<p>Food Education: Online courses: From farm to labels and beyond - Natalia Mansilla, University of Reading, UK</p>
16:30-16:50 CET	<p>[O13.4] Development and validation of a psychometric scale to measure consumers knowledge and acceptance of food processing Priscila Dinah Lima Oliveira Pereira De Araújo^{1,2}, Wilma Maria Coelho Araújo¹ ¹<i>University of Brasília (UnB), Brazil.</i> ²<i>University Center of the Federal District (UDF), Brazil</i></p>	<p>[O14.4] Exploring processing strategies to affect protein properties and functionality of intermediate wheatgrass (<i>Thinopyrum intermedium</i>) Yaxi Dai¹, Radhika Bharati², George Annor², Catrin Tyl¹ ¹<i>University of Georgia, USA.</i> ²<i>University of Minnesota, USA</i></p>	<p>[O15.4] UVC LEDs as a contemporary solution against common pathogens and spoilage organisms in foods and beverages Tatiana Koutchma <i>Agriculture and Agri-Food Canada, Canada</i></p>	<p>[O16.4] The effect of rapeseed protein on polyphenols stability and antioxidant capacity Inbal Hanuka-Katz, Eden Eran-Nagar, Zoya Okun, Avi Shpigelman <i>Technion, Israel</i></p>	<p>Emerging Food Processing Technologies for Leveraging Food System Sustainability Iris HABERKORN, Alexander MATHYS <i>ETH Zurich, Zurich, Switzerland</i></p>	<p>Seaweed supplementation to mitigate methane (CH₄) emissions by cattle (SeaCH4NGE) - Ásta Heiðrún E. Pétursdóttir, Matis, Iceland</p>
16:50-17:00 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up

17:00-17:15 CET	Short Break					
17:15-18:00 CET	<p>EFFoST Panel Discussion - “Does Green equal Sustainable?”</p> <p>This panel discussion is organised by the EFFoST working group on Sustainable Food that is chaired by Henry Jäger and Felix Schottroff, from the University of Natural Resources and Life Sciences (BOKU), Vienna. For more information and to join the working group here.</p>			<p>How to get published: A discussion with Elsevier journal editors and publishers</p> <p>Alejandro Marangoni, <i>Editor-in-Chief of Current Research in Food Science & Current Opinion in Food Science</i></p> <p>Sonia Calligaris, <i>Editor-in-Chief of Food Structure</i></p> <p>Petros Taoukis, <i>Editor of Innovative Food Science and Emerging Technologies</i></p>		

Thursday, 12th November 2020

<p>09:00-10:30 CET</p>	<p>Session 17: 5D oral processing of foods Session Chair : Padler Caravani Vered</p>	<p>Session 18: Food innovations Session Chair : Cornelia Rauh</p>	<p>Session 19: Reinforcing food security & sustainability Session Chair : Paola Pittia</p>	<p>Session 20: Tailoring protein digestion and functionality Session Chair : Stephen Euston</p>	<p>Special Session: GHI session - Food security in the nearby future Session Chair : Abenaa Akyaa Okyere</p>	
<p>09:00-09:20 CET</p>	<p>[KN O17.1] Oral tribology: A new frontier in food science Anwasha Sarkar <i>University of Leeds, UK</i></p>	<p>[O18.1] Identification of very bitter compounds in food and drugs in the era of machine learning Eitan Margulis*, Masha Y. Niv, <i>The Hebrew University of Jerusalem, Israel</i></p>	<p>[O19.1] Food System after covid-19: Efficiency vs resilience Serafim Bakalis^{1,2}, Lilia Ahrne³, Dimitris Argyropoulos, Enda Cummins⁴, Jianghe Che⁵, Ashim Datta⁶, Peter Fryer, Estefania Lopez-Quiroga, Ourania Gouseti², Almudena Hospido⁷, Kai Knoerzer⁸, Alain LeBail⁹, Petros Taoukis¹⁰ <i>¹University of Nottingham, UK. ²University of Birmingham, UK. ³University of Copenhagen, Denmark. ⁴University College Dublin School of Biosystems and Food Engineering, Ireland. ⁵Zhejiang Gongshang University, China. ⁶Cornell University, USA. ⁷University of Santiago de Compostela, Spain. ⁸Agriculture and Food, CSIRO, Australia. ⁹Oniris, Gepea UMR CNRS, France. ¹⁰National Technical University of Athens, Greece</i></p>	<p>[O20.1] Overcoming gastric destabilization of pea protein microgel particle-stabilized Pickering emulsions using electrostatic coating with cellulose nanocrystals Shuning Zhang, Nuttaporn Suriyachay, Melvin Holmes, Rammile Ettelaie, Brent S. Murray, Anwasha Sarkar <i>University of Leeds, UK</i></p>	<p>09:00-09:30 What could gene technology really deliver for the food sector? - Stefan Jansson, <i>UPSC, Umeå University, Sweden</i></p>	

09:20-09:40 CET	<p>[O17.2] Oral tribology and rheology of starch + κ-carrageenan mixtures Kwan-Mo You, Brent S. Murray, Anwsha Sarkar <i>University of Leeds, UK</i></p>	<p>[O18.2] Towards a fouling control during fruit juice microfiltration: Rheological identification of interactions between juice suspended particles in the fouling layer Camille Demoulin¹, Loyal Dahdouh¹, Julien Ricci¹, Michèle Delalonde², Christelle Wisniewski² ¹CIRAD, UMR Qualisud, France. ²Qualisud Univ Montpellier, France</p>	<p>[O19.2] SAFELIVERY: Safer Food Delivery and distribution service during and after the COVID-19 Pandemic Marco Gerevini¹, Maria Chiara Leva², Lucia Vannini³, Micaela Demichela⁴, Orla Cahill² ¹Tecnoalimenti, Italy ²Technological University Dublin, Ireland. ³University of Bologna, Italy. ⁴Politecnico di Torino, Italy</p>	<p>[O20.2] Delivery of capsaicin in edible vehicles: Using alpha-lactalbumin to fabricate nano-complexes and evaluation of their loading and controlled release under in vitro digestive conditions Alon Romano, Carolina Leiterer, Avi Shpigelman, Uri Lesmes <i>Technion – Israel Institute of Technology, Israel</i></p>	09:30-10:00 <p>Irradiation improves food safety and security but faces regulatory restrictions - Heidi Kotilainen, <i>Global Harmonization Initiative, Working Group Food Preservation Technologies, UK</i></p>	
09:40-10:00 CET	<p>[O17.3] Understanding the interfacial behaviour of bile salts, a key to their role in lipid digestion Olivia Pabois^{1,2}, Richard Harvey³, Isabelle Grillo², Myriam Grundy⁴, Balazs Bajka¹, Peter Wilde⁵, Yuri Gerelli², Cécile Dreiss¹ ¹King's College London, UK. ²Institut Laue-Langevin, France. ³University of Vienna, Austria. ⁴University of Reading, UK. ⁵Quadram Institute Bioscience, UK</p>	<p>[O18.3] Influence of pH-value and ionic strength on the temperature-dependent microfiltration of milk proteins Simon Schiffer, Ulrich Kulozik <i>Technical University of Munich, Germany</i></p>	<p>[O19.3] Sustainable food systems in Europe, potential contributions of food science and technology Hugo de Vries^{1,2}, Mechthild Donner^{1,3}, Monique Axelos¹ ¹INRAE, France. ²UMR IATE, France. ³UMR MOISA, France</p>	<p>[O20.3] Pulsed electric field assisted extraction of proteins and fat from house crickets (<i>Acheta domesticus</i>): Effects on yield and technofunctional properties Marios Psarianos¹, George Dimopoulos², Sara Bußler¹, Ana Clara Cavini Moreno^{1,3}, Petros Taoukis², Shikha Ojha¹, Oliver Schlüter¹ ¹Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB), Germany. ²National Technical University of Athens (NTUA), Greece. ³University of São Paulo (USP), Brazil</p>	10:00-10:30 <p>Could edible insects processing enhance consumer health and food security? - Abenaa Akyaa Okyere, BNARI, Ghana <i>Atomic Energy Commission, Ghana</i></p>	
10:00-10:20 CET	<p>[O17.4] Common beans, Dietary Fiber and Lipid digestibility: Impact of Bean processing</p>	<p>[O18.4] The impact of milder fractionation methods on the footprint of the food production system</p>	<p>[O19.4] Sustainability in the future farming sector: Environmental scenarios Ariane Voglhuber-Slavinsky, Ewa Dönitz, Björn Moller</p>	<p>[O20.4] Quinoa protein concentrate in fibril structure as potential functional ingredient in emulsion and gel systems</p>		

	Tiantian Lin, Sean O'keefe, Susan Duncan, Cristina Fernandez-Fraguas <i>Virginia Tech, USA</i>	Anouk Lie-Piang, Albert van der Padt, Remko Boom <i>Wageningen UR, The Netherlands</i>	<i>Fraunhofer Institute for Systems and Innovation Research ISI, Germany</i>	Ohad Hanan, Ofir Benjamin <i>Tel Hai College, Israel</i>		
10:20-10:30 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up		
10:30-11:00 CET	Break: Poster sessions and one-on-one meetings					
11:00-12:30 CET	Session 21: Tackling process-food-consumer intersections Session Chair : Anwesh Sarkar	Session 22: Smart packages and processes Session Chair : Julien Lonchamp	Session 23: Shaping food properties & novel ingredients Session Chair : Tara Grauwet	Session 24: Food processing innovations Session Chair : Serafim Bakalis	Special Session: Food & Health Digitalisation Session Chair : Siân Astley	
11:00-11:20 CET	[KN O21.1] Consumer adapted food science and technology - an interdisciplinary challenge Cornelia Rauh <i>Technical University of Berlin, Germany</i>	[O22.1] Blockchain technology for improving resource efficiency and circularity in food supply chains Maitri Thakur, Magnus Stoud Myhre, Sepideh Jafarzadeh <i>SINTEF Ocean, Norway</i>	[KN O23.1] Sustained energy release food products: An opportunity grasped by fully implementing triple helix innovation approaches Jan A. Delcour, Kurt Gebruers, Elien Lemmens, Stijn Reyniers <i>KU Leuven, Belgium</i>	[O24.1] Harnessing nanosecond pulsed electric field processing for optimizing the efficiency of single-cell based value-chains Iris Haberkorn ¹ , Leandro Buchmann ² , Alexander Mathys ¹ ¹ <i>ETH Zurich, Switzerland.</i> ² <i>Bühler AG, Switzerland</i>	FNS-Cloud (www.fns-cloud.eu) Paul Finglas, Scientific Coordinator, <i>QIB, UK</i>	
11:20-11:40 CET	[O21.2] Exploring the role of structure and composition of raw material in mild fractionation processes Anna Cäcilie Möller ¹ , Albert van der Padt ^{1,2} , Atze Jan Van der Goot ¹ ¹ <i>Wageningen Univeristy, The Netherlands.</i> ² <i>Friesland Campina, The Netherlands</i>	[O22.2] Cold atmospheric plasma towards next-generation nanobiocomposites for active food packaging Nusrat Sharmin ¹ , Izumi Sone ¹ , Cecilia. Górriz Fernández ¹ , J. L. Walsh ² , Morten Sivertsvik ¹ , Estefania Noriega Fernández ¹ ¹ <i>Nofima AS, Norway.</i> ² <i>University of Liverpool, UK</i>	[O23.2] Oral tribology, adsorption and rheology of alternative food proteins Ben Kew, Melvin Holmes, Anwesh Sarkar <i>University of Leeds, UK</i>	[O24.2] Pulsed electric field assisted valorisation of microalgae Lars Leonhardt <i>Technische Universität Dresden, Germany</i>	SEAFOOD^{TOMORROW} (seafoodtomorrow.eu) António Marques, Coordinator <i>IPMA, Portugal</i>	

11:40-12:00 CET	<p>[O21.3] Aero-/thermodynamic optimization of cooling tunnels to tailor quality characteristics of chocolate confectionery under largely improved sustainability conditions</p> <p>Lucas Grob, Erich Windhab Swiss Federal Institute of Technology Zürich (ETH), Switzerland</p>	<p>[O22.3] What are the impacts of the food processing ways on the nutritional qualities of soft bread?</p> <p>Bastien Maurice^{1,2,3}, Anne Saint-Eve^{1,2,3}, Emilie Ouvrard^{1,2,3}, Aurélia Pernin^{1,2,3}, Isabelle Souchon^{1,2,3} ¹AgroParisTech, France. ²INRAE, France. ³Université Paris-Saclay, France</p>	<p>[O23.3] Matrix- and preservation technology-dependent stability and bioaccessibility of strawberry anthocyanins during storage</p> <p>Anna-Sophie Stübler^{1,2}, Lena Böhmker¹, Andreas Juadjur¹, Cornelia Rauh², Avi Shpigelman³, Kemal Aganovic¹ ¹DIL German Institute of Food Technologies e.V., Germany. ²Technical University Berlin, Germany. ³Technion - Israel Institute of Technology, Israel</p>	<p>[O24.3] Extrusion processing – influence on the physicochemical and functional properties of lupin kernel fibre</p> <p>Susanne Naumann^{1,2}, Ute Schweiggert-Weisz², Peter Eisner^{1,2} ¹Technical University of Munich, Germany. ²Fraunhofer Institute for Process Engineering and Packaging (IVV), Germany</p>	<p>AAL-TURNTABLE (www.aalturntable.eu) Antonio Solinas, R&D&I Director Abinsula, I)</p>
12:00-12:20 CET	<p>[O21.4] Oral tribology and sensory perception of layered hydrogels: Influence of particle size of soft beads</p> <p>Ecaterina Stribitcaia, Emma Krop, Melvin Holmes, Anwasha Sarkar University of Leeds, UK</p>	<p>[O22.4] Comparing the applicability of sustainable packaging materials for meat products and their impact on organoleptic and microbial product quality during storage</p> <p>Imke Korte¹, Claudia Waldhans¹, Maureen Mittler¹, Antonia Albrecht¹, Judith Kreyenschmidt^{1,2} ¹University of Bonn, Germany. ²Geisenheim University, Germany</p>	<p>[O23.4] Application of pulse flours in baked products: Link between formulation, reactivity potential and physicochemical properties</p> <p>Svenja Krause¹, Eugenia A. Asamoah¹, Delphine Huc-Mathis¹, Catherine Bonazzi¹, Barbara Rega² ¹Université Paris-Saclay, France. ²Université Paris-Saclay, INRAE, AgroParisTech, France</p>	<p>[O24.4] Applied CO2 gas hydrate technology for the concentration of liquid foodstuffs</p> <p>Timo Claßen¹, Soebiakto Loekman², Alexander Rudolph³, Bernhard Gatternig¹, Christopher McHardy³, Cornelia Rauh³, Antonio Delgado¹ ¹Institute of Fluid Mechanics, Germany. ²LSTME Busan, Republic of Korea. ³Technical University Berlin, Germany</p>	<p>12:00-12:15 Quisper (quisper.eu) Jo Goossens, Director shiftN, Belgium</p> <p>12:15-12:30 EIT Food PERSO (www.persfo.eu) Glenn Mathijssen, Co-Founder Alberts, Belgium</p>
12:20-12:30 CET	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	Questions and wrap-up	
12:30-12:40 CET	Close of Conference Thank you for attending! We look forward to seeing you in 2021				

Young EFFoST Day 2020

13:00-14:55 CET	Plenary Session chair: Eden Eran Nagar, Dafna Pascoviche, Alon Romano					
13:00-13:05 CET	Welcome & introduction of Young EFFoST Day programme. 1. The future of food science and industry: The end of an era or a beginning of a new dawn? Dafna Pascoviche, Eden Eran Nagar, Alon Romano, <i>Biotechnology & Food Engineering Technion, Israel</i>					
13:05-13:15 CET	Presentation of Young EFFoST and the YE council Felix Schottroff, <i>University of Natural Resources and Life Sciences at Vienna, Austria</i>					
13:15-14:55 CET	Influential communication workshop Natalie Barneš Nagar, <i>Virtuozo, Israel</i>					
15:05-16:05 CET	Interactive group sessions via zoom links Attendees will be divided to discussion groups, according to previously selected topics of interest. The discussions will be directed by professional moderators who will navigate the discussion according to thoughts and questions suggested by the participants themselves, to make the discussion as relevant and inspiring as possible.					
15:05-16:05 CET	1. The future of food science and industry: The end of an era or a beginning of a new dawn? Alejandro Marabi, <i>PepsiCo., Israel</i>	2. From technology to start-up – guiding principles Memi Genosar, <i>Startup Advisor, Israel</i>	3. COVID-19 impact on our daily lives and work: Turning life's lemons into lemonade Serafim Bakalis, <i>University of Copenhagen, Denmark</i>	4. Collaborations between academia and industry – advantages, difficulties and how to encourage them Esther Segal, Israel	5. How to plan an academic career as a young researcher? Maya Davidovich Pinhas, <i>Technion, Israel</i>	6. Are we doing enough (whether academia or industry) towards a “greener” more sustainable world? Anet Režek Jambrak <i>University of Zagreb, Croatia</i>