



IFIS 2026

Program Guide

*International Food Innovation
and Sustainability Congress*



YTU
YILDIZ TECHNICAL
UNIVERSITY

IFIS 2026

1st DAY

7 May 2026, Thursday-Davutpasa Congress Center– Main Hall

08.00 - 09.00	REGISTRATION AND OPENING COCKTAIL	
09.00 - 10.00	A MOMENT OF RESPECT AND THE TURKISH NATIONAL ANTHEM OPENING AND PROTOCOL SPEECHES Prof. Salih Karasu (Food Engineering Department) Prof. Musa Turker (Dean of Chemical & Metallurgical Engineering Faculty) Prof. Guleda Engin (Vice Rector, Yıldız Technical University)	
10.00 - 10.40	Prof. Da-Wen Sun	Sustainable and Innovative Freezing Technologies Enhancing Frozen Food Quality
10.40 - 11.20	Prof. Marco Gobetti	New Frontiers for Steering Food Microbiome
11.20 - 11.40		COFFEE BREAK & POSTER PRESENTATIONS
11.40 - 13.00	I&II. ORAL PRESENTATION SESSIONS	
13.00 - 14.00		LUNCH
14.00 - 14.30	Prof. Esra Capanoglu Guven	From Fresh to Dried Fruits: Effects of Drying Methods on the Content and Bioaccessibility of Bioactive Compounds
14.30 - 15.00	Assoc. Prof. Furkan Turker Saricaoglu	Engineering the Future of Food Packaging: MOF-Functionalized Biopolymers for Active and Smart Packaging
15.00 - 15.30		COFFEE BREAK & POSTER PRESENTATIONS
15.30 - 16.00	Dr. Abdullah Eris	Sustainability from the Perspective of the Food Industry
16.00 - 16.30		PLAQUE CEREMONY
16.30 - 16.45		COFFEE BREAK & POSTER PRESENTATIONS
16.45 - 18.00	III&IV ORAL PRESENTATION SESSIONS	



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2nd DAY

8 May 2026, Friday-Davutpasa Congress Center– Main Hall

08.00 - 09.00 REGISTRATION

Prof. Ferruh Erdogan

09.00 - 09.40 Novel Approaches in Food Processing: Mathematical Modelling Applications From Simulation to Industrial Scale-up for Sustainability

09.40 - 10.20 Prof. Alev Taskin

The Role of Artificial Intelligence in Designing Circular Food Supply Chains

10.20 – 11.00 Prof. Charalampos Proestos

Bringing Sustainability to the Food Industry: Using Green Technology to Create Nanoparticles from Plant By-Products

11.00 - 11.20



COFFEE BREAK & POSTER PRESENTATIONS

11.20 - 12.00

PANEL: R&D AND ENTREPRENEURSHIP AND SUSTAINABILITY

12.00 - 13.00

V&VI. ORAL PRESENTATION SESSIONS

13.00 - 14.00



LUNCH

14.00 - 14.30

Dr. Betul Vazgecer

Sustainable Food Systems: The Strategic Role of Codex Alimentarius

14.30 - 15.00

Assoc. Prof. Fatih Tarlak

AI-Driven Modelling of Microbial Behaviour in Food Systems

15.00 - 15.15



COFFEE BREAK & POSTER PRESENTATIONS

15.15 - 16.30

VII&VIII. ORAL PRESENTATION SESSIONS

16.30 - 16.45



COFFEE BREAK & POSTER PRESENTATIONS

16.45 - 18.00

IX&X. ORAL PRESENTATION SESSIONS

19.00 - 23.00



GALA DINNER



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IFIS 2026

3rd DAY

9 May 2026, Saturday-Davutpasa Congress Center– Main Hall

08.00 - 09.00 REGISTRATION

Prof. Tuba Esatbeyoglu

09.00 - 09.30 Investigation of Non-Thermal Cold Plasma Treatment on Quality of Spices

Prof. Fatih Oz

09.30 - 10.00 Thermal Processing-Induced Heterocyclic Aromatic Amines in Meat and Meat Products: Formation Dynamics and Mitigation Approaches

10.00 - 10.15  **COFFEE BREAK & POSTER PRESENTATIONS**

10.15 - 11.30 **XI&XII. ORAL PRESENTATION SESSIONS**

11.30 - 11.45  **COFFEE BREAK & POSTER PRESENTATIONS**

11.45 - 13.00 **XIII&XIV. ORAL PRESENTATION SESSIONS**

13.00 - 13.30  **LIGHT LUNCH**

13.30 - 14.30 **XV&XVI. ORAL PRESENTATION SESSIONS**

14.30 - 15.00 **CLOSING AND AWARD CEREMONY**



TRAINING SESSION: 8 MAY 2026- RED HALL

14.00 - 16.00 **Prof. Sencer Buzrul**

Describing Experimental Data with Mathematical Models

***Google forms are closed and quota has been filled.**

IFIS 2026: 1st Day 7 May 2026, Thursday 11.40-13.00: I&II. Oral Presentation Sessions	
SESSION I Chair: Prof. Tamara Aleksandrzak Piekarczyk Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	SESSION II Chair: Prof. Nevzat Konar Davutpasa Congress Center– Green Hall
11.40-11.55 Raffaella Di Cagno, Pasquale Filannino, Ali Tlais Zein Alabiden, Olga Nikoloudaki, Alessandra Gasparrini, Kashika Arora, Marco Gobetti The Infinite Fermentation Potential: An Ancient Biotechnology for Our Great Future	11.40-11.55 Sahin Aydin, Elif Deniz Yelmeoglu, Gulsum Cigdem Cavdaroglu, Mehmet Nafiz Aydin, Samet Okuyan, Serhat Solmaz, Gokhan Akdeniz, Gonul S. Tuzlu, Huseyin Deniz, Muhammet Emre Ozkan, Deniz Altintas, Hasan Kivrakdal, Simge Sanem Iskaloglu A Mobile-Integrated Digital Traceability and Quality Monitoring System for Honey within Sustainable Food Supply Chains
11.55-12.10 Pasquale Filannino, Rosalba Lanciotti, Stefano Campanaro, Carlo Rizzello, Marco Gobetti, Raffaella Di Cagno Future-Proof Bioactive Peptides from Food By-products Through Eco-Sustainable Bioprocessing for Tailored Multifunctional Foods: The PROACTIVE Project	11.55-12.10 Nilgun Basak Tecer, Derya Kahveci Karincaoglu, Simel Bagder Elmaci Blockchain-Enabled Traceability of Grape-Derived Products in Sustainable Supply Chains: A Strategic Perspective
12.10-12.25 Halide Yildirim, Esmaeil Ghanbari Shendi Precision Fermentation as a Sustainable Food Innovation: Integrating Smart Technologies for Future Nutrition	12.10-12.25 Ibrahim Sani Ozdemir From Research to Impact: TÜGİP as an Infrastructure for Food Innovation
12.25-12.40 Huseyin Erten Microbiota of Lactic Acid Bacteria in Milk Kefir Produced from Goat, Cow, and Sheep-Derived Grains	12.25-12.40 Gonul Silav Tuzlu, Mehmet Nafiz Aydin, Sahin Aydin, Arif Selcuk Ogresci, Gokhan Akdeniz, Samet Okuyan, Serhat Solmaz A Digital Traceability Platform for Smart Honey Value Chains:Mapping HACCP Principles to a Multi-Layered Framework
12.40-12.55 Suzan Tireki Evaluation of Peanut and Pistachio Shells in Kombucha Fermentation	12.40-12.55 Sahin Aydin, Gulsum Cigdem Cavdaroglu A Data-Driven and GIS-Based Optimization Framework for Sustainable Honey Production and Food Systems

IFIS 2026: 1st Day 7 May 2026, Thursday 16.45-18.00: III&IV. Oral Presentation Sessions	
SESSION III Chair: Prof. Raffaella Di Cagno Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	SESSION IV Chair: Prof. Senem Kamiloglu Bestepe Davutpasa Congress Center - Green Hall
16.45-17.00 Tamara Aleksandrzak-Piekarczyk, Jan Gawor, Mariusz Radkiewicz, Emilia Samborowska, Agnieszka Szczepankowska, Szymon Powałowski, Furkan Demirgul, Omer Simsek Selection of Lactic Acid Bacteria with Preservative and Pro-Health Potential for Functional Food Additives	16.45-17.00 Tefide Kizildeniz The Function of Biostimulants in Improving the Quality of Functional Foods in Medicinal and Aromatic Plants: A Study on Basil (<i>Ocimum basilicum</i> L.)
17.00-17.15 Ozum Ozoglu, Sevda Jafari Aghdam, Berfin Gulay Guler, Aytekin Uzunoglu Two-dimensional (2D) Borophene-Based Electrochemical Biosensor for Foodborne <i>Escherichia coli</i> Detection	17.00-17.15 Cihat Guner, Hakan Basdogan Production of Noodles Enriched with Natural Mineral Water: Effects on Cooking Performance, Texture, and Overall Quality
17.15-17.30 Ozge Kahraman Ilikkan In Silico Identification of Antimicrobial Targets of Selected Food Aroma Pyrazines Against Foodborne Pathogens Through Docking, ADMET, and Molecular Dynamics Simulation	17.15-17.30 Katibe Sinem Coruk, Hande Baltacioglu Utilization of Colored Potato Powders (Yellow and Purple) Dried by Microwave and Hot Air in Functional Soup Development
17.30-17.45 Sefa Isik Effect of Hydrogen Peroxide Application on Pathogen Inhibition in Hydroponic Nutrient Solution	17.30-17.45 Meliha Arslanturk, Betul Bay Yilmaz, Gorkem Ozulku, Muhammet Arici Impact of Using Selected Starter Cultures on FODMAP Content in Type-II Whole Wheat Sourdough
17.45-18.00 Fatma Beyza Ozpinar, Selma Kayacan Cakmakoglu, Muhammed Ozgolet, Hasan Cankurt, Elif Seda Kocoglu, Osman Sagdic, Enes Dertli Impact of In Situ Exopolysaccharide-Producing Lactic Acid Bacteria on the Physicochemical and Textural Properties of Traditional Fermented Sucuk	17.45-18.00 Abdussamet Aydin, Lale Karataylioglu, Kubra Ozkan, Cagla Ozer, Hamit Kokscl Effect of Einkorn and Emmer Flours on Quality Attributes of Beypazari Kuruusu, a Traditional Geographical Indication Product

SESSION V	SESSION VI
Chair: Prof. Figen Korel Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	Chair: Assoc. Prof. Ruhan Askin Uzel Davutpasa Congress Center– Green Hall
12.00-12.15	12.00-12.15
Eda Demirok Soncu, Eda Coskun, Ozge Mamay, Zeynep Bacin, Huseyn Huseynli, Nilay Korkmaz, Beyza Gul Haymana, Said Aykut Aytac, Ferruh Erdogdu Radio Frequency Thawing of Frozen Bulk Chicken Meat: Determination of Quality Aspects	Merve Elmal, Umit Yildiz Innovation and Sustainability at Golf Dondurma
12.15-12.30	12.15-12.30
Emine Asik Canbaz Impact of Indirect Pulsed Electric Field Application on Chlorophyll Extraction and Physicochemical Properties of Cauliflower Leaf Powder	Yusuf Cakmakci, Hakan Basdogan Explainable Artificial Intelligence Applications In Predicting The Degradation Of Frying Oils Used In Noodle Production
12.30-12.45	12.30-12.45
Fahriye Seyma Ozcan, Aysenur Kanbur, Nihat Ozcan, Aysun Ozturk, Suzan Uzun, Fatih Bozkurt, Hasret Altunkanat, Seda Kayahan, Osman Sagdic From Waste to Value: Cold Plasma Modification of Mushroom Protein	Kayhan Irmak Current R&D Supports/Incentives In The Food Sector
12.45-13.00	12.45-13.00
Kamile Bayrak Akay, Bulent Basyigit, Mehmet Karaaslan Physicochemical, Mechanical, and Barrier Properties of Soy Protein-Derived Natural Packaging: Effect of Ultrasonic Power	Eda Sensus, Maide Kosar, Emine Sukran Okudan, Beraat Ozelik, Aysun Yucetepe Assessment of Thermal and pH Stability of Encapsulated ACE Inhibitory Peptides from Gracilaria dura

SESSION VII	SESSION VIII
Chair: Prof. Salih Karasu Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	Chair: Assoc. Prof. Ilyas Atalar Davutpasa Congress Center - Green Hall
15.15-15.30	15.15-15.30
Muhammed Fidan, Ali Caner Celik, Serdar Marasli Unveiling Environmental Hotspots in the Snack Industry: A Comprehensive Life Cycle Assessment Review	Nur Azzahrah Amir, Anida Yusoff, Fadhilah Jailani The Optimisation of Protein Extraction and Functional Properties of Mung Bean (<i>Vigna Radiata</i> L.), Pea (<i>Pisum Sativum</i> L.) and Winged Bean (<i>Psophocarpus Tetragonolobus</i> (L.) Dc.) Proteins
15.30-15.45	15.30-15.45
Aida Daei, Cassandra Hayward, Hessam Jahangiri, Mukesh Goel, Hongwei Zhang Evaluating Low-Carbon Technologies in Food Production: Comparative Case Studies from the UK	Mahmut Ekrem Parlak, Furkan Turker Saricaoglu, Senay Simsek Selective Isolation of Osborne Protein Fractions: Unlocking the Functional Potential of Plant Proteins
15.45-16.00	15.45-16.00
Samiye Akin Adal From Energy Quality to Environmental Impact: Integrated Exergy–LCA Analysis in Food Processing	Ilayda Sanli, Esra Capanoglu, Gulay Ozkan Optimization of High Hydrostatic Pressure Processing for Bioactive Peptide Release from an Essential Amino Acid–Balanced Oilseed Meal Protein Blend
16.00-16.15	16.00-16.15
Cassandra Hayward, Aida Daei, Hessam Jahangiri, Mukesh Goel, Hongwei Zhang From Data to Practice: Quantifying Water Use in Food and Drink Manufacturing Facilities in the United Kingdom	Edanur Topaloglu, Alper Eti, Mehtap Er Kemal, Mehmet Kemal, Aysegul Besir Ozgecen, Nihat Yavuz Optimizing the Production of a Novel Infant Formula Including Rice Protein Microgels
16.15-16.30	16.15-16.30
Muhammed Fidan, Ali Caner Celik, Serdar Marasli Deforestation from the Perspective of the Global Food Industry: Current Regulations and Future Perspectives	Seyma Kesgin, Necati Pehlivan, Sukran Asgin Uzun, Mahmut Ekrem Parlak, Ilyas Atalar, Furkan Turker Saricaoglu Structure–Function Modulation of Hazelnut Meal Protein Isolate by High-Pressure Homogenization

SESSION IX	SESSION X
Chair: Assoc. Prof. Abdullah Kurt Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	Chair: Asst. Prof. Ozge Tastan Ulku Davutpasa Congress Center– Green Hall
16.45-17.00	16.45-17.00
Fahriye Seyma Ozcan Purification of Inulin from <i>Inula helenium</i> L.: Effects of Different Adsorbents on Product Quality and Yield	Gulzhan Zhumaliyeva, Urishbay Chomanov, Gulmira Kenenbay, Zhomartkyzy Togzhan, and Assem Boribay Spice Herb Extracts and Powders Enhance Sensory Quality of Beef Meatballs
17.15-17.30	17.00-17.15
Ilkay Buran Physicochemical Characterization and Investigation of the Functional Properties of Saffron (<i>Crocus sativus</i> L.) By-products (Petals and Stamens)	Yagmur Kucukduman, Gonca Bilge Ozel Monitoring Food Manufacturing Through Real-Time Spectroscopic Fingerprinting for Early-Stage Identification of Defects
17.30-17.45	17.15-17.30
Ece Surek Valorization of Agricultural Wastes into Antioxidant Oligosaccharides with Prebiotic Properties: Current Trends, Production Strategies, and Future Perspectives	Elif Nur Peksenar Kutlu, Tuna Surmeli Bilir, Ceren Elmaci, Serdar Marasli Validation of a Robust LC-MS/MS Method for Quantification of Acrylamide in Multiple Food Matrices
17.45-18.00	17.30-17.45
Birsen Basak Adamoglu Vitamins in Foods: Bioavailability, Interactions, and Processing Effects	H. Goknur Agca Kucukaydin, Merve Usal, Hatice Sanlidere Aloglu Effect of Chia Seeds (<i>Salvia hispanica</i> L.) on the Physicochemical and Functional Properties of Whey-Based Pudding

SESSION XI	SESSION XII
Chair: Prof. Sencer Buzrul Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	Chair: Prof. Sibel Uzuner Davutpasa Congress Center - Green Hall
10.15-10.30	10.15-10.30
Melisa Arslan, Fatma Yanik, Omer Faruk Unsal, Mahmut Ekrem Parlak, Furkan Turker Saricaoglu Ammonia Sensitivity of Boron-Doped Carbon Nanodots and Intelligent Food Packaging Applications	Necattin Cihat Icyer Investigation of Sunflower-Derived Phospholipid Fractions as Sustainable Emulsifiers in Ice Cream: Effects on Microstructure, Rheology, and Stability
10.30-10.45	10.30-10.45
Ainaz Alizadeh, Perihan Kubra Akman, Arezou Habibzadeh Khiabani, Omer Said Toker Influence of Camellia Oil–Beeswax Oleogel on the Film-Forming and Functional Properties of Zein–Modified Starch Biocomposite Film	Hande Koksall, Sibel Bolek Physicochemical, Antioxidant and Sensory Characteristics of Crackers Enriched with <i>Piper longum</i>
10.45-11.00	10.45-11.00
Sinem Argun, Ozge Tastan Ulku Synthesis and Characterization of Carbon Quantum Dots from Food Byproducts: Sensing and Packaging Applications	Kadir Yavuz, Dilek Dulger Altner Food Neophobia from a Neurogastronomy Perspective: Sensory Perception and Acceptance of Novel Foods
11.00-11.15	11.00-11.15
Merve Canpolat, Osman Sagdic Preparation of Apricot Kernel Shell-Based Composite Raw Material for Food Packaging Production	Hulya Balci, Duygu Ozmen, Omer Said Toker Effect of Oil and Emulsifier Ratio on the Rheological and Structural Properties of Culinary Creams
11.15-11.30	11.15-11.30
Fatma Yanik, Melisa Arslan, Mahmut Ekrem Parlak, Furkan Turker Saricaoglu Tuning the Crystal Size of Food-Grade NaCD-MOFs via PEG Modulation	Ruhan Askin Uzel, Fahri Yemiscioglu Palm Oil as a Source of Sustainable Nutritive Solution for Food Industry

SESSION XIII Chair: Prof. Anida Yusoff Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	SESSION XIV Chair: Assoc. Prof. Ozge Kahraman Ilkkan Davutpasa Congress Center– Green Hall
11.45-12.00 Ilay Yilmaz, Sukran Asgin Uzun, Mahmud Ekrem Parlak, Abdullah Kurt, Furkan Turker Saricaoglu Rheological and Textural Properties of Lentil Protein Fractions under GDL-Induced Cold-Set Gelation 12.00-12.15 Merve Aydin, Sara Ibrahim Hussein Abdallah Physicochemical and Technological Properties of Recovered Proteins from Green Lentil, Chickpea and Bean Aquafabas using Isoelectric Precipitation Method 12.15-12.30 Kamile Bayrak Akay, Bulent Basyigit, Mehmet Karaaslan Investigating the Utilization of Lupin Protein Isolate as a Replacement for Egg Yolk in Mayonnaise Formulation 12.30-12.45 Nur Karaca, Sevda Dere, Enes Dertli, Hale Inci Ozturk Ultrasound and Fermentation-Induced Modification of Aquafaba: Physicochemical, Structural, and Technological Characterization 12.45-13.00 Yusuf Cakmakci, Cihat Guner, Recep Kara, Hakan Basdogan Development of High-Protein Noodle Formulations Using Wheat Germ and Evaluation of Their Technological Properties	11.45-12.00 Büsra Akdeniz Oktay, Elif Turabi Yolacaner Niosomal Delivery of Betalain-Rich Cactus Pear (<i>Opuntia ficus-indica</i>) Peel Extract: From By-Product to Functional Ingredient 12.00-12.15 Nur Farizan Mohd Fauzi, Ainaa Nadia Zainudin, Nur Faqihah Abdullah, Nur Syazana Izzati Norazami, So'bah Ahmad, Adi Md Sikin, Adeliza Dorado Development and Functional Quality Assessment of Black Tea-Like Beverage from <i>Syzygium samarangense</i> leaves 12.15-12.30 Gizem Mergen Duymaz, Cansu Torol Hidiroglu, Tugce Dastan, Sinem Raday, Ozge Erdem, Emel Damarh Sensory Attributes, Phenolic Content, and Antibacterial Potential of Functional Lozenges Enriched with Honey, Propolis and Herbal Ingredients 12.30-12.45 Leyla Eren, Pelin Dolek Ekinci Physicochemical and Bioactive Properties of Extracts from the Fortuna Barley Cultivar Germinated under Different Temperature and Time Conditions 12.45-13.00 Elif Seyma Bagdat, Nuriye Gul Deniz, Betul Yorulmaz Development of a Sustainable Plant-Based Synbiotic Ice Cream: Use of <i>Lactiplantibacillus plantarum</i> 299v and Psyllium

SESSION XV Chair: Assoc. Prof. Hale Inci Ozturk Davutpasa Congress Center - Prof. Dr. Ferruh Erturk Hall	SESSION XVI Chair: Assoc. Prof. Rusen Metin Yildirim Davutpasa Congress Center - Green Hall
13.30-13.45 Filiz Saman Yazici, Mustafa Yaman, Osman Sagdic Development of Energy-Efficient Cooking Process in Cakes: Effects on Maillard Reaction Products and In Vitro Digestion 13.45-14.00 Fulya Harp Celik Sustainable Algal Lipids and Their Industrial Applications 14.00-14.15 Ayşe Nur Yilmaz, Fazilet Midik Insects in Sustainable Gastronomy and Food Science Approaches 14.15-14.30 Arezou Habibzaddeh Effect of Replacing Animal Fat with Oleogel as an Innovative Strategy on Fatty Acid Composition, Technological, Oxidative, and Sensory properties of hamburgers	13.30-13.45 Gul Vatansever, Burcu Demirtas, Fatma Yanik, Ayşe Neslihan Dunder, Oya Irmak Cebeci, Furkan Turker Saricaoglu Incorporation of Pomegranate Peel Extract Enhances Total Phenolic Content and Antioxidant Capacity in Bigel-Based Systems 13.45-14.00 Ayşe Nur Bulut Gunes, Fatih Bozkurt, Osman Sagdic Xylo-Oligosaccharide Production from Corncob 14.00-14.15 Damla Bayana The Effect of UV-C LED-Assisted Drying in a Custom-Designed Module on the Antioxidant Activity of Myrtle (<i>Myrtus communis</i> L.) Leaves 14.15-14.30 Ipek Bayrakci, Tugba Aktar Sustainable Valorization of Passion Fruit (<i>Passiflora edulis</i> f. <i>edulis</i>) Waste: Comparative Extraction Methods and Comprehensive Pectin Characterization