



IFIS 2026



YTU
YILDIZ TECHNICAL
UNIVERSITY

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 GOBBETTI 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 SARICA OGLU 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 ERİS 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



IFIS 2026



YTU
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2nd DAY

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

08.00 - 09.00

REGISTRATION

Prof. Ferruh ERDOGDU

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



IFIS 2026



YTU
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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.**

SESSION I

Chair: Prof. Tamara Aleksandrak Piekarczyk
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk 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

11.55-12.10

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

12.10-12.25

Halide Yildirim, Esmaeil Ghanbari Shendi
Precision Fermentation as a Sustainable Food Innovation: Integrating Smart Technologies for Future Nutrition

12.25-12.40

Huseyin Erten
Microbiota of Lactic Acid Bacteria in Milk Kefir Produced from Goat, Cow, and Sheep-Derived Grains

12.40-12.55

Suzan Tireki
Evaluation of Peanut and Pistachio Shells in Kombucha Fermentation

SESSION II

Chair: Prof. Nevzat Konar
Davutpasa Congress Center -
Green Hall

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

Nilgun Basak Tecer, Derya Kahveci Karıncaoglu, Simel Bagder Elmaci
Blockchain-Enabled Traceability of Grape-Derived Products in Sustainable Supply Chains: A Strategic Perspective

12.10-12.25

Ibrahim Sani Ozdemir
From Research to Impact: TÜGİP as an Infrastructure for Food Innovation

12.25-12.40

Gonul Silav Tuzlu, Mehmet Nafiz Aydin, Sahin Aydin, Arif Selcuk Ogrenci, 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

Sahin Aydin, Gulsum Cigdem Cavdaroglu
A Data-Driven and GIS-Based Optimization Framework for Sustainable Honey Production and Food Systems

SESSION III

Chair: Prof. Raffaella Di Cagno
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk Hall

16.45-17.00

Tamara Aleksandrak-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

17.00-17.15

Ozum Ozoglu, Sevda Jafari Aghdam, Berfin Gulay Guler, Aytekin Uzunoglu
Two-dimensional (2D) Borophene-Based Electrochemical Biosensor for Foodborne *Escherichia coli* Detection

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

17.30-17.45

Sefa Isik
Effect of Hydrogen Peroxide Application on Pathogen Inhibition in Hydroponic Nutrient Solution

17.45-18.00

Fatma Beyza Ozpınar, 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

SESSION IV

Chair: Prof. Senem Kamiloglu Bestepe
Davutpasa Congress Center -
Green Hall

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 (*Ocimum basilicum* L.)

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

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

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

Abdussamet Aydin, Lale Karataylioglu, Kubra Ozkan, Cagla Ozer, Hamit Koksel
Effect of Einkorn and Emmer Flours on Quality Attributes of Beypazari Kuru, a Traditional Geographical Indication Product

SESSION V

Chair: Prof. Figen Korel
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk Hall

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

12.15-12.30

Emine Asik Canbaz

Impact of Indirect Pulsed Electric Field Application on Chlorophyll Extraction and Physicochemical Properties of Cauliflower Leaf Powder

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

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

SESSION VI

Chair: Prof. Sercan Karav
Davutpasa Congress Center -
Green Hall

12.00-12.15

Merve Elmal, Umit Yildiz

Innovation and Sustainability at Golf Dondurma

12.15-12.30

Yusuf Cakmakci, Hakan Basdogan

Explainable Artificial Intelligence Applications In Predicting The Degradation Of Frying Oils Used In Noodle Production

12.30-12.45

Kayhan Irmak

Current R&D Supports/Incentives In The Food Sector

12.45-13.00

Eda Senu, 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

Chair: Prof. Salih Karasu
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk Hall

15.15-15.30

Muhammed Fidan, Ali Caner Celik, Serdar Marasli

Unveiling Environmental Hotspots in the Snack Industry: A Comprehensive Life Cycle Assessment Review

15.30-15.45

Aida Daei, Cassandra Hayward, Hessem Jahangiri, Mukesh Goel, Hongwei Zhang

Evaluating Low-Carbon Technologies in Food Production: Comparative Case Studies from the UK

15.45-16.00

Samiye Akin Adal

From Energy Quality to Environmental Impact: Integrated Exergy-LCA Analysis in Food Processing

16.00-16.15

Cassandra Hayward, Aida Daei, Hessem Jahangiri, Mukesh Goel, Hongwei Zhang

From Data to Practice: Quantifying Water Use in Food and Drink Manufacturing Facilities in the United Kingdom

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

SESSION VIII

Chair: Assoc. Prof. İlyas Atalar
Davutpasa Congress Center -
Green Hall

15.15-15.30

Nur Azzahrah Amir, Anida Yusoff, Fadhilah Jailani

The Optimisation of Protein Extraction and Functional Properties of Mung Bean (*Vigna Radiata* L.), Pea (*Pisum Sativum* L.) and Winged Bean (*Psophocarpus Tetragonolobus* (L.) Dc.) Proteins

15.30-15.45

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

İlayda 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

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

Seyma Kesgin, Necati Pehlivan, Sukran Asgin Uzun, Mahmut Ekrem Parlak, Furkan Turker Saricaoglu

Structure-Function Modulation of Hazelnut Meal Protein Isolate by High-Pressure Homogenization

IFIS 2026: 2nd Day

8 May 2026, Friday

16.45-18.00: IX&X. Oral Presentation Sessions

SESSION IX

Chair: Prof. Pasquale Filannino
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk Hall

16.45-17.00

Fahriye Seyma Ozcan

Purification of Inulin from *Inula helenium* L.: Effects of Different Adsorbents on Product Quality and Yield

17.00-17.15

Busra Cetinkaya, Yekta Goksungur

Optimization of Bacterial Cellulose Production from Waste Bread

17.15-17.30

Ilkay Buran

Physicochemical Characterization and Investigation of the Functional Properties of Saffron (*Crocus sativus* L.) By-products (Petals and Stamens)

17.30-17.45

Ece Surek

Valorization of Agricultural Wastes into Antioxidant Oligosaccharides with Prebiotic Properties: Current Trends, Production Strategies, and Future Perspectives

17.45-18.00

Birsen Basak Adamoglu

Minerals in Foods: Bioavailability, Interactions, and Processing Effects

SESSION X

Chair: Asst. Prof. Ozge Tastan Ulku
Davutpasa Congress Center -
Green Hall

16.45-17.00

Gulzhan Zhumaliyeva, Urishbay Chomanov, Gulmira Kenenbay, Zhomartkyzy Togzhan, and Assem Boribay

Spice Herb Extracts and Powders Enhance Sensory Quality of Beef Meatballs

17.00-17.15

Yagmur Kucukduman, Gonca Bilge Ozel

Monitoring Food Manufacturing Through Real-Time Spectroscopic Fingerprinting for Early-Stage Identification of Defects

17.15-17.30

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

17.30-17.45

H. Goknur Agca Kucukaydin, Merve Usal, Hatice Sanlidere Aoglu

Effect of Chia Seeds (*Salvia hispanica* L.) on the Physicochemical and Functional Properties of Whey-Based Pudding

IFIS 2026: 3rd Day

9 May 2026, Saturday

10.15-11.30: XI&XII. Oral Presentation Sessions

SESSION XI

Chair: Prof. Sencer Buzrul
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk Hall

10.15-10.30

Melisa Arslan, Fatma Yanik, Omer Faruk Unsal, Mahmut Ekrem Parlak, Furkan Turker Saricaoğlu

Ammonia Sensitivity of Boron-Doped Carbon Nanodots and Intelligent Food Packaging Applications

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

10.45-11.00

Sinem Argun, Ozge Tastan Ulku

Synthesis and Characterization of Carbon Quantum Dots from Food Byproducts: Sensing and Packaging Applications

11.00-11.15

Merve Canpolat, Osman Sagdic

Preparation of Apricot Kernel Shell-Based Composite Raw Material for Food Packaging Production

11.15-11.30

Fatma Yanik, Melisa Arslan, Mahmut Ekrem Parlak, Furkan Turker Saricaoğlu

Tuning the Crystal Size of Food-Grade NaCD-MOFs via PEG Modulation

SESSION XII

Chair: Prof. Sibel Uzuner
Davutpasa Congress Center -
Green Hall

10.15-10.30

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

Hande Koksall, Sibel Bolek

Physicochemical, Antioxidant and Sensory Characteristics of Crackers Enriched with *Piper longum*

10.45-11.00

Kadir Yavuz, Dilek Dulger Altner

Food Neophobia from a Neurogastronomy Perspective: Sensory Perception and Acceptance of Novel Foods

11.00-11.15

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

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

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

SESSION XIV

Chair: Assoc. Prof. Rusen Metin Yildirim
Davutpasa Congress Center-
Green Hall

11.45-12.00

Büsra Akdeniz Oktay, Elif Turabi Yolacaner
 Niosomal Delivery of Betalain-Rich Cactus Pear (*Opuntia ficus-indica*) 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 *Syzygium samarangense* leaves

12.15-12.30

Gizem Mergen Duymaz, Cansu Torol Hidroglu, 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 *Lactiplantibacillus plantarum* 299v and Psyllium

SESSION XV

Chair: Assoc. Prof. Hale Inci Ozturk
Davutpasa Congress Center -
Prof. Dr. Ferruh Erturk 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

SESSION XVI

Chair: Assoc. Prof. Ozge Kahraman Ihkkan
Davutpasa Congress Center -
Green Hall

13.30-13.45

Gul Vatanserver, 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 (*Myrtus communis* L.) Leaves

14.15-14.30

Ipek Bayrakci, Tugba Aktar
 Sustainable Valorization of Passion Fruit (*Passiflora edulis* f. *edulis*) Waste: Comparative Extraction Methods and Comprehensive Pectin Characterization