



8th EURASIA WASTE MANAGEMENT SYMPOSIUM

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Cappadocia, Turkiye / 26-28 October 2026

PROGRAM BOOK

ORGANIZED BY



PREFACE

On behalf of the Organizing Committee, it is our great pleasure to welcome you to the 8th EurAsia Waste Management Symposium (EWMS 2026), held in the historic and breathtaking region of Cappadocia, Türkiye, from October 26 to 28, 2026.

Over the past decades, solid waste and resource management have transitioned from conventional disposal paradigms into holistic, interdisciplinary frameworks central to global sustainable development. Today, humanity faces unprecedented challenges such as the urgent imperatives of climate change mitigation, raw material security, emerging contaminants such as microplastics and PFAS, and the complex transformation towards circular economies. Addressing these challenges requires profound collaboration between academia, municipal authorities, industrial leaders, and policymakers.

The 8th EurAsia Waste Management Symposium serves as a comprehensive bridge between theoretical scientific innovation and practical engineering implementation. The technical program covers a broad spectrum of critical themes, including municipal solid waste management, advanced thermal and biological processes, industrial effluent and leachate treatment, biochar synthesis and valorization, circular construction materials, life cycle assessment, and digital/AI-driven environmental governance.

With more than 120 oral and poster presentations delivered by researchers, engineers, and experts from across the globe, alongside insightful keynote addresses by internationally acclaimed scholars, this gathering offers a vibrant platform for exchanging ideas, establishing multidisciplinary partnerships, and charting future directions for environmental stewardship. We express our sincere appreciation to the keynote speakers, authors, and session chairs for their outstanding scientific contributions. We also extend our profound gratitude to our partner institutions, sponsoring organizations, and supporting staff whose commitment and enthusiasm made this symposium possible.

Beyond the rich scientific discourse, we hope your stay in Cappadocia provides memorable moments. We hope this symposium foster fruitful discussions, long-lasting collaborations, and impactful solutions for a cleaner, resilient, and more sustainable world.

Sincerely,

Prof. Dr. Mehmet Sinan Bilgili
On Behalf of the Symposium Organizing Committee

PROGRAM

26.10.2026 MONDAY

MAIN HALL

Opening Program

08:30 REGISTRATION

Opening Ceremony

- 10:00 *Prof. Dr. Ahmet Demir*
Rector of Uşak University
Honorary Chair of the EurAsia Waste Management Symposium
- 10:15 *Fatih Uğur*
General Manager of ISTAC Inc.
- 10:30 *Prof. Dr. Rainer Stegmann*
Honorary Member of International Waste Working Group (IWWG)
- 10:45 *Prof. Dr. Raffaello Cossu*
President of International Research Association on Circular Economy (IRACE)

Session 1: Keynote Presentations

Session Chair: Prof. Dr. Tanju Karanfil

- 11:00 102_Keynote - Lights and Shadows in Circular Economy
R. Cossu
- 11:30 105_Keynote - Machine Learning-Based Intelligent Waste Identification and Incineration Emission Prediction
H. Zhang
- 12:00 106_Keynote - Toward a Safe Circular Economy: Understanding and Managing Micropollutants in Sewage Sludge
F. D. Sanin
- 12:30 121_Keynote - Enhancing Resource Recovery from Food Waste: Black Soldier Fly Larvae Bioconversion of Post-Hydrolyzed Food Waste into Biodiesel and Protein
S. Babel
- 13:00 LUNCH

PROGRAM

26.10.2026 MONDAY

HALL 1

Session 2-A : Municipal Solid Waste Management

Session Chair: Prof. Dr. Rainer Stegmann

- 14:00 036_The Use of a Digital Behavior Indicator to Predict Yard Waste Collection
K. T. Wai Ng
- 14:15 055_Electrification of Rotopress Waste Transfer Vehicles: A Novel Zero-Emission and Energy-Efficient Approach for Sustainable Waste Management
D. Temizel, H. A. Makineci, A. İ. Atasoy, M. Gencosmanoğulları, M. F. Peker, F. Hoşoğlu
- 14:30 029_A Comparative Environmental LCA of Landfill-mined Soil-like Fractions Management Scenarios
V. S. N. S. Goli, A. Nalladiyil
- 14:45 091_Deployment and Process Optimization of an RDF Plant
M. Farah Mohamed, N. Doğan Sağlamtimur, M. Peker
- 15:00 117_Life Cycle Assessment-Based Evaluation of Integrated Municipal Solid Waste-to-Energy Strategies: A Metropolitan Case for Sustainable Resource Recovery and Circular Economy Transition
A. Çetinkaya
- 15:15 173_Beyond Scenario Ranking - An Integrated Diagnostic Framework for Circular Municipal Solid Waste Management: Environmental Mechanisms, Implementation Feasibility, Water Circularity and Dynamic Nexus Behavior
O. Letaif, A. Acquaye, M. El Fadel
- 15:30 COFFEE BREAK

PROGRAM

26.10.2026 MONDAY

HALL 2

Session 2-B : Agricultural & Organic Waste Valorization and Biomaterials

Session Chair: Prof. Dr. İpek İmamoğlu

- 14:00 028_Biochar–Earthworm–Microbiome Mechanistic Integration in Vermicomposting System for Efficient Valorization of Organic Waste in Türkiye
Z. G. Gebrehana, Y. Avşar
- 14:15 035_Bacterial Biofertilizers: A Sustainable Pathway Towards Organic Agriculture
M. A. Dar, E. Koca Akkaya, R. Fahim
- 14:30 053_Factors Affecting Oil Yield of Traditional Pili Pulp Oil Extraction Process in Sorsogon: A Material Flow Analysis
F. Baleta, M. A. Miciano, L. C. Viviezca, D. J. Tenorio, G. Espeña
- 14:45 059_Investigation of the Feasibility of Using Carbon-Based Material Produced from Pomegranate Peel Waste as an Anode
P. Ahlimanova, M. Ozturk, A. Ozkan, M. Banar
- 15:00 082_Hydrothermal Pretreatment of Olive Pomace: Evaluation of Solubilization Dynamics in Autogenous and Pressure-Controlled Batch Reactors
Z. Arıcı, A. B. Aslan, N. Kara, A. Çağlak, H. Sarı Erkan, J. Qiu, F. Lü, P. He, M. S. Bilgili
- 15:15 149_Membrane-Assisted Anaerobic Chain Elongation as a Sustainable Feedstock Platform for Bioplastics Production
F. Hajimoradloo, H. Yeşil
- 15:30 COFFEE BREAK

PROGRAM

26.10.2026 MONDAY

HALL 3

Session 2-C : Biochar Applications, Adsorption, and Hazardous Waste Immobilization

Session Chair: Prof. Dr. Şehnaz Şule Kaplan Bekaroğlu

- 14:00 043_ Investigation of Heavy Metal Adsorption Potential of Activated Carbons Derived from Zonguldak Armutçuk Coals
F. Alp, G. Sarıhan, İ. Toroğlu, S. Yılmaz, M. Bilen
- 14:15 090_ Valorization of Sewage Sludge Gasification Biochar for the Adsorptive Removal of Acid Blue 25 from Aqueous Solutions
K. Licht, D. Nakić, H. Posavčić, E. Sirotić, T. Ajduk, M. Cvetnić
- 14:30 187_ Wastewater-to-Hydrogen Valorization Using MOF/Quantum-Dot Photocatalysts: A Critical Review of Material Design, Reaction Mechanisms and Reactor Scale-Up
M. Qasim, G. Dalgıç Bozyiğit
- 14:45 130_ Waste-to-Resource Approach for Mercury Remediation: Development of a Reduced Functionalized Whole Pine Needle Adsorbent
S. Ranote, O. Sarti, G. S. Chauhan, M. S. Bilgili
- 15:00 143_ Cement-Based Solidification/Stabilization of Mercury-Saturated Zeolites – A Sustainable Approach to Hazardous Waste Management
M. Ugrina, A. Jurić, M. Knezović, D. Barbir, I. Nuić
- 15:15 045_ Artificial Intelligence and Machine Learning Approaches for the Recovery of Rare Earth and Critical Elements from Industrial Waste
B. Büyükdeğirmenci, G. Sarıhan, M. Bilen
- 15:30 COFFEE BREAK

PROGRAM

26.10.2026 MONDAY

HALL 1

Session 3-A : Microplastics and Emerging Contaminants

Session Chair: Prof. Dr. Damia Barcelo

- 16:00 024_Effects of Ionic Strength and Ion Composition on PFAS Adsorption onto Microplastics: Roles of Polymer Type, PFAS Structure, and Environmental Factors
H. Yildirim, S. S. Kaplan Bekaroglu, M. Kitis, T. Karanfil
- 16:15 060_Deep Learning Based Evaluation of Microplastic Aging Using SEM Imagery
E. Pamuk, A. Aksoy, İ. İmamoğlu
- 16:30 061_BPA Release and Anaerobic Digestion Performance of Disintegrated WAS in the Presence of Polycarbonate Microplastics
F. D. Sanin, İ. Ayça
- 16:45 064_Influence of Microplastic Dose and Polymer Crystallinity on the Fate and Effects of Microplastics During the Anaerobic Digestion of Wastewater Sludge
A. Rajput, F. Sanin
- 17:00 113_PFOS as a Hazardous Waste-Derived Contaminant in Apicultural Systems: Dynamic Transfer from Environmental Sources to Honeybee Colonies and Honey
S. Sanin, T. K. Koçak, Ö. Sak, İ. Kılıçaslan, B.Terzierol
- 17:15 163_Transformation of Microplastics into Value-Added Chemicals via Photoreforming: Current Status and Future Perspectives
Z. Yücesoy, F. Noyan Tekeli, A. Kantürk Figen
- 17:30 180_Microplastic Release during the Preprocessing Stage of Plastic Recycling in Thailand
A. Phongphiphat, N. Phutthivanit, A. Kenprom, S. Towprayoon

19:00 GALA DINNER (URANOS SARIKAYA RESTAURANT, CAPPADOCIA)

PROGRAM

26.10.2026 MONDAY

HALL 2

Session 3-B : Anaerobic Digestion and Waste-to-Energy Systems

Session Chair: Prof. Dr. Hua Zhang

- 16:00 015_Modularisation as a Game Changer for Waste-to-Energy
A. Hoffmann, B. Englebert
- 16:15 039_Assessment of the Biomethane Potential of Oregano Harvest Waste and Distillation Pomace within the Context of the Circular Economy
N. B. Bitrak, G. Kurtoglu Akkaya
- 16:30 085_An Extraordinary Methane Booster: Balanced Microbiome, Trace Metals and Enzymes Favour for Stable Enhanced Digester Performance
U.Tezel, S. Teksoy Basaran, A. Sungu, G. Capan, A. Capan, M. S. Basaran, B. A. Pak
- 16:45 145_Biogas Production in Anaerobic Digestion Systems: Digestate Derived Biochar as a Functional Additive
M. E. İncedere Demir, E. Koca Akkaya
- 17:00 152_Kinetic Assessment of Enhancement Strategies for the Valorization of Chicken Manure into Biohydrogen
İ. Konar, R. Kunayeva, Y. D. Yilmazel
- 17:15 157_Enhanced Hydrolysis Kinetics in Microbial Electrolysis Cell-Assisted Anaerobic Digestion (MEC-AD) Systems
A. M. Altigani, Y. Yilmazel
- 17:30 178_Enhanced Biomethane Recovery from Cow Manure Using Anaerobic Digestion-Microbial Electrolysis Cell (AD-MEC) Systems Under Increasing Organic Loading
M. U. Abbas, Y. D. Yilmazel

19:00 GALA DINNER (URANOS SARIKAYA RESTAURANT, CAPPADOCIA)

PROGRAM

26.10.2026 MONDAY

HALL 3

Session 3-C : Nutrient Recovery and Nitrogen Removal

Session Chair: Prof. Dr. Sandhya Babel

- 16:00 033_High-Efficiency Removal of Nitrogen in Low C/N Wastewater Using a 3D-BER System: Mechanisms, Pathways and Microbial Community
M. Hassan, E. Debik, N. Manav Demir, K. Ulucan Altuntas
- 16:15 076_Nitrogen Recovery from Ammonium-Rich Industrial Wastewaters via Ammonia Stripping Process
R. S. Taşkın, N. Semerci, E. Şahinkaya
- 16:30 083_Long-Term Treatment Performance of Waste Plastic Carriers in Anammox Reactors
Y. Öztürk, D. Akgül
- 16:45 111_Evaluation of Municipal Wastewater Treated in an Upflow Anaerobic Sludge Blanket Microfiltration Osmotic Membrane Bioreactor as Irrigation Water
İ. Yalcin Guney, G. Yılmaz, Z. B. Özçelep, Y. Kaya, S. Hasanoğlu, İ. Vergili
- 17:00 148_Sludge Reduction and Nutrient Removal in OSA-Based Hybrid Biological Processes: Current Approaches and New Perspectives for MBMBR Systems
Ç. Kalkan Aktan, E. Şahinkaya
- 17:15 165_Advancing Sustainable Waste Management Through DIRAMMOX: A Novel Direct Ammonia Oxidation Process for Organic-Rich Waste Streams
D. Y. Batur, G. Y. Karademir, H. Pınar, B. Kocamemi
- 17:30 166_Closing the Nitrogen Loop in Sludge Treatment: Enhancing Anammox Performance for Anaerobic Digester Centrate through DNRA
L. G. Çetinbaş, S. Yavuzarslan, F. S. Topçu, D. Y. Batur, S. Çelik, B. Kocamemi

PROGRAM

27.10.2026 TUESDAY

MAIN HALL

Session 4: Keynote Presentations

Session Chair: Prof. Dr. Raffaello Cossu

- 09:30 101_Keynote - Ecological Waste Management and Waste Minimization
R. Stegmann
- 10:00 103_Keynote - Microwave Irradiation Effectively Regenerates Granular Activated Carbons
T. Karanfil
- 10:30 104_Keynote - Analysis, Fate and Removal of Per- and Polyfluoroalkyl Substances (PFAS) in the Global Aquatic Environment: Perspectives and Combined Risks with Microplastics
D. Barceló
- 11:00 182_Keynote - Nature-Based Solutions as Living Infrastructure for Climate-Resilient Cities: Evidence, Barriers and Pathways
M. Babel
- 11:30 COFFEE BREAK

09:30 - 17:30 POSTER PRESENTATIONS (FOYER AREA)

PROGRAM

27.10.2026 TUESDAY

HALL 1

Session 5-A : Sewage Sludge Management

Session Chair: Prof. Dr. Ayşe Filibeli

- 12:00 116_Valorization of Waste Activated Sludge Through Paper Production
A. Avcı, S. Övez
- 12:15 141_Biological Stability as an Indicator of Odour Emissions in Sewage Sludge: A Monitoring Study in Lombardy (Northern Italy)
P. De Nisi, M. Dell'Orto, M. Ceriani, F. Barone, M. Parmigiani, M. Gamba, E. Casaletta, A. Giordano, F. Adani
- 12:30 154_Optimization of Struvite Crystallization from Cattle Manure Digestate in a Fluidized-Bed Reactor
I. Yetik, S. N. Köse, M. Canbulat Özdemir, Y. D. Yilmazel
- 12:45 161_Transforming Wastewater Sludge into Renewable Energy: Conventional Versus A-Process
S. Çelik, B. Kocamemi, E. Erken, D. Y. Batur, F. Hajimoradloo, H. Yeşil
- 13:00 LUNCH

PROGRAM

27.10.2026 TUESDAY

HALL 2

Session 5-B : Environmental Governance and Digital Tools in Waste Management

Session Chair: Prof. Dr. Hanife Sarı Erkan

- 12:00 133_A Holistic-Integrated Local Governance Model for the Protection of the Marmara Sea Ecosystem: Istanbul Metropolitan Municipality Marine Services Practices and Future Vision
Ö. T. Sezgin, A. Erdinçler, İ. Aslan
- 12:15 174_Beyond Recyclable: A Circular Conference Framework for Waste Prevention and Sustainability Assessment
T. Almoulki, G. Engin, E. Koca Akkaya
- 12:30 181_Machine Learning-Based Flood Susceptibility Assessment of Landfills in Chachoengsao, Thailand
A. Phongphiphat, M. M. Kamara, T. Limpiti, A. Chidthaisong, A. Limsakul, S. Towprayoon
- 12:45 186_Water Footprint and Digital Efficiency Assessment in Industrial Cake Production
H. A. Gökçek, E. Sakarya, A. Ünlü
- 13:00 LUNCH

PROGRAM

27.10.2026 TUESDAY

HALL 3

Session 5-C : Construction and Demolition Waste and Green Buildings

Session Chair: Prof. Dr. Afşin Yusuf Çetinkaya

- 12:00 026_Assessing Critical Raw Materials in Germany's Building Stock
K. Kippert, C. Böcher, V.S. Rotter
- 12:15 071_Development of an Optimization Model for Sustainable Buildings with Minimum Cost
B. Özel, A. İ. Kayan, A. Aksoy
- 12:30 135_Adoption of the Circular Economy Approach for Construction and Demolition Waste Management
in the Building Production Process
H. Bozkurt, N. Coşgun
- 12:45 147_Chemical and Mineralogical Characterization of Post-Earthquake Controlled Demolition Waste from the 2023
Kahramanmaraş Earthquakes, Türkiye
K. Özçelik, Y. Önal, S. S. Övez, K. E. Maçın, O. A. Arıkan
- 13:00 LUNCH

PROGRAM

27.10.2026 TUESDAY

HALL 1

Session 6-A : E-waste and Critical Raw Material Recovery

Session Chair: Prof. Dr. Gülsüm Yılmaz

- 14:00 027_End-of-Life Vehicles and Photovoltaic Panels in Italy: Current Management and Future Possible Improvements
L. Rigamonti, S. Puricelli, G. Brussa, C. Tua, G. Dolci
- 14:15 052_Strategies for the Recovery and Degradation of Liquid Crystal Waste: Subcritical Water Treatment of EDPB
Y. Yıldırım, N. Ruzi, H.S. Zainuddin, N. Sabli, S. Izhar
- 14:30 058_Recovery and Characterization of Surface Coated Metals from Composite-Based Automotive Wastes
M. Öztürk, Ç. Keleş, A. Özdemir, Z. Günkaya, A. Özkan, M. Banar
- 14:45 127_Characterization of Degradation Mechanisms in NCA Lithium-Ion Cylindrical Cells: Toward Optimized Second-Life and Recycling Strategies
A. Barrera, U. Maschke, C. Binet, P. Supiot, C. Vandingenen, F. Soubhie
- 15:00 129_Liquid Crystal Monomers (LCMs): Analysis in Environmental Matrices and Emerging Treatment Technologies
Y. Yildirim
- 15:30 COFFEE BREAK

PROGRAM

27.10.2026 TUESDAY

HALL 2

Session 6-B : Industrial Effluent Treatment and Water Reuse

Session Chair: Prof. Dr. F. Dilek Sanin

- 14:00 032_A Case Study: Sustainable Water, Energy, And Waste Management For A Climate-Resilient Wastewater Treatment Plant
M. Erdoğan, A. Filibeli
- 14:15 019_Microalgae for Wastewater Treatment, CO2 Bio-fixation, and Bioenergy Production: Recent Trends and Cost Analysis
R. Fahim, M. A. Dar, E. Koca Akkaya
- 14:30 068_Integrated Water Demand Assessment and Desalination Potential Evaluation for Sustainable Water Management in Muğla, Türkiye
M. Uygur, E. Yandımata, A. Aksoy
- 14:45 069_Atmospheric Water Harvesting in Muğla, Türkiye: A District-Scale Optimization and Material Options Assessment
B. Bağış, E. Yandımata, A. Aksoy
- 15:00 132_Fate and Environmental Risk of Pharmaceuticals and Their Metabolites in a Full-Scale Wastewater Treatment Plant: Implications for De Facto Agricultural Wastewater Reuse
T. Dolu
- 15:30 COFFEE BREAK

PROGRAM

27.10.2026 TUESDAY

HALL 3

Session 6-C : Decarbonization and Life Cycle Assessment

Session Chair: Prof. Dr. Bilge Kocamemi

- 14:00 107_Carbon Footprint Calculation of a Wood Products Manufacturing Facility
S. Hasanoglu
- 14:15 070_Life Cycle Assessment and Techno-Economic Analysis of Fish Processing Waste Management: Benchmarking Hydrothermal Carbonization Against Landfill, Composting, Pyrolysis, and Anaerobic Digestion
T. Siddhartha, P. Heynderickx, F. Ronsse
- 14:30 139_Decarbonization through Supercritical CO₂ Enhanced Oil Recovery
A. H. Meniai, A. Deghmoum, F. Rahal, M. Louaer, W. Louaer
- 14:45 144_Green Methanol Production from Biogas-Derived CO₂ through the Power-to-Methanol Process
M. E. İncedere Demir, Ç. Aydın, A. Kemirtlek
- 15:00 179_Life Cycle Assessment of Cellulose Based and Commercial Membrane Fabrication Scenarios
U. Yüzendağ, B. Ozdemir, Z. Culfaz, Y. D. Yilmazel
- 15:15 183_Exploring the Relationship Between Raw Material Consumption and Carbon Emissions in Industrial Symbiosis: Implications for Sustainable Waste and Resource Management
B. Altınkaynak, G. S. Daş, T. Göçken, B. Birgören
- 15:30 COFFEE BREAK

PROGRAM

27.10.2026 TUESDAY

HALL 1

Session 7-A : Landfill and Leachate Management

Session Chair: Prof. Dr. Osman Arıkan

- 16:00 046_Integrated Municipal Solid Waste Management in Istanbul: Current Status and Challenges
A. Erdinçler, S. Altındağ, S. Gençoğlu Hesap
- 16:15 122_Comparative Performance Analysis of Municipal Solid Waste Management in European Union Countries
S. Sahinkaya
- 16:30 049_Advancing Leachate Treatment Sustainability: Active Oxygen-Based NF Concentrate Disposal at Kömürcüoda Leachate
F. Çoker, H. A. Makineci, A. İ. Atasoy, M. Gençosmanoğulları, M. F. Peker, F. Hoşoğlu
- 16:45 075_Towards Zero Landfill: Waste Management and Valorization Strategies on Corvo Island
H. Pacheco, M. Silva, O. Rocha
- 17:00 088_Cost Analysis of the Construction and Operation of a Sanitary Landfill: The Denizli Tavas Case Study
R. Değirmenci, R. G. Yılmaz Çinçin, Y. Çinçin, O. N. Ağdağ
- 17:15 089_Fate of Soluble Microbial Products During the Biological Treatment Process of Waste Leachate by a Novel Flux Model
J. Qiu, F. Lü, H. Zhang, M. S. Bilgili, P. He
- 17:30 153_GIS-Based and Field-Validated Framework for Post-Disaster Demolition Waste Landfill Site Selection: A Case Study of the 2023 Türkiye Earthquakes
A. T. Çetinkaya, K. Özçelik, H. Güven, M. Altıbaş, Y. Mahmutoğlu, M. Y. Bıyık, M. O. Mete, O. A. Arıkan
- 17:45 164_Monitoring Biogas Leakages in Landfills: An Integrated Approach Using Remote Sensing and UAVs
S. Yalçinkaya, E. E. Tepeciklioğlu

PROGRAM

27.10.2026 TUESDAY

HALL 2

Session 7-B : Industrial Wastes in Sustainable Construction Materials

Session Chair: Prof. Dr. Yılmaz Yıldırım

- 16:00 017_Engineering Autoclaved Aerated Concrete Using Ladle Furnace Slag: Sustainable Replacement of Key Components
P. Kumari, H. A. Salih, N. Al Amoodi, L. Vega
- 16:15 131_Accelerated Carbonation Pretreatment of Municipal Solid Waste Incineration Fly Ash and Its Valorization with Bottom Ash in Alkali-Activated Materials
O. Sarti, S. Ranote, J. Nouairi, M. S. Bilgili
- 16:30 044_V valorization of Basic Oxygen Furnace Slag Through Alkali Activation and Geopolymer Binder Design
C. Tuz, S. Yılmaz, G. Sarıhan, H. Duru, T. Günter, M. Bilen
- 16:45 065_Integrated LCA–LCC Assessment of BOF Slag in Flexible Asphalt Pavements: A Case Study from Türkiye
A. Jaradat, E. Özkök
- 17:00 079_From Agricultural Waste to Sustainable Building Materials: A Circular Economy Perspective With Case Studies from Asia, Europe, and Africa
N. Mostafa, A. Bahraq, B. Salami
- 17:15 118_ Investigation of the Potential Use of Waste Fly Ash in Sustainable Ceramic Glaze Production
E. Kara, Y. Yıldırım
- 17:30 160_Development and Characterization of Zeolite- and Bentonite-Based Ceramic Waste Forms for Strontium Immobilization
N. Yanıkömer, S. Akyıl Erentürk

PROGRAM

27.10.2026 TUESDAY

HALL 3

Session 7-C : Circular Economy and Environmental Policy Frameworks

Session Chair: Prof. Dr. Mukand Babel

- 16:00 030_Linking Circular Economy, Sustainable Supply Chains, and Life Cycle Assessment for Improved Waste Management
G. Karaca, N. Büyükkamacı
- 16:15 038_Incentive Mechanisms in Green Transformation
S. Göksülük, A. B. Tümer
- 16:30 051_Science, Technology, and Innovation for Circular Economy (STI4CE): A Policy Framework for Sustainable and Inclusive Development in the Philippines
F. Baleta
- 16:45 136_Compliance with The European Union Green Taxonomy Technical Screening Criteria in the Iron and Steel Industry: an Analysis of the Effects of Energy and Raw Material Transition Scenarios on Emission Thresholds
B. Korkmaz, B. Doğan, Ö. Apaydın
- 17:00 137_Compliance with EU Green Taxonomy Technical Screening Criteria in the Cement Sector: A Comparative Analysis of Production Routes and Low-Carbon Transition Scenarios
D. S. Akar, B. Doğan, Ö. Apaydın
- 17:15 138_Evaluation of Bioenergy-Based Electricity Generation in Türkiye within the Framework of EU Taxonomy Criteria
A. Bıdı, B. Doğan, Ö. Apaydın
- 17:30 155_Europeanization Without Membership: The Impact of the European Green Deal on Regulatory Convergence in Türkiye
O. Kaytan, S. Maden

PROGRAM

27.10.2026 TUESDAY

POSTER PRESENTATIONS (FOYER AREA)

POSTER PRESENTATIONS (27.10.2026 - DURING ALL BREAKS BETWEEN THE SESSIONS)

- P1 011_Solid Waste as a Natural and Cultural Heritage Risk Factor in Valleys of Cappadocia
S. Sahinkaya
- P2 031_Microwave-Assisted Chemical Recycling of PLA-PEAz Copolymers as Sustainable Substrates
for Printed Electronics
N. Bikiaris, R. Loannidis, N. Nikolaidis
- P3 047_Analysis of Waste Generation and Disposal Patterns on A University Campus
V. Ishchenko
- P4 050_Solid-state Fermentation Initiated by *Pleurotus Ostreatus* on Tomato and Cucumber Greenhouse Crop
Residues: Impact on the Nutritional Profile
D. Arapoglou, C. Eliopoulos, I. Kalapothareas, P. Samara, M. Tselios, G. Markou, P. Sourri, A. Liatiri
- P5 054_Aqueous Processing of Wool Fibers as a Route of Pretreatment of Textile Waste for a Successive Management of
Their Waste Volumes
D. Bikiaris, K. Lazaridou, E. Vouvoudi, E. Christodoulou, A. Zamboulis, E. Xanthopoulou
- P6 057_LC HRMS Fingerprinting to Assess Micropollutant Behaviour during Treatment and Reuse
of Landfill Leachate for Crop Irrigation
D. Lambropoulou, L. Koronaiou, P. Parthenidis, E. Evgenidou
- P7 066_Impact of Insufficient Chemicals Management Practices on Exposure to Pesticides
from Affected Aquatic Food Webs
A. İ. Kayan, İ. İmamoğlu
- P8 074_Cumulative Carcinogenic and Non-Carcinogenic Human Health Risk Assessment of Persistent
Organic Pollutants (POPs) via Dietary Intake in Türkiye
E. F. Yağar, İ. İmamoğlu, E. Kentel Erdoğan
- P9 081_Comparative Biomass Production and Biochemical Responses of *Chlorella Vulgaris* and *Tetraselmis*
Suecica in Atyrau Petroleum Refinery Wastewater
H. Kabakçı, B. İnan, A. T. Koçer, D. Balkanlı

PROGRAM

27.10.2026 TUESDAY

POSTER PRESENTATIONS (FOYER AREA)

POSTER PRESENTATIONS (27.10.2026 - DURING ALL BREAKS BETWEEN THE SESSIONS)

- P10 086_Production of Biochar from Shrimp Shell Waste and Evaluation of Adsorption Performance for Methylene Blue Removal
U. B. Arpacı, T. Koç, H. Z. Özpamukcu, Ö. Tapan, G. A. Karaca, B. Karacaoğlu, H. Kabakcı, A. T. Koçer, B. İnan, D. Balkanlı
- P11 087_Cultivation of Phormidium sp. in Wastewater and Evaluation of Biomass and Phycocyanin Production
H. Z. Özpamukcu, Ö. Tapan, G. A. Karaca, B. Karacaoğlu, H. Kabakcı, A. T. Koçer, B. İnan, D. Balkanlı
- P12 092_Degradation of Benzotriazole in Water and Leachates by Various AOPs
D. A. Lambropoulou, A. Rapti, E. Evgenidou, D. Bikiaris
- P13 109_The Optimization of Conditions for CO₂ Sequestration Using Olivine.
S. Karahan, Z. B. Gürgün, M. C. Gökhanoglu, İ. Yalçın Güney, G. Yılmaz, İ. Vergili, Y. Kaya, F. Şişman Tükel, Z. B. Özçelep
- P14 110_Evaluation of the Effect of Pervious Concrete on Stormwater Quality Using Column Studies
R. Y. Altinkilic, N. E. Bayram, M. S. Karakas, L. Tepici, B. Sevim, İ. Yalcin Guney, M. C. Kazezyilmaz Alhan, İ. Vergili
- P15 112_The Effect of Boron and Chromium on the Treatment of Municipal Wastewater Using an Upflow Anaerobic Sludge Blanket Microfiltration Osmotic Membrane Bioreactor
İ. Yalçın Güney, G. Yılmaz, İ. Vergili, Z. B. Özçelep, K. İ. Gezer, S. Dursun, S. Hasanoğlu, Y. Kaya
- P16 114_Integrated Simulation-Based Design and Economic Analysis of an Industrial Wastewater Treatment Plant for Albanian Oil Refinery Effluents
I. Malollari, L. Liçi, S. Makolli, L. Rapaj, J. Llupa
- P17 115_Evaluation of Feldspar as a Mineral for CO₂ Sequestration
İ. S. Beyreli, D. Sari, R. Sahin, G. Yılmaz, İ. Vergili, Y. Kaya, Z. B. Gönder, F. Şişman Tükel, İ. Yalçın Güney
- P18 119_Simple Mathematical Model for Simulating Nitrogen Uptake by Microalgae in Municipal Wastewater
B. S. Özgür, H. Z. Özpamukcu, Ö. Tapan, H. Kabakcı, G. A. Karaca, B. Karacaoğlu, A. T. Koçer, D. Balkanlı, B. İnan
- P19 128_Recycling Hazardous Electronic Plastics via UV-Visible Irradiation: Toward a Circular Economy
A. Barrera, U. Maschke, F. Z. Boubarka, W. Larbi, M. Bouhent, Z. Boubarka, J. N. Staelens, R. Bitar, I. De Schrijver, P. Supiot
- P20 150_Waste Plastic Management and Climate Impact: Scenario-Based Carbon Reduction Potential in the Retail Sector
E. H. Akkaya, Z. Horoz, H. Yeşil

PROGRAM

27.10.2026 TUESDAY

POSTER PRESENTATIONS (FOYER AREA)

POSTER PRESENTATIONS (27.10.2026 - DURING ALL BREAKS BETWEEN THE SESSIONS)

- P21 151_Selection of Biomass Waste for Biochar Production In Wastewater Treatment Using the Analytical Hierarchy Process
F. B. Turan Ekrem, N. Bektaş
- P22 159_Sustainable Electrocoagulation Pretreatment for Dairy Wastewater : Process Optimization and Pollutant Removal
M. Bouteraa, R. Zamouche Zerdazi, H. Boukebbous, A. Bourbia, A. Ayache, A. H. Derdiche, A. Boutaghane, M. Bencheikh Lehocine
- P23 162_Supercritical Water Oxidation (SCWO) : A Reliable Waste Treatment Technique
N. Benmakhlouf, I. Houcinat, N. Outili, A. H. Meniai, S. Arris
- P24 168_Ammonia Production from Casein: Effects of Temperature, HRT, and Substrate Concentration
M. Makian, M. Mohit, A. A. Joolaei, D. H. Kim
- P25 175_Dielectric Barrier Discharge Plasma for Amoxicillin Degradation: Kinetics, Performance, and Mineralization
I. Ahmadli, M. Chala, A. D. Altinay, N. Boudrahem-Boualit, M. Saleem, K. Ulucan Altuntas
- P26 177_The Circularity–Contamination Dilemma of PFAS-Containing Textile Waste: A Literature-Based Perspective on End-of-Life Management
A. S. Aydin, M. İ. Aydin, K. Ulucan Altuntas
- P27 184_Comparative Evaluation of Peroxymonosulfate and Hydrogen Peroxide Activation by Transition Metals for the Degradation of Reactive Azo Dyes
Y. Çobanoğlu, H. C. Yatmaz
- P28 185_High-Efficiency Treatment and Energy Recovery from Dairy Industry Wastewater Using Chemically Assisted DAF
H. A. Gökçek

28.10.2026 WEDNESDAY

09:30 HALF-DAY CAPPADOCIA CULTURAL TOUR (REQUIRES ONSITE REGISTRATION)



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