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5th INTERNATIONAL WORLD ENERGY CONFERENCE

12-13 / DECEMBER / 2025 / KAYSERİ / TÜRKİYE

IN-PERSON SESSIONS



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-OPENING CEREMONY-

DATE: 12.12.2025 / TSI TIME-10⁰⁰ : 10³⁰
VENUE: FACULTY OF ENGINEERING, ERCIYES UNIVERSITY
(F BLOK KONFERANS SALONU)
Moderator: Assist. Prof. Saltuk Buğra SELÇUKLU

Prof. Dr. Mustafa Serdar GENÇ

Erciyes University, Faculty of Engineering, Department of Energy Systems Engineering
HEAD OF CONFERENCE

Serdal KARA

Deputy Chairman of the Kayseri Branch of the Chamber of Mechanical Engineers

Dr. Mustafa Latif EMEK

President of IKSAD Institute

Prof. Dr. Fatih ALTUN

Rector of Erciyes University

- PANEL SESSION-

DATE: 12.12.2025 / TSI TIME-10³⁰ : 12⁰⁰
VENUE: FACULTY OF ENGINEERING, ERCIYES UNIVERSITY
(F BLOK KONFERANS SALONU)
Moderator: Prof. Dr. Gamze GENÇ

Emrah Berat BİRSEN

Türkiye Enerji, Nükleer ve Maden Araştırma Kurumu Radyoaktif Atık Yönetimi Koordinatörü
"TENMAK ve Fırsatları"

Prof. Dr. Recep ULUCAK

Erciyes Üniversitesi, İktisadi ve İdari Bilimler Fakültesi
"İklim Değişikliğinin Ekonomik Etkileri"

Adem ÖZDEMİR

RHG Enertürk Enerji Mühendislik ve Teknik Destek Müdürü
"Net-Sıfır Yolculuğunda Sürdürülebilirlik Uygulamaları"

Participant Countries: Albania, Algeria, Azerbaijan, Bangladesh, China, France, Georgia, India, Indonesia, Iran, Iraq, Italy, Kosovo, Lithuania, Malaysia, Morocco, Nigeria, Norway, Poland, Saudi Arabia, Somalia, Spain, Tunisia, Türkiye, UK, USA, Vietnam

12.12.2025 / In-person Session-1 / TSI Time-14⁰⁰:16³⁰



Venue: Erciyes University, Faculty of Engineering



HEAD OF SESSION: Assist. Prof. Dr. Halil HAKAN AÇIKEL

Authors	Affiliation	Presentation title
Assist. Prof. Dr. Duygu Yiğit Ünlü	Aksaray University, Türkiye	USE OF LED LIGHTING SYSTEMS IN CANNABIS CULTIVATION: AN ASSESSMENT OF SPECTRAL CHARACTERISTICS AND EFFICIENCY
Ahmet GÜL Ayşe SAYIN Hasip TUNA Mehmet SAĞER Özlem AYDOĞDU	Pamukkale University, Türkiye Lupamat Makina Sanayii A.Ş., Türkiye	ENERGY EFFICIENCY AND EMISSION PERFORMANCE OF SINGLE- AND TWO-STAGE INDUSTRIAL SCREW COMPRESSORS
Assoc. Prof. Dr. Ahmet AKSOZ Emrah BEYZO	Kayseri University, Türkiye	DESIGN OF A 48VDC AND ADJUSTABLE 105A BATTERY CHARGER USING A THREE-PHASE MAINS INPUT
Assoc. Prof. Dr. Ahmet AKSÖZ Bekir DURSUN	Kayseri University, Türkiye	ENERGY MANAGEMENT IN HYBRID AC/DC MICROGRIDS BASED ON PV, BATTERY, AND GENERATOR: EMS CONTROL ALGORITHM AND OPTIMIZATION
Mehtap ÖZTÜRK Osman Cudi ÇOŞKUN Melih KOYUNCU Salih Buğra ASLAN Assoc. Prof. Dr. Ahmet AKSÖZ	Kayseri University, Türkiye	DEVELOPING SUSTAINABLE E-MOBILITY INFRASTRUCTURE FOR DISABLED INDIVIDUALS WITH PIEZOELECTRIC-BASED ENERGY HARVESTING SYSTEMS

12.12.2025 / In-person Session-2 / TSI Time-14⁰⁰:16³⁰



Venue: Erciyes University, Faculty of Engineering



HEAD OF SESSION: Prof. Dr. Gamze GENÇ

Authors	Affiliation	Presentation title
M.Burak SERT Mert Osman HANİLCİ Bengisu YAVUZ İrem TEKDEN Prof. Dr. Mustafa Serdar GENÇ	Erciyes University, Türkiye	SIGNIFICANCE OF GEOGRAPHICAL CONDITIONS IN THE MICRO-SITING OF WIND ENERGY SYSTEMS
Res. Assist. Dr. Melih MANIR Prof. Dr. Gamze GENC Prof. Dr. Vagif NEVRUZOGLU Dr. Tugba BAYAZIT	Recep Tayyip Erdogan University, Türkiye Erciyes University, Türkiye	PRODUCTION AND INVESTIGATION OF CU AND Cu-Au PLASMONIC NANOPARTICLES WITH AN INNOVATIVE METHOD
Res. Assist. Dr. Melih MANIR Prof. Dr. Gamze GENC Yunus Emre KÖSE Prof. Dr. Vagif NEVRUZOGLU Dr. Tugba BAYAZIT Assist. Prof. Dr. Kemal KUVVET	Recep Tayyip Erdogan University, Türkiye Erciyes University, Türkiye	FABRICATION AND INVESTIGATION OF SURFACE PLASMON RESONANCE (SPR)-EFFECTIVE AuNp/n-Si/Al PHOTODEVICE USING CRYOGENIC TECHNIQUE
Assist. Prof. Dr. Muhammed Murat AKSOY Assoc. Prof. Dr. Tahir DURHASAN Assoc. Prof. Dr. Zehan KESILMIS Prof. Dr. Mustafa Serdar GENÇ	Osmaniye Korkut Ata University, Türkiye Adana Alparslan Turkes Science and Technology University, Türkiye Erciyes University, Türkiye	NANOSCALE ENERGY TRANSPORT IN BORON NITRIDE NANOTUBES FOR HYDROGEN STORAGE: FROM CRYOGENIC TO ELEVATED TEMPERATURES
Alparslan BOZKURT Prof. Dr. Mustafa Serdar GENÇ Assist. Prof. Dr. Sertaç Samed SEYİTOĞLU	Erciyes University, Türkiye Hitit University, Türkiye	OPTIMIZATION OF RENEWABLE ENERGY-BASED HYBRID ENERGY SYSTEMS FOR ELECTRIC VEHICLE CHARGING ON EDİRNE-ANKARA HIGHWAYS

12.12.2025 / In-person Session-3 / TSI Time-14⁰⁰:16³⁰



Venue: Erciyes University, Faculty of Engineering



HEAD OF SESSION: Assoc. Prof. Dr. Şükrü Taner AZGIN

Authors	Affiliation	Presentation title
Assoc. Prof. Dr. Asım Mustafa AYTEN Lect. Dr. İbrahim Hakan GÖVER	Abdullah Gül University, Türkiye	UNIVERSITY STUDENTS' ENVIRONMENTAL AWARENESS AND ENERGY-SAVING BEHAVIORS: AN ANALYSIS ON UN SDG-BASED COURSES
Assoc. Prof. Dr. Eyyüp Ensari ŞAHİN Assoc. Prof. Dr. Gürçem ÖZAYTÜRK Assist. Prof. Dr. Ayyüce MEMİŞ KARATAŞ	Niğde Ömer Halisdemir University, Türkiye	ENERGY PRICING PROJECTIONS WITH A HYBRID MODEL: ANALYSIS OF GLOBAL AND REGIONAL DYNAMICS
Assist. Prof. Dr. Feryade TOKAN ŞENOL Assoc. Prof. Dr. Seçil ÖZAY	Yeditepe University, Türkiye Marmara University, Türkiye	USE OF SOURCES AND FRAMING TENDENCIES IN ENERGY NEWS IN TURKEY
Dr. Serhat BİLGİN Dr. Ebubekir YAŞAR Dr. Mithat ŞİMŞEK Dr. Nurullah GÜLTEKİN	Tokat Gaziosmanpasa University, Türkiye	BIOCHAR PRODUCTION FROM WASTE SLUDGE USING PYROLYSIS TECHNOLOGY: CARBON SEQUESTRATION, CERTIFICATION, AND MULTI-SECTOR APPLICATIONS
Res. Assist. Muhammed HATEM Prof. Dr. Mustafa Serdar GENÇ	Erciyes University, Türkiye	NUMERICAL INVESTIGATION OF AXIAL COMPRESSORS USED IN COMPRESSED AIR ENERGY STORAGE SYSTEMS
Prof. Dr. Arzu AL Dr. Mustafa Latif EMEK	Marmara University, Türkiye IKSAD Institute, Türkiye	THE ENERGY-DEVELOPMENT RELATIONSHIP POLICY SHIFTS AND GLOBAL IMPACT WITHIN THE FRAMEWORK OF THE FIRST TRUMP TERM (2017-2021)

12.12.2025 / In-person Session-4 / TSI Time-14⁰⁰:16³⁰



Venue: Erciyes University, Faculty of Engineering



HEAD OF SESSION: Prof. Dr. Mustafa Serdar GENÇ

Authors	Affiliation	Presentation title
Res. Assist. Oğuz Kaan ÇİNiCi Prof. Dr. Adem ACIR	Gazi University, Türkiye	NUMERICAL INVESTIGATION OF FIN DIAMETER EFFECT ON THERMAL-HYDRAULIC PERFORMANCE IN PRISMATIC LiFePO ₄ BATTERIES
Prof. Dr. Ercan KARAKÖSE Serhat AKKUŞ	Kayseri University, Türkiye	APPLICATION OF ZnO NANOSTRUCTURES IN AMMONIA (NH ₃) GAS SENSORS
Abdirisak Mohamed Abdillahi Assoc. Prof. Dr. Savaş BAYRAM	African Institute for Multidisciplinary Studies, Somalia Erciyes University, Türkiye	SPATIAL INEQUALITIES IN HOUSEHOLD ENERGY ACCESS ACROSS URBAN, RURAL, AND NOMADIC SETTLEMENTS IN SOMALILAND
Eren Anıl SEZER Eylül ÖNAL Prof. Dr. Mustafa Serdar GENÇ	Erciyes University, Türkiye	EFFECT OF THE LENGTH OF THE SETTLING CHAMBER ON FLOW QUALITY IN BLOWN TUNNEL DESIGN
Nazlı NUR Res. Assist. Sinem KESKİN Prof. Dr. Mustafa Serdar GENÇ	Erciyes University, Türkiye	BOUNDARY-LAYER AND VELOCITY PROFILE ANALYSIS ON A CAMBERED NACA AIRFOIL VIA HOT-WIRE MEASUREMENTS
Eda YILDIZ Res. Assist. Sinem KESKİN Prof. Dr. Mustafa Serdar GENÇ	Erciyes University, Türkiye	DETAILED INVESTIGATION OF THE SEPARATION BUBBLE OVER AIRFOILS WITH TIME-DEPENDENT PRESSURE DATA

12.12.2025 / In-person Session-5 / TSI Time-14⁰⁰:16³⁰



Venue: Erciyes University, Faculty of Engineering



HEAD OF SESSION: Assist. Prof. Saltuk Buğra SELÇUKLU

Authors	Affiliation	Presentation title
Edanur KILIÇ Assist. Prof. Dr. Erhan MUĞALOĞLU	Erciyes University, Türkiye	THE IMPACT OF CARBON PRICING ON ENERGY TRANSITION AND ECONOMIC ACTIVITY: FRANCE AND GERMANY
Dilay SAĞDIÇ	Turkish Electricity Transmission Corporation, Türkiye Ankara University, Türkiye	EVALUATION OF LEGAL CHALLENGES IN CRYPTO CURRENCY TRANSACTIONS IN THE CONTEXT OF ENERGY CONSUMPTION
Sevde ERTÜRK ÇETİNKAYA Assoc. Prof. Dr. Muhammet ÇELİK Prof. Dr. Gamze GENÇ	Erciyes University, Türkiye Aksaray University, Türkiye	COMPARATIVE ECONOMIC ANALYSIS OF OPERATIONAL STRATEGIES FOR BIOGAS-PV-WIND HYBRID SYSTEMS
Aiman Yousef Al Hard Res. Assist. Seda Nur BOZKURT Prof. Dr. Gamze GENÇ	Erciyes University, Türkiye	OPTIMIZING SOLAR ENERGY FORECASTING USING ADVANCED MACHINE LEARNING IN YEMEN
Assoc. Prof. Dr. Ebubekir İNAN Assoc. Prof. Dr. Ahmet AKSÖZ	Kayseri University, Türkiye	PROXIMITY-AWARE EXPLAINABILITY LAYER FOR ENERGY SYSTEM MODELS: A CONCEPTUAL FRAMEWORK
Assoc. Prof. Dr. Ebubekir İNAN Assoc. Prof. Dr. Ahmet AKSÖZ	Kayseri University, Türkiye	PROXIMITY-BASED RESILIENCE MAPPING FOR ENERGY INFRASTRUCTURES: A CONCEPTUAL FRAMEWORK
Yağmur ŞAN Prof. Dr. Ercan ŞENYİĞİT	Erciyes University, Türkiye	ANALYZING AND FORECASTING TURKEY'S RENEWABLE ENERGY EFFICIENCY IN THE WORLD VIA DBSCAN CLUSTERING AND FTS FORECASTING