

**Day 1**  
**(July 3)**

METU-CCC / Hall A

METU-CCC / Hall B

8:30

REGISTRATION

**9:00 OPENING SESSION**

**CURRENT PANORAMA OF SOLAR ENERGY UTILIZATION IN THE WORLD AND TÜRKİYE & INNOVATIVE TRENDS IN PHOTOVOLTAIC CELL TECHNOLOGIES**  
(Session Chair: Serap GÜNES (ODTÜ-GÜNAM & Yıldız Technical University, Türkiye))

09:00 – 09:10 **Welcome Speeches**

Serap GÜNES (Chair) (Yıldız Technical University, Türkiye)  
Rasit TURAN (Co-chair) (METU & ODTÜ-GÜNAM, Türkiye)

09:10 – 09:25 **Opening Speech**

A. Bugrahan KARAVELİ (Chairman of the Executive Board and President of TENMAK, Türkiye)  
**The Role of Solar in Energy Transition of Türkiye**

09:25 – 09:40 **Opening Speech**

TO BE CONFIRMED (Republic of Türkiye Ministry of Industry and Technology)

09:40 – 10:10 **Plenary Speaker**

Michael GRAETZEL (EPFL, Switzerland)  
**Molecular Photovoltaics and The Stunning Rise of Perovskite Solar Cells**

10:10 – 10:40 **Plenary Speaker**

Rolf BRENDEL (ISFH, Germany)  
**Contact Selectivity Guiding the ISFH-Roadmap for Crystalline Si Photovoltaics**

10:40 - 11:00

BREAK

**11:00 SESSION - 2.1**

**RECENT DEVELOPMENTS IN TOPCon CELL TECHNOLOGY**  
(Session Chairs:  
Rasit TURAN (ODTÜ-GÜNAM & METU, Türkiye),  
Hisham NASSER (ODTÜ-GÜNAM, Türkiye))

**SESSION - 2.2**

**SOCIOECONOMIC ASPECTS OF SOLAR ENERGY UTILIZATION AND APPLICATIONS - I**  
(Session Chairs:  
Ramazan SARI (Technical University of Denmark, Denmark),  
İpek GÜRSEL DİNO (ODTÜ-GÜNAM & METU, Türkiye))

11:00 - 11:15 **Invited Speaker**

Marc HOFMANN (Fraunhofer ISE, Germany)  
**TOPCon Solar Cell Technology: Status and Perspective at Fraunhofer ISE - I**

Elif Dilek YILMAZ (METU, Türkiye)

**How Does License-Exempt Solar Excess Electricity Generation Affect Türkiye's Economic Growth?**

11:15 - 11:30 **Invited Speaker**

Marc HOFMANN (Fraunhofer ISE, Germany)  
**TOPCon Solar Cell Technology: Status and Perspective at Fraunhofer ISE - II**

İbrahim TOKGÖZ (Marmara University, Türkiye)

**Optimizing Photovoltaic Lifecycle Management: A Comparative Study of Business Models**

11:30 - 11:45 Berkay UYGUN (ODTÜ-GÜNAM, Türkiye)

**Local p+ Poly-Si Passivating Contacts Realized by Direct FlexTrail Printing of Boron Ink and Selective Alkaline Etching for High Efficiency TOPCon Based Solar Cells**

Ömer Faruk TUNÇBİLEK (TENMAK / Clean Energy Research Institute, Ankara, Türkiye)

**Socioeconomic Aspects of Solar PV Applications: Example of Ankara Province Ayaş District**

11:45 - 12:00 Gökhan ALTINER (ODTÜ-GÜNAM, Türkiye)

**Development Of Hydrogenated Aluminum-Doped Zinc Oxide Recombination Junction Enabling Superior Passivation Of Bottom Cell With Front TOPCon For Silicon/Perovskite Tandem Devices: Towards Indium-Free Recombination Junction**

Pınar DERİN GÜRE (METU, Türkiye)

**Semi-Transparent Photovoltaic Windows in Türkiye: Exploring Stakeholder Perspectives on Opportunities and Barriers**

12:00 - 12:15 Damian Brunner (RENA Technologies, Germany)

**Comprehensive Analysis and Process Optimization for Wet-Chemical Alkaline Edge Isolation for Industrial TOPCon Solar Cells**

Samed PEKDEMİR (Uludağ Elektrik Dağıtım, Türkiye)

**Empowering PV-Integrated Energy Communities through Digitalization: Insights from the Masterpiece Project**

12:15 - 12:30 Eni MUKA (ODTÜ-GÜNAM, Türkiye)

**Simulation of TOPerc Bottom Structures for Perovskite/Silicon Tandem Solar Cells using QUOKKA3**

Mehrdad Hajian ZEİDY (Eastern Mediterranean University, Turkish Republic of Northern Cyprus)

**Evaluation of the Quality Components of the Urban Environment and their Influence on Citizen's Satisfaction by Use of Photovoltaic Systems for the Location of Gazimağusa / North Cyprus**

12:30 - 12:45

Besim Can ZİRH (METU, Türkiye)

**A Case Study in Turkey (Akhisar): Opportunities and Constraints in the Transition to Solar Energy Transition**

12:45 - 14:00

LUNCH BREAK

**Day 1**  
**(July 3)**

**METU-CCC / Hall A**

**METU-CCC / Hall B**

**14:00 SESSION - 3.1**

**RECENT DEVELOPMENTS IN HETEROJUNCTION CELL TECHNOLOGY**  
(Session Chair: *Marc HOFMANN* (Fraunhofer ISE, Germany))

**14:00 - 14:30 Invited Speaker**

*Kaining DING* (Forschungszentrum Jülich, Germany)  
**What is New in Silicon Heterojunction Solar Technology 2023/2024?**

**14:30 - 15:00 Invited Speaker**

*Lang ZHOU* (Nanchang University, PRC)  
**Potentials of HWCVD as a Lower Cost Alternative for HJT Cell Production**

**15:00 - 15:15 Büsra ALTINSOY** (ODTÜ-GÜNAM, Türkiye)

**Intrinsic Amorphous Silicon Bilayers for Surface Passivation in Silicon Heterojunction Solar Cells**

**15:15 - 15:30 Furkan GÜÇLÜER** (Niğde Ömer Halisdemir University, Türkiye)

**Investigating the Impact of MZO-IZO Bilayer Transparent Conductive Films on the Performance of c-Si Heterojunction Solar Cells**

**SESSION - 3.2**

**"SOLARHUB" SPECIAL SESSION: SHOWCASE OF FIVE ECOSYSTEMS**  
(Session Chair: *Hande ERYILMAZ*)

[Please click HERE for the session program](#)

**15:30 - 15:45**

**BREAK**

**15:45 SESSION - 4.1**

**LARGE-SCALE PV MANUFACTURING**  
(Session Chairs:  
*Raymond de MUNNIK* (Enerctics Pte. Ltd., Singapore),  
*Kaining DING* (Forschungszentrum Jülich, Germany))

**15:45 - 16:00 Invited Speaker**

*Vincent LAU* (Jolywood, PRC)  
**Study on Efficiency Improvement Technology of Industrial Manufacturing for Jolywood-  
TOPCon Solar Cell**

**16:00 - 16:15 Invited Speaker**

*Jichun YE* (Ningbo Institute of Material Technology and Engineering, PRC)  
**Recent Progress of TOPCon Solar Cell Technology in China**

**16:15 - 16:30 Xinrui AN** (JTPV, PRC)

**High Efficiency Cell Technology of JTPV**

**16:30 - 16:45 Dilara SUBASI** (Fraunhofer ISE, Germany)

**Improved Solar Cell Factory Design with increasing Equipment Throughput**

**16:45 - 17:00 Homer CHEN** (S.C New Energy Technology Corporation, PRC)

**Key Points of Advanced Turnkey High-Efficiency Mass Production Line of Different Solar Cells**

**17:00 - 17:15 Josua STUCKELBERGER** (LAPLACE Renewable Energy Technology Co. Ltd., PRC)

**Advances in Turn-key Solutions for High-Efficiency TOPCon Cells**

**17:15 - 17:30 Yuelong HUANG** (Wuxi Songyu Technology Co. Ltd., PRC)

**High Efficiency Solar Cell Turnkey Line Solution**

**SESSION - 4.2**

**SOCIOECONOMIC ASPECTS OF SOLAR ENERGY UTILIZATION AND APPLICATIONS - II**  
(Session Chairs:  
*Erkan ERDİL* (METU, Türkiye),  
*Pınar DERİN GÜRE* (ODTÜ-GÜNAM & METU, Türkiye))

**Invited Speaker**

*Ramazan SARI* (Technical University of Denmark, Denmark)  
**The Social Acceptability of New Technologies in Shaping Energy Policy - I**

**Invited Speaker**

*Ramazan SARI* (Technical University of Denmark, Denmark)  
**The Social Acceptability of New Technologies in Shaping Energy Policy - II**

*Furkan TÜZÜN* (Social Sciences University of Ankara, Türkiye)

**Drivers and Challenges of Solar Photovoltaics Adoption by Turkish Manufacturers**

*Esin YAZICI* (METU, Türkiye)

**Socio-economic Impact Assessment of Solar PV Technology in Türkiye**

*Tayfun HIZ* (ODTÜ-GÜNAM, Türkiye)

**Managing End-of-Life Photovoltaic Panels: A Comparative Analysis of National Policies and Regulations**

*Yelda ERDEN TOPAL* (METU, Türkiye)

**The Evolution of Turkish Solar Energy Research Network in Three Periods**

*Ezgi IPEK* (Industrial Development Bank of Türkiye, Türkiye)

**Unlocking Türkiye's Solar Potential: A Computable General Equilibrium Analysis**

**17:30 - 19:30**

**WELCOME RECEPTION & POSTER OPENING SESSION**

Day 2  
(July 4)

METU-CCC / Hall A

METU-CCC / Hall B

8:45 **SESSION - 5.1**

**EMERGING PHOTOVOLTAICS - I**

(Session Chair: *Figen VARLIOGLU YAYLALI* (ODTÜ-GÜNAM & METU, Türkiye))

**SESSION - 5.2**

**PV MODULE TECHNOLOGIES AND PERFORMANCE ANALYSIS - I**

(Session Chair: *Duygu KUZUYAKA* (ODTÜ-GÜNAM, Türkiye))

08:45 - 09:00 **Invited Speaker**

*Seçkin AKIN* (Necmettin Erbakan University, Türkiye)

**Breaking Barriers with Cutting-Edge Strategies: Advancing Efficiency and Stability in Perovskite Photovoltaics - I**

*Aksel Kaan ÖZ* (Fraunhofer ISE, Germany)

**Pushing the Boundaries: Optimizing the Lamination Processes for Photovoltaic Modules in New Application Areas**

09:00 - 09:15 **Invited Speaker**

*Seçkin AKIN* (Necmettin Erbakan University, Türkiye)

**Breaking Barriers with Cutting-Edge Strategies: Advancing Efficiency and Stability in Perovskite Photovoltaics - II**

*Refika BUDAKOGLU* (Sisecam, Türkiye)

**Environmentally Sustainable Methodologies for the Extraction of Ethylene Vinyl Acetate (EVA) from PV Panels Dismantled by Hot-Knife Technic**

09:15 - 09:30 **Invited Speaker**

*Henk BOLINK* (University of Valencia, Spain)

**Vacuum Deposited Perovskites For Single Junction And Tandem Solar Cells**

*Meryem Ezgi KARAHALLI* (ODTÜ-GÜNAM, Türkiye)

**Analyzing the Changes in Electrically Conductive Adhesives During the Curing Process for Shingled Solar Cells**

09:30 - 09:45 *Mustafa YASA* (ODTÜ-GÜNAM, Türkiye)

**Novel Patterning Approach for Large-Area Translucent Perovskite Solar Cells for Indoor Applications**

*Abdulkerim GÖK* (Gebze Technical University, Türkiye)

**Toward Sustainable PV Systems: Evaluating Alternative Encapsulant Materials for Enhanced Reliability**

09:45 - 10:00

BREAK

10:00

**SESSION - 6 (PART - I)**

**SPECIAL SESSION:**

**HORIZON EUROPE PROJECTS ON PEROVSKITE-BASED SINGLE, TANDEM AND TRIPLE JUNCTION PV**

(Session Chairs:

*Seçuk YERCI* (ODTÜ-GÜNAM & METU, Türkiye)

*Görkem GÜNBAŞ* (ODTÜ-GÜNAM & METU, Türkiye))

10:00 - 10:15 **Invited Speaker**

*Perrine CARROY* (CEA-INES, France)

**HE Project NEXUS: Overview of the Results Achieved during the 1st Period**

10:15 - 10:30 **Invited Speaker**

*Hisham NASSER* (ODTÜ-GÜNAM, Türkiye)

**NEXUS Hybrid PERC/TOPCon Bottom Cell Enabling Ag-Free and In-Free Design for Perovskite-Si Tandem Solar Cells**

10:30 - 10:45 **Invited Speaker**

*Jans BOLDING* (SALD B.V., Netherlands)

**Industrially Applicable Spatial Atomic Layer Deposition of Metal Oxides for Perovskite and Tandem Solar Cells**

10:45 - 11:00 **Invited Speaker**

*Jonas SCHÖN* (University of Freiburg, Germany)

**Simulation-Based Structure Optimization of Monolithic Perovskite/Perovskite/Silicon Triple Junction Solar Cells**

11:00 - 11:15 **Invited Speaker**

*Christian Wolff* (EPFL, Switzerland)

**Perovskite/Perovskite/Si Triple Junctions by Solution Processing**

11:15 - 11:30 **Invited Speaker**

*Henk BOLINK* (University of Valencia, Spain)

**Perovskite solar cells with enhanced stability and applicability (VALHALLA)**

11:30 - 11:45

BREAK

Day 2  
(July 4)

METU-CCC / Hall A

METU-CCC / Hall B

11:45

**SESSION - 6 (PART - II)**

**SPECIAL SESSION:**

**HORIZON EUROPE PROJECTS ON PEROVSKITE-BASED SINGLE, TANDEM AND TRIPLE  
JUNCTION PV**

(Session Chairs:

*Selçuk YERCI* (ODTÜ-GÜNAM & METU, Türkiye)

*Görkem GÜNBAS* (ODTÜ-GÜNAM & METU, Türkiye))

11:45 - 12:15 **Q/A & Discussion**

*All the Invited Speakers & Session Participants*

12:15 - 13:15

LUNCH BREAK

Day 2  
(July 4)

METU-CCC / Hall A

METU-CCC / Hall B

13:15 **SESSION - 7.1**

**AGRIVOLTAICS AND METEOROLOGICAL MONITORING FOR PV SYSTEM DESIGN AND APPLICATIONS**

(Session Chair: *Emre DEMIREZEN* (ODTÜ-GÜNAM & METU, Türkiye))

13:15 - 13:30 *Bilge SENTÜRK* (ODTÜ-GÜNAM, Türkiye)

**The Impact of Photovoltaic Panels on the Environment and Yield Parameters in an Open Field Agrivoltaic System: A Case Study in Ayaş, Ankara**

13:30 - 13:45 *Ilhan Bora SERIN* (Seven Sensor Solutions, Türkiye)

**Meteorological Sensors Selection for PV Plants**

13:45 - 14:00 *Harun GÜMÜS* (Ege University, Türkiye)

**Multidimensional Assessment of Agrivoltaic System Potential in Turkey**

14:00 - 14:15 *Ömer YALÇIN* (ODTÜ-GÜNAM, Türkiye)

**Agrivoltaic System Design for Sugar Beets and Wheat in Central Anatolia**

**SESSION - 7.2**

**PV MODULE TECHNOLOGIES AND PERFORMANCE ANALYSIS - II & POWER ELECTRONICS FOR PV APPLICATIONS - I**

(Session Chair: *Aksel Kaan ÖZ* (Fraunhofer ISE, Germany))

*Rıdvan ÇELİK* (ODTÜ-GÜNAM, Türkiye)

**Glare Effect Assessment for the Highway, Circular Road Junction, and Airport in the Mardin Region**

*Zeynep CANTÜRK* (ODTÜ-GÜNAM, Türkiye)

**Comparison of Panel Glass Surface Texturing for Anti-reflective and Anti-soiling Properties by Three Methods: RIE, MACE and LIPSS**

*Batuhan Mert LAÇINKAYA* (Robsys Robotic Systems, Türkiye)

**Techniques and Trends in Photovoltaic Panel Cleaning for Sustainable Solar Energy**

*Özgür Arda KÜÇÜKASLAN* (ODTÜ-GÜNAM, Türkiye)

**A Situational Awareness and Decision Support Tool for Power Systems with High rPV Penetration**

14:15 - 14:30

BREAK

14:30

**SESSION - 8**  
**SPECIAL SESSION:**  
**PERC'ÜN VARISI KİM?**  
**(IF PERC IS DYING, WHO IS THE HEIR?)**  
**(in Turkish)**

(Session Chair: *Rasit TURAN* (ODTÜ-GÜNAM & METU, Türkiye))

14:30- 14:45 **Invited Speaker**

*Tarik SARVAN* (CW Enerji, Türkiye)

14:45- 15:00 **Invited Speaker**

*Halil DEMİRDAG* (Smart Solar, Türkiye)

15:00- 15:15 **Invited Speaker**

*Dr. Fırat ES* (MEM Solar, Türkiye)

15:15- 15:30 **Invited Speaker**

*Assoc. Prof. Dr. Selçuk YERCI* (METU & ODTÜ-GÜNAM, Türkiye)

15:30 - 15:45 **Q/A & Discussion**

*All the Invited Speakers & Session Participants*

15:45 - 16:00

BREAK

Day 2  
(July 4)

METU-CCC / Hall A

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16:00

SESSION - 9

SPECIAL SESSION:

TARIMDA FOTOVOLTAİK SİSTEM TASARIMI VE UYGULAMALARI  
(AGRIVOLTAIC SYSTEM DESIGN AND APPLICATIONS)  
(in Turkish)

(Session Chair: *Bahadır TURHAN* (Solar3GW, Türkiye))

16:00 - 16:15 **Invited Speaker**

*Dr. Murat ERÖZ* (EnerjiSA Üretim, Türkiye)

16:15 - 16:30 **Invited Speaker**

*Yasir HERDEM* (Gumbel Group, Türkiye)

16:30 - 16:45 **Invited Speaker**

*Assoc. Prof. Dr. Talat ÖZDEN* (ODTÜ-GÜNAM & Gümüşane University, Türkiye)

16:30 - 16:45 **Invited Speaker**

*Ramona DAVOUDNEZHAD* (Kalyon PV, Türkiye)

16:45 - 17:00 **Q/A & Discussion**

*All the Invited Speakers & Session Participants*

19:30

GALA DINNER

Day 3  
(July 5)

METU-CCC / Hall A

METU-CCC / Hall B

8:45 **SESSION - 10.1**

**ADVANCED PRODUCTION METHODS FOR SILICON SOLAR CELLS**

(Session Chair: *Veysel ÜNSÜR* (ODTÜ-GÜNAM & Necmettin Erbakan University, Türkiye))

**SESSION - 10.2**

**BUILDING-INTEGRATED PHOTOVOLTAIC TECHNIQUES AND APPLICATIONS**

(Session Chairs:

*Bülent G. AKINOGLU* (ODTÜ-GÜNAM & METU, Türkiye)

*Bilge SENTÜRK* (ODTÜ-GÜNAM & Türkiye))

08:45 - 09:00

**Invited Speaker**

*Sascha SADEWASSER* (INL - International Iberian Nanotechnology Laboratory, Portugal)

**Micro-Structured Semi-Transparent Cu(In,Ga)Se<sub>2</sub> Solar Cells - I**

09:00 - 09:15

**Invited Speaker**

*Sascha SADEWASSER* (INL - International Iberian Nanotechnology Laboratory, Portugal)

**Micro-Structured Semi-Transparent Cu(In,Ga)Se<sub>2</sub> Solar Cells - II**

09:15 - 09:30 *Hüseyin Utkucan KAYACI* (Nanovatif Materials Technologies, Türkiye)

**Water-Based Electrically Conductive Adhesive for PERC-Type Shingled Solar Cells**

*Kerem Çagatay IÇLI* (Sisecam, Türkiye)

**Atmospheric and Online Deposition of Dichroic Filters on Flat Glass by a Pyrolytic Process for BIPV Applications**

09:30 - 09:45 *Nabil KHELIFATI* (CRTSE, Algeria)

**Effect Of The Morphology Of Black Silicon Passivated By Alumina On The Performance Of Interdigitated Back Contact Solar Cells**

*Giray KARTOPU* (Northumbria University, UK)

**Laser Patterned Thin Film Solar Cells for BIPV Applications**

09:45 - 10:00 *Muhammad USMAN* (National Centre for Physics, Pakistan)

**Ion Implantation for High-Efficiency Solar Cells**

*Parisa SHARIF* (ODTÜ-GÜNAM, Türkiye)

**Development of a Photonic Glass-Based Colored Photovoltaic Panel for BIPV Applications Utilizing Metal Oxide Nanoparticles**

10:00 - 10:15 *Mustafa BÜYÜKGÜZEL* (ODTÜ-GÜNAM, Türkiye)

**Formation of Selective Emitter Through Double Diffusion Approach**

*Ahadollah AZAMI* (Cukurova University, Türkiye)

**Building Shape Impact on BIPV Performance with Different PV Module Technologies**

10:15 - 10:30

*Amirhossein KARIMIZADEH* (Eastern Mediterranean University, Turkish Republic of Northern Cyprus)

**A Cost-Benefit Analysis of Photovoltaic Building Facades: A Case Study in Northern Cyprus**

10:30 - 10:45

BREAK

Day 3  
(July 5)

METU-CCC / Hall A

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10:45 **SESSION - 11.1**

**EMERGING PHOTOVOLTAICS - II**

(Session Chairs:

*Seçkin AKIN* (Necmettin Erbakan University, Türkiye),

*Mustafa YASA* (ODTÜ-GÜNAM, Türkiye))

**SESSION - 11.2**

**PV-INTEGRATED HYBRID SYSTEM DESIGN AND TECHNOLOGIES & METEOROLOGY AND SOLAR ENERGY RESOURCE ASSESSMENT - I**

(Session Chairs:

*Onur TAYLAN* (ODTÜ-GÜNAM, Türkiye),

*André AUGUSTO* (Dalarna University, Sweden))

10:45 - 11:00

**Invited Speaker**

*Canan KANDILLI* (Uşak University, Türkiye)

**Potential of the Photovoltaic Thermal Systems for Green Transformation in Industry and Zero Energy Building Applications - I**

11:00 - 11:15

**Invited Speaker**

*Canan KANDILLI* (Uşak University, Türkiye)

**Potential of the Photovoltaic Thermal Systems for Green Transformation in Industry and Zero Energy Building Applications - II**

11:15 - 11:30 *Konstantin TSOI* (ODTÜ-GÜNAM, Türkiye)

**Bayesian Optimization with Experience for Fast Development of Monolithic Tandem Solar Cells: Simulation Case Study**

*Nikolaos I. TSONGIDIS* (CERTH, Greece)

**Sustainable Conversion of Agri-food Waste using HTL Reactor Integrated with Concentrated Solar Energy, Thermal Energy Storage and Solar PV**

11:30 - 11:45 *Zeynep GÖZÜKARA KARABAG* (ODTÜ-GÜNAM, Türkiye)

**Strong Impact of Substituent Position in PEAI-Founded Organic Cations to Enable the Efficient and Durable 3D/2D-Constructed Perovskite Solar Cells**

*Emre İLTER* (Yıldız Technical University, Türkiye)

**Towards Large-Area Luminescent Solar Concentrators: CsPbBr<sub>3</sub> Quantum Dot-Embedded Glass Nanocomposite Integration Strategies**

11:45 - 12:00 *Enrique H. BALAGUERA* (Universidad Rey Juan Carlos, Spain)

**Stabilization Of Current-Voltage Curves In Perovskite Solar Cells**

*Neslihan ÇOLAK GÜNES* (Ege University, Türkiye)

**Enhancing Heat Pump Efficiency through Integrated Photovoltaic Thermal Systems**

12:00 - 12:15 *Sevdiye Basak TURGUT* (Ege University, Türkiye)

**Utilizing a Carbazole-Incorporated Regioisomeric Synthesis Strategy to Design Hole Transporting Materials for Perovskite Solar Cells**

*Ilkim CANLI* (ODTÜ-GÜNAM, Türkiye)

**Rooftop Segmentation Approach with Unclassified Data for PV Potential Estimation**

12:15 - 12:30 *Cihangir KAHVECI* (Yıldız Technical University, Türkiye)

**Investigation Performance and Stability Effect of Natural Antioxidants on the Perovskite Solar Cells**

*Hasan TENLI* (Sakarya University, Türkiye)

**Maximizing Solar Energy Harvesting Efficiency: AI-Based Prediction for PV Panel Systems Positioning**

12:30 - 14:00

LUNCH BREAK



Day 3  
(July 5)

METU-CCC / Hall A

METU-CCC / Hall B

14:00 **SESSION - 12.1**

**EMERGING PHOTOVOLTAICS - III & POWER ELECTRONICS FOR PV APPLICATIONS - II**  
(Session Chairs:  
*Gönül HIZALAN ÖZSOY* (ODTÜ-GÜNAM, Türkiye),  
*Aliyekber KARABAG* (ODTÜ-GÜNAM, Türkiye))

**SESSION - 12.2**

**PV-INTEGRATED HYBRID SYSTEM DESIGN AND TECHNOLOGIES & METEOROLOGY AND SOLAR ENERGY RESOURCE ASSESSMENT - II**  
(Session Chairs:  
*Canan KANDILLI* (Uşak University, Türkiye),  
*Nikolaos I. TSONGIDIS* (CERTH, Greece))

14:00 - 14:15 *Bahri Eren UZUNER* (ODTÜ-GÜNAM, Türkiye)  
**Wide Bandgap Perovskite Solar Module Geometry Optimization by Single-diode Modeling Leading >98% Geometrical Fill Factor >80% Fill Factor**

**Invited Speaker**  
*André AUGUSTO* (Dalarna University, Sweden)  
**Hybrid PV Solutions for Industrial and Household Heating Systems - I**

14:15 - 14:30 *Asma BOUBAKRI* (Cadi Ayyad University, Morocco)  
**Comparative Analysis of Properties of SnS Thin Film Deposited by Electrodeposition and Sol-Gel Spin Coating Techniques**

**Invited Speaker**  
*André AUGUSTO* (Dalarna University, Sweden)  
**Hybrid PV Solutions for Industrial and Household Heating Systems - II**

14:30 - 14:45 *Mehmet Cem SAHINER* (ODTÜ-GÜNAM, Türkiye)  
**Insights into the Recombination Dynamics of Perovskite Solar Cells via Voltage and Photon Flux Dependence of Impedance Response**

*Robert BALOG* (Texas A&M University, Qatar)  
**Nonplanar PV System Application on Water Tower**

14:45 - 15:00 *Duygu AKIN KARA* (Ege University, Türkiye)  
**Formulation and Characterization of New PEDOT:PSS Inks for Inkjet Printed Perovskite Solar Cells**

*Ertugrul ÇUBUK* (ODTÜ-GÜNAM, Türkiye)  
**Cooling Optimization for Concentrating Photovoltaics Modules: A Study of Convective and Radiative Cooling with a Focus on Plate Fin Applications**

15:00 - 15:15 *Cansu EMIR* (Atılım Univ., Türkiye)  
**Boosting Device Efficiency, Exploring Si Nanowire and SnS<sub>2</sub> Thin Film Heterojunctions**

*Berathan YILDIRIM* (Istanbul Energy, Türkiye)  
**Mobile Energy Applications in Mobile Offices**

15:15 - 15:30 *Mrittika PAUL* (Indian Institute of Technology, India)  
**Comparative Analysis of Properties of SnS Thin Film Deposited by Electrodeposition and Sol-Gel Spin Coating Techniques**

*Mahmut S. BÜKER* (Necmettin Erbakan University & SOLİMPEKS Solar, Türkiye)  
**Investigation of the Effect of a New Absorber Plate Design on Hybrid PV/T Collector Performance**

15:30 - 15:45 *M. Mustafa ÇODUR* (ODTÜ-GÜNAM, Türkiye)  
**Optimizing Transparent Conductive Oxide Thickness for Perovskite Solar Cells Under Indoor Illumination**

*Ismail Mekkaoui ALAOUJ* (Cadi Ayyad University, Morocco)  
**Hybrid Water Pumping as A Complement to the Irrigation System in the Ziz Valley (East of Morocco)**

15:45 - 16:00 *Drici MANAL* (Badji Mokhtar Annaba University, Algeria)  
**Comparison between P&O and Incremental Conductance MPPT Control Strategies for PV**

16:00

CLOSING REMARKS & END OF PVCOn2024  
(Small Foyer)