

Monday, 13 April 2026

9:00 AM - 9:15 AM - Hall B and Online

**Opening Session SilicoNPV 2026**

9:15 AM - 10:30 AM - Hall B and Online

**Session 1: Highlights of Best Ranked Abstracts**

9:15 AM - 9:30 AM **FoilMet®-Interconnect-Shingling: latest results of our silver-, copper-, lead-, solder- and adhesive-free cell interconnection technology for crystalline silicon PV based on laser joined pure aluminum foil** Jan Nekarda<sup>1</sup>. <sup>1</sup>Fraunhofer ISE.

9:30 AM - 9:45 AM **Nanopinhole-Enabled Passivated Contacts: A Possible Alternative to TOPCon** Paul Stradins<sup>1</sup>.

<sup>1</sup>National Renewable Energy Laboratory.

9:45 AM - 10:00 AM **A Silicon-Based Recombination Junction for >31% Efficient TCO-Free Interconnection Perovskite- Silicon Tandem Solar Cells** Julien Hurni<sup>1</sup>. <sup>1</sup>EPFL.

10:00 AM - 10:15 AM **Ultrafast Sub-Cell Current Measurements in Perovskite-Silicon Tandem Solar Cells** Martin C. Schubert<sup>1</sup>.

<sup>1</sup>Fraunhofer Institute for Solar Energy Systems ISE.

10:15 AM - 10:30 AM **Stability of Ga-doped Cz-Si Solar Cells under PV-Module Field conditions** Michael Winter<sup>1</sup>.

<sup>1</sup>Institute for Solar Energy Research Hamelin (ISFH).

10:30 AM - 11:00 AM - Foyer

**Coffee Break**

11:00 AM - 11:30 AM - Hall B and Online

**Keynote Stefan W. Glunz (Fraunhofer ISE)**

11:00 AM - 11:30 AM **Silicon - the main pillar of current and future photovoltaic technology** Stefan W. Glunz<sup>1</sup>. <sup>1</sup>Fraunhofer-ISE.

11:30 AM - 12:30 PM - Hall B and Online

**Session 2: TOPCon-based c-Si 1**

11:30 AM - 11:45 AM **Hydrogen induced J0 degradation and recovery dynamics in poly-Si/SiOx passivating contacts: Moving beyond kinetic models** Aditya Ratnapagol<sup>1,2</sup>. <sup>1</sup>Colorado School of Mines, <sup>2</sup>National Renewable Energy Laboratory.

11:45 AM - 12:00 PM **Development of Boron-Doped Poly-SiCx for TOPCon Solar Cells** Arghavan Salimi<sup>1</sup>. <sup>1</sup>ODTU-GUNAM.

12:00 PM - 12:15 PM **Atomically precise interfacial SiO<sub>x</sub> grown by a novel separate-precursor-pulse PECVD technology for passivating poly-Si on oxide contacts (ONLINE)** Yevgeniya Larionova<sup>1</sup>.

<sup>1</sup>Institute for Solar Energy Research Hamelin/Emmerthal (ISFH), Am Ohrberg 1, 31860 Emmerthal, Germany.

12:15 PM - 12:30 PM **UV degradation in TOPCon solar cells - impacting factors and mitigation strategies** David Bäurle<sup>1</sup>.

<sup>1</sup>ISC Konstanz e.V..

12:30 PM - 1:30 PM - Foyer

**Lunch Break**

1:30 PM - 2:30 PM - Foyer

**Poster Session 1 - On-Site Only**

1:30 PM - 2:30 PM **NF<sub>3</sub> in Silicon Heterojunction Solar Cell Production** Marc Hofmann<sup>1</sup>.

<sup>1</sup>Fraunhofer Institute for Solar Energy Systems (ISE).

1:30 PM - 2:30 PM **Optimization of Sputter Deposition Conditions for Ce-Doped In<sub>2</sub>O<sub>3</sub> Thin Films Targeting Silicon-Based Tandem Solar Cell Application** Yoshio Ohshita<sup>1</sup>. <sup>1</sup>Toyota Technological Institute.

1:30 PM - 2:30 PM **Hydrogenation of thermally induced defects in n-type FZ Si with tunnel oxide passivating contacts** Reyuu Sakakibara<sup>1</sup>, Julien Hurni<sup>2</sup>. <sup>1</sup>EPFL, <sup>2</sup>EFPL.

1:30 PM - 2:30 PM **Investigation of Ag-Free Al-Si Rear Contact Formation for iTOPCon Solar Cells** Melisa Korkmaz Arslan<sup>1</sup>.

<sup>1</sup>ODTÜ GÜNAM (Center for Solar Energy Research and Application), Ankara, Türkiye.

1:30 PM - 2:30 PM **Study of light-induced changes in the optoelectronic quality of Ga-doped silicon wafers** Andrés David Pardo Perdomo<sup>1</sup>. <sup>1</sup>Instituto de Energía Solar, Universidad Politécnica de Madrid.

1:30 PM - 2:30 PM **Reducing Oxygen and Energy Use through Heater Design in CZ Growth** Ece Çamkara<sup>1</sup>.

<sup>1</sup>Kalyon PV Solar Technologies.

1:30 PM - 2:30 PM **Enabling Silicon Solar Cell Technology for Space Radiation Environments through Thickness Optimization and Protective Down-Converting Coatings** Alex Fedoseyev<sup>1</sup>. <sup>1</sup>SSS Optical Technology LLC.

1:30 PM - 2:30 PM **Silver and Indium-Free Half TBC Solar Cell as a Bottom Cell in Tandem Applications** Veysel Unsur<sup>1</sup>.

<sup>1</sup>ODTU-GUNAM.

1:30 PM - 2:30 PM **Techno-Economic Analysis of Solar Cell Manufacturing in Türkiye and Suggested Roadmap** Hande KARAKAN CANKUL<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **The Role of End-of-Life Photovoltaic Panel Management in Achieving the Sustainable Development Goals** Tayfun HIZ<sup>1,2</sup>. <sup>1</sup>ODTÜ-GÜNAM, <sup>2</sup>Middle East Technical University, ESS Program.

1:30 PM - 2:30 PM **Physical Device Simulation of Tunnel Oxide Passivated Contact Rear Emitter (TOPCoRE) solar cell with localized MoOx** Hisham Nasser<sup>1</sup>. <sup>1</sup>Middle East Technical University (METU), Ankara, Turkey.

1:30 PM - 2:30 PM **Innovative Approach for the Industry-Compatible Cu Plating Metallization of Silicon Heterojunction Solar Cells** Bülent ARIKAN<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **Developing Sub-micron Pyramidal Texturing Approach on Large Area for Next-Generation Perovskite/Silicon Tandem Cells** İrem Nur Manaz<sup>1</sup>. <sup>1</sup>ODTU GUNAM.

1:30 PM - 2:30 PM **Tailoring Poly-Si Passivating Contacts for Mitigating Current Mismatch Problem for 2T Perovskite/TOPCon2 Tandem Solar Cells** Yiğit Mert Kaplan<sup>1</sup>. <sup>1</sup>ODTU-GUNAM, Middle East Technical University, Ankara, Çankaya, Türkiye.

1:30 PM - 2:30 PM **Contact Optimization of TOPCon Solar Cells Using Halogen Lamp and Reverse Current** Tunçer Deniz Kurttekin<sup>1</sup>. <sup>1</sup>ODTÜ GÜNAM.

1:30 PM - 2:30 PM **Picosecond Laser Processing for Poly-Finger Formation in TOPCon Solar Cells** Shojaa Abusakha<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **Enhanced Light Trapping in Black Silicon: Comparative Study of Scalable Hybrid NaOH and H2SO4 Chemical Etching and Inductively Coupled Plasma Reactive Ion Etching (ICP-RIE)** Aleena Nadeem<sup>1,2</sup>.

<sup>1</sup>Micro and Nanotechnology, Graduate Program of Natural and Applied Sciences, Middle East Technical University (METU), Ankara, Turkey,

<sup>2</sup>METU GUNAM.

1:30 PM - 2:30 PM **Development of a fabrication technology for ultra-thin n-type silicon solar cells** Álvaro Briones<sup>1</sup>, Mario Cruz<sup>1</sup>.

<sup>1</sup>Institute of Microelectronic Technology.

2:30 PM - 2:45 PM - Foyer

**Short Break**

2:45 PM - 3:15 PM - Hall B and Online

**Keynote Jichun Ye (NIMTE)**

2:45 PM - 3:15 PM **The status and trends of TOPCon solar cells in China (ONLINE)** Jichun Ye<sup>1</sup>.

<sup>1</sup>NIMTE: Ningbo Institute of Materials Technology and Engineering.

3:15 PM - 4:30 PM - Hall B and Online

**Session 3: TOPCon-based c-Si 2**

3:15 PM - 3:30 PM **Towards 25% interdigitated back-contact solar cells on Ga-doped Cz-Si using a simple industrial process flow (ONLINE)** Yevgeniya Larionova<sup>1</sup>.

<sup>1</sup>Institute for Solar Energy Research Hamelin/Emmerthal (ISFH), Am Ohrberg 1, 31860 Emmerthal, Germany.

3:30 PM - 3:45 PM **High-Quality TOPCon Tunnel Oxides Deposited at Near Room Temperature (50°C) by Plasma-Enhanced Spatial ALD** Gökhan Altıner<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

3:45 PM - 4:00 PM **Aluminum oxide deposited by tube plasma enhanced-ALD achieving low surface recombination on TOPCon solar cells** Lazhar Rachdi<sup>1</sup>. <sup>1</sup>ISC Konstanz.

4:00 PM - 4:15 PM **Towards front-localized n-type poly-Si passivating contacts in hybrid TOPCon/SHJ solar cells** Elif YILMAZ<sup>1</sup>.

<sup>1</sup>Dr.

4:15 PM - 4:30 PM **Selective Patterning of BSG-Capped Poly-Si/SiO<sub>x</sub> Using a Screen-Printed Etch-Resist Mask** Eni Muka<sup>1</sup>.

<sup>1</sup>ODTÜ GÜNAM.

4:30 PM - 5:00 PM - Foyer

**Coffee Break**

5:00 PM - 6:15 PM - Hall B and Online

**Session 4: Characterization 1**

5:00 PM - 5:15 PM **Inhomogeneities in Tandem PK-Si Solar Cells: A 2-Dimensional TCAD Simulation Study**

**(ONLINE)** Pierre Lottigier<sup>1</sup>. <sup>1</sup>Université Grenoble Alpes, CEA, Liten, Site de l'INES.

5:15 PM - 5:30 PM **Accurate Extraction of  $iVoc$ ,  $J0e$ , and  $\tau_{bulk}$  Using PL Imaging and Input Parameter Sensitivity**

**Analysis** Tristan de la Beaujardiere<sup>1</sup>. <sup>1</sup>Sinton Instruments.

5:30 PM - 5:45 PM **Impact of Different Separation Techniques on the Edge Recombination in PERC, TOPCon and SHJ Solar**

**Cells** Alexander Göbel<sup>1</sup>. <sup>1</sup>Fraunhofer ISE.

5:45 PM - 6:00 PM **Drastic improvement in carrier lifetime (>50 ms) and stability of poly-Si-passivated n-type Cz-Si wafers by a simple belt-line furnace annealing step** Daniel Beck<sup>1</sup>. <sup>1</sup>Institute for Solar Energy Research Hamelin (ISFH).

6:00 PM - 6:15 PM **Modulation of Fixed Charges in PECVD-SiNx by N<sub>2</sub>O Plasma Treatment: Insight into Plasma-Induced Charge Control** Ayşe Can<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

Tuesday, 14 April 2026

9:00 AM - 10:15 AM - Hall B and Online

**Session 5: Characterization 2**

9:00 AM - 9:15 AM **Investigation of Triangular Front Contact Performance and Fabrication using String Printing** Jonas Valentijn<sup>1</sup>.  
<sup>1</sup>University of Twente.

9:15 AM - 9:30 AM **Bulk degradation in n-type Cz Si-based TOPCon cell precursors as well as P-, Sb- and As-doped Cz-Si wafers** Paul Stradins<sup>1</sup>. <sup>1</sup>National Renewable Energy Laboratory.

9:30 AM - 9:45 AM **Lumped series resistance determination and hysteresis correction analyzing transient and steady-state current-voltage measurements derived in less than 20 ms** Matthias Müller<sup>1</sup>.  
<sup>1</sup>TU Bergakademie Freiberg / Institute of Applied Physics.

9:45 AM - 10:00 AM **Minimizing carrier lifetime degradation in n-type Cz-Si by controlling the hydrogen incorporated during fast-firing** Michael Winter<sup>1</sup>. <sup>1</sup>Institute for Solar Energy Research Hamelin (ISFH).

10:15 AM - 10:45 AM - Foyer  
**Coffee Break**

10:45 AM - 11:10 AM - Hall B and Online  
**Keynote Bram Hoex (UNSW)**

10:45 AM - 11:10 AM **From Corrosion to UV Effects: Unveiling and Mitigating Degradation Mechanisms in TOPCon solar cells and modules** Bram Hoex<sup>1</sup>. <sup>1</sup>UNSW.

11:15 AM - 12:30 PM - Hall B and Online  
**Session 6: Characterization 3**

11:15 AM - 11:30 AM **Microscopic Characterization of SHJ Interdigitated Back-Contacts** Aleš Vlk<sup>1</sup>.  
<sup>1</sup>Institute of Physics of the Czech Academy of Sciences, Cukrovarnicka 10, 16200 Prague, Czech Republic..

11:30 AM - 11:45 AM **Comparing the morphology and electrical activity of dislocation structures in (100) Cz-Si ingots (ONLINE)** Asma Medjahed<sup>1</sup>. <sup>1</sup>CEA/DES/LITEN/DTS.

11:45 AM - 12:00 PM **Sheet resistance characterization of passivated contact structures using contact and contactless techniques** Ferenc Korsós<sup>1</sup>. <sup>1</sup>Semilab Co. Ltd..

12:00 PM - 12:15 PM **TOPCon with high emitter sheet resistance paradox: where did lateral resistance losses go?** Pierre Saint Cast<sup>1</sup>. <sup>1</sup>Fraunhofer ISE.

12:15 PM - 12:30 PM **Role of the First (Porous) Intrinsic a-Si:H Layer within the Bilayer Stack on SHJ Cell Performance under Different Metallization Conditions** BUSRA ALTINSOY<sup>1</sup>. <sup>1</sup>METU GUNAM.

12:30 PM - 1:30 PM - Foyer

**Lunch Break**

1:30 PM - 2:30 PM - Virtual Poster Session

**Poster Session 2 - ONLINE ONLY**

1:30 PM - 2:30 PM **AFM, SEM, Transmission-Reflection and Ellipsometry Analysis of Tio<sub>2</sub> Photocatalytic Coating on Glass Substrate for Self-Cleaning Surface Applications** NIMA E. GORJI<sup>1</sup>. <sup>1</sup>TU DUBLIN.

1:30 PM - 2:30 PM **Recycling the Future: A Cost and Sustainability Model for Perovskite Photovoltaic Glass Recycling Perovskite Glass in Solar Technologies: Cost, Scale, and Sustainability Insights** Umer Shahzad<sup>1</sup>. <sup>1</sup>Forschungszentrum jülich.

1:30 PM - 2:30 PM **NF<sub>3</sub> in Silicon Heterojunction Solar Cell Production** Marc Hofmann<sup>1</sup>.  
<sup>1</sup>Fraunhofer Institute for Solar Energy Systems (ISE).

1:30 PM - 2:30 PM **Long-Term Vision for Photovoltaic Silicon Recycling in Europe: Cost Modeling, Waste Stream Scenarios, and Strategic Outlook** Umer Shahzad<sup>1</sup>. <sup>1</sup>Forschungszentrum Jülich.

1:30 PM - 2:30 PM **Optimization of Sputter Deposition Conditions for Ce-Doped In<sub>2</sub>O<sub>3</sub> Thin Films Targeting Silicon-Based Tandem Solar Cell Application** Yoshio Ohshita<sup>1</sup>. <sup>1</sup>Toyota Technological Institute.

1:30 PM - 2:30 PM **Hydrogenation of thermally induced defects in n-type FZ Si with tunnel oxide passivating contacts** Reyu Sakakibara<sup>1</sup>, Julien Hurni<sup>2</sup>. <sup>1</sup>EPFL, <sup>2</sup>EFPL.

1:30 PM - 2:30 PM **Evaporated C<sub>60</sub> as Electron-Selective Contact in Dopant-Free Silicon Heterojunction Solar Cells** Riccardo Brondolin<sup>1</sup>. <sup>1</sup>Photovoltaic Materials and Devices Group, Delft University of Technology, Delft, the Netherlands.

1:30 PM - 2:30 PM **Investigation of Ag-Free Al-Si Rear Contact Formation for iTOPCon Solar Cells** Melisa Korkmaz Arslan<sup>1</sup>.  
<sup>1</sup>ODTÜ GÜNAM (Center for Solar Energy Research and Application), Ankara, Türkiye.

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<sup>1</sup>Kalyon PV Solar Technologies.

1:30 PM - 2:30 PM **Enabling Silicon Solar Cell Technology for Space Radiation Environments through Thickness Optimization and Protective Down-Converting Coatings** Alex Fedoseyev<sup>1</sup>. <sup>1</sup>SSS Optical Technology LLC.

1:30 PM - 2:30 PM **Silver and Indium-Free Half TBC Solar Cell as a Bottom Cell in Tandem Applications** Veysel Unsur<sup>1</sup>.  
<sup>1</sup>ODTU-GUNAM.

1:30 PM - 2:30 PM **Techno-Economic Analysis of Solar Cell Manufacturing in Türkiye and Suggested Roadmap** Hande KARAKAN CANKUL<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **The Role of End-of-Life Photovoltaic Panel Management in Achieving the Sustainable Development Goals** Tayfun HIZ<sup>1,2</sup>. <sup>1</sup>ODTÜ-GÜNAM, <sup>2</sup>Middle East Technical University, ESS Program.

1:30 PM - 2:30 PM **Physical Device Simulation of Tunnel Oxide Passivated Contact Rear Emitter (TOPCoRE) solar cell with localized MoOx** Hisham Nasser<sup>1</sup>. <sup>1</sup>Middle East Technical University (METU), Ankara, Turkey.

1:30 PM - 2:30 PM **Innovative Approach for the Industry-Compatible Cu Plating Metallization of Silicon Heterojunction Solar Cells** Bülent ARIKAN<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **Developing Sub-micron Pyramidal Texturing Approach on Large Area for Next-Generation Perovskite/Silicon Tandem Cells** İrem Nur Manaz<sup>1</sup>. <sup>1</sup>ODTU GUNAM.

1:30 PM - 2:30 PM **Tailoring Poly-Si Passivating Contacts for Mitigating Current Mismatch Problem for 2T Perovskite/TOPCon2 Tandem Solar Cells** Yiğit Mert Kaplan<sup>1</sup>. <sup>1</sup>ODTU-GUNAM, Middle East Technical University, Ankara, Çankaya, Türkiye.

1:30 PM - 2:30 PM **Contact Optimization of TOPCon Solar Cells Using Halogen Lamp and Reverse Current** Tunçer Deniz Kurttekin<sup>1</sup>. <sup>1</sup>ODTÜ GÜNAM.

1:30 PM - 2:30 PM **Picosecond Laser Processing for Poly-Finger Formation in TOPCon Solar Cells** Shojaa Abusakha<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

1:30 PM - 2:30 PM **Enhanced Light Trapping in Black Silicon: Comparative Study of Scalable Hybrid NaOH and H2SO4 Chemical Etching and Inductively Coupled Plasma Reactive Ion Etching (ICP-RIE)** Aleena Nadeem<sup>1,2</sup>.

<sup>1</sup>Micro and Nanotechnology, Graduate Program of Natural and Applied Sciences, Middle East Technical University (METU), Ankara, Turkey,

<sup>2</sup>METU GUNAM.

1:30 PM - 2:30 PM **Development of a fabrication technology for ultra-thin n-type silicon solar cells** Álvaro Briones<sup>1</sup>, Mario Cruz<sup>1</sup>.

<sup>1</sup>Institute of Microelectronic Technology.

1:30 PM - 2:30 PM **UV Impact on Commercial nc-Si SHJ Structure** Please edit Please edit<sup>1</sup>. <sup>1</sup>please fill.

2:30 PM - 2:45 PM - Foyer

**Short Break**

2:45 PM - 3:15 PM - Hall B and Online

**Keynote Nerea Dasilva Villanueva (Universidad Politécnica de Madrid)**

2:45 PM - 3:15 PM **Study of Compensated Si in the Context of the Recycling of p-Type Substrates for n-Type Based Solar Cell Architectures (ONLINE)** Nerea Dasilva Villanueva<sup>1,2</sup>. <sup>1</sup>Instituto de Energía Solar, Universidad Politécnica de Madrid, <sup>2</sup>Escuela Técnica Superior de Ingeniería y Diseño Industrial, Universidad Politécnica de Madrid.

3:15 PM - 4:15 PM - Hall B and Online

**Session 7: PV Innovations in Sustainability**

3:15 PM - 3:30 PM **Developing n-type polysilicon-based passivating contacts to mitigate copper diffusion in TOPCon solar cells** Reyu Sakakibara<sup>1</sup>. <sup>1</sup>EPFL.

3:30 PM - 3:45 PM **Designing the future: Dynamic Prospective Life Cycle Insights into Photovoltaic Technologies by 2050 (ONLINE)** Déborah Moeren<sup>1</sup>. <sup>1</sup>CEA-INES (National Solar Energy Institute), Le Bourget du Lac, France.

3:45 PM - 4:00 PM **One-Step Closed-Loop Recycling of Perovskite-Silicon Tandems** Yanxue Wang<sup>1</sup>.  
<sup>1</sup>Helmholtz-Institut Erlangen-Nürnberg für Erneuerbare Energien.

4:00 PM - 4:15 PM **LARS : Laser Assisted Recycling of Solar modules** Maarten van der Vleuten<sup>1</sup>. <sup>1</sup>TNO Netherlands.

4:15 PM - 5:00 PM - Foyer

**Coffee Break**

5:00 PM - 6:15 PM - Hall B and Online

**Session 8: Low Temperature Passivated Contacts**

5:00 PM - 5:15 PM **Localized front CSPCs towards TCO-free SHJ solar cells** Olindo Isabella<sup>1</sup>. <sup>1</sup>Delft University of Technology.

5:15 PM - 5:30 PM **Large Area Non-cryogenic Reactive Ion Etching for Novel Nano-texturing of Si Surfaces** Engin Özkol<sup>1</sup>.  
<sup>1</sup>Photovoltaic Materials and Devices Group, Delft University of Technology, Netherlands.

5:30 PM - 5:45 PM **Organic-inorganic hybrid layer as a passivating electron-selective contact in silicon solar cells** Milad Ghasemi<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

5:45 PM - 6:00 PM **Impact of Screen-printed Pure Copper Pastes on Silicon Heterojunction Solar Cells (ONLINE)** Valentin Duval<sup>1,2</sup>. <sup>1</sup>Univ. Grenoble Alpes, CEA, Liten, Campus INES, 73375 Le Bourget du Lac, France, <sup>2</sup>INSA Lyon, INL, UMR 5270, Bâtiment Irène Joliot Curie, 69622 Villeurbanne, France.

6:00 PM - 6:15 PM **Zinc Sulphide Enabling Outstanding Surface Passivation on Crystalline Silicon** Gabriel Bartholazzi<sup>1</sup>.  
<sup>1</sup>The Australian National University.

7:00 PM - 10:00 PM -  
**Conference Dinner**

Wednesday, 15 April 2026

9:00 AM - 10:00 AM - Hall B and Online

**Session 9: Silicon for Tandems**

9:00 AM - 9:15 AM **TCO Layers for TOPCon based Perovskite-Silicon Tandem Solar Cells: Process Sequences and Electrical Losses** Anna Damm<sup>1</sup>. <sup>1</sup>Fraunhofer Institute for Solar Energy Systems.

9:15 AM - 9:30 AM **Design and Fabrication of Industrial PERC/TOPCon Bottom Cell with Improved Performance for Two-Terminal Perovskite-Si Tandem Solar Cells** Yiğit Mert Kaplan<sup>1</sup>. <sup>1</sup>ODTU-GUNAM, Middle East Technical University, Ankara, Çankaya, Türkiye.

9:30 AM - 9:45 AM **The Singlet Fission Route for >30% Efficient Solar Cells: Silicon Cell Requirements (ONLINE)** Shona McNab<sup>1</sup>. <sup>1</sup>University of New South Wales, Sydney.

9:45 AM - 10:00 AM **PVD - the way to upscale Perovskite/Tandem to GW Production** Sebastian Gatz<sup>1</sup>. <sup>1</sup>VON ARDENNE GmbH.

10:00 AM - 10:45 AM - Foyer

**Coffee Break**

10:45 AM - 11:15 AM - Hall B and Online

**Keynote (tbd)**

10:45 AM - 11:15 AM **Keynote** Xu Xixiang<sup>1</sup>. <sup>1</sup>Longi.

11:15 AM - 12:30 PM - Hall B and Online

**Session 10: Module Technologies 1**

11:15 AM - 11:30 AM **Module Glass Textures for Suppressed Glare and Enhanced Light In-Coupling** Marc Hofmann<sup>1</sup>. <sup>1</sup>Fraunhofer ISE.

11:30 AM - 11:45 AM **Design and manufacture of hybrid photovoltaic thermal module using aluminium tube based thermal absorber** Yijiang Xu<sup>1</sup>. <sup>1</sup>SINTEF.

11:45 AM - 12:00 PM **Angle-Independent Colored Photonic Glass Layers for BIPV: Mie-Based Color Control Using Metal Oxide Nanostructures** Parisa Sharif<sup>1</sup>. <sup>1</sup>ODTÜ GÜNAM.

12:00 PM - 12:15 PM **Novel Assessment of a Three-Parameter Beta Fit Model for PV Low-Light Characterization (ONLINE)** Andreas Schneider<sup>1</sup>. <sup>1</sup>University of Applied Sciences Gelsenkirchen.

12:15 PM - 12:30 PM **Real-World Evolution of Cell Cracks in Silicon PV Modules** Claudia Buerhop Lutz<sup>1</sup>.  
<sup>1</sup>Forschungszentrum Jülich GmbH, HI ERN.

12:30 PM - 1:30 PM - Foyer  
**Lunch Break**

1:30 PM - 2:00 PM - Hall B and Online  
**Keynote Miro Zeman (Renshine)**

1:30 PM - 2:00 PM **Keynote Miro Zeman**<sup>1</sup>. <sup>1</sup>Renshine.

2:00 PM - 3:15 PM - Hall B and Online  
**Session 11: Module Technologies 2**

2:00 PM - 2:15 PM **Challenges and Solutions for Industrially Feasible Materials and Technologies for PV Interconnection (ONLINE)** Holger Neuhaus<sup>1</sup>. <sup>1</sup>Fraunhofer Institute for Solar Energy Systems ISE.

2:15 PM - 2:30 PM **End-Edge Intelligence Driven State of Health Management and Control for Energy Storage Systems in Tajikistan (ONLINE)** Mamadsho Ilolov<sup>1</sup>.  
<sup>1</sup>Center for Innovative Development of Science and Digital Technologies, National Academy of Sciences of Tajikistano.

2:30 PM - 2:45 PM **Advanced Testing and Lamination Optimization for TOPCon Module Encapsulants: A Comparative Study** Aksel Kaan Öz<sup>1</sup>. <sup>1</sup>Fraunhofer Institute for Solar Energy Systems ISE.

2:45 PM - 3:00 PM **Field Validation of View Factor and Ray Tracing Irradiance Models in a Desert Environment (ONLINE)** Mohamed Abdelrahim Elsiddig<sup>1</sup>. <sup>1</sup>Hamad Bin Khalifa University.

3:00 PM - 3:15 PM **Three Terminal Tandem Solar Cells vs Conventional Two Terminal and their Interconnection in Conventional Two Terminal PV Modules** Juan Carlos Jimeno<sup>1</sup>. <sup>1</sup>Technological Institute of Microelectronics, EHU.

3:15 PM - 3:45 PM - Foyer  
**Coffee Break**

3:45 PM - 6:45 PM -  
**Technical Tour 1**

Thursday, 16 April 2026

9:00 AM - 9:15 AM - Hall B and Online

**Welcome to bifiPV Workshop**

9:00 AM - 9:08 AM **Welcome to bifiPV Workshop** Veyssel Unsur<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

9:08 AM - 9:15 AM **Welcome to bifiPV Workshop (ONLINE)** Radovan Kopecek<sup>1</sup>. <sup>1</sup>ISC Konstanz.

9:15 AM - 9:45 AM - Hall B and Online

**Status of PV in Türkiye**

9:45 AM - 10:30 AM - Hall B and Online

**Industrial-Scale Crystalline Silicon PV: Strategy, Integration, and Challenges**

9:45 AM - 10:00 AM **Industrial PV Manufacturing in Turkey: Technical Challenges and Field Experience** Firat Es<sup>1</sup>. <sup>1</sup>Alfa Solar.

10:00 AM - 10:15 AM **Choosing the Right Technology in a Rapidly Evolving Landscape: Rationale, Trade-offs, and Future Directions** Frank Feldmann<sup>1</sup>. <sup>1</sup>Holosolis.

10:15 AM - 10:30 AM **Strategic R&D Integration in Industrial-Scale Crystalline Silicon PV** Meriç Çalışkan Arslan<sup>1</sup>. <sup>1</sup>Kalyon PV.

10:30 AM - 11:00 AM - Foyer

**Coffee Break**

11:00 AM - 11:25 AM - Hall B and Online

**Keynote Cosimo Gerardi (3SUN)**

11:00 AM - 11:25 AM **Industrializing the Future of Solar: HJT & Tandem Innovation at Europe's 3Sun Gigafactory (ONLINE)** Cosimo Gerardi<sup>1</sup>. <sup>1</sup>3SUN.

11:30 AM - 12:15 PM - Hall B and Online

**Next Generation PV Tech**

11:30 AM - 11:45 AM **Highly Efficient Perovskite-Silicon Tandem Solar Products** Meriç Firat<sup>1</sup>. <sup>1</sup>Oxford PV.

11:45 AM - 12:00 PM **Results and consequences from IBC4EU project** Florian Buchholz<sup>1</sup>. <sup>1</sup>ISC Konstanz.

12:15 PM - 12:45 PM - Hall B and Online

**Closing Session, Awards, Announcements**

12:45 PM - 1:45 PM - Hall B

**Lunch Break**

1:45 PM - 3:00 PM - Hall B and Online

**Mass Production and Characterization**

1:45 PM - 2:00 PM **De-Risking GW-Scale Silicon Solar Cell Manufacturing: Execution Lessons from Global Projects** Wolfgang Jooß<sup>1</sup>. <sup>1</sup>RCT Solutions GmbH.

2:00 PM - 2:15 PM **Leading-edge Laser Technologies Empower the Performance of c-Si Solar Cells (ONLINE)** Ben Lee<sup>1</sup>.  
<sup>1</sup>DR Laser.

2:15 PM - 2:30 PM **Metrology and Performance Determination of Bifacial Perovskite/Silicon Tandems: From 4-Terminal Concepts to 2-Terminal Architectures** Salar Sedani<sup>1</sup>. <sup>1</sup>ODTÜ GÜNAM.

2:30 PM - 2:45 PM **Bifacial solar simulators for high-efficiency and new-PV Technologies** Waqas Zia<sup>1</sup>. <sup>1</sup>Wavelabs.

2:45 PM - 3:00 PM **Industrial TOPCon Solar cell with Super Sheet Resistance** Xiejie Meng<sup>1</sup>. <sup>1</sup>Tongwei Solar.

3:00 PM - 3:30 PM - Foyer

**Coffee Break**

Friday, 17 April 2026

9:30 AM - 10:45 AM - Hall B and Online

**bifiPV Book**

9:30 AM - 10:00 AM **Bifacial book 2026- the story continues (ONLINE)** Radovan Kopecek<sup>1</sup>. <sup>1</sup>ISC Konstanz.

10:00 AM - 10:15 AM **Presentation NLR** Silvana Ovaitt<sup>1</sup>. <sup>1</sup>NLR.

10:15 AM - 10:30 AM **Presentation from Atamostec (ONLINE)** Felipe Valencia<sup>1</sup>. <sup>1</sup>Atamostec.

10:30 AM - 11:15 AM - Foyer

**Coffee Break**

11:15 AM - 12:00 PM - Hall B and Online

**bifiPV Applications**

11:15 AM - 11:30 AM **Bifacial modules, results from Karapınar, data from test stations** Merve Tan<sup>1</sup>. <sup>1</sup>Kalyon PV.

11:30 AM - 11:45 AM **AgriPV and Bifacial PV: Synergies, Challenges, and Opportunities for Sustainable Land Use** Duygu Kuzyaka<sup>1</sup>. <sup>1</sup>ODTÜ-GÜNAM.

11:45 AM - 12:00 PM **Future of bifi PV (ONLINE)** Radovan Kopecek<sup>1</sup>. <sup>1</sup>ISC Konstanz.

12:00 PM - 12:15 PM - Hall B and Online

**bifiPV2026 Closing**

12:00 PM - 12:15 PM **Closing and Annoucement (ONLINE)** Radovan Kopecek<sup>1</sup>. <sup>1</sup>ISC Konstanz.

12:15 PM - 1:30 PM - Foyer

**Lunch Break**

1:30 PM - 6:15 PM -

**Technical Tour 2**