

PROGRAM OF THE 4TH RENEWPV + 16TH EUROPEAN KESTERITE CONFERENCE

Tallink Spa & Conference Hotel (Sadama tänav 11a, 10111 Tallinn, Estonia)

Wednesday 17th June 2026

8:30-9:00	Registration, Welcome and Information	
8:55-9:00	Welcome, Information & Opening words	Nicolae Spalatu
9:00-9:30	INVITED: Molecular Ink Engineering for Chalcogenide Solar Absorbers: Cation Disorder in AgBiS ₂ and Low-Temperature Formation of BaZrS ₃	<u>Wooseok Yang</u>
Advances in Antimony Chalcogenide Moderators: J. Major, N. Maticiu		
9:30-9:50	9.2% Efficient Antimony Chalcogenide Thin-Film Solar Cells	H. Guptae, Y. Wange, J. Lee, K. Norrman, K. Pantleon, A. M. P. Enevoldsen, G. Ghimire, E. Gilshtein, B. Shin, <u>Stela Canulescu</u>
9:50-10:10	Comparison of Sb ₂ Se ₃ thin films deposited by vacuum evaporation and vapor transport deposition	<u>Elisa Artegi</u> , S. Ramamoorthy, A. Veneri, M. Mukhtar, A. Romeo
10:10-10:30	Controlled Composition of Sb ₂ (S,Se) ₃ via Sulfo-Selenization of Metallic Sb	<u>David Payno</u> , L. Lázaro-Castrillón, M. Rusu, A. Arranz, R. Kaupmees, M. Grossberg-Kuusik, J. Andrade-Arvizu, M. D. Ynsa, J. Gonzalo, R. Caballero
10:30-10:50	Interfacial Energetics and Layer-by-Layer Development of Built-in Voltage in Sb ₂ (S,Se) ₃ Solar Cells	<u>Marin Rusu</u> , A. B. Suseela, T. Unold, S. Schorr, N. Spalatu
10:50-11:20	Coffee Break	
Antimony Chalcogenide: Material and Device Processing (I) Moderators: A. Romeo, S. Canulescu		
11:20-11:40	Sb ₂ S ₃ based superstrate solar cells: performance, reproducibility and stability	<u>Aurelian Catalin Galca</u> , A. El Kanouny, V. Stancu, R. Merah, M. Tamin, S. Laafar, A. E. Bocirnea, L. N. Leonat, C. Radu, A. G. Tomulescu, E. Gilshtein, G. E. Stan, S. Canulescu, I. Pintilie, C. Besleaga
11:40-12:00	Sb ₂ S ₃ thin-film solar cells by Vapor Transport Deposition: from growth control to device performance	<u>Luna Lázaro-Castrillón</u> , D. Payno, C. Ruiz-Herrero, Y. H. Khan, M. Cathelinaud, G. Chen, R. Caballero
12:00-12:20	Multifunctional Self-Assembled Monolayers for High-Performance and Stable Sb ₂ S ₃ Solar Cells	<u>Ernest A. Asare</u> , R. A. Liiv, T. Malinauskas, A. Katerski, A. Magomedov, V. Getautis, N. Spalatu, M. Krunks, I. Oja Acik
12:20-12:40	Correlative mapping of orientation-dependent photocurrent in Sb ₂ S ₃ thin-film solar cells	<u>Evgeniia Gilshtein</u> , J. Chauvel, D. Komisar, G. Ghimire, A. M. P. Enevoldsen, F. Ghaffari-Tabrizi, K. Stergiou, O. Ilchenko, D. Abou-Ras, S. Canulescu
12:40-14:00	Lunch Break	
Antimony Chalcogenide: Material and Device Processing (II) Moderators: L. Lázaro-Castrillón, M. Rusu		
14:00-14:30	INVITED: From Lattice to Market Structures - How Chalcogenide Laboratory Results Predefine the Technologies' Market Applications	<u>Robert Arndt</u> (CTF Solar)
14:30-14:50	Impact of back-surface oxidation on carrier collection in Sb ₂ S ₃ solar cells	<u>Aeshah Almushawwah</u>
14:50-15:10	Air annealing of the CdS layer to improve Sb ₂ Se ₃ devices efficiency	<u>Sharmiladevi Ramamoorthy</u> , E. Artegi, A. Veneri, M. Mukhtar, A. Romeo
15:10-15:40	Coffee Break	
Antimony Chalcogenide: Material and Device Processing (III) Moderators: E. Artegi, A. Drabavičius		
15:40-16:00	Tailored Optimization Strategies for Substrate- and Superstrate-type Sb ₂ Se ₃ Solar Cells via Co-evaporation	V. P. Hoang Huy, H. V. Quy, J. Lee, <u>Bashiru Kadiri-English</u> , E. Cho, D.-K. Hwang, K.-J. Yang, J.-K. Kang, S.-J. Sung, D.-H. Kim
16:00-16:20	Elemental Selenium Beyond Single-Junction Photovoltaics	<u>Charif Tamin</u> , A. Fave
16:20-16:40	Structure and microstructure of hot-injection synthesized powders in Cu-Sb-S system	<u>Nikola Ilić</u> , I. Validžić, C. Radu, A.C. Galca
16:40-16:45	5 minutes pitch from Ready-PV EU project	Natalia Maticiu
16:50-20:00	Coffee break and Poster Session	

Thursday 18th June 2026

8:45-9:00	Registration, Welcome and Information	
HIGHLY EFFICIENT KESTERITE - BASED PV Moderators: M. Grossberg-Kuusik, E. Saucedo		
9:00-9:30	INVITED: Why not all Cu-based quaternary chalcogenides are kesterites: a growth model hypothesis	Susan Schorr
9:30-9:50	18.1% Efficient CZTS Solar Cells Under Indoor Conditions Enabled by Ge Alloying via a Molecular Inks Method	Harris Goniotakis , O. El Khouja, I. Caño, D. R. Ferrer, A. Jimenez-Arguijo, O. Segura-Blanch, S. Giraldo, M. Placidi, Z. J. Li-Kao, Y. Gong, E. Saucedo
9:50-10:10	Towards the Future of Kesterite Photovoltaics: Flexible Inkjet-Printed CZTSSe Solar Cells with >10% Efficiency	Berenice Elena Gaia Colombo , A. Sangiorgi, G. Tseberlidis, C. Gobbo, F. Butrichi, V. Trifiletti, M. Acciarri, A. Sanson, S. Binetti
10:10-11:00	Coffee Break	
ALLOYING AND PROCESSING Moderators: S. Schorr, P. Vidal-Fuentes		
11:00-11:20	Exploring Cu ₂ ZnSi(SxSe _{1-x}) ₄ : from wide bandgap to structural challenges	Galina Gurieva , A. Manjon-Sanz, C. Ritter, M. Kirkham, S. Schorr
11:20-14:40	Cooperative Na–Ag Alloying Reshapes Structural Disorder and Defect Chemistry in CZTSSe Solar Cells	Outman El Khouja , Y. Gong, H. Goniotakis, A. Jimenez-Arguijo, D. R. Ferrer, I. Caño, O. Segura-Blanch, R. Scaffidi, C. Malerba, M. Valentini, S. Giraldo, M. Placidi, Z. J. Li-Kao, E. Saucedo
11:40-12:00	CdCl ₂ and MgCl ₂ treatments to enhance the performance of CZTSSe solar cells	Alessandro Veneri , M. Mukhtar, E. Artegiani, A. Romeo
12:00-12:20	Influence of Precursor Composition on Cu-Vacancy-Driven p-Type Conductivity, Defect Formation, and Optoelectronic Performance in Cd-Free Pure-Sulfide CZTS Solar Cells	Mostafa Garshasbi , U. Razi, Y. Sánchez, A. Pérez-Rodríguez, V. Izquierdo-Roca, M. Guc, P. Vidal-Fuentes
12:20-12:40	Wide-Bandgap CZTS Absorbers for Emerging Solar Technologies: Integrating Substrate Engineering, Silver Alloying and Alkali Co-Doping	Messaoud Tamin , O. El Khouja, M. Guemmaz, C. Tamin, A. E. Bocirnea, I. Assahsahi, S. Laafar, C. Besleaga, Z. J. Li-Kao, E. Saucedo, D. Chaumont, A. C. Galca
12:40-14:00	Lunch Break	
ALLOYING, PROCESSING & APPLICATIONS Moderators: G. Gurieva, A. C. Galca		
14:00-14:20	How the molybdenum process influences the growth of CZTSSe: a comparative study of different lab-grown and commercial molybdenum substrates	Alessandro Veneri , I. Anefnaf, E. Artegiani, P. Punathil, M. Mannini, G. Zoppi, A. Romeo
14:20-14:40	Multi-Scenario Applications of Kesterite Semiconductors	Yuancai Gong , O. El Khouja, H. Goniotakis, C. Gobbo, E. Maggi, P. Selvaraj, T. Bernard, A. Jimenez-Arguijo, S. G. Muñoz, Z. J. Li-Kao, M. Placidi, P. Scardi, H. Xie, S. Binetti, E. Saucedo
14:40-15:00	From Outdoor to Indoor Photovoltaics: Efficient and Stable Pure-Sulfide CZTS Solar Cells via Cooling-Process Engineering	Achmad Nasyori , I. Mengü, M. Pilvet, M. Danilson, J. Krustok, A. Alexander, J. Kokla, R. Kaupmees, V. Mikli, R. Josepson, G. K. Grandhi, P. Vivo, M. Grossberg-Kuusik, M. Kauk-Kuusik
15:00-15:20	Scalable and Sustainable Thin-Film Thermoelectric Generators via Kesterite-Chalcopyrite Integration	Tanguy Bernard , O. El Khouja, A. J. Arguijo, Y. Gong, D. R. Ferrer, M. D’Incau, E. Isotta, N. Ataollahi, E. Saucedo, P. Scardi
15:20-15:40	Ultrafast Spectroscopic Ellipsometry for Emerging Chalcogenide Photovoltaics	Shirly Espinoza
15:45-18:00	Coffee break and Poster Session II - Continuation	
19:00-23:00	Gala dinner at Pier 4/2 (Logi tn 4-2)	



Pier 4/2 location

Friday 19th June 2026

8:45-9:00	Registration, Welcome and Information	
9:00-9:30	INVITED: Impact (online)	<u>Phil Dale</u>
Advanced Characterization, Modelling and AI methodologies for Materials and Devices Moderators: C. Don, N. Maticiu		
9:30-9:50	SOLEY: A First-Principles Photovoltaic Simulation Platform from Device Physics to Utility-Scale Energy Yield	<u>Zacharie Jehl Li-Kao</u> , S. Giraldo, A. Jimenez, Y. Gong, M. Placidi
9:50-10:10	Extended Defect Tolerance in Anisotropic Chalcogenide Solar Absorbers	<u>Keith P. McKenna</u>
10:10-10:20	Defect-Induced Hot Polaron Formation in the Chalcohalide Solar Absorber BiSBr: Insights from First-Principles Calculations	<u>Cibrán López</u> , X. Guo, J. Ye, R. L. Z. Hoyer, E. Saucedo, C. Cazorla
10:20-10:40	Bridging First-Principles Defects and Photovoltaic Efficiency for Predictive Solar Cell Modeling	<u>Alex Jiménez-Argüjio</u> , S. Kavanagh, A. Squires, C. López-Álvarez, I. Mosquera-Lois, A. Walsh, C. Cazorla, Z. J. Li-Kao, D. O. Scanlon, K. P. McKenna
10:30-11:10	Coffee Break	
Advanced Characterization, Modelling, AI methodologies for Materials and Devices Moderators: Z. J. Li-Kao, K. McKenna		
11:10-11:30	Physically Meaningful Explainable Artificial Intelligence Methodology for Accelerated Research of Thin-Film Photovoltaics	<u>Jon Gari-Galindez</u> , R. Fonoll-Rubio, A. Perez-Rodriguez, P. Vidal-Fuentes, M. Guc, V. Izquierdo-Roca
11:30-11:50	Thermal Optoelectronics via AI	<u>Pol Benitez</u> , E. Saucedo, C. Cazorla
11:50-12:10	Advances in Bi-chalcohalide electrodes for hydrogen production applications	<u>David Rovira Ferrer</u> , E. Maggi, C. López, M. Nejatpour, D. Ormart, C. Puigjaner, X. Alcobé, T. Jawhari, L. Calvo-Barrio, C. Cazorla, J. Puigdollers, E. Saucedo
12:10-12:30	Exploring compositional engineering and physicochemical stability of chalcogenide perovskites	<u>Lorenza Romagnoli</u>
12:30-13:50	Lunch Break	
Emerging Materials, Concepts and Devices Moderators: A. Bronsiene		
13:50-14:10	Alternative Buffer Layers for High-Efficiency Kesterite/c-Si Tandem Solar Cells: A Combined Optical and Electrical Study	<u>Safae Aazou</u> , N. Ennouhi, A. Errafyg, Z. Sekkat
14:10-14:30	Development of p-Type Transparent Conducting BaCu ₄ S ₃ Thin Films by a Two-Step Sputtering-Sulfurization Route	<u>Younes Lablali</u> , O. Donzel-Gargand, J. J. S. Scragg, M. Makha
14:30-15:00	Closing Ceremony and Next European RenewPV + Kesterite Workshop	

Poster Session

#	Name Author #1	Abstract title:
1.	Abdessamad El Kanouny	Interface Engineering and Absorber Optimization in SnS-Based Thin-Film Photovoltaic Devices
2.	Alessandra Rocchina Palmieri	NiO _x Nanoparticle Optimization and Interfacial Engineering for Semi Transparent Sb ₂ S ₃ Solar Cells
3.	Alexandra Apostoluk	Metallic oxides and their application in solar cells and photocatalysis
4.	Amelia Bocirnea	A superficial view of chalcogenide based solar cells: X-ray photoemission spectroscopy
5.	Amine HAJ TAIEB	Participatory and AI-Enhanced Frameworks for Integrating Social Knowledge into Sustainable Photovoltaic Innovation
6.	Andrea Aroldi	Enhancing hydrothermal Sb ₂ (S,Se) ₃ solar cells via interface engineering and absorber modification
7.	Andrea Maria Pierri Enevoldsen	Optimizing hydrothermally deposited Sb ₂ S ₃ solar absorbers through annealing thermal profile
8.	Antoine Moore	Persistent Photoconductivity and Synaptic Properties in Sb ₂ Se ₃ -based Thin-Film Solar Cells
9.	Arnau Torrens Dinarès	In-Situ X-Ray Characterisation of Room-Temperature Photo-crystallisation in Amorphous Selenium: Kinetics and Texture Control
10.	Asta Bronusiene	Investigation of ZnIn ₂ S ₄ Thin Films as an Eco-Friendly Buffer Layer Alternative to CdS
11.	Atanas Tanushevski	Changes in conductivity type and properties of SnS thin films induced by SnCl ₂ solution treatment followed by thermal annealing
12.	Athulya Babu Suseela	Towards Efficient Ultrathin Sb ₂ (S,Se) ₃ Solar Cells via Close-Spaced Sublimation
13.	Audrius Drabavičius	Influence of vapor transport deposition parameters on Sb ₂ Se ₃ microstructure and ZnO/Sb ₂ Se ₃ solar cell performance
14.	Aydan Khaligzade	Radiation-Induced Defects and Electrical Properties of Yb-Doped GaS thin films
15.	Bashiru Kadiri-English	Suppressing selenium deficiency in Sb ₂ Se ₃ solar cells via pressure-assisted rapid thermal selenization
16.	Betul Teymur	Fully Earth-Abundant and Solution Processed Photoelectrochemical Device for Solar Water-Splitting
17.	Chamseddine Madouri	Hidden Inhomogeneities: How Local Sulfurization Conditions Affect SnS Thin Film Properties
18.	Christopher Don	Exploring strategies to reduce fill-factor losses in Sb ₂ S ₃ solar cells through ETL morphology control
19.	David Rovira Ferrer	Band structure engineering through crystal termination in chalcogenide materials.
20.	Diego Nistal-Castro	Hydrothermal Sb ₂ S ₃ Solar Cells with Dual Sulfur Sources: Impact of Thioacetamide Addition under Indoor Illumination
21.	Dumitru Untila	Investigation of absorber layer deposition for solar cells by Close-Spaced Sublimation using AgSbS ₂ as source material
22.	Erdem Çiftçi	Numerical Investigation of Microchannel-Based Photovoltaic Module Cooling Under Variable Solar Radiation Conditions
23.	Gülfeza Kardaş	A ternary Mo-BiVO ₄ @Bi ₂ S ₃ @Zr-MOF photoanode performance for photoelectrochemical water splitting
24.	Hadeer Hussien	Overcoming the voltage deficit in ultrathin semi-transparent Sb ₂ S ₃ solar cells via ZnO interface engineering
25.	İsmail Borazan	Investigation of Quantum Dot Incorporation in MAPbX ₃ Perovskite Solar Cells
26.	Jaebaek Lee	ALD ZnSnO as a Cd-Free Front Buffer for Superstrate Sb ₂ Se ₃ Thin Film Solar Cells
27.	Liisa Kumar	Chemical Bath Deposition of ZnMgO Thin Films for Indoor Photovoltaic Applications
28.	Maciej Sibinski	1D- Simulation Problem Analysis of Sb ₂ S ₃ Solar Cell with Semitransparent Absorber
29.	Marc Heemskerk	Thermal Treatments Under S-Vapour Atmosphere on p-type Pyrite Absorbers for Off-Earth Solar Cell Applications
30.	Maris Pilvet	Optimization of Sulfurization Conditions for Magnetron Co-Sputtered Cu ₂ GeS ₃ Thin Films
31.	Maxim Ganchev	Investigation of SnS thin films for photovoltaic application
32.	Mehmet Ali Olğar	Enhancing Sb ₂ S ₃ Solar Cell Efficiency Through Heating Rate Control and Window Layer Engineering
33.	Mia-Maria Meldorf	Surface Passivation of p-Type FeS ₂ Microcrystals for Photovoltaic Applications
34.	Mohamed Yassine Zaki	Controlled Sn Incorporation in Electrodeposited Sb ₂ S ₃ Thin Films: Impact on Crystallinity, Morphology, and Optical Properties

35.	Mykhailo Koltsov	Composition-tunable (SbXBi1-X)2S3 solid-solution thin films via close-spaced sublimation
36.	Nafiseh Abbasi	Deep defect suppression in Sb2Se3 via atmosphere-dependent selenization probed by photoluminescence spectroscopy
37.	Neul Ha	Synergistic Modulation of Cation Disorder and Morphology in Molecular Ink-Derived AgBiS2 for Enhanced Photoelectrochemical Water Splitting
38.	Paula Eda Stoicescu	Thermal analysis study of antimony chloride and thiourea containing precursors for antimony sulphide thin films
39.	Rahman Nurkovic	Advancement in solar technology energy
40.	Rakhshana Mamishova	Radiation-Induced Changes in Electrical Properties of CuTIS ₂ Single Crystals
41.	Rayene Merah	Role of CdS Interface Layer in Sb2S3 Solar Cells Prepared by Spray Pyrolysis
42.	Recep Zan	Unveiling the Combined Effects of Sodium Doping and Graphene Integration in Solution-Processed CTS Thin-Film Solar Cells
43.	Sevinj Nuriyeva	Photoluminescence and Charge Transfer in ZnO–ZnS Core–Shell/MWCNT Nanocomposites for Photovoltaic Interface Applications
44.	Vipin Kumar	Tailoring the structural and electro-optical properties of visible-light emitting BaZrO ₃ photocatalyst: integrating DFT and comprehensive experimental analysis†
45.	Annabel Saar	Systematic Optimization of Precursor Concentration and Lithium Doping for Spin-Coated CZTS Thin-Film Absorbers
46.	Avni Berisha	Interaction of 2D Nanomaterials with Kesterite Surfaces: A DFT Study
47.	Dae-Kue Hwang	Reducing Open-Circuit Voltage Deficit through Front Bandgap Engineering in CZTSSe Thin Films
48.	Edoardo Maggi	Bandgap Engineering and Interface Optimization of Kesterite Photocathodes for Solar Hydrogen Production
49.	Gokhan YILMAZ	Ligand-Driven Self-Sulfurization for Solution-Processed CZTS Thin Films
50.	Hamide Kavak	Fabrication and simulation of kesterite based solar cells
51.	Katri Muska	Molten Salt Synthesis and Characterization of Cu ₂ SiS ₃ Monograin Powders Using Lil as a Flux
52.	Mehmet Akif Kartal	A Comparative Review of Efficiency Trends in Kesterite-Based Solar Cells: Challenges and Future Outlook
53.	Mehr Un Nisa	Effect of Ag-doping and Solvent Selection on CZTS Nanoparticles Hole Transport Layer for Perovskite Solar Cells
54.	Oriol Segura Blanch	Non-toxic ZTO electron transport layers for kesterite indoor photovoltaics
55.	Yavuz Atasoy	Co-engineering of Sb Alloying and Reduced Graphene Oxide Doping for High-Performance CTS Thin Films

POSTER INFORMATION:

The preferred poster size is A0 (841 × 1189 mm). Poster putty for mounting the posters onto the boards will be provided.

The poster session starts on 17 June at 16:50. Therefore, posters should be mounted before the session begins and remain on display until the end of the workshop (19 June).