

PVSAT 2026

22–24 April 2026

The Catalyst, Newcastle, UK





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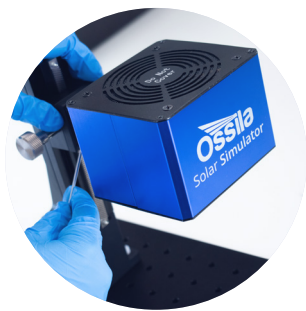
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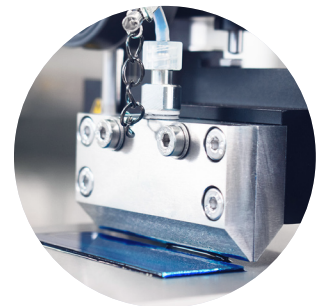
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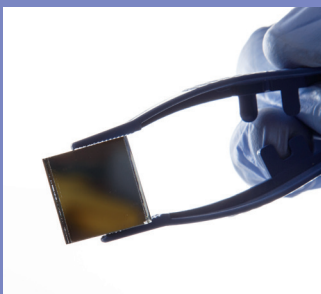
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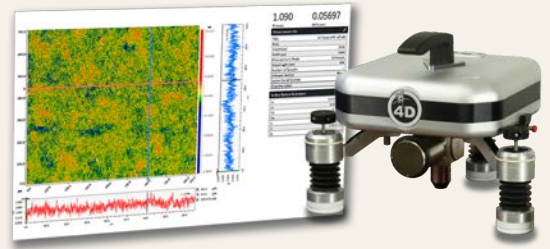
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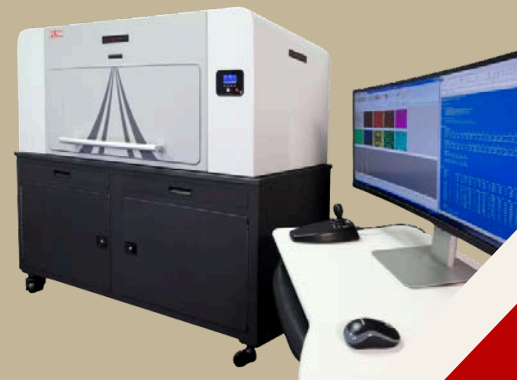


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PVSAT Programme

Wednesday 22 April 2026

10:15 AM - 11:00 AM	Registration and Arrival Refreshments
11:00 AM - 12:30 PM	<p>Opening Session</p> <p>11:00 AM - 11:15 AM PVSAT Committee Welcome</p> <p>11:15 AM - 11:25 AM Adam Suttle Updates from the Engineering and Physical Science Research Council</p> <p>11:25 AM - 11:30 AM Allison Vickers Membership at the IoP</p> <p>11:30 AM - 12:00 PM Martin Schubert (Invited Speaker) Measurement challenges of perovskite-silicon tandem cells</p> <p>12:00 PM - 12:15 PM Sebastian Bonilla The Impact of Transparent Conducting Electrodes on Tandem Solar Cell Efficiency</p> <p>12:15 PM - 12:30 PM Byunggi Kim Multi-Bridged Lewis-Functionalized Interfacial Engineering for Enhanced Crystallinity and Stability in Inverted Perovskite Photovoltaics</p>
12:30 PM - 1:30 PM	Lunch
1:30 PM - 2:45 PM	Poster Session A
2:45 PM - 3:00 PM	Afternoon Break
3:00 PM - 4:30 PM	<p>Session 2: OPVs, TCOs and Electrodes in PV</p> <p>3:00 PM - 3:30 PM Julianna Panidi (Invited Speaker) Enhancing the stability of OPVs without compromising their sustainability</p> <p>3:30 PM - 3:45 PM John O'Sullivan Transparent Conducting Electrodes for Perovskite-Silicon Tandem Solar Cells</p> <p>3:45 PM - 4:00 PM Tony Woodgate Are you using an appropriate PV reference cell to measure your OPV device?</p> <p>4:00 PM - 4:15 PM Harsh Malapur AZO-based transparent conductive electrode for ITO-free OPV application</p> <p>4:15 PM - 4:30 PM Theodore D C Hobson The electronic and chemical properties of silicon/zinc-oxide interfaces for nanolayer transparent electrodes in photovoltaics</p>
4:30 PM - 4:45 PM	Afternoon Break

<p>4:45 PM - 5:45 PM</p>	<p>Session 3: Compound Semiconductor PV</p> <p>4:45 PM - 5:00 PM David Keeble Detection and identification of vacancy-related point defects in photovoltaic antimony selenide</p> <p>5:00 PM - 5:15 PM Daniel McDermott Coupled optical & electrical frequency domain spectroscopy to characterize defects in Cu(In,Ga)Se₂ solar cells</p> <p>5:15 PM - 5:30 PM PRABEESH PUNATHIL Grain-Boundary Passivation and Band-Gap Engineering in CZTSSe via a Low-Temperature CdCl₂ Process</p> <p>5:30 PM - 5:45 PM Mehvish Javed Thermochemical processing of Sb₂S₃ nanorod inks: anion exchange pathways to Sb₂Se₃ absorbers for tandem photovoltaic applications</p>
<p>6:00 PM - 8:00 PM</p>	<p>Welcome Reception and Pizza</p> <p>The Catalyst Foyer</p>

Thursday 23 April 2026

9:00 AM - 10:45 AM	<p>Session 4: Perovskites</p> <p>9:00 AM - 9:30 AM Petra Cameron (Invited Speaker) Understanding the impact of mobile ions on perovskite solar cells</p> <p>9:30 AM - 9:45 AM Dumitru (Dima) Sirbu Sustainable PV Manufacturing with Micro-Groove Architecture</p> <p>9:45 AM - 10:00 AM Matthew Sharpe Ion Beam Analysis for Quantifying Hydrogen, Radiation Effects and Interfaces of Advanced Photovoltaic Materials</p> <p>10:00 AM - 10:15 AM Mojtaba Abdi Jalebi Integrated Molecular, Interface, and Passivation Approaches to Ultra-Efficient Indoor and BIPV Perovskite Photovoltaics</p> <p>10:15 AM - 10:30 AM Jiayi Zhao Ethanol-based Green Solvent System for Fabricating Perovskite Solar Cells</p> <p>10:30 AM - 10:45 AM Hashini Perera Improved optoelectronic homogeneity of perovskite photovoltaics through bottom-up design</p>
10:45 AM - 11:00 AM	Morning Break
11:00 AM - 12:30 PM	<p>Session 5: Space PV</p> <p>11:00 AM - 11:30 AM Louise Hirst (Invited Speaker) Space Photovoltaics for emerging applications</p> <p>11:30 AM - 11:45 AM Albertus Mostert Advanced Anti Reflective Coatings for Space Solar PV</p> <p>11:45 AM - 12:00 PM Adam Law Development of Multifunctional Anti-reflection Coatings for Space Photovoltaics</p> <p>12:00 PM - 12:15 PM Youhuang Yang Development of Ultra-Thin InGaP/GaAs Tandem Cells for Space Applications</p> <p>12:15 PM - 12:30 PM Anup Yadav Carrier Lifetime in Silicon Solar Cell Materials for Space Applications Using Temperature-Dependent Photoexcited Muon Spin Spectroscopy</p>
12:30 PM - 1:30 PM	Lunch
1:30 PM - 2:45 PM	Poster Session B
2:45 PM - 3:00 PM	Afternoon Break

<p>3:00 PM - 4:30 PM</p>	<p>Session 6: Silicon PV and PV Modules</p> <p>3:00 PM - 3:30 PM Nicholas Grant (Invited Speaker) PV reliability at the tera-watt scale</p> <p>3:30 PM - 3:45 PM Sophie Pain Hydrogen in atomic layer deposition-grown aluminium oxide films for silicon surface passivation</p> <p>3:45 PM - 4:00 PM Yaxin Zhan Graded AZO/Al₂O₃ hole selective passivating contact for silicon heterojunction solar cells</p> <p>4:00 PM - 4:15 PM Oli Fryatt Mechanical and Compositional Characterisation of PV Module Laminates to Inform High-Value Recycling Pathways</p> <p>4:15 PM - 4:30 PM Kelsey Hall ALD coatings for wettability control on anti-soiling PV glass</p>	
<p>4:30 PM - 4:45 PM</p>	<p>Afternoon Break</p>	
<p>4:45 PM - 6:00 PM</p>	<p>Delegates are invited to choose one of the parallel sessions scheduled</p>	
	<p>Lab Tours: EPSRC Advanced Thin Film Sputtering Fabrication Facility (TF-FAB), Northumbria University</p>	<p>Panel Session: How can academic research contribute to the UK Solar Roadmap and increase in Solar PV deployment?</p>
<p>7:00 PM - 10:00 PM</p>	<p>Reception Drinks and Conference Dinner</p> <p>Biscuit Factory, 16 Stoddart Street, Newcastle Upon Tyne, NE2 1AN</p>	

Friday 24 April 2026

9:00 AM - 10:45 AM	<p>Session 7: Perovskites, OPV and DSSC</p> <p>9:00 AM - 9:30 AM Alex Ramadan (Invited Speaker) Understanding heterogeneity in quasi-2D perovskite photovoltaics</p> <p>9:30 AM - 9:45 AM Tommy Richards Halide Perovskite Solar Cells for Space Applications</p> <p>9:45 AM - 10:00 AM Sirawit Kamnoedmanee A-site Cations Engineering of Quasi-2D Passivation Layer for Efficient and Stable Perovskite Solar Cells</p> <p>10:00 AM - 10:15 AM Amy Neild Circular Economy in Printable Perovskite Solar Cells</p> <p>10:15 AM - 10:30 AM Zongtai Zhang From lab to reality: how non-AM1.5 conditions shape the future of perovskite and organic solar cells</p> <p>10:30 AM - 10:45 AM Meiyi Chen Geometric Stabilization and Alkyl-Chain Engineering Enable High-Performance Cu-Based HTMs for Solid-State DSSCs</p>
10:45 AM - 11:00 AM	Morning Break
11:00 AM - 12:15 PM	<p>Session 8: PV Systems and Sustainability</p> <p>11:00 AM - 11:30 AM Shahab Dehghan (Invited Speaker) Solar Opportunities for Low-Carbon and Affordable Community Energy</p> <p>11:30 AM - 11:45 AM Dimitar Kutsarov Novel Carbon-Based Electrode Materials for High-Performance Emerging Solar Cell Technologies with Enhanced Sustainability</p> <p>11:45 AM - 12:00 PM Lavanya Malarkannan Exploring a simplified approach towards modelling of bifacial PV systems</p> <p>12:00 PM - 12:15 PM Kyle Richard Affleck Assessing the Environmental Impacts of Repowering UK Solar Farms</p>
12:15 PM - 12:30 PM	Closing Remarks and Awards Presentation
12:30 PM - 1:00 PM	Lunch (grab and go)