

1:30 - 2:00		Mark Howden, Climate change update T1			
		T1 COP21 update	T2 PV Devices - Si	T4 PV Devices - Perov	T5 Concentrating Solar Thermal
2:00 - 3:00	2:00		Han Cheng Sio Recombination behaviour of p-type high performance multicrystalline silicon before and after phosphorus diffusion and hydrogenation	Yuanchih (Atom) Chang Nanosphere Lithography for Fast and Controlled Fabrication of Large Area Plasmonic Nanostructures in Thin Film Photovoltaics	Mark Baldry Radiometric and Calorimetric Analysis of a Solar Furnace for Design Optimisation of a Photothermal Solar Chemical Reactor
	2:15		Anyao Liu Shallow Dopant(s) in Silicon Revealed by Photoluminescence Spectra	Cho Fai Jonathan Lau CsPbI ₂ Br ₂ Perovskite Solar Cell by Spray Assisted Deposition	Seneeti Purohit The Potential of Solar Processing of Iron Ores
	2:30		Shaoyang Liu Exploring the Potential and Limitations of Interdigitated Back Contact Solar Cells Using Experimentally Validated Quokka 3-D Simulation	Daniel Jacobs Characterizing and Explaining Hysteresis Behaviour in Perovskite Solar Cells: Device Modelling with Mobile Ions	Geoffrey Brooks Solar Thermal Reactors for High Temperature Material Processing
	2:45		James Bullock Dopant-free carrier selective contacts for silicon solar cells	Robert Bennett Investigating practical approaches to fine control of perovskite morphology in large scale processing	Will Logie Thermal Elastic Stress in Sodium Receiver Tubes
3:00 - 3:30		Tea break			
3:30 - 4:00		T1 Simon Corbell, 100% renewables			
		T1 High Renewable Futures	T2 PV Devices - Perov	T4 Solar energy systems, integration & deployment	T5 Concentrating Solar Thermal
4:00 - 5:30	4:00		Arman Mahboubi Soufiani Lessons Learnt from Spatially-resolved Electro- and Photo-luminescence Imaging: Interfacial Delamination in CH ₃ NH ₃ PbI ₃ Planar Perovskite	Constantino Aznar González Zero Export solutions. Pros and cons.	Alberto de La Calle System-Level Simulation of a Solar Power Tower Plant for Optimized Annual Performance
	4:15		Qingshan Ma Inorganic CsPbI ₂ Br perovskite solar cells	Catherine O'Neill Economic Analysis of Solar Battery Storage Under Various Electricity Tariffs	Rhys Jacob Effect of Storage on Revenue using Historical Spot Market Pricing for CSP
	4:30		Adrian Shi Accelerated Lifetime Testing of Organic-Inorganic Perovskite Solar Cells Encapsulated by Poly-isobutylene	Bhupendra Shakya An Energy Services Approach for Optimisation of Hybrid Mini Grid Systems	Meige Zheng Optimization of flat tubular molten salt receivers
	4:45		Jacek J. Jasieniak Ultrasonic Spray Deposition of TiO ₂ Hole Blocking Layers for High Efficiency Hybrid Perovskite Solar Cells	Navid Haghdadadi Operational performance analysis of distributed PV systems in Australia	Lifeng Li Beam-Redirecting Secondary Optics for Horizontal-Axis High-Flux Solar Simulators
	5:00			Sven Killinger Identification of Typical Quality Control Issues in Distributed PV Power Output Data	Farzin Ghanadi The effects of heliostat mirror geometry on static and dynamic wind loads
	5:15			Anubhav Roy The Impacts of Peer to Peer Trading on The National Electricity Market	Mahesh Venkataraman Energy and Exergy Analysis of Concentrated Solar Supercritical Water Gasification of Algae Biomass
5:30 - 7:30		Solar Oration, Jeremy Leggett (drinks & food afterwards)			

Wednesday - Day Two	8:30 - 9:00	Registration								
	9:00 - 9:30	Gus Nathan - Solar Thermal								
		T2 PV Devices - Perov		T3 PV Devices - OPV		T4 Solar and Renewable Energy Services		T5 Solar Energy in the Asia Pacific		
	9:30 - 10:30	9:30	Ricky Dunbar	Comparison of efficiency measurement methods for perovskite solar cells	Wenchao Huang	Influence of Fullerene Acceptor on the Performance, Microstructure and Photophysics of Low Band-Gap Polymer Solar Cells	Greg Buckman	Solar Proposals in ACT Reverse Auctions, 2012 to 2016	Richard Corkish	Photovoltaics for Basic Health and Communication Services in Post-Cyclone Vanuatu
		9:45	Heping Shen	Analysis of the hysteresis behavior and response time of perovskite solar cells due to both perovskite film and electron transport ...	A Jumabekov	Back-Contacted Hybrid Organic-Inorganic Perovskite Solar Cells	Kanyawee Keeratimahat	Review of very short term frequency management strategies for integration of high penetrations of non-synchronous utility-scale PV in electricity ..	Yu-Chung Chen	Incentivizing Solar Photovoltaic Applications in Remote Areas in Taiwan
		10:00	Kallista Sears	Robust and flexible perovskite solar cells with roll-to-roll printed electrodes			Iain Macgill	PV in the Australian NEM – large, small or all	Ulfah J. Sirega	Potential and Sustainability of Biomass for Electrification of Remote Area in Indonesia
		10:15	Yi-Bing Cheng	Stability Issues of Perovskite Solar Cells			Bin Lu	Satisfying 90% of electricity needs in the National Electricity Market with wind, photovoltaics and off-river pumped storage	James Prest	Indonesia's New Solar Feed-in Tariff Law: Will it Help PV Break Through the Barriers?
	10:30 - 11:00	Tea break								
		T2 PV Devices - Si		T3 AESA Storage workshop		T4 Solar and Renewable Energy Services		T5 Concentrating Solar Thermal		
	11:00 - 12:30	11:00	Hieu Nguyen	Detecting Heavily-Doped Layers Using Micro-Photoluminescence Spectroscopy	Mary Hendricks, AESA	Overview and Update on the Australian Energy Storage Database	Gough Lui	Realising Point-of-Use Photovoltaic-Powered Light-Emitting Diode-based Water Disinfection Systems	Tim Anderson	Impact of dish structure on the convective heat loss form a parabolic dish solar cavity receiver
		11:15	Marco Ernst	Laser-processed large area interdigitated back contact silicon solar cells with high open-circuit voltage	11.10am	Bruce Thompson, Community Development Director, GreenSync, Overview of current Microgrid and Network Support Projects	Wen-Chien Lo	Assessing the Capacity Value of Variable Renewable Generation in the Australian National Electricity Market	Ian Nock	A Computational Evaluation of Convective Losses from Bladed Solar-Thermal Receivers
		11:30	Mohsen Goodarzi	Modeling and characterisation of multicrystalline silicon blocks by quasi-steady-state photoconductance			Kirsten Anderson	Electrification of transport in the ACT – the path to deep cuts in transport-related greenhouse gas emissions	Ye Wang	Peak Flux Constraints on Bladed Receiver Performance in High-Temperature Molten Salt Concentrating Solar Power System
		11:45	Qilin Ye	Rear thermally diffused point contact solar cell with dielectric breakdown	11.30am	Paul Scott, Research Fellow, Research School of Computer Science, ANU – Overview of the Bruny Island Battery Trial	Anna Nadolny	Solar fuel synthesis will be electric-driven	John Pye	Design and testing of a high-efficiency solar thermal receiver for direct steam generation
		12:00	Chang Sun	Activation Kinetics of the Boron-Oxygen defect in Compensated n- and p-type Silicon Studied by High-Injection Micro-photoluminescence	11.50am	Megan Ward, Manager, Energy Projects, ACT Government – ACT Battery Auctions and recent Battery Installations	Zhaolin Liu	The Economic Feasibility Analysis on Pumped Hydro Energy Storage in Kidston, Queensland and the Modelling of the Effect of Integrating Additional Co-located Wind and PV Generation	Daniel Potter	Coupled heliostat field and receiver optimisation for central tower CSP facilities
		12:15	William Barker	Systematic determination of the most accurate method of QSSPC and PCD data analysis for n-type silicon wafers	12.10pm	Panel with Bruce Thompson, Paul Scott, Megan Ward, moderator Mary Hendricks	Zoe Hungerford	Impact of a Shiftable Solar Hot Water Load on Solar Photovoltaic Energy Integration for the Australian National Energy Market	Dominic Davis	Assessment of the Thermal Performance of Solar Expanding Vortex Receiver
	12:30 - 1:30	Lunch								
	1:30 - 2:00	Nathan Steggl, Windlab - Wind energy T2								
	2:00 - 2:30	Brian Schmidt - ANU VC, Nobel Prize winner T2								
	2:30 - 3:00	Lara Olsen, Tesla Energy - Storage & grids T2								
	3:00 - 3:30	Tea break								
	3:30 - 3:45	ACAP & ASTRI: Martin Green & Wes Stein T2								
		T2 ARENA: industry - research collaboration		T3 PV Devices Perov & OPV		T4 Solar energy systems, integration & deployment		T5 Concentrating Solar Thermal		
	3:45 - 5:15	3:45	The latest ARENA developments and future funding opportunities for Research & Development		Arastoo Teymouri	Transparent Conductive Film for Emerging Heat-Sensitive Devices	Emily Mitchell	A Case Study Investigation of Direct End User Procurement of Offsite Renewable Energy in the Australian Context	Riahi-Saman-Bruno	Thermal Behavior of High Temperature PCMs under the Periodic Heat Transfer Fluid Flow Reversal
		4:00	Panel discussion	Facilitator: Patrick Crittenden, Director of Sustainable Business Pty Ltd.	Hemant Kumar Mulmudi	Investigating phase segregation in Rubidium based mixed cation perovskite solar cells using cathodoluminescence	Grahams Mills	Developing a Framework for Direct End User Procurement of Offsite Renewable Energy in the Australian Context	Xiang Gao	Solar Thermochemical CO2 Splitting via Redox Cycling with Low-cost Metal Oxide Nanostructures
4:15		Zhengrong Shi	SunTech founder	Iacopo Benesperi	Polypyridyl Iron Complex as Hole Transporting Material for Formamidinium Lead Bromide Perovskite Solar Cells	Johanna Bowyer	Retail Arrangements for Community Owned Embedded Networks	Larissa Fedunik Hofman	Thermodynamic Performance of Carbonation–Calcination Looping for High-Temperature Thermal Energy Storage	
4:30		Muriel Watt	Head, Energy Policy & PV, IT Power	Jun Peng	Efficient Indium-Doped TiOx Electron Transport Layers for High-Performance Perovskite Solar Cells and Perovskite-Silicon Tandems	Rolando Madriz-Vargas	Energy with Development: 50-year Experience of Successful Community-driven Rural Electrification and Future Challenges for COOPEGUANACASTE in Costa Rica	Lindsay Yue	Solar Thermal Driven Chemical Cycling for CO2 Capture and Energy Storage: Thermal Transport and Conversion in Single Reacting Particles	
4:45		Craig Wood Fiona McClure	CEO of Vast Solar Principal Consultant at EnergyAE	YiLiang Wu	Grain boundary characterization using Cathodoluminescence and Photoluminescence mapping of large grained perovskite films	Tim Anderson	Solar Potential Assessment of Facades in an Urban Context: An Algorithm for 1.5D Digital Surface Models	Larissa Fedunik-Hofman	Kinetic Analysis and Stability of Improved Carbonate Looping Materials for High-Temperature Thermochemical Energy Storage	
5:00		Oliver Hartley	Managing Director of epho	Greg Wilson	Morphology Controlled Facile Perovskite Crystal Growth via a Uniform Metallic Seed Layer	Aziz Ahmad	Residential Household Electrical Appliance Management Using Model Predictive Control of a Grid Connected Photovoltaic-Battery System	Bo Wang	Fluid Dynamics and Heat Transfer Analyses for Solar Thermal Production of Metallic Nanoparticles	
5:30 - 6:30	Poster Session 1						T5 UNSW CEEM Tariff Tool workshop			
6:30 - 8:00	Conference Social with Drinks and Fingerfood									

Thursday - Day Three	8:30 - 9:00	Registration				
	9:00 - 9:30	Nancy Haegel Photovoltaics T2				
	9:30 - 10:00	Klaus Vajen - SHC T2				
	10:00 - 10:30	Bob Burton - Fossil futures T2				
	10:30	Tea break				
	11:00 - 12:30		T2 PV Devices - Perov	T3 Solar Heating and Cooling, Low Carbon Living	T4 Solar energy systems, integration & deployment	T5 AI Weimer + Concentrating Solar Thermal
		11:00	Udo Bach Back-contact Perovskite Solar Cells	Steven Meyer When to Use Solar Thermal or Photovoltaics for Industrial Process Heat Based Upon Project Investment	Muriel Watt Solar R,D&D in Australia: An Overview of ASI and ARENA Investments	AI Weimer Solar Thermochemical Processing – The Path Forward
		11:15	Nathan Chang A Manufacturing Cost Analysis Method for Early Stage Technologies	Ninad Dharmadhikari Prototype design of a low-concentration roof-mounted solar thermal collector for industrial heat production	Alison Lennon Metallisation Metrology for Reliable and Durable Silicon Photovoltaic	Sha Li Comparative Thermodynamic Analyses of Solar Hydrogen Production via Ceria-Based Metal Oxide
		11:30	Mei Gao Roll to Roll Compatible Process for Printed Perovskite Solar Cells	Cameron Stanley Design of a low-concentration roof-mounted solar thermal collector for industrial heat production	Rhett Evans Introducing PVeyeTM – An Analytics Dashboard for PV Manufacturers	Yanping Sun Development of low temperature bi-functional catalysts for production of solar hydrogen in a
		11:45	Hasitha Weerasinghe Encapsulation and De-cohesion Analysis of Printed Photovoltaics	Dominik Ritter Reduction of failures during the planning and installation phases and automated failure detection	Ingrid Haedrich Investigation of the Optical Performance of Black Silicon Solar Cells within a Module Setup	Larissa Fedunik-Hofman Techno-economic Assessment of Solid-gas Thermochemical Energy Storage for Concentrating
		12:00	Jincheol Kim Towards large area and high efficiency perovskite solar device by modified spin-coating process	Osama Bany Mousa Solar Thermal Sterilization: A TRNSYS Performance Analysis	Joe Wyndham Network services from distributed solar PV and inverters	Peter Kreider Grid-Scale Thermochemical Energy Storage Using Mixed Metal Oxide Redox Cycles
		12:15	Mathias Rothmann Direct observation of intrinsic twin domains in tetragonal CH ₃ NH ₃ PbI ₃	Mark Snow City of Sydney Thermal Building Assessment and Opportunities Study towards delivering Low Carbon Energy Storage for Air-Conditioning Using CO ₂ Gas Hydrates		
	12:30 - 1:30	Lunch				
	1:30 - 3:00		T2 PV Devices - tandem	T3 Solar Heating and Cooling, Low Carbon Living	T4 Solar energy systems, integration & deployment	T5 Solar Energy in the Asia Pacific
1:30		The Duong High efficiency perovskite-silicon tandem system: a roadmap toward 26%	Fiona McClure Benchmarking of DR AS 5389:2016 TRNSYS Domestic Building Model and Reference Air-Conditioner Against	Junxu Lu Collective Ramp Event Analysis for Four Solar Farms in China's Dali Province	Simon Troman 1.00-1.30pm Renewable Energy: Barriers and Openings in the Pacific Region	
1:45		Dale Grant An Optical Study On Material Selection For Perovskite/Silicon 2-Terminal Tandem Solar Cells	Tim Anderson Examining the thermal comfort characteristics of naturally ventilated residential buildings in NZ	Jessie Copper Calculation of PV System Degradation Rates in a Hot Dry Climate	Gautam Jindal Frequency Balancing Services for Integration of Solar PV in A Small Isolated Electricity Market: Singapore	
2:00		Marina Montiero Lunardi Life cycle assessment and energy payback time of Perovskite/Si Tandem Solar Cells	Alastair Mc Dowell A methodology for calculating the temperature exposure history of water in hot water tank systems for	Rhett Evans The Quantitative Impact of System Aging on Mismatch Loss in Fielded PV Arrays	H. Weeraturge Integration of Multiple Renewables and Storage Solutions to Solar Energy Base: An Energy Solution for	
2:15		Matthew Stocks Performance advantages of series-parallel connection of tandem solar cells	Fiona McClure Modelling of Ventilator Performance in Domestic Buildings in Accordance with DR AS 5389	Phillip Wild PV Yield And ENSO Interaction: SAM Based PV Yield Projection at GSRF Over 2007-2015	Grujica Ivanovich Planning future island networks	
2:30		Di Yan Passivating contacts for silicon solar cells based on recrystallized amorphous silicon	Alistair Sproul Analysis of Low Energy Housing Designs using the Admittance/Fourier Approach	Thomas Ratcliff Current Loss in Acrylic Non-Imaging Concentrators for Photovoltaics	Nelson Jr Ehano Tradeoffs in Large-Scale Renewable Energy Deployment in Developing Countries: The Case of	
2:45		Catherine Chan Light-induced degradation mechanisms in multi-crystalline Si PERC cells	James Hudson Solar Heat Below Grid Price		Kaveh Rajab Khallipour A DS4S Tool (Decision Support for Screening, Selection, Sizing, and Scheduling) for On-grid and Accelerating the Adoption of Solar Home Systems as a Means of Rural Electrification in India	
3:00 - 3:30	Tea break					
3:00 - 5:30		T2 PV Devices - Si	T3 IEA PVPS & SHC	T4 Solar energy systems, integration & deployment	T5 PV Devices - OPV	
	3:30	Kean Chern Fong Simulation of Fill-factor Loss in IBC Solar Cells	Facilitators: Klaus Vagen & Ken Guthrie	Evan Franklin Peak Demand Management on Distribution Networks via Intelligent Distributed Coordination of Residential	H Hui Jin Efficient organic solar cells with 3D NDI-based non-fullerene acceptors	
	3:45	Phang Sieu Pheng N-type High-Performance Multicrystalline and Quasi-Monocrystalline Silicon Wafers with Lifetimes above	Ken Guthrie Introduction to IEA Technology Collaboration Programs. How they work, Why get involved? How to get involved?	Sharon Young Framework to Assess the Ability of Network Regulatory Arrangements to Facilitate investment in Distributed	David J. Jones Side-Chain Engineering In High Performance P-Type Organic Semiconductors For Printed OPV	
	4:00	Fiacre E. Rougieux High efficiency Upgraded Metallurgical grade silicon cells	Muriel Watt Overview of the IEA PVPS program	Igor Skryabin Industrial PV-Storage optimization through spot price and solar forecasting	Dani Stolzhus Thiophene dendrimer-based low donor content solar cells	
	4:15	Jie Cui (Jason) Highly effective electronic passivation of silicon surfaces by atomic layer deposited hafnium oxide	Ken Guthrie Overview of the IEA SHC program	Evan Franklin An Assessment of Wholesale Market Participation Opportunities for Behind-The-Meter PV/Battery Systems in the National Electricity Market	Ardalan Armin Scaling up solution processed thin film solar cells	
	4:30	Udo Römer The transport mechanism of carrier selective poly-Si / c-Si junctions – tunneling vs. pinholes	Linda Koschier PVPS Communications, Strategy and Outreach . What is covered What is relevant to Australia?	Dylan McConnell Quantifying distributed solar generation using Bayesian inversion	Jegadesan Subbiah Fabrication of efficient organic solar cells: Device optimization and scale-up	
4:45	Alexander To Advanced modelling of the recombination rate at inverted p+ silicon surfaces: A novel method for the extraction of fixed interface charge	Mark Snow Solar Energy and Urban Planning. Place Sensitive Deployment of PV and Solar Heating technologies.	Luke Marshall Distributed Energy in the Australian National Electricity Market	Valerie Mitchell Amphiphilic block copolymers as organic photovoltaics: Towards industrially relevant solubilities		
5:30 - 6:30	T2 APVI AGM		Drinks and Light Food (sponsored by APVI)		T5 ASTRI update (by invitation)	