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2020 Asia-Pacific Solar Research Conference

30th November to 2nd December

Attend physically or virtually

MELBOURNE LOCATION for physical attendance

SYDNEY LOCATION for physical attendance

30th NOV		DAY 1
	9.15 - 9.55	Arrival Tea/Coffee
	9.55 - 10.00	<p>APVI Chair Welcome: Dr Chris Fell, Principal Research Scientist, CSIRO</p> <p>2020 APSRC Chair Welcome Address: Dr. Roger Dargaville, Deputy Director, Monash Energy Institute, Senior Lecturer, Renewable Energy, Monash University</p> <p>Acknowledgment of Country ZOOM MEETING - CLICK HERE</p>
MONDAY	10.00 - 12.15	Plenaries MORNING SESSION
	10.00 - 10.30	Sarah Barker, Head of Climate Risk Governance, MinterEllison "Climate change through a finance and liability lens: how developments in the EU may shape Australian markets"
		Question Time - 10mins
	10.45 - 11.15	Professor Andrew Blakers FTSE, Research School of Electrical, Energy and Materials Engineering. College of Engineering and Computer Science, Australian National University "Australia, the global renewable energy pathfinder"
		Question Time - 10mins
	11.30 - 12.00	Dr. Dietmar Tourbier, Director, Australian Solar Thermal Research Institute (ASTRI) at CSIRO "Advancements in Concentrated Solar Thermal"
		Question Time - 10mins
	12.15 - 1.15	Lunch
	1.30 - 3.45	Plenaries AFTERNOON SESSION ZOOM MEETING - CLICK HERE
	1.30 - 2.00	Professor Paul Cooper, Senior Professor, Sustainable Buildings Research Centre (SBRC), University of Wollongong "Enhanced Solar Energy Exploitation in Buildings with Advanced HVAC and Storage systems"
		Question Time - 10mins
	2.15 - 2.45	Dr Xiaojing (Jeana) Hao, Associate Professor, Photovoltaics & Renew. Energy Engineering, UNSW "Recent development in high bandgap chalcogenide thin film PV materials and devices"
	Question Time - 10mins	
3.00 - 3.30	Dr. Philipp Furler, Chief Technical Officer, Synhelion SA, Lugano, Switzerland "Solar thermal pathways for sustainable fuels"	
	Question Time - 10mins	
4.00 - 5.30	Networking Session on Location Only	

1st DECEMBER					
TUESDAY	ONLINE MORNING SESSION				
	10.00 – 11.30	Characterisation of PV Devices Chairs: Dr Yan Zhu (UNSW) & Wenjie Yang (ANU) ZOOM MEETING - CLICK HERE	BIPV & Solar Thermal Systems Chairs: Dr. Rebecca Yang (RMIT) & Daniel Mugnier (IEA SHC TCP) ZOOM MEETING - CLICK HERE	CST Receivers Chair: Dr. John Pye (ANU) ZOOM MEETING - CLICK HERE	D&I - Distribution networks and EVs Chair: Dr Mike Roberts (UNSW) ZOOM MEETING - CLICK HERE
	10.00 - 10.15	Germain Rey "Outdoor PL Imaging of Photovoltaic Modules at Constant Operating Point"	Chaoliang Zhang "A Comparison and Classification of BIPV Application for BIPV Products Selection"	Daniel Potter "Optimisation of Multi-aperture Falling Particle Cavity Receivers and Heliostat Fields"	Naomi Stringer "Decentralisation Framework: An approach to mapping power system transition"
	10.15 - 10.30	Yoann Buratti "Deep Learning on Electroluminescence Images for End-of-Line Binning of Full and Half-Cut Cells"	Maria Panagiotidou "The solar energy potential of window-mounted semi-transparent PV in the urban environment"	Sahan Kuruneru "A preliminary analysis of ceramic particles' velocity in gravity-driven solar particle receivers"	Niraj N. Lal "Essential Power System Services with Very High Levels of Renewable Energy, with Principles for DER Interaction"
	10.30 - 10.45	Shuai Nie "Temperature-dependent Characterization of Si-SiO ₂ Interface Passivation for Corona Charged Oxides"	Damiloluju Adeyina "A Parametric Study of Passive House Design in a Sub-tropical Climate"	Mohammadreza Sedighi "High-Temperature Receiver with a Packed Bed of Transparent Spheres Using CFD Analysis"	Katelyn Purnell "Electrified Public Transit: A Global Estimation Tool on the Impact at the Small and Large Electricity Grid Scales"
	10.45 - 11.00	Zubair Abdullah-Vetter "Localisation of Solar Cell Defects in Luminescence Images using Deep Learning"	Delight M. Sedzro "Thermal performance of unglazed roof-mounted solar thermal collectors"	Charles-Alexis Asselineau "Design of a heliostat field and liquid sodium cylindrical receiver for the Gen3 Liquids Pathway"	Ned Ekins-Daukes "The Potential For Vehicle Integrated Photovoltaics In Australia"
	11.00 - 11.15	Henner Kampwerth "Photorefectance (PR) Photothermal Deflection Spectrometry (PDS) for new Material Research"		Jim-Soo Kim "Construction and Test of a Novel Particle Receiver System"	
11.15 - 11.30			Shuang Wang "Performance co-optimisation of a heliostat field and a cylindrical receiver"		
AFTER LUNCH ONLINE SESSION					
1.00 – 2.30	Passivating Contacts and Defects Chairs: Dr Josua Stuckelberger (ANU) & Dr Li Wang (UNSW) ZOOM MEETING - CLICK HERE	BSHC and Data Analysis Chairs: Melissa James (CSIRO) & Dr. Tim Anderson (Auckland UT) ZOOM MEETING - CLICK HERE	CST - Materials and Heat Exchangers Chair: Ross Flewell-Smith (UniSA) ZOOM MEETING - CLICK HERE	D&I - Solar farms and practical solutions Chair: Dr Baran Yildiz (UNSW) ZOOM MEETING - CLICK HERE	
1.00 - 1.15	Moonyong Kim "A new universal metric called the relative defect concentration, β in c-Si solar cells"	Nihal Abdul Hameed "Verification of ClimateCypher Climate Data Outputs with System Advisor Model (SAM)"	Raihan Rumman "Cracking Failure in a 253 MA – Weld – Haynes 230 Concentrated Solar Power Receiver"	Richard Corkish "UNSWERV – Engineering Students Helping Out while Learning through Practice"	
1.15 - 1.30	Samam Jafari "Boron-oxygen-related traps in Czochralski grown silicon"	Trevor Lee "Effect of Energy Efficiency Rating (EER) of Dwellings on Sale Prices in the ACT 1999-2020"	Stuart Bell "Material Degradation Testing and Analysis for Next Generation CSP Applications"	John Boland "Forecasting solar radiation and farm power using combined seasonality and autoregressive model"	
1.30 - 1.45	Bruno Vicari Stefani "P-type Czochralski Silicon Heterojunction Solar Cells with High and Stable Open-circuit Voltage"	Hongying Zhao "Investigation on the Economic Performance of Distributed Building Photovoltaic Systems in the Urban Environment in China"	Hugh Russell "Stress analysis of sCO ₂ Turbine Pressure Casing"	Alexander Nassar "Improving Productivity of Cropland through Agrivoltaics"	
1.45 - 2.00	Winney Yang "Amorphous silicon based electronically-coupled upconverters for crystalline silicon solar cells"	Trevor Lee "Updating Australia's Reference Meteorological Years (RMYS) with the addition of Hourly Precipitation Data"	Yanting Yin "Mechanism of Degradation and Interfaces Formation of Stainless Steel Subjected to High Temperature Cycling with Phase Change Salts"	Damien Vermeer "DC/AC inverter oversizing ratio – what is the optimal ratio for Australian solar farms?"	
2.00 - 2.15	Anh Huy Tuan Le "Temperature-dependent performance of polysilicon passivating contacts and their solar cells"		Ross Flewell-Smith "Prototype Design of a High Temperature Phase Change Material Storage System"	Oliver Kunz "Alpha-Prototype Outdoor Photoluminescence Imaging Tool for Solar Module Field Testing"	
2.15 - 2.30	Thien N. Truong "Doped Poly-Si/SiO ₂ Passivating Contacts: Hydrogenation and Its Mechanisms"		Abdulrahman S. Alotabi "Stabilising the Au9 Clusters at the TiO ₂ Film using Chromium Oxide Layer Depends on the Stability of TiO ₂ Film"		
AFTERNOON SESSION					
3.30 – 5.00	PV - Module Testing and Performance Chairs: Dr Oliver Kunz (UNSW) & Dr Hang (Kelvin) Sio (ANU) ZOOM MEETING - CLICK HERE	WORKSHOP 1	CST - Optics, storage and system analysis Chair: Wes Stein (CSIRO) ZOOM MEETING - CLICK HERE		
3.30 - 3.45	Simon (Meng Fei) Zhang "A "Post-Mortem" Investigation of Cell-Level Degradation in Field SHJ Modules"	Energy Resilience in Pacific Island Countries: Planning and investing in more resilient energy systems Information and registration: here	Shuang Wang "An Efficient Method for Aiming Heliostats Using Ray-tracing"		
3.45 - 4.00	Chris Fell "Module testing round robin results: Does CSIRO's PV lab really perform?"		David Saldivia "Optical Assessment using Ray Tracing for a Beam-Down Receiver with Solid Thermal Storage"		
4.00 - 4.15	Renate Egan "Lifetime in the Field: Technology Transfer, Manufacturing and Field Performance of CSG Solar Modules"		Soheila Riahi "Prototype Design of a Printed Circuit Heat Exchanger for Na-sCO ₂ "		
4.15 - 4.30	Renate Egan "Australian PV Market Trends"		Navid Mohammadzadeh "Quantifying the Impact of Weather Uncertainty on Optimal Dispatch Planning"		
4.30 - 4.45	Marina Lunardi "Sustainable End of Life Management of PV Solar PV Waste: The Impact of Transportation"		Muhammad M. Rafique "Assessing the Role of Refractory Lining to Overcome the Solar Intermittency Challenge in Particle Receivers"		
4.45 - 5.00					

2nd DECEMBER				
ONLINE PROGRAM				
WEDNESDAY	10.15 - 10.45	ACAP Plenary Speaker Chair: Dr Richard Corkish (ACAP/UNSW) Prof. Paul Burn, ARC Australian Laureate Fellow, School of Chemistry and Molecular Biosciences, UQ "2D or not 2D - that is the perovskite question" ZOOM MEETING - CLICK HERE		
	11.00 - 12.30	ONLINE COMBINED POSTER SESSION Chairs: Dr. Roger Dargaville & Dr. Nathan Chang APSRC posters - ZOOM MEETING - CLICK HERE ACAP Posters - ZOOM MEETING - CLICK HERE Includes ACAP and Conference Posters		
	ONLINE AFTER LUNCH SESSION			
	1.30 - 3.00	PV - Perovskite and Tandem Solar Cells Chairs: Dr Hieu Nguyen (ANU) & Dr Yajie (Jessica) Jiang (UNSW) ZOOM MEETING - CLICK HERE	BSHC - Hot water and water processing Chairs: Dr. Maria Panagiotidou (Monash) & Dr. Robert Taylor (UNSW) ZOOM MEETING - CLICK HERE	CST Solar mineral and chemical processing Chair: Prof. Graham "Gus" Nathan (Adelaide Uni) & Dr. Saw Woei ZOOM MEETING - CLICK HERE
		ACAP # 1 Chairs: Fiacre Rougieux & David Jones ZOOM MEETING - CLICK HERE		
	1.30 - 1.45	Lei (Adrian) Shi "Gas chromatography-mass spectrometry analyses of encapsulated stable perovskite solar cells"	Djamel Benhadji "Numerical and Experimental validation of natural convection inside single slope solar still"	Suneeti Purohit "Solar Agglomeration of Iron Ores"
	1.45 - 2.00	Robert Lee-Chin & Arman Mahboubi Soufiani "Insights into Surface Recombination of Polycrystalline Perovskite Films via Injection-Dependent Lifetime Analysis"	Osama Bany Mousa "The Potential for PV Self-Consumption for Hot Water Systems in Australia"	Matthew Shaw "Applications for Solar Thermal Processing on the Moon and Related Challenges"
	2.00 - 2.15	Monika Michalska "The Impact of Ligand Engineering on Low Temperature NiO Hole Transporting Materials for Perovskite Solar Cells"	Mikel Duke "Solar Energy in Industrial Water and Wastewater Management "Survey of technologies for formulating guidelines for decision-making support to end-users"	Agung Setiawan "Solar Carbothermic Reduction of Complex Weathered Ilmenite using Biomass"
	2.15 - 2.30	Milos Dubajic "The role of the organic cation in acoustic phonons and hot carrier properties of lead bromide perovskites"	Si Thu Paing "Baffles and their effect on thermal performance of a solar hot water storage tank during static operation"	Reiza Mukhlis "Technoeconomic of Solar Recycling of Alkaline Batteries for Zn/ZnO Recoveries"
	2.30 - 2.45	Nathan Chang "Techno-economic analysis of Silicon Perovskite Tandem cells"	Question Time	Alireza Rahbari "System-Level Modelling of Solar-Thermal Beneficiation of Iron Ore"
	2.45 - 3.00	Juemeng Bing "Understanding how chlorine additive in a dynamic sequential process affects FA0.3MA0.7PbI3 perovskite film growth for solar cell application"		Matt Stocks "Emissions Reductions from Co-burning Ammonia with Coal in Japan: The Need For Green Ammonia"
		ONLINE AFTERNOON SESSION		
	3.30 - 5.00	PV - CZTS, III-V and Friends Chairs: Dr Arman Mahboubi Soufiani (UNSW) & Dr Michelle Vaquero Contreras (UNSW) ZOOM MEETING - CLICK HERE	WORKSHOP 2	D&I - Markets and the Region Chair: Dr Rob Passey (UNSW) ZOOM MEETING - CLICK HERE
		Energy Resilience in Pacific Island Countries: Energy resilience and the political economy of off-grid solar Information and registration: here		ACAP # 2 Chairs: Mei Gao & Udo Bach ZOOM MEETING - CLICK HERE
	3.30 - 3.45	Stephen Bremner "Integrating III-V materials for high performance and novel PV Applications"		Bin Lu "A Zero-Carbon Asia-Pacific Super Grid"
	3.45 - 4.00	Jessica Yajie Jiang "Thermal Performance of Singlet Fission and Tandem Solar Cells"		Jack Munro "Modelling Generator Bidding Behaviour in the National Electricity Market"
	4.00 - 4.15	Fiacre Rougieux "Accurate Solar Cell Efficiency From First Principle"		Thomas Jeffrey "Pathways for Essential Action in the NSW Energy Sector"
	4.15 - 4.30	Ned Ekins-Daukes "Next Generation III-V Multi-Junction Solar Cells For Aerospace Applications"		Hou Sheng Zhou "Aggregated impact of coordinated commercial-scale BESS and financial outcome"
	4.30 - 4.45	Jianjun Li "Defect control for 12.5% efficiency Cu2ZnSnS4 kesterite thin-film solar cells by engineering of local chemical environment"		
	4.45 - 5.00	Binesh Puthen Veettil "Development of Microwave Processing Techniques for Solar Cells"		CSIRO: Dr. Dechan Angmo "Materials and process development towards roll-to-roll fabrication of perovskite solar cells: a progress report"
	5.00 - 5.30	Awards Presentations/Closing Ceremony - ZOOM MEETING - CLICK HERE		