

Solar 2012 Conference Programme

Page 1: 5th-6th December

5th Dec	
14:00 - 16:00	Registration

6-Dec	
08:00:00	Registration

08:45:00	Plenary 1 Chair: Steve Blume	Welcome & Opening	Steve Blume, President, Australian Solar Council	
09:00:00		Keynote 1	John Grimes, CEO, Australian Solar Council	Bringing research and industry together
09:30:00		Keynote 2	Scott Frier, Abengoa Solar	'Yes we can'
10:00:00		Keynote 3	Peter Fries, Journalist	First one out of the foxhole gets shot: tales from the trenches of Solar One

MORNING BREAK

10:50:00	Photovoltaics 1 Chair: David Jones	Key-note 4	Min Gu, Swinburne University of Technology	Solar Heating & Cooling 1 Chair: Ken Guthrie	Key-note 5	Stephen White, CSIRO	Concentrating-Solar Power Chair: Scott Frier	CSP1	Majedul Islam	Three dimensional simulation of a parabolic trough concentrator thermal collector		
11:20:00		PV1	Jie Cui		Localised back surface field formation via different dielectric patterning approaches	SHC1		Alistair Sproul	Experimental results of a PVT-water module design for developing countries	CSP2	Mehdi Jafarian	Modelling the influence of high intensity radiation flux on particle performance in a hybrid solar chemical looping combustion reactor
11:40:00		PV2	Jing Rao		Optimization of light trapping in polycrystalline silicon thin film solar cells using double-nanoparticle-layerstructure	SHC2		Tanzeen Sultana	Performance of a linear Fresnel rooftop mounted concentrating solar collector	CSP3	Pegah Haseli	Thermal analysis of a 40MWe dish-based CSP plant using measured solar data
12:00:00		PV3	Wenkai Cao		A systematic study of thermal annealing effects of P3HT:SiNC hybrid solar cells	SHC3		William Duff	A solar cooling demonstration with a novel geometry ICPC solar collector: fourteen years of experimental and simulation results	CSP4	José Zapata	Experimental validation of a dynamic model for a mono-tube cavity receiver
12:20:00		PV4	Yang Li		Optical modeling of anodic aluminum oxide for light-trapping in silicon solar cells	SHC4		Dan Wu	Technical feasibility of a façade integrated solar cooling system for commercial buildings	CSP5	Xue Dong	A high flux solar simulator system for investigating the influence of concentrated solar radiation on turbulent reacting flows
12:40:00		PV5	Chaowei Xue		Influence of emitter doping and thickness on the performance of n-type evaporated poly-Si thin-film solar cells on glass	SHC5		Gabriele Lobaccaro	Urban solar district: a case study of geometric optimization of solar façades for a residential building in Milan	CSP6	Noel Barton	Passive solar power generation with air-blown thermal storage

LUNCH

Solar 2012 Conference Programme

Page 2: 6th December

14:00:00	Plenary 2 Chair: Alistair Sproul	Key-note 6		Ken Guthrie Sustainable Energy Transformation	The IEA Solar Heating and Cooling Roadmap - Plotting a course for Renewable Heat							
14:30:00		Poster oral presentations										
		Poster discussion										
15:40:00	AFTERNOON BREAK											
16:00:00	Photovoltaics 2 Chair: Min Gu	PV6	Daniel Chung	Camera imaging for antireflection coating process control	Solar Heating and Cooling 2 Chair: Brendan Bourke	SHC6	Rajat Das	Investigations on solar energy driven liquid desiccant cooling systems for tropical climates	Solar Resources Chair: Ian Grant	RES1	Ian Muirhead	One minute solar: observation, access and applications
16:20:00		PV7	Lorenzo Rosa	Optical response simulation and measurement of silver plasmonic nano-particles in hexagonal patterns for high-efficiency solar harvesting		SHC7	Lu Aye	Evaluation of a solar refrigeration system for field storage of blueberries in Biobio region		RES2	Barbara Ridley	Altering typical meteorological years to cater for climate change
16:40:00		PV8	Yuanxun Liao	Fabrication of $\gamma\text{-Al}_2\text{O}_3/\text{Si}/\gamma\text{-Al}_2\text{O}_3$ quantum well structures for energy selective contact of hot carrier solar cell		SHC8	Alistair Sproul	A novel thermal circuit analysis of solar thermal collectors		RES3	John Boland	Forecasting solar radiation on short time scales using a coupled autoregressive and dynamical (CARDS) model
17:00:00		PV9	Santosh Shrestha	Structural properties of germanium nanocrystals deposited with RF sputtering		SH9	John Pye	Heat loss estimation for dish cavity receivers by experimental and computational methods		RES4	Philip Woods-Bradley	Cloud tracking with optical flow for short-term solar forecasting
17:20:00	Australian Solar Energy Society AGM											
18:45:00	Pre-dinner drinks											
19:15:00	Pre-dinner drinks	Sponsor Presentation										
19:30:00	Dinner											
20:30:00		MC: Peter Fries, Journalist										
21:15:00		Annual Awards										
21:30:00		Wal Read Awards										

Solar 2012 Conference Programme

Page 3: 7th December

7-Dec												
09:15:00	Plenary 3 Chair: Larry Bellamy	Welcome	John Grimes, CEO, Australian Solar Council									
09:30:00		Keynote 7	David Waldren, Grocon Group	The next benchmark - net zero energy buildings								
10:00:00		Keynote 8	Keith Lovegrove, IT Power									
10:30:00		Keynote 9	Harald Drucek, University of Stuttgart	Latest developments and trends in Europe's solar thermal technology								
10:55:00 MORNING BREAK												
11:20:00	Photovoltaics 3 Chair: Pete Gorton	Key-note 10	David Jones, University of Melbourne	Built Environment Chair: David Waldren	Key-note 11	Stefan Preuss, Sustainability Victoria	Head in the Clouds, Feet on the Ground – From International Energy Agency Collaboration to Upgrading Victoria's Office Stock	Policy Chair: David Ferrari	Key-note 12	Monica Oliphant, Consultant	Community owned power	
11:50:00		PV10	Faisal Ghani		Extraction of solar cell modeling parameters using the Lambert W-function	BE1	Matt Francis		Strategies for improving the thermal performance and comfort levels of a kindergarten in Nepal	POL1	Trevor Berrill	Renewable energy policy in Queensland - a bumpy ride
12:10:00		PV11	Lisa Havas		Analysis of a residential rooftop photovoltaic trial in Alice Springs	BE2	Mahalath Halperin		Retrofitting for sustainability - does it work?	POL2	Lynette Molyneaux	Where is Australian power headed in 2035?
12:30:00		PV12	Daniel Macdonald		The emergence of n-type silicon for solar cell manufacture	BE3	Martin Anda		Carbon neutral settlements: the role of solar energy	POL3	Igor Skryabin	Business and financial structures for solar power stations
12:50:00		PV13	John Ward		The virtual power station – achieving dispatchable generation from small scale solar	BE4	Annabel Sawyer		A family-sized greenhouse for a remote mountain region of Nepal	POL4	Craig Froome	Modelling the effect of climatic conditions on solar yield and the implications for solar forecasting
13:10:00 LUNCH												

Solar 2012 Conference Programme

Page 4: 7th December

13:40:00	Poster discussion									
14:00:00	Grids Chair: Stephen White	GRI1	Stefan Tait	Development of commercial PV in Australia - critical factors apart from economics	Built Environment and Solar Developments Chair: Stefan Preuss	BESD1	Dimitris Lazos	The value of commercial BIPV systems in the urban environment	Rob Bartrop (Business Development Manager, First Solar)	Greenough River Solar Farm Lessons and Opportunities
14:20:00		GRI2	Francis Clark	The OzEA 50% renewables modelling - results and reflections		BESD2	Stephen Berry	Transformational role of sustainable niche developments	Andrew Dickson (Operations Manager, Clean-Sight and former Manager, Solar Dawn project)	Where to from here with Big Solar?
14:40:00		GRI3	Mark Utting	Planning for the impact of distributed solar energy on the grid		BESD3	Wil Gardner	Development of a solar thermal supercritical steam generator		
15:00:00		GRI4	Worawit Tayati	PV generation hosting capacity of remote area power supply systems		BESD4	Vaman Kuber	Designing solar photovoltaic power plant for optimum performance	Wayne Smith (Director, Clean Economy Services)	Solar Policy Opportunities and Challenges in 2013
15:20:00		GRI5	Keith Sue	Distributed energy storage in the Australian National Electricity Market: assessing potential benefits and a framework for integration		BESD5	Tshewang Lhendup	Experimental study of coolth charging of an inter-seasonal underground thermal storage system	Blair Pester (Regional Manager, Winaico)	Best Practice and Quality in PV
15:40:00	AFTERNOON BREAK									
16:00:00	Closing session	John Grimes, CEO, Australian Solar Council	Close and Farewell							
16:30:00	End of Conference									