Monday, 24 October 2016: PVSEC-26 Conference Registration & SIEW 2016 Welcome Reception		
Venue	**Time**	**Event**
Hibiscus Level 3 (Foyer)	16:00 onwards	PVSEC-26 Conference Registration
Jasmine Level 3 (Foyer)	17:00 – 19:00	PVSEC-26 Welcome Cocktail Reception
National Gallery Singapore	18:00 onwards	SIEW 2016 – Singapore Energy Summit Networking Reception https://www.siew.sg/programme/events/ses-networking-reception

Tuesday, 25 October 2016: Joint Opening Ceremony for PVSEC-26, ACES 2016 and AWTEC 2016		
Venue	**Time**	**Event**
Jasmine Room (3801A – 3906)	08:00 – 18:00	Registration
	08:50	Guests to be seated
	09:00 – 09:10	Welcome Address by Mr Edwin KHEW, Chairman, Sustainable Energy Association of Singapore
	09:10 – 09:20	Welcome Address by Prof Armin ABERLE, CEO, Solar Energy Research Institute of Singapore, General Chair of PVSEC-26
	09:20 – 09:35	Address by Minister Masagos Zulkifl, Minister for the Environment and Water Resources (MEWR), Singapore
	09:35 – 09:45	Key Clean Energy announcements by Minister Masagos Zulkifl
	09:45 - 09:55	PVSEC Award Presentations
	09:55 – 10:15	Keynote Address by Mr Jon MOORE, Head, Bloomberg New Energy Finance (BNEF)
ACES Exhibition (Level 4, 4700 Simpor Roselle)	10:15 – 10:45	Coffee / Tea Break
Jasmine Room (3801A – 3906)	10:45 – 11:00	Keynote Address by Mr Bambang SUSANTONO, VP for Knowledge Management and Sustainable Development, Asian Development Bank
	11:00 – 11:50	Panel Discussion: Global Trends in Clean Energy Moderator: Justin WU, BNEF
	11:50 – 12:05	Keynote Address by Mr John SMIRNOW, Secretary General, Global Solar Council *10 Million Solar Jobs by 2030*
	12:05 – 12:55	Panel Discussion: Scaling Solar Power- a path to reducing emissions and providing energy access Moderator: John SMIRNOW, Global Solar Council
(Level 4, 4700 Simpor Roselle)	12:55 – 14:00	Lunch

Tuesday, 25 October 2016: PVSEC-26 Conference – Keynote and Plenary talks		
Venue	**Time**	**Event**
Jasmine Room (3801A – 3906)	Session Chairs: Prof Makoto KONAGAI, Tokyo City University, Japan Prof Armin ABERLE, SERIS, Singapore	
	14:00 – 14:30	Keynote talk: Prof Ken BALDWIN Australian National University, Australia *Our Climate and Energy Future*
	14:30 – 15:00	Plenary speaker Area 5: Prof Eicke WEBER Fraunhofer Institute for Solar Energy Systems, Germany *Photovoltaics Moving into the Terawatt Range*
	15:00 – 15:30	Plenary speaker Area 1: Dr Nicholas EKINS-DAUKES Imperial College London, United Kingdom *Solar Power Conversion Efficiency Above 40% Short and Long Term Options*
	15:30 – 16:00	Plenary speaker Area 2: Dr Pierre VERLINDEN Trina Solar, China *Will We Have > 22% Efficient Multi-Crystalline Silicon Solar Cells?*
(Level 4, 4700 Simpor Roselle)	16:00 – 16:30	Coffee / Tea Break
Jasmine Room (3801A – 3906)	16:30 – 17:00	Plenary speaker Area 3: Prof Tsutomu MIYASAKA Toin University of Yokohama, Japan *Organo-Metal-Halide Perovskite Solar Cells – Past, Present and Future*
	17:00 – 17:30	Plenary speaker Area 4: Dr Shankar SRIDHARA REC Solar Pte. Ltd., Singapore *Technology Developments in REC: Silicon to Module*

Wednesday, 26 October 2016 (09:00 – 10:30): PVSEC-26 Conference sessions		
Hibiscus, Level 3 (Foyer)	08:00 – 18:00	Registration
Room 3711/3712/ 3713 (Posters)	09:00 – 10:30	Poster Setup (For Areas 1 & 3)
Room 3612/3613	09:00 – 10:30	CREATE Energy Symposium 2016: Grand Challenges for Solar Energy Technologies & Systems in Southeast Asia
Session 2.3.1 Room 3912/3913	**Session 2.3.1: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Prof Junsin YI, Sungkyunkwan University, South Korea 2. Dr Shubham DUTTAGUPTA, SERIS, Singapore	
	09:00 - 09:15	2.3.1a (Invited): Dr Markus FISCHER, Hanwha Q-Cells, Germany, *The 7th edition of the International Technology Roadmap for Photovoltaic (ITRPV) – Current Trends and Challenges in c-Si Technology*
	09:15 - 09:30	2.3.1b (Invited): Prof Stuart WENHAM, University of New South Wales, Australia, *Advanced hydrogenation of mono-Si solar cells*
	09:30 - 09:45	2.3.1c: Dr Thorsten DULLWEBER, Institute for Solar Energy Research Hamelin, Germany, *Screen-printed Rear Al Finger Grids Enabling Bifacial PERC+ Cells and Modules*
	09:45 - 10:00	2.3.1d: Dr Ki Hyung KIM, Shinsung Solar Energy Co., South Korea, *Record High Efficiency of Screen Printed Si Al-BSF Solar Cell: 20.29%*
	10:00 - 10:15	2.3.1.e: Dr Josef HAASE, Centrotherm photovoltaics AG, Germany, *Low Pressure Chemical Vapour Deposition for In Situ Doped N+ POLO Junctions in Industrial Silicon Solar Cells*
	10:15 – 10:30	2.3.1f: Mr Zhengshan YU, Arizona State University, United States, *Silicon heterojunction solar cells tuned to the infrared spectrum for use in tandems*
Session 3.2.1 Room 3812/3813	**Session 3.2.1: CIS and CdTe thin-film solar cells** Session Chairs: 1. Dr Selvaraj VENKATARAJ, SERIS, Singapore 2. Dr Negar NAGHAVI, Institut de recherche et développement sur l'énergie photovoltaïque, France	
	09:00 - 09:15	3.2.1a (Invited): Dr Katsumi KUSHIYA, Solar Frontier, Japan, *CIS-based Thin-film PV Technology: Unlocking the Key of High Performance*
	09:15 - 09:30	3.2.1b: Dr Sebastian SCHMIDT, Helmholtz-Zentrum Berlin, Germany, *Interface Engineering of CIGSe/ALD-Zn(O,S) Heterojunctions*
	09:30 - 09:45	3.2.1c: Mr Kosuke SHUDO, Tokyo University of Science, Japan, *Effect of Heat-Light Soaking on KF-treated CIGS Thin Film with CBD-CdS and ZnS(O,OH) Buffer Layers*
	09:45 - 10:00	3.2.1d: Dr Zhenhao ZHANG, Singulus Technologies AG, Germany, *CIGS-High Efficiency Process Technology for Photovoltaics: CIGS provides the basis for an effective PV module production*

	10:00 - 10:15	3.2.1e: Dr Hideaki ARAKI, National Institute of Technology (Nagaoka College), Japan, *Effects of Sodium on Cu_2SnS_3 Thin Films Prepared By Co-Evaporation*
	10:15 – 10:30	3.2.1f: Mr Adiyudha SADONO, Tokyo Institute of Technology, Japan, *Efficiency Enhancement of Flexible Cu(In,Ga)Se_2 Deposited on Polyimide-coated Soda Lime Glass Substrates by Alkali Treatment*
Session 1.1.1 Room 3911	**Session 1.1.1: Novel materials for future PV technologies** Session Chairs: 1. Dr Sjoerd VELDHUIS, Energy Research Institute at NTU (ERI@N), Singapore 2. Dr Avishek KUMAR, REC Solar Pte Ltd, Singapore	
	09:00 - 09:15	1.1.1a (Invited): Dr Adele TAMBOLI, National Renewable Energy Laboratory (NREL), United States, *II-IV-V_2 materials: Inexpensive III-V Analogs for High-Efficiency Photovoltaics*
	09:15 - 09:30	1.1.1b: Prof Alexandre FREUNDLICH, Univ. of Houston, United States, *Large-Grain Near Single Crystalline Ge Thin Films on Glass*
	09:30 - 09:45	1.1.1c: Dr Naoya MIYASHITA, University of Tokyo, Japan, *Enhancement of Photocurrent in Epitaxial Lift-Off Thin Film GaInNAsSb Solar Cells By The Light Confinement Structure*
	09:45 - 10:00	1.1.1d: Dr Marwan DHAMRIN, Toyo Aluminium K.K., Japan, *Fabrication of Single-Crystalline SixGe1-x on Large Area Silicon Substrates by Screen-Printing Method*
	10:00 - 10:15	1.1.1e: Dr Keishiro GOSHIMA, Aichi Institute of Technology, Japan, *Intermediate Band in Multi Stacked InGaAs Quantum Dots*
	10:15 - 10:30	1.1.1f: Dr Stella Maris VAN EEK, FHR Anlagenbau GmbH, Germany, *Investigation of multilayer ZnO:Al/Ag/ZnO:Al transparent conductive films prepared by magnetron sputtering for solar applications*
Session 2.1.1 Room 3811	**Session 2.1.1: Silicon feedstock & wafers** Session Chairs: 1. Prof Erik Stensrud MARSTEIN, Institute for Energy Technology, IFE, Norway 2. Mr Adolphus Song, REC Solar Pte Ltd, Singapore	
	09:00 – 09:15	2.1.1a: Prof Chung-Wen LAN, National Taiwan University, Taiwan, *The Effect of Seed Arrangements on the Ingot Quality of N-type Mono-like Silicon Grown by Directional Solidification*
	09:15 - 09:30	2.1.1b: Mr Xiande DING, Bruker Optik GmbH, Germany, *High sensitivity FTIR oxygen quantification in complete polycrystalline silicon ingots*
	09:30 - 09:45	2.1.1c: Dr Anandha Babu GOVINDAN, Nagoya University, Japan, *Effect of different thin seed layers on the grain structure of multicrystalline silicon for photovoltaic application*
	09:45 - 10:00	2.1.1d: Mr Su-Hyun BAEK, Yonsei University, South Korea, *Recycling of poly silicon based solar cell wastes using steam plasma method*
	10:00 - 10:15	2.1.1e: Mr Takuto KOJIMA, Meiji University, Japan, *Effects of growth conditions and carbon on oxygen precipitation in Cz silicon*
	10:15 – 10:30	2.1.1f: Mr Kwanghun KIM, Woongjin Energy, South Korea

		The Effect of Heating Position on Temperature Profile of the Czochralski method
Session 4.1.1, & 4.2.1 Room 3611	**Session 4.1.1: Silicon wafer based PV modules** **Session 4.2.1: Thin-film PV modules** Session Chairs: 1. Dr Yan WANG, SERIS, Singapore 2. Mr Zhiqiang FENG, Trina Solar, China	
	09:00 – 09:15	4.1.1a (Invited): Mr Daisuke FUJISHIMA, Panasonic, Japan, *Silicon heterojunction photovoltaic module with conversion efficiency of 23.8%*
	09:15 - 09:30	4.1.1b (Invited): Dr Yong Sheng KHOO, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Bifacial photovoltaic module with superior front and rear side performance*
	09:30 - 09:45	4.1.1c: Dr Hisanari ONOUCHI, Nitto Denko Corporation, Japan, *Novel Wavelength Conversion Technology "RAYCREA" to Enhance Power Output and Reliability of PV modules*
	09:45 - 10:00	4.1.1d: Dr Anna J. CARR, Energy Research Centre of Netherlands (ECN), Netherlands, *Shade response of a full size TESSERA module*
	10:00 - 10:15	4.2.1a: Prof Shih-Hung LIN, TungHai University, Taiwan, *Influence of edge recombination on the CIGS solar module*
	10:15 – 10:30	4.1.1e: Dr Zhiqiang FENG, Trina Solar, China *Multi-crystalline Silicon Solar Module with Aperture Efficiency of 19.86%*
Session 1.2.1 Room 3810A & 3810B	**Session 1.2.1: New PV concepts** Session Chairs: 1. Dr Qiming LIU, Saitama University, Japan 2. Prof Armin ABERLE, SERIS, Singapore	
	09:00 – 09:15	1.2.1a (Invited): Prof Yoshitaka OKADA, University of Tokyo, Japan *Progress of Quantum Dot Intermediate-Band Solar Cells*
	09:15 - 09:30	1.2.1b: Prof Arno SMETS, Delft University of Technology, Netherlands *Hybrid multi-junction PV devices based on thin-film a-Si:H, nc-Si:H, CIGS, organic and c-Si wafer based hetero-junctions*
	09:30 - 09:45	1.2.1c: Dr Zhi Peng LING, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Comparison and characterization of different tunnel layers, suitable for passivated contact formation*
	09:45 - 10:00	1.2.1d: Dr Kenji ARAKI, Toyota Technological Institute, Japan, *Beyond the limit of Si solar cells – III-V on Si cell and its PCSC module concept*
	10:00 - 10:15	1.2.1e: Mr Prashant SINGH, CSIR-National Physical Laboratory, India *Light Intensity Dependent Characteristics of Micro-textured Si/PEDOT:PSS Heterojunction Solar Cell*
	10:15 – 10:30	1.2.1f: Dr Anna NIKOLSKAIA, Russian Academy of Sciences, Russia, *Efficient Four-Terminal Tandem PV Cells: from DSC/c-Si to PSC/c-Si*
Level 3 Jasmine Junior	10:30 – 11:00	**Coffee/Tea Break**

Foyer & Level 4, 4700 Simpor Roselle Room		

Wednesday, 26 October 2016 (11:00 – 12:30): PVSEC-26 Conference sessions		
3711/3712/ 3713 (Poster)	11:00 – 12:30	Poster session 1 (Area 3, sub-area 3.1 & 3.2) (For each poster, at least one presenter must be present)
3612/3613	11:00 – 12:30	CREATE Energy Symposium 2016: Grand Challenges for Solar Energy Technologies & Systems in Southeast Asia
Session 2.3.2 Room 3912/3913	**Session 2.3.2: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Hao JIN, Jinko Solar, China 2. Dr Thorsten DULLWEBER, Institute for Solar Energy Research, Hamelin, Germany	
	11:00 – 11:15	2.3.2a (Invited): Prof Makoto KONAGAI, Tokyo City University, Japan, *Major research accomplishment in 5 years of "FUTURE-PV Innovation" project*
	11:15 – 11:30	2.3.2b (Invited): Dr Armin RICHTER, Fraunhofer-ISE, Germany, *Silicon solar cells with full-area passivated rear contacts: Influence of wafer resistivity on device performance on a 25% efficiency level*
	11:30 – 11:45	2.3.2c: Mr Christophe ALLEBE, Centre Suisse d'Electronique et de Microtechnique, Switzerland, *Hitting the symbolic 30% efficiency threshold of Si-based photovoltaics*
	11:45 – 12:00	2.3.2d: Dr Felix HAASE, Institute for Solar Energy Research Hamelin (ISFH), Germany, *IBC solar cells with polycrystalline on oxide (POLO) passivating contacts for both polarities*
	12:00 – 12:15	2.3.2e: Mr Di YAN, Australian National University, Australia, *Silicon Nitride/Silicon Oxide interlayer for solar cell passivating contacts based on PECVD amorphous silicon*
	12:15 – 12:30	2.3.2f: Kai Carstens, University of Stuttgart, Germany, *23.2% laser processed back contact solar cells with amorphous silicon passivation*
Session 3.2.2 Room 3812/3813	**Session 3.2.2: CIS and CdTe thin-film solar cells** Session Chairs: 1. Dr Yan WANG, SERIS, Singapore 2. Dr Marc D. HEINEMANN, PVcomB - Helmholtz Zentrum Berlin, Germany	
	11:00 – 11:15	3.2.2a (Invited): Dr Kannan RAMANATHAN, Stion, United States, *New emitters for CIGS: from cells to full size modules*
	11:15 – 11:30	3.2.2b: Dr Kong Fai TAI, Solar Frontier K.K., Japan *From 20.9% to 22.3% CIGS Solar Cell: Reduced Recombination Rate at the Interface and Depletion Region due to K-treatment*
	11:30 – 11:45	3.2.2c: Ms Xue ZHENG, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Raman Spectroscopy Studies of Cu(In,Ga)Se_2 Absorber Layers Prepared at Various Selenization Temperatures*

	11:45 – 12:00	3.2.2d: Dr Reinhard FENDLER, FHR Anlagenbau GmbH, Germany, *Large Area Deposition of Contact Films by Magnetron Sputtering*
	12:00 – 12:15	3.2.2e: Dr Negar NAGHAVI, IRDEP, France, *Ultrathin CIGS based solar cells: the impact of deposition methods & light management*
	12:15 – 12:30	3.2.2f: Mr Takahito NISHIMURA, Tokyo Institute of Technology, Japan, *Interface-quality Improvement by Controlling Cu(2-x)Se layer in Three-stage Method for High Efficiency Cu(In, Ga)Se2 Solar Cells*
Session 1.1.2 Room 3911	**Session 1.1.2: Novel materials for future PV technologies** Session Chairs: 1. Asst Prof Nripan MATHEWS, Energy Research Institute @ NTU, Singapore 2. Dr Adele TAMBOLI, National Renewable Energy Laboratory, NREL, United States	
	11:00 - 11:15	1.1.2a: Mr Maksym PLAKHOTNYUK, Technical University of Denmark, Denmark, *Behind the Nature of Titanium Oxide Excellent Surface Passivation and Carrier Selectivity of c-Si*
	11:15 - 11:30	1.1.2b: Mr Chang-Yeh LEE, University of New South Wales, Australia, *The Effect of Thermal Annealing on WOX Hole Selective Contacts for P-type Silicon Solar Cells*
	11:30 - 11:45	1.1.2c: Dr Shuhei YAGI, Saitama University, Japan, *Effect of Carrier Blocking Layer on Carrier Collection in Inter-mediate-Band Solar Cells using GaAs:N Delta-Doped Superlattice*
	11:45 - 12:00	1.1.2d: Dr Sjoerd VELDHUIS, Energy Research Institute at NTU (ERI@N), Singapore, *Highly Luminescent and Stable Organic-Inorganic Perovskite Core-shell Nanoparticles for Light Emission and PV Applications*
	12:00 - 12:15	1.1.2e: Mr Krit KONGURAI, Chulalongkorn University, Thailand, *Tandem Quantum Dot Nanostructures for Photovoltaic Applications*
	12:15 - 12:30	1.1.2f: Dr Hidetoshi SUZUKI, University of Miyazaki, Japan, *The influence of substrate orientation on strain relaxation mechanisms of InGaAs layer grown on vicinal GaAs substrates measured by in situ X-ray diffraction*
Session 2.1.2 Room 3811	**Session 2.1.2: Silicon feedstock & wafers** Session Chairs: 1. Prof Chung-Wen LAN, National Taiwan University, Taiwan 2. Dr Anandha Babu GOVINDAN, Nagoya University, Japan	
	11:00 – 11:15	2.1.2a (Invited): Prof Erik Stensrud MARSTEIN, Institute for Energy Technology (IFE), Norway, *New processes for producing silicon for solar cells from silane gas*
	11:15 – 11:30	2.1.2b: Dr Fiacre ROUGIEUX, Australian National University, Australia, *Carrier induced degradation in compensated n-type solar cells: Impact of temperature, light-intensity and forward bias voltage on the reaction kinetics*
	11:30 – 11:45	2.1.2c: Mr Chang SUN, Australian National University, Australia, *Activation Kinetics of the Boron-Oxygen defect in Compensated n- and p-type Silicon Studied by High-Injection Micro-*

		photoluminescence
	11:45 – 12:00	2.1.2d: Mr Ryota SUZUKI, Meiji University, Japan, *Evaluation of Saw Damages with Diamond-Coated Wire in Crystalline Silicon Solar Cell by Photoluminescence Imaging*
	12:00 – 12:15	2.1.2e: Dr Boyun JANG, Korea Institute of Energy Research, South Korea, *Mono-crystalline silicon wafering process by using a multi-wire electrical discharge*
	12:15 – 12:30	2.1.2f: Mr Adolphus SONG, REC Solar, Singapore, *Elkem Solar Silicon: Silicon Feedstock for High Performance Multicrystalline Wafers*
Session 4.1.2 & 4.2.2 Room 3611	**Session 4.1.2: Silicon wafer based PV modules** **Session 4.2.2: Thin-film PV modules** Session Chairs: 1. Mr Daisuke FUJISHIMA, Panasonic Corporation, Japan 2. Dr KHOO Yong Sheng, SERIS , Singapore	
	11:00 – 11:15	4.1.2a (Invited): Mr Colin QUAN, HIUV, China *Advantages of using white encapsulants in PV modules*
	11:15 – 11:30	4.1.2b (Invited): Dr Jinseok LEE, Korea Institute of Energy Research (KIER), South Korea, *Recovery Technology of Intact Wafer from End-of-life c-Si Photo-voltaic Module*
	11:30 – 11:45	4.2.2a (Invited): Dr Dirk WEISS, First Solar, United States, *The bottom line: real-world performance advantage of thin-film CdTe technology*
	11:45 – 12:00	4.2.2b (Invited): Mr Michael van der GUGTEN, Smit Thermal Solutions, Netherlands, *Controllability and reproducibility measures in thermal process equipment*
	12:00 – 12:15	4.1.2c: Mr Stefan ROEST, Eternal Sun Group, Netherlands, *PERC: Critical measurement requirements for manufacturing and laboratory testing*
	12:15 – 12:30	4.1.2d: Mr Christophe MAYR, Austrian Institute of Technology (AIT), Austria *Lead-free and low silver c-Si modules – Innovative solutions from Austria*
Session 1.2.2 Room 3810A & 3810B	**Session 1.2.2: New PV concepts** Session Chairs: 1. Prof. Yoshitaka OKADA, University of Tokyo, Japan 2. Rolf STANGL, SERIS, Singapore	
	11:00 – 11:15	1.2.2a (Invited): Prof Christophe BALLIF, EPFL & CSEM, Switzerland *Application of silicon solar cells with passivated contacts in high-efficiency tandem solar cells*
	11:15 – 11:30	1.2.2b: Ms Sarah SOFIA, Massachusetts Institute of Technology (MIT), United States, *Metal Grid Contact Design for Four-Terminal Tandem Solar Cells*
	11:30 – 11:45	1.2.2c: Mr Haohui LIU, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Predicted outdoor energy yield of Si based tandem solar cells*
	11:45 – 12:00	1.2.2d: Dr Qiming LIU, Saitama University, Japan,

		Nafion-modified PEDOT:PSS for stable, high-performance crystalline-Si/organic heterojunction solar cells
	12:00 – 12:15	1.2.2e: Prof Tomoyoshi MOTOHIRO, Nagoya University, Japan, *Concept of the solar-pumped laser-PV combined system and its application to laser beam power feeding to electric vehicles*
	12:15 – 12:30	1.2.2f: Prof Gavin CONIBEER, University of New South Wales, Australia, *Uncovering hot carrier cooling mechanisms in multiple quantum wells*
Level 3 Jasmine Junior Foyer & Level 4, 4700 Simpor Roselle Room	**12:30 – 14:00**	**Lunch**

Wednesday, 26 October 2016 (14:00 – 15:30): PVSEC-26 Conference sessions		
3711/3712/ 3713 (Poster)	14:00 – 15:30	Poster session 2 (Area 3, sub-area 3.3, 3.4, 3.5) (For each poster, at least one presenter must be present)
3612/3613	14:00 – 15:30	CREATE Energy Symposium 2016: Grand Challenges for Solar Energy Technologies & Systems in Southeast Asia
Session 3.3.1 Room 3912/3913	**Session 3.3.1: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Xiaxia LIAO, Helmholtz-Zentrum Berlin (HZB), Germany 2. Prof Shuzi HAYASE, Kyushu Institute of Technology, Japan	
	14:00 - 14:15	3.3.1a (Invited): Prof David MITZI, Duke Chemistry, United States, *Perovskite Absorbers Beyond $CH_3NH_3PbI_3$: Status and Challenges*
	14:15 - 14:30	3.3.1b (Invited): Prof Constance CHANG-HASNAIN, University of California, Berkeley, United States *Illumination Angle Insensitive Indium Phosphide Tapered Nanopillar Solar Cell On a Silicon Substrate*
	14:30 - 14:45	3.3.1c: Ms Yan CHEN, NTU, Singapore *Lead-free Tin (IV)-based A2SnI6 Perovskite Materials for Photo-voltaic Application*
	14:45 - 15:00	3.3.1d: Mr Santhosh SHANMUGAM, Solliance - Holst Centre, Netherlands, *Up-scalable sheet-to-sheet production of high efficiency perovskite module and solar cells on 6-inch substrate using slot-die coating*
	15:00 - 15:15	3.3.1e: Dr Mikas REMEIKA, Okinawa Institute of Science and Technology, Japan, *Scalable Fabrication of Perovskite Solar Cells under Ambient Conditions by Ultrasonic Spray Coating*
	15:15 – 15:30	3.3.1f: Mr Zhengshan YU, Arizona State University, United States, *Two-terminal monolithic perovskite/silicon tandem solar cells with efficiencies over 22%*

Session 3.2.3 Room 3812/3813	**Session 3.2.3: CIS and CdTe thin-film solar cells** Session Chairs 1. Dr Kannan RAMANATHAN, Stion, United States 2. Dr Kong Fai TAI, Solar Frontier K.K., Japan	
	14:00 - 14:15	3.2.3a (Invited): Dr Sebastian S. SCHMIDT, Helmholtz-Zentrum Berlin, Germany, *Fast Atmospheric Chalcogenization of Metallic Cu-In-Ga Precursors*
	14:15 - 14:30	3.2.3b: Mr Weimin LI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Investigation of Modified Molybdenum Rear Contact Stack Designs for CIGS solar cells*
	14:30 - 14:45	3.2.3c: Mr Seung Tae KIM, Korea Advanced Institute of Science and Technology (KAIST), South Korea, *Growth of a large-grained Cu-deficient CIGS film with two-stage co-evaporation process and investigation of morphology evolution*
	14:45 - 15:00	3.2.3d: Dr Jihye KIM, ISAC Research Inc., South Korea, *Development of high throughput batch type ALD system for Zn(OS) buffer layer for CIGS PV Module*
	15:00 - 15:15	3.2.3e: Dr Anjun HAN, Chinese Academy of Sciences, China, *Effect of heat treatment on the properties of the partially selenized Cu(In,Ga)Se_2 films*
	15:15 – 15:30	3.2.3f: <TBC>
Session 1.1.3 Room 3911	**Session 1.1.3: Novel materials for future PV technologies** Session Chairs 1. Prof Alexandre FREUNDLICH, University of Houston, United States 2. Prof Clas PERSSON, University of Oslo, Norway	
	14:00 - 14:15	1.1.3a: Dr Vinod KUMAR, Indian Institute of Technology Delhi, India, *Effect of applied voltage on spray deposited gallium doped ZnO thin films for solar cell application*
	14:15 - 14:30	1.1.3b: Mr Arastoo TEYMOURI, University of New South Wales (UNSW), Australia, *Transparent Conductive Film for Emerging Heat-Sensitive Devices*
	14:30 - 14:45	1.1.3c: Dr Pei WANG, University of New South Wales, Australia, *Carrier thermalisation of titanium hydride analysed by transient absorption test*
	14:45 - 15:00	1.1.3d: Dr Katsuhisa YOSHIDA, University of Tokyo, Japan, *Simulation Analysis of Impurity-Band assisted Quantum-Dot Intermediate-Band Solar Cell*s
	15:00 - 15:15	1.1.3e: Mr Warakorn YANWACHIRAKUL, University of Tokyo, Japan, *Design Structure of Free-barrier InGaAs/GaNAs Multiple Quantum Well Solar Cells with 1.2 eV Energy Gap*
	15:15 - 15:30	1.1.3f: Dr Francesco MADDALENA, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Effect of precursor stoichiometry and device architecture on the characteristics of methylammonium lead iodide perovskite field-*

		effect transistors
Session 2.2.1 Room 3811	**Session 2.2.1: Multicrystalline silicon wafer solar cells** Session Chairs: 1. Dr Laurent CLOCHARD, NINES PV, Ireland 2. Dr Joel LI, SERIS, Singapore	
	14:00 - 14:15	2.2.1a (Invited): Prof Jan SCHMIDT, Institute for Solar Energy Research (ISFH), Germany, *Recent advances in understanding and suppressing light-induced degradation in multi-Si solar cells*
	14:15 - 14:30	2.2.1b: Mr Hang Cheong SIO, ANU, Australia, *Recombination behaviour of p-type high performance multicrystalline silicon before and after phosphorus diffusion and hydrogenation*
	14:30 - 14:45	2.2.1c: Dr Sieu Pheng PHANG, Australian National University (ANU), Australia, *N-type High-Performance Multicrystalline and Quasi-Monocrystalline Silicon Wafers with Lifetimes above 2ms*
	14:45 - 15:00	2.2.1d: Dr Wolfgang JOOSS, RCT Solutions, Germany, *Recent results on multicrystalline PERCT solar cells and modules*
	15:00 - 15:15	2.2.1e: Dr Abhishek KUMAR, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Total cost of ownership to manufacture solar cells: Al-BSF vs PERC*
	15:15 – 15:30	2.2.1f: Ms Monika BIERI, Solar Energy Research Institute of Singapore (SERIS), Singapore *Economic viability analysis of solar cell manufacturing*
Session 4.3.1 Room 3611	**Session 4.3.1: PV module reliability** Session Chairs: 1. Dr John WOHLGEMUTH, National Renewable Energy Laboratory, NREL, United States 2. Dr Yan WANG, SERIS, Singapore	
	14:00 - 14:15	4.3.1a (Invited): Dr Volker NAUMANN, Fraunhofer-CSP, Germany, *Investigations on the formation of stacking faults leading to PID-shunting*
	14:15 - 14:30	4.3.1b: Dr Atsushi MASUDA, National Institute of Advanced Industrial Science and Technology, Japan, *Potential-Induced Degradation for Heterojunction Crystalline Si Photovoltaic Modules*
	14:30 - 14:45	4.3.1c: Dr Renate ZAPF-GOTTWICK, University of Stuttgart, Germany, *Long term leaching of photovoltaic modules*
	14:45 - 15:00	4.3.1d: Dr Tadanori TANAHASHI, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Acceleration factor of high-speed degradation of photovoltaic cells exposed to acetic acid vapor against that observed in photovoltaic modules tested under damp heat stress conditions*
	15:00 - 15:15	4.3.1e: Dr Jacqui CROZIER, Nelson Mandela Metropolitan University, South Africa, *Quantification of the effects of Photovoltaic module defects and degradation using Electroluminescence imaging*
	15:15 - 15:30	4.3.1f: Dr Anil KOTTANTHARAYIL, IIT Bombay, India

		Comparative study of performance of fielded PV modules in two countries
Session 4.4.1 Room 3810A & 3810B	**Session 4.4.1: Simulation & characterisation of PV modules** Session Chairs: 1. Prof Marko TOPIC, University of Ljubljana, Slovenia 2. Dr Tetsuyuki ISHII, Central Research Institute of Electric Power Industry (CRIEPI), Japan	
	14:00 - 14:15	4.4.1a (Invited): Mr Giuseppe GALBIATI, ISC Konstanz, Germany *Zebra Cells and Module Technology for Bifacial System*
	14:15 - 14:30	4.4.1b: Mr Kenneth GOH, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Fast (NOCT) Nominal Operating Cell Temperature Indoor Measurement*
	14:30 - 14:45	4.4.1c: Dr Werner HERMANN, TUV Rheinland Group, Germany, *Advances in spectral irradiance analysis of solar simulators*
	14:45 - 15:00	4.4.1d: Dr Jai Prakash SINGH, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Bifacial solar cell measurements under STC and its impact on bifacial module measurements*
	15:00 - 15:15	4.4.1e: Dr Kenji ARAKI, Toyota Technological Institute, Japan, *A 2-D Monte Carlo Simulation for Analysis of the Acceptance Angle of CPV*
	15:15 - 15:30	4.4.1f: <TBC>
Level 3 Jasmine Junior Foyer & Level 4, 4700 Simpor Roselle Room	15:30 – 16:00	**Coffee/Tea Break**

Wednesday, 26 October 2016 (16:00 – 18:00): PVSEC-26 Conference sessions		
Room 3711/3712/ 3713 (Poster)	16:00 – 18:00	Poster session 3 (Area 1) (For each poster, at least one presenter must be present)
Room 3612/3613	16:00 – 18:00	CREATE Energy Symposium 2016: Grand Challenges for Solar Energy Technologies & Systems in Southeast Asia
Session 3.3.2 Room 3912/3913	**Session 3.3.2: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Mikas REMEIKA, Okinawa Institute of Science and Technology, Japan 2. Prof Constance CHANG-HASNAIN, University of California, Berkeley, United States	
	16:00 – 16:15	3.3.2a (Invited): Prof Shuzi HAYASE, Kyushu Institute of Technology, Japan, *Architecture of interface at perovskite layer and hole transport layer for perovskite solar cells*
	16:15 –	3.3.2b (Invited): Prof Donghwan KIM, Korean University, South Korea

	16:30	*Light- and electric field-induced degradation of perovskite solar cells*
	16:30 – 16:45	3.3.2c: Mr Yiliang WU, Australian National University (ANU), Australia, *On the Origin of Hysteresis in Perovskite Solar Cells*
	16:45 – 17:00	3.3.2d: Dr Sneha Avinash KULKARNI, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Investigating the feasibility of symmetric guanidinium (GA, CH6N3+) based plumbate perovskites (GAPbI3 and GA2PbI4) in prototype solar cell devices*
	17:00 – 17:15	3.3.2e: Dr Masato MAITANI, University of Tokyo, Japan, *Carrier Transport of Perovskite Solar Cells Controlled by Exposed Facet of Oxide Scaffold*
	17:15 – 17:30	3.3.2f: Dr Guifang HAN, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Effect of lead source on the performance of inverted planar perovskite solar cell*
	17:30 – 17:45	3.3.2g: Dr Mathew SHERBURNE, University of California Berkeley, United States, *Identifying lead-free double perovskite photovoltaic materials by high-throughput computational screening*
	17:45 – 18:00	3.3.2h: Dr Mohammad Istiaque HOSSAIN, Qatar Environment and Energy Research Institute, Qatar, *Fabrication of Hybrid Organic-Inorganic Perovskite Solar Cells and Photoluminescence Study of the Charge Dynamics*
Session 3.2.4 Room 3812/3813	**Session 3.2.4: CIS and CdTe thin-film solar cells** Session Chairs: 1. Prof David MITZI, Duke Chemistry, United States 2. Dr Jihye KIM, ISAC Research Inc., South Korea	
	16:00 – 16:15	3.2.4a (Invited): Dr Homare HIROI, Showa Shell Sekiyu & Solar Frontier, Japan, *New Challenge in Se-free Cu(In,Ga)S_2 Solar Cells*
	16:15 – 16:30	3.2.4b: Dr Shin Woei LEOW, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Grain growth in antimony doped CuIn(S,Se) thin films with 8% efficiency*
	16:30 – 16:45	3.2.4c: Dr Negar NAGHAVI, Institut de recherche et développement sur l'énergie photovoltaïque (IRDEP), France *New ammonia free, room temperature and reusable chemical bath for Zn(S,O) buffer layer in Cu(In,Ga)Se2 based solar cells*
	16:45 – 17:00	3.2.4d: Dr Pedro SALOME, Instituto de Ciências Exatas, Brazil, *Cd and Cu interdiffusion in CIGS/CdS hetero-interfaces*
	17:00 – 17:15	3.2.4e: Mr Motoki WATANABE, Tokyo Institute of Technology, Japan, *Thiourea treatment for Cu(In,Ga)Se_2 solar cells*
	17:15 – 17:30	3.2.4f: Mr Kazuki HAMAMURA, Ritsumeikan University, Japan, *Influence of Cu/(Ge+Sn) composition ratio on photovoltaic performances of Cu2Sn1-xGexS3 solar cell*
	17:30 – 17:45	3.2.4g: Dr Leng ZHANG, Tsinghua University, China, *The key limiting factors in CuInGaSe2 thin film solar cells prepared by Sputtering From Quaternary Target Without Post-selenization*
	17:45 – 18:00	3.2.4h: Dr Nicoleta NICOARA, International Iberian Nanotechnology Laboratory, Portugal,

		Spatially-resolved insight into the formation of the Cu(In,Ga)Se_2/CdS interface - evidence for chemical and electronic non-uniformities
	18:00 – 18:15	3.2.4i: Mr Xianfeng ZHANG, Waseda University, Japan *Influence of Annealing Temperature on Properties of Cu2ZnSnS4 Thin Films Fabricated from Ball-milled Nanoparticle Inks*
Session 1.2.3 Room 3911	**Session 1.2.3: New PV concepts** Session Chairs: 1. Prof Christophe BALLIF, EPFL & CSEM, Switzerland 2. Prof Tomoyoshi MOTOHIRO, Nagoya University, Japan	
	16:00 – 16:15	1.2.3a: Dr Lewis FRAAS, JX Crystals Inc, United States, *Light Weight Fuel-Fired TPV Battery Replacement*
	16:15 – 16:30	1.2.3b: Dr Kikuo MAKITA, National Institute of Advanced Industrial Science and Technology, Japan, *Low Concentration InGaP/GaAs/Si 3-Junction Solar Cells with Smart Stack Technology*
	16:30 – 16:45	1.2.3c: Dr Zacharie JEHL, University of Tokyo, Japan, *Selective contacts for Hot Carrier Solar Cells using asymmetric double resonant tunnelling barriers*
	16:45 – 17:00	1.2.3d: Mr Prashant SINGH, CSIR-National Physical Laboratory, India, *Fabrication and Characterization of Silver Assisted Chemically Etched Silicon Nanowire Arrays Based Solar Cells*
	17:00 – 17:15	1.2.3e: Mr Zhe LIU, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Effect of Ohmic Shunts on 2T Multijunction Solar Cells*
	17:15 – 17:30	1.2.3f: Prof Tomah SOGABE, The University of Electro-Communications, Japan, *Investigation of Hot Carrier Transportation Dynamics in InAs/GaAs Quantum Dot Solar Cell*
	17:30 – 17:45	1.2.3g: Prof Stanko TOMIC, University of Salford, United Kingdom, *Global Optimisation of Multi Junction Solar Cells Under Current Matching Conditions*
	17:45 – 18:00	1.2.3h: Ms Sunhwa LEE, Korea Institute of Industrial Technology, South Korea, *Monolithic a-Si:H Thin Film/c-Si Tandem Solar Cells using Double Doped nc-Si:H Tunneling Junction*
	18:00 - 18:15	1.2.3i: Dr Santosh SHRESTHA, University of New South Wales, Australia, *Recent progress with absorber and energy selective contacts for hot carrier solar cells*
Session 2.2.2 Room 3811	**Session 2.2.2: Multicrystalline silicon wafer solar cells** Session Chairs: 1. Prof Jan SCHMIDT, Institute for Solar Energy Research (ISFH), Germany 2. Dr Abhishek KUMAR, SERIS, Singapore	
	16:00 – 16:15	2.2.2a (Invited): Dr Hao JIN, Jinko Solar, China, *21.63% world record large area multicrystalline silicon solar cell*
	16:15 – 16:30	2.2.2b: Mrs Jessica CHOU, DuPont, Taiwan, *The Evolution of Metallization Paste Development to Enable Fine Line Printing*
	16:30 – 16:45	2.2.2c: Dr Fangdan JIANG, Jinko Solar, China, *Effective Reduction of Light Induced Degradation in PERC Solar Cells*

		by Electro-Injection Annealing
	16:45 – 17:00	2.2.2d: Prof Chung-Wen LAN, National Taiwan University, Taiwan, *Surface activation and gettering of multi-crystalline silicon wafers from diamond and slurry wire slicing*
	17:00 – 17:15	2.2.2e: Dr Ankit KHANNA, Solar Energy Research Institute of Singapore (SERIS), Singapore *Single-component non-acidic emitter etch-back process for both n and p-type tube-diffused crystalline silicon wafer solar cells*
	17:15 – 17:30	2.2.2f: Dr Yufeng ZHUANG, Shanghai Jiao Tong University, China, *Versatile strategies for improving the performance of diamond wire sawn mc-Si solar cells*
	17:30 – 17:45	2.2.2g: Mr Laurent CLOCHARD, Nines PV, Ireland, *Industrial Dry texturing developments for diamond-wire cut mc-Si wafers*
	17:45 – 18:00	2.2.2h: Dr Saravanan SOMASUNDARAM, RenewSys India, India *Loss Analysis on Inline Processed Multi Crystalline Silicon Solar Cells*
Session 4.3.2 Room 3611	**Session 4.3.2: PV module reliability** Session Chairs: 1. Dr Atsushi MASUDA, National Institute of Advanced Industrial Science and Technology, Japan 2. Dr Renate ZAPF-GOTTWICK, University of Stuttgart, Germany	
	16:00 – 16:15	4.3.2a (Invited): Dr John WOHLGEMUTH, National Renewable Energy Laboratory (NREL), United States *Reliability and Durability of PV Modules in PV Systems*
	16:15 – 16:30	4.3.2b: Dr Sungwoo CHOI, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Time-dependent changes in CIGS and CdTe photovoltaic modules due to outdoor exposure*
	16:30 – 16:45	4.3.2c: Dr Santosh Kumar RATH, REC Solar, Singapore, *PV Backsheets: An Investigation of Hydrolytic Degradation of the middle PET*
	16:45 – 17:00	4.3.2d: Dr Volker NAUMANN, Fraunhofer Center for Silicon Photovoltaics CSP, Germany, *Microstructural analysis of the soiling process in desert regions*
	17:00 – 17:15	4.3.2e: Mr Wei LUO, Solar Energy Research Institute of Singapore (SERIS), Singapore, *In-situ Characterization of Potential Induced Degradation in c-Si Photovoltaic Modules through Dark I-V Measurements*
	17:15 – 17:30	4.3.2f: Ms Sachiko JONAI, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Root Cause of Potential Induced Degradation for p-Type Crystalline Silicon Photovoltaic Modules*
	17:30 – 17:45	4.3.2g: Ms Yaowanee SANGPONGSANONT, King Mongkut's University of Technology Thonburi (KMUTT), Thailand, *Thirteen-year Long-term Monitoring and Reliability of PV Module Degradation in Thailand*
	17:45 –	4.3.2h: <TBC>

	18:00	
Session 4.4.2 Room 3810A & 3810B	**Session 4.4.2: Simulation & characterisation of PV modules** Session Chairs: 1. Mr Giuseppe GALBIATI, ISC Konstanz, Germany 2. A/Prof Arief BUDIMAN, Singapore University of Technology and Design, Singapore	
	16:00 – 16:15	4.4.2a: Prof Marko TOPIC, University of Ljubljana, Slovenia, *Diffuse and direct light solar spectra and mc-Si PV module performance modelling*
	16:15 – 16:30	4.4.2b: Dr Tetsuyuki ISHII, Central Research Institute of Electric Power Industry, Japan, *Development of a methodology to estimate electric power from various photovoltaic technologies*
	16:30 – 16:45	4.4.2c: Dr Yoshihiro HISHIKAWA, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Effects of Synchronous Irradiance Monitoring and Correction of I-V Curves on the Outdoor Performance Measurements of PV Modules*
	16:45 – 17:00	4.4.2d: Mr Jiadong QIAN, Australian National University, Australia, *Accurate Outdoor I-V Measurement of c-Si PV Module*
	17:00 – 17:15	4.4.2e: Mr Ryota SAKAMOTO, University of Miyazaki, Japan, *Output increase of photovoltaic module using silica based coat having anti-reflection and anti-soiling effects*
	17:15 – 17:30	4.4.2f: Mr Takumi SAKAI, University of Miyazaki, Japan, *Receiving conditions at the time of vertical installation in the bifacial photovoltaic*
	17:30 – 17:45	4.4.2g: Ms Min Hsian SAW, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Optical characterization and evaluation of various PV module materials for maximized module power output*
	17:45 – 18:00	4.4.2h: Dr Vikrant SHARMA, National Institute of Solar Energy, India, *Development of Current Voltage Characteristics for a Photovoltaic (PV) Module from Name Plate Specification Considering the Effect of Module Degradation*
	18:00 – 18:15	4.4.2i: Dr Adarsh Kumar PANDEY, University of Malaya, Malaysia *Performance evaluation of PV/T air collector at constant solar radiation and flow rates*
Room 3711/3712/ 3713 (Poster)	18:00 – 18:30	Poster removal (Area 1 & Area 3)
	From 19:00 onwards	Conference Dinner at Grand Copthorne Waterfront Hotel http://www.pvsec-26.com/conference-dinner

Thursday, 27 October 2016 (09:00 – 10:30): PVSEC-26 Conference sessions		
Hibiscus, Level 3 (Foyer)	08:00 – 18:00	Registration
Room 3711/3712/ 3713 (Poster)	09:00 – 10:30	Poster Setup (for Areas 2, 4 & 5)
Room 3810A & 3810B (PVPS)	09:00 – 10:30	PVPS Workshop
Session 3.3.3 Room 3912/3913	**Session 3.3.3: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Masato MAITANI, The University of Tokyo, Japan 2. Dr Sneha Avinash KULKARNI, ERI@N, Nanyang Technological University, Singapore	
	09:00 – 09:15	3.3.3a (Invited): Dr Lioz ETGAR, The Hebrew University of Jerusalem, Israel, *Two Dimensional organic-inorganic perovskite from nanostructures to solar cells*
	09:15 – 09:30	3.3.3b (Invited): Dr Tomas LEIJTENS, Stanford University, United States *(invited talk title TBC)*
	09:30 – 09:45	3.3.3c: Mr Yuji OKAMOTO, University of Tsukuba, Japan, *Effects of mesoporous BaTiO3/TiO2 double layer for electron transport and enhanced photovoltaic performance in perovskite solar cells*
	09:45 – 10:00	3.3.3d: Mr Kenta TAKAHASHI, University of Tsukuba, Japan, *Preparation and evaluation of perovskite solar cells with CuI inorganic hole conductor*
	10:00 – 10:15	3.3.3e: Dr Xiaxia LIAO, Helmholtz-Zentrum Berlin (HZB), Germany, *MoO3/CH3NH3PbI3-xClx-an inherently unstable interface?*
	10:15 – 10:30	3.3.3f: Mr Akio MATSUSHITA, Panasonic Corporation, Japan, *Degradation Mechanism in High-temperature Exposure of Perovskite Solar Cells*
Session 3.2.5 Room 3812/3813	**Session 3.2.5: CIS and CdTe thin-film solar cells** Session Chairs: 1. Dr Reinhard FENDLER, FHR Anlagenbau GmbH, Germany 2. Dr Homare HIROI, Showa Shell Sekiyu K.K. & Solar Frontier K.K., Japan	
	09:00 – 09:15	3.2.5a: Prof Tamotsu OKAMOTO, National Institute of Technology, Kisarazu College, Japan, *Investigation of Cu-doping Effects in CdTe Solar Cells by Junction Photoluminescence with Various Excitation Wavelengths*
	09:15 – 09:30	3.2.5b: Prof Dragica VASILESKA, Arizona State University, United States, *Understanding Self-Compensation Mechanism of Cu Doping in CdTe*
	09:30 – 09:45	3.2.5.c: Mr Shuya KITABAYASHI, Ryukoku University, Japan,

		CdTe solar cells with SrCuSeF and ITO bilayer back contact
	09:45 – 10:00	3.2.5.d: Mr Zhengshan YU, Arizona State University, United States, *Monocrystalline CdTe solar cell with an a-Si:H hole contact reaches 1.1 V open-circuit voltage*
	10:00 – 10:15	3.2.5e: Prof Gerardo S. CONTRERAS-PUENTE, Instituto Politécnico Nacional, Mexico *Thermal treatment of CdTe ultra-thin films with CdCl2*
	10:15 – 10:30	3.2.5.f: Dr Rogelio MENDOZA PÉREZ, UACM, Mexico, *$CdCl_2$ Thermal Treatment on CdTe Solar Cells in 100 cm^2 and Its Correlation With The Thermal Profiler In The CSS System*
Session 2.3.3 Room 3612/3613	**Session 2.3.3: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Prof Stuart WENHAM, University of New South Wales, Australia 2. Dr Armin RICHTER, Fraunhofer-ISE, Germany	
	09:00 – 09:15	2.3.3a (Invited): Prof Allen BARNETT, University of New South Wales (UNSW), Australia, *Ultra-thin Silicon Solar Cell for Lightweight Steel Roofs*
	09:15 – 09:30	2.3.3b: Ms Erin LOONEY, Massachusetts Institute of Technology, United States, *Tabula Rasa: Mitigating performance limiting oxygen precipitates though rapid high temperature processing*
	09:30 – 09:45	2.3.3c: Dr Xinbo YANG, Australian National University, Australia, *Over 22% Efficient N-type Silicon Solar Cells Featuring A Full-area Electron Selective TiO2 Contact*
	09:45 – 10:00	2.3.3d: Dr Jie YANG, Zhejiang Jinko Solar, China, *21.0% Efficient Large Area N-type Bifacial Solar Cell with Screen-printed Contacts*
	10:00 – 10:15	2.3.3e: Kees TOOL, Energy Research Centre of Netherlands (ECN), Netherlands, *Bifacial aspects of industrial n-Pasha solar cells*
	10:15 – 10:30	2.3.3f: Mr Thomas GROSSE, Meyer-Burger, Germany, *Deposition of backside AlOx/SiN stacks and front SiN for high efficient (bifacial) PERC solar cells in only one process system – MAiA 3in1*
	10:30 – 10:45	2.3.3g: Dr Stanley WANG, REC Solar, Singapore, *Voltage and Fill Factor Loss Analysis of 21.4% N-type Bifacial Silicon Solar Cells*
Session 5.2.1 Room 3911	**Session 5.2.1: PV system testing & monitoring** Session Chairs: 1. Dr Masaki SHIOYA, Kajima Corporation, Japan 2. Dr Wilfred Walsh, SERIS, Singapore	
	09:00 – 09:15	5.2.1a: Dr Jose BILBAO, University of New South Wales (UNSW), Australia, *Estimation of the Vmp temperature coefficient on the field*
	09:15 – 09:30	5.2.1b: Dr Nicholas EKINS-DAUKES, Imperial College London, England *Outdoor performance study of a 550X concentrator photovoltaic system in Bangalore*
	09:30 – 09:45	5.2.1c: Mr Tohru KOHNO, Hitachi Ltd., Japan, <TBC> *Experimental Verification of Fault-Diagnosis Architecture for Group-*

		Monitoring System in Large-scale Photovoltaic Power Plants
	09:45 – 10:00	5.2.1d: Mr Ballang MUENPINJI, King Mongkut's University of Technology Thonburi (KMUTT), Thailand, *Over/Under Voltage Protection Testing for Grid-Connected Inverters in Thailand*
	10:00 – 10:15	5.2.1e: Ms Hiromi TOBITA, Japan Electrical Safety and Environment Technology Laboratories, Japan, *Solar module temperature measurement procedure in PV system field*
	10:15 – 10:30	5.2.1f: Mr Sergio HONWANA, Saga University, Japan, *Discrete-Fourier-Transform-based Interpolation Method for Missing Data of Measurement in Mega Solar Power Plant*
Session 5.1.1 Room 3811	**Session 5.1.1: PV system technology and BOS components** Session Chairs: 1. Assoc Prof Shigeomi HARA, Saga University, Japan 2. Prof AbuBakr BAHAJ, University of Southampton, United Kingdom	
	09:00 – 09:15	5.1.1a (Invited): Mr Anders LINDGREN, Optistring Technologies, Sweden, *Energy and cost efficient inverter topology for PV and the smart grid*
	09:15 – 09:30	5.1.1b (Invited): Dr Krissanapong KIRTIKARA, King Mongkut's University of Technology Thonburi (KMUTT), Thailand, *On PV Power Plants Development in Thailand*
	09:30 – 09:45	5.1.1c: Dr Nasim SAHRAEI, Singapore MIT Alliance for Research and Technology (SMART), Singapore, *Design considerations for solar cell and battery of a persistent solar powered GPS tracker*
	09:45 – 10:00	5.1.1d: Dr Kenji ARAKI, Toyota Technological Institute, Japan, *Is it possible to track the 100 x CPV module with 30 minutes intervals?*
	10:00 – 10:15	5.1.1e: Mr Robert Alfie S PENA, Ateneo de Manila University, Philippines, *Power Recovery of Dynamic PV Arrays from Partial Shading Using a GA-based Reconfiguration Strategy*
	10:15 – 10:30	5.1.1f: Mr Barry CINNAMON, Spice Solar Inc., United States *Racking and Labor Costs Are the Biggest Challenge for Residential Installers*
Session 1.3.1 Room 3611	**Session 1.3.1: Characterisation of physical phenomena in high-efficiency solar cells** Session Chairs: 1. Dr Rolf STANGL, SERIS, Singapore 2. Prof Gavin CONIBEER, UNSW, Australia	
	09:00 – 09:15	1.3.1a (Invited): Dr Jean-Francois GUILLEMOLES, CNRS, France, *Characterizing the solar cell that does not exist (yet): from new concept to proof of concept*
	09:15 – 09:30	1.3.1b (Invited): Prof Hidefumi AKIYAMA, University of Tokyo, Japan, *Absolute electroluminescence measurements and radiative-efficiency analysis on high-efficiency solar cells*
	09:30 – 09:45	1.3.1c: Prof Stanko TOMIC, University of Salford, United Kingdom *A Quantum Engineering Approach to Voltage Preservation in*

		Intermediate Band Solar Cells
	09:45 – 10:00	1.3.1d: Mr Wenzhu LIU, Chinese Academy of Sciences, China *Structural analysis and growth mechanism of holey a-Si:H film based on passivation layer of silicon heterojunction solar cells*
	10:00 – 10:15	1.3.1e: Dr Amaury DELMARRE, University of Tokyo, Japan, *Optical mapping of the transport efficiency in multi-junction solar cells*
	10:15 – 10:30	1.3.1f: Ms Anastasia SOERIYADI, University of New South Wales (UNSW), Australia, *Solar Cell Parameters Extraction Of Subcells In A Dual Junction System Through A Three Terminal Device Design*
Level 3 Jasmine Junior Foyer	**10:30 – 11:00**	**Coffee / Tea Break**

Thursday, 27 October 2016 (11:00 – 12:30): PVSEC-26 Conference sessions		
Room 3711/3712/ 3713 (Poster)	11:00 – 12:30	Poster session 4 (For Area 5) (For each poster, at least one presenter must be present)
Room 3810A & 3810B (PVPS)	11:00 – 12:30	PVPS Workshop
Session 3.3.4 Room 3912/3913	**Session 3.3.4: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Lioz ETGAR, The Hebrew University of Jerusalem, Israel 2. Dr Abhishek KUMAR, SERIS, Singapore	
	11:00 – 11:15	3.3.4a (Invited): Prof Satoshi UCHIDA, The University of Tokyo, Japan *Perovskite Solar Cell - Crystal Structure and Interface Architecture*
	11:15 – 11:30	3.3.4b: Dr Fabrizio GIODARNO, EPFL, Switzerland, *High efficiency perovskite solar cells*
	11:30 – 11:45	3.3.4c: Mr Ankur SOLANKI, Nanyang Technological University (NTU), Singapore, *Improved crystallization and reduced defect density by water additive for high performance single-step inverted perovskite solar cells*
	11:45 – 12:00	3.3.4d: Dr Annalisa BRUNO, Nanyang Technological University (NTU), Energy Research Institute @ NTU (ERI@N), Singapore, *MAPbI3 Solar Cell Efficiency at Cryogenic Temperatures*
	12:00 – 12:15	3.3.4e: Ms Bhumika CHAUDHARY, Nanyang Technological University (NTU), Energy Research Institute @ NTU (ERI@N), Singapore, *Polymer-based Interfacial Passivation for long term Stability and Reducing Recombination in High Voltage Perovskite Solar Cells*

	12:15 – 12:30	3.3.4f: <TBC>
Session 3.2.6 Room 3812/3813	**Session 3.2.6: CIS and CdTe thin-film solar cells** Session Chairs: 1. Dr DONG Seop Kim, CiGSone Technology Corp, South Korea 2. Dr Selvaraj VENKATARAJ, SERIS, Singapore	
	11:00 – 11:15	3.2.6a (Invited): Prof Byung Tae AHN, Korea Advanced Institute of Science and Technology (KAIST), South Korea *Control of point defects in CIGS films and their effect on the CIGS cell performance*
	11:15 – 11:30	3.2.6b (Invited): Dr Atiye BAYMAN, Miasole, United States, *Enabling high efficiency flexible modules with "All PVD" CIGS thin film technology*
	11:30 – 11:45	3.2.6c: Dr Ishwor KHATRI, Tokyo University of Science, Japan, *Effects of rinsing solution on KF-treated CIGS thin film solar cells*
	11:45 – 12:00	3.2.6d: Dr Takuya KATO, Solar Frontier K.K., Japan, *Recombination analysis of CIGS solar cells using temperature and illumination dependent open-circuit voltage measurement*
	12:00 – 12:15	3.2.6e: A/Prof Lydia Helena WONG, Nanyang Technological University (NTU), Energy Research Institute @ NTU, (ERI@N), Singapore, *Spray Pyrolysis of Chalcopyrite-based solar cells with efficiency > 10.5%*
	12:15 – 12:30	3.2.6f: Dr Jakapan CHANTANA, Ritsumeikan University, Japan, *Investigation of heterointerface recombination of Cu(In,Ga)(Se,S)$_2$ solar cells with different buffer layers*
Session 2.3.4 Room 3612/3613	**Session 2.3.4: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Prof Allen BARNETT, UNSW, Australia 2. Dr Thomas MUELLER, SERIS, Singapore	
	11:00 – 11:15	2.3.4a (Invited): Prof Junsin YI, Sungkyunkwan University, South Korea, *Beyond 22% efficient silicon heterojunction solar cells with industrially feasible n-type front emitter*
	11:15 – 11:30	2.3.4b: Dr Matthieu DESPEISSE, Swiss Center for Electronics and Microtechnology (CSEM), Switzerland, *Advances in Solar Cells implementing Silicon Heterojunction Passivating Contacts*
	11:30 – 11:45	2.3.4c: Dr Mei HUANG, Solar Energy Research Institute of Singapore (SERIS), Singapore, *The Influence of ITO on the Performance of Heterojunction Silicon Wafer Solar Cells*
	11:45 – 12:00	2.3.4d: Dr Zhenhao ZHANG, Singulus Technologies, Germany, *Towards completing the puzzle: an overview on optimization of key industrial equipments for manufacturing silicon heterojunction solar cells*
	12:00 – 12:15	2.3.4e: Dr Matthieu DESPEISSE, Swiss Center for Electronics and Microtechnology (CSEM), Switzerland *Metallization and Interconnection Technologies for Silicon Heterojunction Solar Cells*
	12:15 – 12:30	2.3.4f: Mr Marcel König, Meyer Burger, Germany, *Silicon heterojunction solar cells in Meyer Burger's Demo line:*

		Results of pilot production on mass production tools
Session 5.2.2 Room 3911	**Session 5.2.2: PV system testing & monitoring** Session Chairs: 1. Dr Jose BILBAO, UNSW, Australia 2. Mr Ballang MUENPINIJ, King Mongkut's University of Technology Thonburi, Thailand	
	11:00 – 11:15	5.2.2a: Dr Masaki SHIOYA, Kajima Corporation, Japan, *Estimation of loss factors of mega solar systems using SV analysis*
	11:15 – 11:30	5.2.2b: Mr Yuhei HORIO, Ritsumeikan University, Japan, *Impact estimation of average photon energy of solar spectrum on short circuit current of Si based photovoltaic modules*
	11:30 – 11:45	5.2.2c: Dr Takuya DOI, National Institute of Advanced Industrial Science and Technology (AIST), Japan *PV module irradiance sensor for outdoor precise irradiance measurement - structure and response property to the module under test*
	11:45 – 12:00	5.2.2d: Mr Ayato LIDA, Tokyo University of Science, Japan, *Detection Method of the Number of Failure Module in the string by Using Module Voltage and String Current in PV Array*
	12:00 – 12:15	5.2.2e: Mr Pei-Chin LIN, UKC Electronics (H.K.) Co., Taiwan, *Photovoltaic Outdoor Performance Benchmark of Thin-Film CIS and Crystal-Silicon Technology*
	12:15 – 12:30	5.2.2f: <TBC>
Session 2.4.1 Room 3811	**Session 2.4.1: Simulation & characterisation of c-Si materials & cells** Session Chairs: 1. Dr Bram HOEX, UNSW, Australia 2. Dr Ashley MORISHIGE, Massachusetts Institute of Technology, United States	
	11:00 – 11:15	2.4.1a (Invited): Dr Johnson WONG, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Griddler 2.5 PRO: Modelling high efficiency solar cells with parameter database to calculate room for efficiency improvement*
	11:15 – 11:30	2.4.1b: Dr Sébastien DUBOIS, CEA/LITEN/DTS, INES, France, *Transitory effects in phosphorus-diffused and fired copper-contaminated multicrystalline silicon wafers*
	11:30 – 11:45	2.4.1c: Dr Jian Wei HO, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Optimally Contrasting Large-area Pseudo-monochromatic Illumination for Optical Inspection of Solar Wafers and Cells*
	11:45 – 12:00	2.4.1d: Dr Catherine CHAN, The University of New South Wales, Australia, *LID Mitigation in Commercial Silicon Solar Cells*
	12:00 – 12:15	2.4.1e: Mr Mattias JUHL, The University of New South Wales, Australia, *Review of determination of the effective surface recombination coefficient from minority carrier lifetime measurements*
	12:15 – 12:30	2.4.1f: Sven WASMER, Fraunhofer-ISE, Germany, *Modelling and Analysis of Solar Cell Efficiency Distributions*
	12:30 – 12:45	2.4.1g: Joachim Ranzmeyer, Axel Metz, H.A.L.M. Elektronik GMBH, Germany *Precise determination of steady-state IV-parameters on highly-*

		capacitive solar cells in high-throughput production
Session 3.4.1 Room 3611	**Session 3.4.1: III-V and other thin-film solar cells** Session Chairs: 1. Prof Kin Man YU, City University of Hong Kong, Hong Kong 2. Dr Fen LIN, SERIS, Singapore	
	11:00 – 11:15	3.4.1a (invited): Prof Masafumi YAMAGUCHI, Toyota Technological Institute, Japan, *R&D activities of super high efficiency III-V multi-junction and concentrator solar cells in Japan*
	11:15 – 11:30	3.4.1b: Prof Alexandre FREUNDLICH, University of Houston, United States, *Record performance 1-1.2 eV III-V dilute nitride solar cells for tandem applications*
	11:30 – 11:45	3.4.1c: Mr Zekun REN, SMART, Singapore, *Performance potential analysis of a 21.3% GaAs on industrial c-Si tandem solar cell*
	11:45 – 12:00	3.4.1d: Mr Maung THWAY, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Performance Study of Bottom Silicon Solar Cells in Tandem Configuration under Filtered-Light with Different Injection Levels*
	12:00 – 12:15	3.4.1e: Dr Kevin NAY YAUNG, SMART, Singapore, *Enabling high efficiency GaAsP solar cells on GaP/Si through dislocation engineering*
	12:15 – 12:30	3.4.1f: Dr Takeyoshi SUGAYA, AIST, Japan, *The role of substrate miscut on the properties of InGaP solar cells grown on GaAs(001) by solid source molecular beam epitaxy*
Level 3 Jasmine Junior Foyer	**12:30 – 14:00**	**Lunch**

Thursday, 27 October 2016 (14:00 – 15:30): PVSEC-26 Conference sessions		
Room 3711/3712/ 3713 (Poster)	14:00 – 15:30	Poster session 5 (For Area 4) (For each poster, at least one presenter must be present)
Session 2.3.5 Room 3810A & 3810B	**Session 2.3.5: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Bianca LIM, SERIS, Singapore 2. Dr Matthieu Despeisse, CSEM SA, Switzerland	
	14:00 - 14:15	2.3.5a: Dr Olindo ISABELLA, Delft University of Technology, Netherlands, *IBC c-Si solar cells based on ion-implanted poly-silicon passivating contacts*
	14:15 - 14:30	2.3.5b: Mr Johann-Christoph STANG, Helmholtz-Zentrum Berlin, Germany, *Metallisation on Interdigitated Back Contact Silicon Heterojunction Solar Cells*
	14:30 - 14:45	2.3.5c: Dr Agnes MEWE, ECN, Netherlands, *Enablers for integral IBC cell and module development and*

		implementation in PV industry
	14:45 - 15:00	2.3.5d: Dr Koichi KOYAMA, Japan Advanced Institute of Science and Technology, Japan, *Simple Fabrication of Back Contact Hetero-Junction Solar Cells by Plasma Ion-Implantation*
	15:00 - 15:15	2.3.5e: Dr Do Yun KIM, Forschungszentrum Juelich, Germany, *Dry/Wet etching and Cat-doping Process for Interdigitated Back-Contacted (IBC) Silicon Heterojunction (SHJ) Solar Cell*
	15:15 - 15:30	2.3.5f: Dr Philip PIETERS, IMEC, Belgium, *High efficiency low cost PERT solar cells enabled by kerfless epitaxial Si wafers*
Session 3.3.5 Room 3912/3913	**Session 3.3.5: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Prof Satoshi UCHIDA, The University of Tokyo, Japan 2. Dr Fabrizio Giordano, EPFL, Switzerland	
	14:00 - 14:15	3.3.5a (Invited): Prof Seigo ITO, University of Hyogo, Kobe, Japan, *Stability of Perovskite Solar Cells against Light and Heat*
	14:15 - 14:30	3.3.5b: Dr Teck Ming KOH, NTU, Singapore, *Nanostructuring mixed-dimensional perovskites: A route towards tunable, efficient photovoltaics*
	14:30 - 14:45	3.3.5c: Mr Swee Sien LIM, NTU, Singapore, *Charge Transfer from $CH_3NH_3PbI_3$ to residual PbI_2 in perovskite thin films*
	14:45 - 15:00	3.3.5d: Mr Atthaporn ARIYARIT, Keio University, Japan, *Study the thickness and crystalline of perovskite solar cell by using kriging model method*
	15:00 - 15:15	3.3.5e: Mr Krishnamoorthy THIRUMAL, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Lead-free Germanium Iodide Perovskites for Photovoltaic Applications*
	15:15 - 15:30	3.3.5f: Dr Annalisa BRUNO, Nanyang Technological University (NTU), Energy Research Institute @ NTU (ERI@N), Singapore, *Effect of HCl additive on the efficiency of CH3NH3PbI3 solar cells fabricated under high relative humidity*
Session 3.2.7 Room 3812/3813	**Session 3.2.7: CIS and CdTe thin-film solar cells** Session Chairs: 1. Prof Byung Tae AHN, Korea Advanced Institute Sci. & Tech., South Korea 2. Prof Lydia Helena WONG, NTU, Singapore	
	14:00 - 14:15	3.2.7a (Invited): Dr Dong Seop KIM, CiGSone Technology Corp, South Korea, *Towards Effective R&D and Commercialization of CIGS: Analyses of Performance Loss and Cost Structure of CIGS Modules*
	14:15 - 14:30	3.2.7b (Invited): Prof Jinhyeok KIM, Chonnam National University, South Korea, *Transparent Conductive Characteristics of Mg and Ga Doped ZnO (MGZO) Thin Film For CZTS Solar Cell With Zn(O,S) Buffer Layer*
	14:30 - 14:45	3.2.7c: Mr Kaiwen SUN, University of New South Wales, Australia, *Influence of the chemical composition of the absorber on 9.2% efficient pure sulphide Cu2ZnSnS4 solar cells employing ZnCdS buffer*

	14:45 - 15:00	3.2.7d: Mr Wenjie LI, NTU, Singapore, *Improving Performance of CZTS Solar cell with Cation Substitution*
	15:00 - 15:15	3.2.7e: Dr Edgardo SAUCEDO, Catalonia Institute for Energy Research, Spain, *Surface engineering of Cu2ZnSn(S,Se)4 with group Ⅲ acid solutions using a facile wet chemical route*
	15:15 – 15:30	3.2.7f: <TBC>
Session 2.4.2 Room 3612/3613	**Session 2.4.2: Simulation & characterisation of c-Si materials & cells** Session Chairs: 1. Dr Johnson WONG, SERIS, Singapore 2. Dr Sebastien DUBOIS, CEA/LITEN/DTS, INES, France	
	14:00 - 14:15	2.4.2a: Dr Andreas FELL, Fraunhofer-ISE, Germany, *3D Simulation of Full-Area Silicon Solar Cells: Less Assumptions for High Accuracy and Confidence*
	14:15 - 14:30	2.4.2b: Dr Jonathon MITCHELL, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Terahertz Emission Spectroscopy for a-Si:H Passivated Hit Solar Cells*
	14:30 – 14:45	2.4.2c: Dr Ashley MORISHIGE, Massachusetts Institute of Technology, United States, *Lifetime Spectroscopy Investigation of The Root Cause of Light-Induced Degradation in p-type Multicrystalline Silicon PERC*
	14:45 – 15:00	2.4.2d: Mr Alexander TO, University of New South Wales, Australia, *Improved understanding of the recombination rate at inverted p+ silicon surfaces*
	15:00 - 15:15	2.4.2e: Jingnan Tong, The University of New South Wales, Australia, *Unintentional Consequences of Dual Mode Plasma Reactors: Implications for Upscaling of Record Lab Results*
	15:15 - 15:30	2.4.2f: Mr Naoki TOKUDA, University Miyazaki, Japan, *Effect of Light Irradiation on Carrier Mobility of n- and p-Type Si Substrates for Solar Cell Application*
Session 5.6.1 Room 3911	**Session 5.6.1: PV grid integration** Session Chairs: 1. Mr Raymond HUDSON, DNV GL, United States 2. Mr James HA Hoang Anh Kiet, SERIS, Singapore	
	14:00 - 14:15	5.6.1a (Invited): Prof Andrew BLAKERS, Australian National University, Australia *Pumped Hydro Energy Storage and the Renewable Energy Revolution*
	14:15 - 14:30	5.6.1b: Mr Hadrien VERBOIS, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Forecasting day-ahead solar irradiance for Singapore using Numerical Weather Prediction Model with Post-processing*
	14:30 - 14:45	5.6.1c: Dr Robert HUVA, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Influence of Data Assimilation on Solar Irradiance Forecasting for Singapore Using the WRF Model (WRFDA)*
	14:45 - 15:00	5.6.1d: Miss Alison HIGHTMAN, Waseda University, Japan, *Computational Modelling of Photovoltaic Systems with Battery*

		Management and Demand Response for Smoother Grid Integration
	15:00 - 15:15	5.6.1e: Mr Yuichiro YANAI, Waseda University, Japan, *Battery Group Control with Predictive Information in Area of Massive PV Introduction*
	15:15 – 15:30	5.6.1f: Mr Roland BRUENDLINGER, AIT Austrian Institute of Technology, Austria, *The role of grid codes in the sustainable grid integration of PV - Latest developments in Europe and World-Wide*
Session 5.7.1 Room 3811	**Session 5.7.1: Off-grid PV systems / Rural electrification** Session Chairs: 1. Dr Jose BILBAO, UNSW, Australia 2. Dr Timothy WALSH, Canopy Power, Singapore	
	14:00 - 14:15	5.7.1a: Mr Oktoviano GANDHI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *An Optimization Approach for the Sizing and Siting of Off-Grid PV Hybrid Systems*
	14:15 - 14:30	5.7.1b: Mr Christoph LUERSSEN, Solar Energy Research Institute of Singapore (SERIS), Singapore, *PV Powered Air-Conditioning with Latent Heat Storage: System Concept and Monitoring Design*
	14:30 - 14:45	5.7.1c: Ms Sterling WATSON, Massachusetts Institute of Technology, United States, *Reducing battery size in PV-powered desalination systems by introducing design flexibilities*
	14:45 - 15:00	5.7.1d: Prof Viresh DUTTA, IIT Delhi, India, *Energy Management System for Photovoltaic- Fuel Cell Microgrid Operation*
	15:00 - 15:15	5.7.1e: Dr Teerasak SOMSAK, Rajamangala University of Technology Lanna, Thailand, *Techno-economic Assessment of Photovoltaic Standalone and Photovoltaic Pico-hydro Hybrid System*
	15:15 – 15:30	5.7.1f: Dr Nopporn Patcharaprakiti, Rajamangala University of Technology Lanna, Thailand, *An Energy Performance Comparison of Solar DC and AC Split Type Air Conditioner*
Session 5.8.1 Room 3611	**Session 5.8.1: PV deployment, markets, policies & financing** Session Chairs: 1. Dr Stephen TAY, SERIS, Singapore 2. Dr Matthew Peloso, Sun Electric Pte Ltd, Singapore	
	14:00 - 14:15	5.8.1a (Invited): Prof AbuBakr BAHAJ, University of Southampton, United Kingdom, *Solarising Southampton: Deploying Solar Photovoltaics at City Scale*
	14:15 - 14:30	5.8.1b (Invited): Dr Johnny LH WONG, Housing and Development Board, Singapore, *Deployment of Solar Leasing Projects for Public Housing in Singapore*
	14:30 - 14:45	5.8.1c: Dr Tanokkorn CHENVIDHYA, King Mongkut's University of Technology Thonburi, Thailand, *Photovoltaic systems development in Thailand: from adder to feed-*

		in tariff
	14:45 - 15:00	5.8.1d: Mr John MITCHELL, Arizona State University, United States *Industry-University Public Private Partnerships to Address the Terawatt Challenge*
	15:00 - 15:15	5.8.1e: Mr Takehiko SATO, NEDO, Japan, *Recent progress of PV R&D projects of NEDO*
	15:15 – 15:30	5.8.1f: Mr Mathias STECK, DNV GL, Singapore, *Get Smart: Smarter Solar Services for Operating Assets*
Level 3 Jasmine Junior Foyer	**15:30 – 16:00**	**Coffee/Tea Break**

Thursday, 27 October 2016 (16:00 – 18:00): PVSEC-26 Conference sessions		
Room 3711/3712/ 3713 (Poster)	16:00 – 18:00	Poster session 6 (For Area 2) (For each poster, at least one presenter must be present)
Session 2.3.6 Room 3810A & 3810B	**Session 2.3.6: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Olindo ISABELLA, Delft University of Technology, Netherlands 2. Dr Bianca LIM, SERIS, Singapore	
	16:00 – 16:15	2.3.6a: Prof Matthew TAN, CEC Energy, Singapore, *Elimination of LID with innovative new hydrogenation technology facilitates increased PERC cell efficiencies through the use of lower resistivity p-type Cz wafers*
	16:15 – 16:30	2.3.6b: Prof Abasifreke EBONG, University of North Carolina Charlotte, United States *Understanding the influence of tellurium oxide in front Ag paste for contacting silicon solar cells with homogeneous high sheet resistance emitter*
	16:30 – 16:45	2.3.6c: Dr Felix HAASE, Institute for Solar Energy Research Hamelin (ISFH), Germany, *Printable liquid silicon for local doping of solar cells*
	16:45 – 17:00	2.3.6d: Dr Woojun YOON, US Naval Lab, United States, *Metal Oxides as Full-area Rear Contacts for High-efficiency Crystalline Si Solar Cells*
	17:00 – 17:15	2.3.6e: Dr Fen LIN, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Interface related light induced degradation in monocrystalline silicon wafer solar cells*
	17:15 – 17:30	2.3.6f: Dr Hyunju LEE, Toyota Technological Institute, Japan, *Excellent Surface Passivation of Crystalline Silicon by AlxMg1-xOy and Its Tunable Interface Properties*

	17:30 – 17:45	2.3.6g: Prof Keisuke OHDAIRA, Japan Advanced Institute of Science and Technology (JAIST), Japan, *Catalytic Phosphorus and Boron Doping to Amorphous Silicon Films*
	17:45 – 18:00	2.3.6h: <TBC>
Session 3.3.6 Room 3912/3913	**Session 3.3.6: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Prof Seigo ITO, University of Hyogo, Japan 2. Dr Annalisa BRUNO, ERI@N, NTU, Singapore	
	16:00 - 16:15	3.3.6a: Dr SM LFTIQUAR, Sungkyunkwan University, South Korea, *High efficiency multijunction solar cell with a methyl-ammonium lead halide perovskite sub-cell*
	16:15 - 16:30	3.3.6b: Mr Biplab GHOSH, NTU, Singapore, *Tuning intrinsic defects in Bismuth-based Perovskite for Photovoltaics*
	16:30 - 16:45	3.3.6c: Ms Eunchong KIM, Chonbuk National Univ., South Korea, *In-depth study on the solvent engineering for high-performance perovskite solar cells*
	16:45 - 17:00	3.3.6d: Mr Jia Haur LEW, Nanyang Technological University, Singapore, *Characterization of TiO2 blocking layer in perovskite solar cells*
	17:00 – 17:15	3.3.6e: Dr Natalia YANTARA, NTU, Singapore, *Evaluating the advantages of excess PbI2 on perovskite film deposited via one pot solution method*
	17:15 – 17:30	3.3.6f: Dr Herlina Arianita Dewi, Nanyang Technological University (NTU), Energy Research Institute @ NTU, Singapore, *Bi-facial Semi-Transparent Perovskite Solar Cells for Building Integrated Photovoltaics*
	17:30 – 17:45	3.3.6g: <TBC>
	17:45 – 18:00	3.3.6h: <TBC>
Session 3.2.8 Room 3812/3813	**Session 3.2.8: CIS and CdTe thin-film solar cells** Session Chairs: 1. Dr Edgardo SAUCEDO, Catalonia Institute for Energy Research (IREC), Spain 2. Dr William XU Wei-Lun, SERIS, Singapore	
	16:00 – 16:15	3.2.8a (Invited): Prof Jinhyeok KIM, Chonnam University, South Korea, *CZTS Thin-film Solar Cell*
	16:15 – 16:30	3.2.8b: Assoc Prof. Yosuke SHIMAMUNE, National Institute of Technology (Nagaoka College), Japan, *CZTS Formation by Continuous Processing of Coevaporation followed by Sulfurization using MBE*
	16:30 – 16:45	3.2.8c: Dr Kong Fai TAI, NTU, Singapore *Fill Factor Losses in High Performance Cu2ZnSn(SxSe1-x)4 Solar Cells*
	16:45 – 17:00	3.2.8d: Dr Hitoshi TAMPO, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Efficiency improvement of Cu2ZnSnSe4 solar cell with 10.7% by Na incorporation*
	17:00 – 17:15	3.2.8e: Mr Ying Fan TAY, Nanyang Technological University,

		Singapore, *Solution processed AgxCu1-xZnSnS4 with efficiency >6.5%*
	17:15 – 17:30	3.2.8f: Mr Wei-Chih HUANG, National Tsing Hua Univ., Taiwan, *Ag-alloyed (Ag, Cu)2ZnSn(S, Se)4 kesterite solar cells fabricated by spray pyrolysis*
	17:30 – 17:45	3.2.8g: Mr Chung-Hao CAI, National Tsing Hua Univ, Taiwan, *The effect of sulfurization time on Cu2ZnSn(S,Se)4 solar cells fabricated by sulfurization after selenization of precursors*
	17:45 – 18:00	3.2.8h: Dr Marc D. HEINEMANN, PVcomB - Helmholtz Zentrum Berlin, Germany *Evolution of Optical and Structural Properties during Cu(In,Ga)Se2 Thin Film Growth*
Session 2.4.3 Room 3612/3613	**Session 2.4.3: Simulation & characterisation of c-Si materials & cells** Session Chairs: 1. Dr Andreas FELL, Fraunhofer ISE, Germany 2. Prof Andrew BLAKERS, ANU, Australia	
	16:00 – 16:15	2.4.3a (Invited): Dr Otwin BREITENSTEIN, Max Planck Institute, Germany, *Local efficiency analysis of c-Si solar cells using luminescence imaging and lock-in thermography*
	16:15 – 16:30	2.4.3b: Dr Jie CUI, Australian National University, Australia, *Highly effective electronic passivation of silicon surfaces by atomic layer deposited hafnium oxide*
	16:30 – 16:45	2.4.3c: Mr Rhett EVANS, Solinno Pty Ltd, Australia *Leveraging Virtual Wafer Tracking and Analytics in Advanced Solar Cell Production*
	16:45 – 17:00	2.4.3d: Dr Rolf STANGL, Solar Energy Research Institute of Singapore (SERIS), Singapore, *XSolar-Hetero α-1.0.0: Launching a dynamic web based solar cell simulation platform for the personalized simulation of various solar cell architectures, using various simulation programs*
	17:00 – 17:15	2.4.3e: Prof Marco Topič, Univ Ljubljana, Slovenia, *Design of Back Contact of Bifacial Silicon Heterojunction Cells*
	17:15 – 17:30	2.4.3f: Dr Jaap BEIJERSBERGEN, Levitech BV, Netherlands, *Industrial Optimalization of Al2O3 Passivation Layers in New Cell Designs: a Comparison between PECVD and ALD*
	17:30 – 17:45	2.4.3g: Mr Kyung KIM, University of New South Wales, Australia, *In-situ diagnostics of PECVD AlOx deposition by optical emission spectroscopy*
	17:45 – 18:00	2.4.3h: Dr Yuji INO, Shizuoka Institute of Science and Technology, Japan, *A new evaluation method of Fe impurities in mc-Si solar cells by Mössbauer Spectroscopic Microscope*
Session 1.4.1 Room 3911	**Session 1.4.1: Advanced concepts for light coupling and management** Session Chairs: 1. Prof Armin ABERLE, SERIS, Singapore 2. Dr Vinodh SHANMUGAM, SERIS, Singapore	
	16:00 – 16:15	1.4.1a (Invited): Prof Tom MARKVART, University of Southampton, United Kingdom, *Photon management: from Planck to solar cells and beyond*

	16:15 – 16:30	1.4.1b: Dr Rudi SANTBERGEN, Delft University of Technology, Netherlands, *Minimizing optical losses in flat monolithic perovskite/c-Si tandem solar cells*
	16:30 – 16:45	1.4.1c: Ms Bernice Mae YU JECO, The University of Tokyo, Japan, *Spatial Distribution of Temperature Dependent luminescence coupling Current in InGaP/GaAs/Ge Triple Junction Solar Cells*
	16:45 – 17:00	1.4.1d: Mr Yusuke SHIRAYANAGI, Japan Science and Technology Agency, Japan, *Preparation of axial type wire-structure crystalline silicon solar cells*
	17:00 – 17:15	1.4.1e: Ms Claire DISNEY, University of New South Wales, Australia, *Parasitic absorption in plasmonic light trapping structures for solar cells: Do the performance benefits outweigh the losses?*
	17:15 - 17:30	1.4.1f: Prof Martina SCHMID, Helmholtz-Zentrum Berlin, Germany, *Nano- and microconcentration for the next generation of chalcopyrite solar cells*
	17:30 - 17:45	1.4.1g: Dr Yasuyoshi KUROKAWA, Nagoya University, Japan, *Effect of Surface Morphology Randomness on Optical Properties of Si-based Photonic Nanostructures*
	17:45 - 18:00	1.4.1h: <TBC>
Session 1.1.4 Room 3811	**Session 1.1.4: Novel materials for future PV technologies** Session Chairs: 1. Dr Vinod KUMAR, Indian Institute of Technology Delhi Hauz Khas, India 2. Dr Avishek KUMAR, REC Solar Pte Ltd, Singapore	
	16:00 – 16:15	1.1.4a: Prof Tooru TANAKA, Saga University, Japan, *Growth of Zn1-xCdxTe1-yOy (x=0.2~0.5) highly mismatched alloys for intermediate band solar cells*
	16:15 – 16:30	1.1.4b: Prof Clas PERSSON, University of Oslo, Norway, *Optimizing device efficiency with emerging Cu-based compounds*
	16:30 – 16:45	1.1.4c: Kiseok JEON, Korea Institute of Industrial Technology, South Korea, *Fabrication of Nano and Micro Patterns by Elastomeric Stamp Process for Solar Cell Application*
	16:45 – 17:00	1.1.4d: Mr Yasir ALTOWAIRQI, Durham University, United Kingdom, *Optimisation of Cu2ZnSnS4 nanoparticles using hot injection method- structural and optical study*
	17:00 – 17:15	1.1.4e: Mr Sungbum KANG, UNIST, South Korea *Self-assembled porous ferroelectric polymer for high efficient Si/PEDOT.PSS hybrid solar cell*
	17:15 – 17:30	1.1.4f: Dr Ramakrishnan JAYAKRISHNAN, University of Kerala, India *Can a Silver Plasmonic Layer alter the performance of a Cu2O/In2S3 thin film Solar Cell?*

	17:30 – 17:45	1.1.4g: Dr Kentaroh Watanabe, The University of Tokyo, Japan *Epitaxial growth and characterization of the direct doped PN junction with InGaAs/GaAsP superlattice*
	17:45 – 18:00	1.1.4h: <TBC >
Session 5.8.2 Room 3611	**Session 5.8.2: PV deployment, markets, policies & financing** Session Chairs: 1. Dr Thomas REINDL, SERIS, Singapore 2. Dr Johnny LH WONG, Housing and Development Board, Singapore	
	16:00 – 16:15	5.8.2a (Invited): Mr Frank HAUGWITZ, AECEA, China *The Role of Solar PV during China's 13th Five-Year-Plan (2016-2020) at home and along the One Belt – One Road across Asia*
	16:15 – 16:30	5.8.2b (Invited): Mr Yasser GAMIL, Z-One Holding FZCO, United Arab Emirates *PV market dynamics in Middle East and Africa*
	16:30 – 16:45	5.8.2c (Invited): Mr Jan NAPIORKOWSKI, Ariel Re UK Limited, United Kingdom *PV Project Power Outage Solutions*
	16:45 – 17:00	5.8.2d (Invited): Mr Alex SHOER, Seeder Cleaner Energy, China *The Challenges of Distributed Solar in China: What the future of Solar looks like and how to scale it up*
	17:00 – 17:15	5.8.2e: Dr Tsuyoshi SHIODA, Mitsui Chemicals Inc., Japan, *PV Module Due Diligence for Bankable PV Project*
	17:15 – 17:30	5.8.2f: Dr Matthew Peter PELOSO, Sun Electric Pte Ltd, Singapore, *Post-net-metering scheme for renewable generation*
	17:30 – 17:45	5.8.2g: Mr Raymond Hudson, DNV GL, United States *Securitization of solar PV projects*
	17:45 – 18:00	5.8.2.h: Dr Debajyoti SARANGI, Vikram Solar, India *AC Smart module - the future of PV system*
Room 3711/3712/ 3713	18:00 – 18:30	Poster removal (for Areas 2, 4 & 5)

Friday, 28 October 2016 (09:00 – 10:30): PVSEC-26 Conference sessions		
Hibiscus, Level 3 (Foyer)	08:00 – 17:00	Registration
Room 3612/3613 (Workshop)	09:00 – 10:30	Singapore-Japan Joint Workshop on Photovoltaics 2016
Session 3.3.7 Room 3912/3913	**Session 3.3.7: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Abhishek KUMAR, SERIS, Singapore 2. Dr Natalia YANTARA, NTU, Singapore	
	09:00 – 09:15	3.3.7a: (Invited): Prof Anders HAGFELDT, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, *The Versatility of Mesoscopic Solar Cells*
	09:15 – 09:30	3.3.7b: Mr Shusaku KANAYA, University of Hyogo, Japan, *100˚C Thermal Stability of CH3NH3PbI3 Perovskite Solar Cells using Porous Carbon Counter Electrodes*

	09:30 – 09:45	3.3.7c: Ms Chihiro YAMAMOTO, Tokai University, Japan, *Investigation of Degradation Caused by Applying Voltage in Perovskite Solar Cells*
	09:45 – 10:00	3.3.7d: Mr Hiroyuki KANDA, University of Hyogo, Japan, *Analysis of Sputtering Damage on I-V Curves for Perovskite Solar Cells and Simulation with Reversed Diode Mode*l
	10:00 – 10:15	3.3.7e: Dr Takeshi NODA, National Institute for Materials Science, Japan, *Efficient and stable large-area perovskite solar cells*
	10:15 – 10:30	3.3.7f: <TBC>
Session 3.2.9 Room 3812/3813	**Session 3.2.9: CIS and CdTe thin-film solar cells** Session Chairs: 1. A/Prof Lydia Helena WONG, Nanyang Technological University, Singapore 2. Dr Sebastian SCHMIDT, Helmholtz-Zentrum Berlin für Materialien und Energie, Germany	
	09:00 – 09:15	3.2.9a: Mr Sergio GIRALDO, Catalonia Institute for Energy Research, Spain, *Innovative bi-directional grain growth of $Cu_2ZnSnSe_4$ using Ge_xSe_y liquid phase as crystallization flux*
	09:15 – 09:30	3.2.9b: Dr Hitoshi TAMPO, National Institute of Advanced Industrial Science and Technology (AIST), Japan, *Ge incorporated CZTSe thin-film solar cell with efficiency of 12.3%*
	09:30 – 09:45	3.2.9c: Mr Takeshi UMEHARA, Tokyo Institute of Technology, Japan, *High efficiency Ag(In,Ga)Se_2 thin film solar cells by hybrid buffer layer*
	09:45 – 10:00	3.2.9d: <TBC>
	10:00 – 10:15	3.2.9e: <TBC>
	10:15 – 10:30	3.2.9f: <TBC>
Session 2.3.7 Room 3712/3713	**Session 2.3.7: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Woojun YOON, US Naval Lab, United States 2. Dr Jia GE, SERIS, Singapore	
	09:00 – 09:15	2.3.7a: Ms Naomi NANDAKUMAR, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Very low surface recombination velocities on low-resistivity n-type crystalline silicon using spatial atomic layer deposited Al2O3 films*
	09:15 – 09:30	2.3.7b: Dr Jan HASCHKE, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, *Temperature Dependencies of different silicon solar cell architectures: from cells to modules*
	09:30 – 09:45	2.3.7c: Dr Florian LENTZ, Forschungszentrum Jülich, Germany, *Implementation of Microcrystalline Silicon Alloys in Silicon Wafer Solar Cells*
	09:45 – 10:00	2.3.7d: Ms Zheng XIN, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Surface passivation investigation on ultra-thin atomic layer deposited AlOx layers for their potential application to form tunnel*

		layer passivated contacts
	10:00 – 10:15	2.3.7e: Mr Josua STUECKELBERGER, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, *Recombination analysis of phosphorous-doped nanostructured silicon oxide passivating electron contacts for silicon solar cells*
	10:15 – 10:30	2.3.7f: <TBC>
Session 5.4.1 Room 3911	**Session 5.4.1: PV system energy yield & LCOE** Session Chairs: 1. Dr Matthew Peloso, Sun Electric Pte Ltd, Singapore 2. Dr Robert HUVA, SERIS, Singapore	
	09:00 – 09:15	5.4.1a: Ms Wilawan SEEKAEW, King Mongkut's University of Technology Thonburi, Thailand, *Performance Evaluation of Solar PV Rooftop Program in Thailand*
	09:15 – 09:30	5.4.1b: Dr Yong Sheng KHOO, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Optimal orientation and tilt angle for maximizing in-plane solar irradiation for PV applications in Japan*
	09:30 – 09:45	5.4.1c: Prof Hiroyuki KAWAMOTO, Waseda University, Japan, *Improvement of Electrostatic Cleaning System for Removal of Dust from Solar Panels*
	09:45 – 10:00	5.4.1d: Dr Anna J CARR, Energy Research Centre of Netherlands (ECN), Netherlands, *An energy yield model for bifacial photovoltaic systems*
	10:00 – 10:15	5.4.1e: Mr Ninad GAIKWA, Gujarat Energy & Research Management Institute, India, *Photovoltaic Grid Connected Plant Energy Estimation Application in MATLAB*
	10:15 – 10:30	5.4.1f: Dr Christoph KREMIN, Conergy Global Solutions GmbH, Germany *Optimization of Photovoltaic Performance Simulation Accuracy by Adjustment of Thermal Simulation Settings*
Session 5.3.1 Room 3811	**Session 5.3.1: PV system reliability** Session Chairs: 1. Dr Timothy WALSH, Canopy Power, Singapore 2. Mr Hadrien VERBOIS, SERIS, Singapore	
	09:00 – 09:15	5.3.1a (Invited): Dr Ted SPOONER, UNSW, Australia *PV Reliability - Seeking a quality result through standards and conformity assessment*
	09:15 – 09:30	5.3.1b (Invited): Mr Geoff STAPLETON, Global Sustainable Energy Solutions Pty Ltd (GSES), Australia *How to ensure a quality reliable PV systems: Standards, Training and Inspections*
	09:30 – 09:45	5.3.1c: Miss Nattkarn SAKARAPUNTHIP, King Mongkut's University of Technology Thonburi (KMUTT), Thailand, *Effects of dust deposition on performance of PV systems and suitable cleaning methods for PV power plants in Thailand*
	09:45 – 10:00	5.3.1d: Prof Kensuke NISHIOKA, University of Miyazaki, Japan, *Reduction of soiling on concentrator photovoltaic modules by a*

		tracker system with downward-facing night position
	10:00 – 10:15	5.3.1e: Mr Raymond HUDSON, DNV GL, United States, *PV Module Degradation*
	10:15 – 10:30	5.3.1f: Dr Bing GUO, Texas A&M University at Qatar, Qatar, *Photovoltaics Soiling and Mitigation in Qatar*
Session 3.1.1 Room 3810A & 3810B	**Session 3.1.1: Silicon thin-film solar cells** Session Chairs: 1. Dr Bram HOEX, University of New South Wales, Australia 2. Dr Johnson WONG, SERIS, Singapore	
	09:00 – 09:15	3.1.1a (Invited): Prof Miro ZEMAN, Delft University of Technology, Netherlands, *Thin-Film Silicon for High-Efficiency PV Technologies*
	09:15 – 09:30	3.1.1b: Dr Daniel AMKREUTZ, HZB, Germany, *Recent progress in liquid phase crystallized silicon on glass: integrated processing and interdigitated silicon hetero-junction cells*
	09:30 – 09:45	3.1.1c: Dr Olindo ISABELLA, Delft University of Technology, Netherlands, *Strategies towards high-efficiency quadruple-junction thin-film silicon-based solar cells*
	09:45 – 10:00	3.1.1d: Christian EHLERS, Leibniz-Institute for Crystal Growth, Germany, *Growth of Si on porous silicon and glass substrates from Sn solution*
	10:00 – 10:15	3.1.1e: Dr Hitoshi SAI, AIST, Japan, *Stable nip a-Si:H solar cells and their application to multi-junction thin-film silicon solar cells*
	10:15 – 10:30	3.1.1f: Ms Naomi NANDAKUMAR, Solar Energy Research Institute of Singapore (SERIS), Singapore *Progress with industrial-scale spatial atomic layer deposited Ga-doped ZnO films for application in photovoltaics*
Session 3.5.1 Room 3611	**Session 3.5.1: Simulation & characterisation of thin-film solar cells** Session Chairs: 1. Dr Qingzhu WEI, Zhongli Talesun Solar, China 2. Kenji ARAKI, Toyota Technological Institute, Japan	
	09:00 – 09:15	3.5.1a: Ms Meilin LI, Solar Energy Research Institute of Singapore (SERIS), Singapore *Coarse-grained Forcefield for Polyfluorene Copolymers*
	09:15 – 09:30	3.5.1b: Dr Takashi TAYAGAKI, AIST, Japan, *Optical characterisation of smart stack four junction InGaP/GaAs// InGaAsP/InGaAs solar cells*
	09:30 – 09:45	3.5.1c: Dr Joel Ming Rui TAN, NRF-NTU-HUJ-BGU Programme, Singapore, *Structural Investigation of Phase Transformation of Cu_2ZnSnS_4 nanoparticles via Cation Exchange*
	09:45 – 10:00	3.5.1d: Ms Meilin LI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Cation-controlled Aggregation in Fluorene-Triarylamine Copolymers*
	10:00 – 10:15	3.5.1e: Mr Zhe LIU, Solar Energy Research Institute of Singapore (SERIS), Singapore

		Techno-Economic Considerations for Tandem Solar Cells
	10:15 – 10:30	3.5.1f: Mrs Sangita ROOPAK, Indian Institute of Technology Delhi, India, *Numerical Simulation of Plasmon Coupling of Metal Nanoparticles embedded in Perovskite Medium*
Level 3 Jasmine Junior Foyer	**10:30 – 11:00**	**Coffee/Tea Break**

Friday, 28 October 2016 (11:00 – 12:30): PVSEC-26 Conference sessions		
Room 3612/3613 (Workshop)	11:00 – 12:30	Singapore-Japan Joint Workshop on Photovoltaics 2016
Session 3.3.8 Room 3912/3913	**Session 3.3.8: Organic, dye and perovskite thin-film solar cells** Session Chairs: 1. Dr Teck Ming KOH, NTU, Singapore 2. Prof Anders HAGFELDT, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland	
	11:00 – 11:15	3.3.8a: Prof Der-Ray HUANG, National Dong Hwa University, Taiwan, *Properties of DSSCs at Very Low Intensity Condition*
	11:15 – 11:30	3.3.8b: Mr Daisuke SAKAMOTO, Kyushu University, Japan, *Effects of particle size on catalytic characteristics of polymer counter electrode containing Si nanoparticles in dye-sensitized solar cells*
	11:30 – 11:45	3.3.8c: Dr Masatoshi YANAGIDA, National Institute for Materials Science, Japan, *Quasi-Solid State Dye-Sensitized Solar Cells based on I-/I3- Ion Transport*
	11:45 – 12:00	3.3.8d: Dr Sergei MANZHOS, National University of Singapore, Singapore *Band alignment of small vs large organic molecule and a semiconductor substrate: a comparative DFT and DFTB study*
	12:00 – 12:15	3.3.8e: Mr Chia-Cheng CHOU, Industrial Technology Research Institute, Taiwan, *Durability Test for Organic Photovoltaic (OPV) and Dye Sensitized Solar Cell (DSSC)*
	12:15 – 12:30	3.3.8f: <TBC>
Session 2.3.8 Room 3812/3813	**Session 2.3.8: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Jan HASCHKE, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland 2. Abasifreke EBONG, University North Carolina Charlotte, United States	
	11:00 – 11:15	2.3.8a: Dr Stephanie ESSIG, École Polytechnique Fédérale de Lausanne, PV-Lab, Switzerland, *Analysis and optimization of MoOx based carrier selective contacts for c-Si solar cells*

	11:15 – 11:30	2.3.8b: Dr Ashley MORISHIGE, Massachusetts Institute of Technology, United States, *Correlative elemental and electrical micro-analysis of laser fired contacts in silicon solar cells*
	11:30 – 11:45	2.3.8c: Dr Jia GE, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Ambient Plasma Treatment of Silicon Wafers for Surface Passivation Recovery*
	11:45 – 12:00	2.3.8d: Dr Jian YU, Shanghai Institute of Microsystem and Information Technology (SIMIT), Chinese Academy of Sciences (CAS), China, *Improved optical-electrical properties of silicon hetero-junction solar cells with SiOx/IWO stacks*
	12:00 – 12:15	2.3.8e: Mr Takeo KONISHI, Japan Advanced Institute of Science and Technology (JAIST), Japan, *Recovery of ITO Sputtering Damage for Various Types of Cat-CVD Amorphous Silicon Passivation Films*
	12:15 – 12:30	2.3.8f: Dr Takefumi KAMIOKA, Toyota Technological Institute, Japan *Novel Silver Paste to n- and p-Layers for Fabricating High Efficiency Crystalline Si Solar Cells*
Session 2.4.4 Room 3712/3713	**Session 2.4.4: Simulation & characterisation of c-Si materials & cells** Session Chairs: 1. Dr Otwin BREITENSTEIN, Max Planck Institute, Germany 2. Dr Jie CUI, Australian National University, Australia	
	11:00 – 11:15	2.4.4a: Dr Cangming KE, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Theoretical investigation of metal-semiconductor-insulator-semiconductor (MSIS) passivated hole contacts based on atomic layer deposited AlOx*
	11:15 – 11:30	2.4.4b: Dr Jason NUTTER, Wavelabs Solar Metrology Systems GmbH, Germany, *Spectral Mismatch and Solar Simulator Quality Factor In Advanced LED Solar Simulators*
	11:30 – 11:45	2.4.4c: Dr Takefumi KAMIOKA, Toyota Technological Institute, Japan, *Interfacial Workfunctions of Transition Metal Oxides in Carrier-Selective Contact Stacks*
	11:45 – 12:00	2.4.4d: Mr Chung-Tse LEE, National Sun Yat-Sen University, Taiwan, *Using Wet etching method to form Nano-pillar HIT solar cell with silicon-carbide-based emitter*
	12:00 – 12:15	2.4.4e: Mr Ramachandran AMMAPET VIJAYAN, SASTRA University, India, *Silicon heterojunction solar cells with workfunction-based hole contacts: Numerical simulation of carrier transport*
	12:15 – 12:30	2.4.4f: Dr Jonathon MITCHELL, National Institute of Advanced

		Industrial Science and Technology (AIST), Japan *Adaptive Particle Tracking of Hydrogen within the a-Si:H/c-Si Interface using PTS-MESH for planar and dislocated surface*
	12:30 – 12:45	2.4.4g: Mr Rhett EVANS, University of New South Wales, Australia, *Using the approaches of "Big Data" to generate insights into PV Manufacturing*
Session 5.5.1 Room 3911	**Session 5.5.1: Building integrated PV systems (BiPV)** Session Chairs: 1. Dr Martin REED, SERIS, Singapore 2. Veronika SHABUNKO, SERIS, Singapore	
	11:00 – 11:15	5.5.1a (Invited): Dr A.H.M.E. REINDERS, University Twente, Netherlands, *Opportunities for luminescent solar concentrating PV in building integrated PV*
	11:15 – 11:30	5.5.1b (Invited): <TBD>
	11:30 – 11:45	5.5.1c: Dr Huacong YU, Hanergy PV Science & Technology Co., Ltd., <TBC> *Research on a new type of BIPV modules constructed by Thin-film Photovoltaic Panel(or Module)PUColor organic-coated Steel Plate*
	11:45 – 12:00	5.5.1d: Dr Olindo ISABELLA, Delft University of Technology, Netherlands, *Solar Tracking Issues and Partial Shading Effects of an Ideal Interior Photovoltaic Shading Model*
	12:00 – 12:15	5.5.1e: Mr Philip KWANG, NUS Department of Architecture, Singapore, Solar Architecture
	12:15 – 12:30	5.5.1f: <TBC>
Session 3.5.2 Room 3811	**Session 3.5.2: Simulation & characterisation of thin-film solar cells** Session Chairs: 1. Dr Takashi TAYAGAKI, AIST, Japan 2. Dr Joel Ming Rui TAN, NRF-NTU-HUJ-BGU Programme, Singapore	
	11:00 – 11:15	3.5.2a: Dr Qingzhu WEI, Zhongli Talesun Solar, China, *Investigation of the LID and regeneration of PERC solar cells by using the electrical injection hydrogen passivation (EiHP) method*
	11:15 – 11:30	3.5.2b: Mr Maung THWAY, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Parameter Analysis for III-V/Si Tandem Structures*
	11:30 – 11:45	3.5.2c: Dr Joel Ming Rui TAN, NRF-NTU-HUJ-BGU Programme, Singapore, *Temporal Growth Studies of CMTS (M=Zn, Fe, Co, Mn) Nanoparticles Using Surface Enhanced Raman Spectroscopy (SERS)*
	11:45 – 12:00	3.5.2d: Dr Kenji ARAKI, Toyota Technological Institute, Japan, *Hypothesis: Optimization of the Bandgap Combination at the Specific Site, Considering Ever-changing Spectrum, May Be Determined by the Matching Condition to the Sun Height at the Culmination on the Winter Solstice*
	12:00 – 12:15	3.5.2e: Mr Yuki TAKIGUCHI, Tokyo Institute of Technology, Japan, *Investigation of Optical Confinement Structure for Cu2O*

		Heterojunction Solar Cells Using Two Dimensional Device Simulations
	12:15 – 12:30	3.5.2f: Dr Yoshihiro HISHIKAWA, AIST, Japan, *Precise characterization of novel PV cells and modules*
Session 3.1.2 Room 3810A & 3810B	**Session 3.1.2: Silicon thin-film solar cells** Session Chairs: 1. Prof Miro ZEMAN, Delft University of Technology, Netherlands 2. Dr Hitoshi SAI, AIST, Japan	
	11:00 – 11:15	3.1.2a (Invited): Prof Junsin YI, Sungkyunkwan University, South Korea, *Silicon Thin-film Tandem Solar Cell Properties using Multi-scale architecture*
	11:15 – 11:30	3.1.2b: Mr Maarten Dörenkämper, Energy Research Centre of the Netherlands (ECN), Netherlands, *Near-Infrared Reflecting Layer Stack in a Semi-Transparent Thin Film Solar Cell for BIPV Application*
	11:30 – 11:45	3.1.2c: Prof Debajyoti DAS, Indian Association for the Cultivation of Science, India, *Nanocrystalline Silicon Solar Cells with Si-ncs of Dominant <220> Crystallographic Orientation Prepared by 27.12 MHz Plasma in PECVD*
	11:45 – 12:00	3.1.2d: Miss Pei-Ling CHEN, National Chiao Tung University, Taiwan, *Development of P-type Hydrogenated Silicon Oxide as Window Layer Deposited near Phase Transition for High-performance a-Si:H/a-Si1-xGex:H Tandem Solar Cells*
	12:00 – 12:15	3.1.2e: <TBC>
	12:15 – 12:30	3.1.2f: <TBC>
Session 3.4.2 Room 3611	**Session 3.4.2: III-V and other thin-film solar cells** Session Chairs: 1. Dr Fen LIN, SERIS, Singapore 2. Prof Gavin CONIBEER, UNSW, Australia	
	11:00 – 11:15	3.4.2a (invited): Prof Kin Man YU, City University of Hong Kong, Hong Kong *Multicolor Emission in Intermediate Band Solar Cell Materials*
	11:15 – 11:30	3.4.2b: Dr Hassanet SODABANLU, University of Tokyo, Japan, *Effect of various dopants on properties of GaAs tunnelling junction and p-i-n solar cell*
	11:30 – 11:45	3.4.2c: Dr Asim GUCHHAIT, Nanyang Technological University, Singapore, *Tandem solar cells configuration between perovskite and CIGS solar cells*
	11:45 – 12:00	3.4.2d: Mr Kouki MATSUOCHI, University of Miyazaki, Japan, *Optical Evaluation of Miniband Formation in InGaAs/GaAsP Quantum Well Solar Cells*
	12:00 – 12:15	3.4.2e: Mr Hao XU, The University of Tokyo, Japan, *GaAs Solar Cells with Low-V/III-Ratio MOVPE for Low-Cost Power Generation*
	12:15 – 12:30	3.4.2f: Mr Raymond CHAN, MicroLink Devices, Inc., United States,

		High-Efficiency, Lightweight, Flexible Solar Sheets for High-Altitude, Long Endurance Flight Applications
	12:30 – 12:45	3.4.2g: Dr Charles HO, Temasek Laboratories at NTU, Singapore, *First demonstration of Photovoltaic Power Convertor at ~ 1070 nm*
Level 3 Jasmine Junior Foyer	**12:30 – 14:00**	**Lunch**

Friday, 28 October 2016 (14:00 – 15:30): PVSEC-26 Conference sessions		
Room 3612/3613 (Workshop)	14:00 – 15:30	Singapore-Japan Joint Workshop on Photovoltaics 2016
Room 3812/3813	14:00 – 15:30	Preparation for closing ceremony
Session 2.4.5 3812/3813	**Session 2.4.5: Simulation & characterisation of c-Si materials & cells** Session Chairs: 1. Dr Takefumi KAMIOKA, Toyota Technological Institute, Japan 2. Dr Cangming KE, SERIS, Singapore	
	14:00 - 14:15	2.4.5a: Ernest SNG, REC Solar Pte Ltd, Singapore *N-type Bifacial Module Energy Yield Modelling*
	14:15 – 14:30	2.4.5b: Ms Mengjie LI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Advanced Simulation of Industrially Feasible nBiFAB Silicon Solar Cells with an Efficiency Potential of More than 22%*
	14:30 – 14:45	2.4.5c: Mr Kotaro HIROSE, Tohoku University, Japan, *Quantitative Analysis of Two-dimensional Carrier Concentration in Phosphorus-implanted Emitter Solar Cell using Scanning Nonlinear Dielectric Microscopy*
	14:45 – 15:00	2.4.5d: Mr Ryosuke SATO, Tokyo City University, Japan, *Device Simulation and Experimental Approaches of Silicon Heterojunction Low-Concentrator Solar Cells*
	15:00 – 15:15	2.4.5e: Dr Abasifreke EBONG, University North Carolina Charlotte, United States, *Optimization of Bandgap and Electron Affinity of Zinc Oxide for n-ZnO/p-Si Heterojunction Solar Cell*
	15:15 – 15:30	2.4.5f: Mr Kwan Bum CHOI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Modulated Photoluminescence Lifetime Measurement of Bifacial Solar Cells*
Session 5.5.2 Room 3911	**Session 5.5.2: Building integrated PV systems (BiPV)** Session Chairs: 1. Dr A.H.M.E. REINDERS, Univ Twente, Netherlands 2. Veronika SHABUNKO, SERIS, Singapore	
	14:00 - 14:15	5.5.2a (Invited): Mr Tjerk REIJENGA, BEAR-iD, China *Acceleration of BIPV IEA PVS Task 15*
	14:15 – 14:30	5.5.2b: Ms Monika BIERI, Solar Energy Research Institute of Singapore (SERIS), Singapore, *An Economic Viability Study for Building-Integrated Photovoltaic*

		(BIPV) in the Tropics
	14:30 – 14:45	5.5.2c: Dr Le XU, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Modelling Solar Potential for Urban Rooftops*
	14:45 – 15:00	5.5.2d: Mr Mohammad SHAKERI, The National University of Malaysia, Malaysia, *Online Scheduling with PV System Supplementary Source Usage in Home Energy Management Systems (HEMS)*
	15:00 – 15:15	5.5.2e: Dr Martin REED, Solar Energy Research Institute of Singapore (SERIS), Singapore, *A full 3D Ray Tracing Algorithm with a Perez Sky Model for Solar Insolation Studies of Urban Areas*
	15:15 – 15:30	5.5.2f: This talk has been transferred to 5.7.1f as requested by author on 24/10
Session 2.3.9 Room 3811	**Session 2.3.9: Monocrystalline silicon wafer solar cells** Session Chairs: 1. Dr Jian YU, Chinese Academy of Sciences, China 2. Dr Ankit KHANNA, SERIS, Singapore	
	14:00 - 14:15	2.3.9a: Ms Sisi WANG, University of New South Wales, Australia, *Selective Emitter Formation through Simultaneous Laser doping and Grooving of Silicon Followed by Self-aligned Metal Plating*
	14:15 – 14:30	2.3.9b: Mr Alexander John CRUZ, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Copper-Based Metallization Material for Heterojunction Silicon Wafer Solar Cells*
	14:30 - 14:45	2.3.9c: Mr Martijn ZWEGERS, Meco Equipment Engineers BV, Netherlands, *High Volume Manufacturing Plating Equipment for Metallization of High Efficiency Silicon Solar Cells*
	14:45 – 15:00	2.3.9d: Dr Anamaria MOLDOVAN, Fraunhofer ISE, Germany *Ozone-based surface conditioning: Combining excellent surface passivation and industrial feasibility for advanced silicon solar cells*
	15:00 – 15:15	2.3.9e: Dr Ziv HAMEIRI, The University of New South Wales, Australia *Development of Low-Absorption and Thermally-Stable Silicon Nitride Films for Surface Passivation of Silicon Solar Cells*
	15:15 – 15:30	2.3.9f: Ms Gurleen KAUR, National University of Singapore, Singapore *Effect of surface treatment and thickness of ultrafast ALD grown AlOx films on the passivation of c-Si CZ wafers*
Session 5.6.2 Room 3810A & 3810B	**Session 5.6.2: PV grid integration** Session Chairs: 1. Prof Andrew BLAKERS, Australian National University, Australia 2. Dr Robert HUVA, SERIS, Singapore	
	14:00 - 14:15	5.6.2a (Invited): Mr Raymond HUDSON, DNV GL, United States *Keeping the Lights On: Best Practices in Achieving High PV Grid Penetration*
	14:15 – 14:30	5.6.2b: Ms Congmiao LI, Solar Energy Research Institute of Singapore (SERIS), Singapore,

		Secured Online Solar PV Impact Assessment Framework for Smart Grid
	14:30 – 14:45	5.6.2c: Mr Kevin J.-P.M. WINTER, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Statistical Solar Irradiance Forecasts: A Comparison using Different Spatial and Temporal Resolution Input Data*
	14:45 – 15:00	5.6.2d: Ms Dhivya SAMPATH KUMAR, Solar Energy Research Institute of Singapore (SERIS), Singapore *Fault Diagnosis of PV-dominated distribution feeders*
	15:00 – 15:15	5.6.2e: Mr Zibo DONG, Solar Energy Research Institute of Singapore (SERIS), Singapore, *Comparison of the State-of-the-Art Machine Learning Methods in Hourly Solar Irradiance Forecasting for Tropical Regions*
	15:15 – 15:30	5.6.2f: Mr Goutam MAJI, Philips Lighting India Ltd., India, *Validation of Performance Prediction by HOMER Pro for Grid feed-in DC-Centralized Solar Street Lighting System in Test Bed Situ*
Session 3.4.3 Room 3611	**Session 3.4.3: III-V and other thin-film solar cells** Session Chairs: 1. Dr Charles HO, Temasek Laboratories at NTU, Singapore 2. Mr Raymond CHAN, MicroLink Devices, Inc., United States	
	14:00 - 14:15	3.4.3a: Mr Hiroshi NAKAI, Tokyo University of Science, Japan, *Electrical properties of undoped or Li-doped NiO/ZnO heterojunction for visible-light-transparent solar cells*
	14:15 – 14:30	3.4.3b: Mr Stener LIE, Nanyang Technological University, Singapore *Effect of Mn substitution in Cu2MnxZn1-xSn(S,Se)4 thin films solar cell*
	14:30 – 14:45	3.4.3c: Dr Nobuaki KOJIMA, Toyota Technological Institute, Japan *Study of recombination center in GaAsN grown by chemical beam epitaxy*
	14:45 – 15:00	3.4.3d: Dr Nguyen Tam Nguyen TRUONG, Yeungnam University, South Korea, *Fabrication and Enhancement of Zinc Oxide Nanorods/Polymer Composited Vacuum Free-Hybrid Solar Cells*
	15:00 – 15:15	3.4.3e: Firdaus bin SUHAIMI, Energy Research Institute @NTU, Singapore, *Energy Band Modelling of the Work Function Shift and Charge Transport Mechanism of Al-doped MoO3 in Single and Tandem Organic Solar Cells*
	15:15 – 15:30	3.4.3f: Prof Viresh DUTTA, Indian Institute of Technology Delhi, India *A novel method for MoO3 thin film fabrication for application in organic solar cells*
Room 3711/3712/ 3713	**15:30 – 16:30**	**Closing Ceremony and Best Presentation Awards (Orals, Posters)**