

11+12 Dec 2014
NUS University Hall, Singapore

Programme		
Day 1, 11 Dec (Thursday)		
Session 1	09:00 – 11:45	Plenaries
Opening	09:00 – 09:15	Welcome address
Plenary 1	09:15 – 09:45	Overview of PV R&D in Japan Prof Masafumi YAMAGUCHI, Toyota Technological Institute, Japan
Plenary 2	09:45 – 10:15	Overview of PV R&D in Singapore Prof Armin ABERLE, SERIS, Singapore
Coffee break	10:15 – 10:35	
Plenary 3	10:35 – 11:05	"FUTURE-PV Innovation" (Fukushima top-level united center for Renewable Energy research - Photovoltaics Innovation) Asst Prof Yasuyoshi KUROKAWA, Tokyo Institute of Technology, Japan
Plenary 4	11:05 - 11:35	Overview of PV market in Singapore and South East Asia Dr Thomas REINDL, SERIS, Singapore
	11:35 - 11:45	Corporate Video Presentation by Exclusive Sponsor, Dai-Dan Co., Ltd.
Lunch	11:45 - 13:10	By invitation only
Session 2	13:10 – 16:10	Advanced silicon wafer solar cells
	13:10 – 13:30	Status of crystalline Si solar cell R&D in Japan Prof Yoshio OHSHITA, Toyota Technological Institute, Japan
	13:30 – 13:50	Advanced Si wafer solar cells at SERIS Dr Bram HOEX, SERIS, Singapore
	13:50 – 14:10	Heterojunction silicon wafer solar cell research at SERIS Dr Thomas MUELLER, SERIS, Singapore
	14:10 – 14:30	Growth of high-quality multicrystalline silicon ingot for solar cells Prof Noritaka USAMI, Nagoya University, Japan
	14:30 – 14:50	Characterisation of silicon wafer solar cells Dr Johnson WONG, SERIS, Singapore
Coffee break	14:50 – 15:10	
	15:10 – 15:30	Advanced simulation & modelling of silicon wafer solar cells and modules Dr Rolf STANGL, SERIS, Singapore
	15:30 – 15:50	Rear-side passivated multicrystalline silicon solar cells in mass production Dr Rob STEEMAN, REC Solar, Singapore
Session 3	15:50 – 17:30	Next-generation organic and dye solar cells
	15:50 - 16:10	Printable perovskite solar cells covering near IR region Prof Shuzi HAYASE, Kyushu Institute of Technology, Japan
	16:10 - 16:30	Dye-sensitized solar cells Assoc Prof Bin LIU, NUS, Singapore
	16:30 – 16:50	Future prospects of organic and hybrid solar cells for next generation photovoltaics Prof Hiroshi SEGAWA, University of Tokyo, Japan
	16:50 - 17:10	Organic solar cells Assoc Prof Peter HO, SERIS/NUS, Singapore
	17:10 – 17:30	Organic PV, dye sensitized solar cell to perovskite PV transition and A*STAR capabilities and developments Dr Jie ZHANG, IMRE, A*STAR, Singapore
Networking reception	17:30 – 19:15	By invitation only
Day 2, 12 Dec (Friday)		
Session 4	09:00 – 10:40	Advanced thin-film solar cells
	09:00 – 09:20	Current status and future prospect of CIS-based thin-film PV technology in Solar Frontier K.K.: Toward higher efficiency Dr Katsumi KUSHIYA, Solar Frontier K.K., Japan
	09:20 – 09:40	Establishment of an R&D pilot line for CIGS solar cells and mini-modules in Singapore Dr Selvaraj VENKATARAJ, SERIS, Singapore
	09:40 – 10:00	Future prospects of the CIGS PV technology Dr Shigeru NIKI, AIST, Japan
	10:00 – 10:20	CIGS & CZTSS solar cells by solution processes Asst Prof Lydia WONG, ERI@N, Singapore
	10:20 – 10:40	High efficiency copper electroplated heterojunction solar cells and modules Dr Kenji YAMAMOTO, Kaneka, Japan
Coffee break	10:40 – 11:00	
Session 5	11:00 – 15:10	Novel PV concepts and PV systems
	11:00 – 11:20	Perovskite solar cells - Challenges & outlook Prof Subodh MHAISALKAR, ERI@N, Singapore

	11:20 – 11:40	Perovskite solar cells - Investigations of transport and recombination Dr Pablo BOIX, ERI@N, Singapore
	11:40 – 12:00	Differences between CIS and CZTS solar cells on the basis of phase diagram, defect formation and Cd diffusion in these absorbers Prof Takahiro WADA, Ryukoku University, Japan
Lunch	12:00 - 13:30	By invitation only
	13:30 – 13:50	Defect evaluation for Si thin film solar cells by FTPS Assoc Prof Takashi ITOH, Gifu University, Japan
	13:50 – 14:10	2D materials: Photovoltaic effects and potential photovoltaic devices Assoc Prof Junqiao WU, Berkeley Education Alliance for Research in Singapore, Singapore
	14:10 – 14:30	Si/Ge clathrate thin film Prof Shuichi NONOMURA, Gifu University, Japan
	14:30 – 14:50	Reserve Slot
Session 6	14:50 – 15:20	Discussion session & closing Moderators: Workshop Chairmen (Prof Aberle & Prof Yamaguchi)
	15:20 – 15:25	Presentation of Appreciation Plaque to Exclusive Sponsor by Prof Armin ABERLE to Dai-Dan Co., Ltd. (Singapore Branch), General Manager, Mr Takashi AZUMA
	15:25 – 15:35	Presentation by SERIS (Live irradiance map of Singapore)
	15:35 - 15:40	Video presentation on SERIS' PV Module Labs
Lab & Site tour	15:45 – 18:20	By invitation only
Dinner	18:30 – 21:30	By invitation only