WEDNESDAY, 21 OCTOBER 2020

	07:00	**Summary & Introduction**	Zhengxin Liu, *Tongwei Solar, TW Solar/ Shanghai Insitute of Microsystem and Information Technology, SIMIT*
ADVANCED CONCEPT & CHARACTER-IZATION **7:05 – 8:55** Chairman: Zhenxin Liu *TW Solar/SIMIT*	07:05	**Advanced characterization of high-efficiency cells at I-V test**	Ron Sinton, *Sinton Instruments*
	07:35	**Scaling perovskite/silicon tandems**	Zachary Holman, *Arizona State University, ASU*
	07:55	**Improving perovksite solar cells for low-cost tandem on silicon**	Jixian Xu, *University of Science and Technology of China, USTC*
	08:15	**Efficient textured perovskite/silicon tandems: three ways to make them & first outdoor tests**	Stefaan De Wolf, *King Abdullah University of Science and Technology, KAUST*
	08:35:	**Defect engineering and transport mechanisms for high efficiency single- and double-junction front/back contacted solar cells**	Paul Procel, *Delft University of Technology, TU Delft*
	08:55	**Break**	
CONTACTS & DEVICE **9:10 – 10:50** Chairman: Christophe Ballif *CSEM*	09:10	**Heterojunction solar cells: reducing the gap from lab to fab**	Delfina Munoz, *Institut national de l'énergie solaire, CEA-INES*
	09:30	**From silicon heterojunction solar cells to transparent passivating contact**	Kaifu Qiu, *Forschungszentrum Jülich GmbH, JÜLICH*
	09:50	**Optimized a-Si:H microstructure towards higher fill factor in SHJ solar cells**	Zhuopeng Wu, *Shanghai Insitute of Microsystem and Information Technology, SIMIT*
	10:10	**TCOs for SHJ solar cells: What is a good choice?**	Bernd Stannowski, *Helmholtz-Zentrum Berlin, HZB*
	10:30	**Beyond traditional contacts for silicon heterojunction solar cells**	Mathieu Boccard, *École Polytechnique Fédérale de Lausanne, EPFL*
	10:50	**Summary & Outlook**	Christophe Ballif, *Swiss Center for Electronics and Microtechnology, CSEM*

STEERING COMMITTEE

Prof. Christophe Ballif, CSEM
Dr. Kaining Ding, JÜLICH
Dr. Mikio Taguchi, Panasonic Corporation
Prof. Zhengxin Liu, TW Solar/SIMIT
Prof. Zachary Holman, ASU

ORGANIZERS

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3rd International workshop on Silicon HeteroJunction solar cells:

SCIENCE AND INDUSTRY TECHNOLOGY

19 – 21 October 2020 | Virtual Workshop | CEST 7:00 – 11:00 am

www.fz-juelich.de/shj_workshop

SIMIT Panasonic csem ASU Arizona State University JÜLICH Forschungszentrum

SCOPE

The 1st and 2nd international workshops on silicon hetero-junction solar cells which were held in Shanghai and Chengdu in 2018 and in 2019 have played a positive role in promoting the scientifi c and technical exchanges as well as the industrialization of SHJ solar cells.

Due to COVID-19 pandemic, the 3rd international workshop on SHJ solar cells will be held as a virtual meeting instead of a physical meeting. JÜLICH and SIMIT will host this virtual event.

The workshop will involve high level representatives from international research and industry covering diff erent aspects of SHJ technology. Workshop topic includes Stability and Reliability, Module and System, Industrial Processes, Equipment Manufacturing as well as Material and Process Development.

Further information: www.fz-juelich.de/shj_workshop

The time is based on CEST time.

PROGRAMME

MONDAY, 19 OCTOBER 2020

	07:00	**Introduction**	Kaining Ding, *Forschungszentrum Jülich GmbH*
PRODUCTION & FINANCE **7:10–8:40** Chairman: Kaining Ding, *JÜLICH*	07:10	**Review: Industrialization trends of SHJ solar cell in China**	Zhengxin Liu, *Tongwei Solar, TW Solar/ Shanghai Insitute of Microsystem and Information Technology, SIMIT*
	07:40	**Overview on Commercialization of HJT cell/Module Technologies**	Shravan Chunduri, *TaiyangNews*
	08:00	**Heterojunction industry and investment trends in China**	Haijun Zheng, *Three Gorges Capital Holdings Co., ltd*
	08:20	**Silicon heterojunction cells and modules in mass production and utility scale operation**	Dmitriy Andronikov, *Hevel Solar*
	08:40	**Break**	
PROCESS & EQUIPMENT **9:00–11:00** Chairman: Weiyuan Duan, *JÜLICH*	09:00	**Advantage of Cat-CVD Technology in Fabrication of SHJ Solar Cells**	Hideki Matsumura, *Japan Advanced Institute of Science and Technology, JAIST*
	09:20	**Advanced SHJ Solar PV Technologies and Applications**	Akira Terakawa, *Panasonic Corporation*
	09:40	**Futher into HJT volumn production: large capacity equipment, application technology and cost reduction**	Qian Luo, *GS-Solar*
	10:00	**High Throughput Magnetron Sputtering Technology at 10,000 wafers per hour for Cost-Competitive Manufacturing of transparent conductive oxides (TCO)**	Eric Schneiderlöchner, *Von Ardenne GmbH*
	10:20	**Efficiency and reliability of SHJ solar cell vs N type silicon wafer quality**	Fanying Meng, *Tongwei Solar, TW Solar/ Shanghai Insitute of Microsystem and Information Technology, SIMIT*
	10:40	**Roadmap for industrial mass production equipment for high efficiency silicon heterojunction solar cells**	Xuemei Cheng, *Singulus*

TUESDAY, 20 OCTOBER 2020

	07:00	**Summary & Introduction**	Zachary Holman, *Arizona State University, ASU*
MODULE & APPLICATIONS **7:05–8:55** Chairman: Zachary Holman, *ASU*	07:05	**Silicon heterojunction field observations**	Dirk Jordan, *National Renewable Energy Laboratory, NREL*
	07:35	**Advanced characterisation methods and their applications for SHJ cells**	Ziv Hameiri, *The University of New South Wales, UNSW*
	07:55	**Research of light and elevated Temperature Induced performance changes of silicon heterojunction solar cells and modules**	Yanfeng Cui, *Risen Energy Co., Ltd.*
	08:15	**Potential-induced degradation of silicon heterojunction photovoltaic modules**	Keisuke Ohdaira, *Japan Advanced Institute of Science and Technology, JAIST*
	08:35	**Increased PID Resistance of Silicon Heterojunction Solar Cells via Optimized Module Packaging**	Olatz Arriaga, *École Polytechnique Fédérale de Lausanne, EPFL*
	08:55	**Break**	
WAFER BASED **9:10–09:50** Chairman: Mikio Taguchi, *Panasonic Corporation*	09:10	**Progress in defect-engineered heterojunction solar cells**	Brett Hallam, *The University of New South Wales, UNSW*
	09:30	**Mono wafer updates as substrate for High efficiency solar cell**	Yichun Wang, *LONGi Green Energy Technology Co., Ltd., LONGi*
PANEL DISCUSSION **9:50–11:00** Chairman: Kaining Ding, *JÜLICH*	09:50	**Global Heterojunction Industrialization Outlook**	Akira Terakawa, *Panasonic Corporation* Wenzhong Shen, *Shanghai Jiao Tong University* Gunter Erfurt, *Meyer Burger*
	10:25	**Next-Generation PV Industry Technologies**	Radovan Koppecek, *ISC Konstanz* Qiang Huang, *Risen Energy Co., Ltd.* Frank Feldmann, *Fraunhofer Institute for Solar Energy Systems ISE, Fraunhofer ISE*