

## 2<sup>nd</sup> Asian Nations Joint Workshop on Photovoltaics

1. Date: Tuesday, 14, November, 2017, 13:30 – 17:40
2. Conference room: Convention Hall 6, Lake Biwa Otsu Prince Hotel  
(same venue as PVSEC-27)

### 3. Program

Chairperson: Makoto Konagai, Tokyo City University  
Vice-chairperson: Donghwan Kim, Korea University  
Vice-chairperson: Ying Zhao, Nankai University

- Session-AN-1 Chair: Donghwan Kim
- 13:30-13:40 Opening Address  
Makoto Konagai, Tokyo City University
- 13:40-14:00 Recent trends in innovative solar cell research in Europe  
Arnulf Jäger-Waldau and Juan Lopez-Garcia  
European Commission, Joint Research Centre
- 14:00-14:20 Materials and Process Informatics for SMART Silicon Ingot  
Noritaka Usami<sup>1</sup>, Yusuke Hayama<sup>1</sup>, Tetsuya Matsumoto<sup>2</sup>, Hiroaki Kudo<sup>2</sup>,  
Tatsuya Yokoi<sup>1</sup>, Katsuyuki Matsunaga<sup>1</sup>, Kentaro Kutsukake<sup>3</sup>, Yutaka Ohno<sup>3</sup>  
<sup>1</sup>Graduate School of Engineering, Nagoya University, <sup>2</sup>Graduate School of  
Informatics, Nagoya University, <sup>3</sup>Institute for Materials Research, Tohoku  
University
- 14:20-14:40 Development Status and Prospect of High-Efficiency Crystalline Silicon  
Solar Cell Manufacturing in China  
Zhiqiang Feng,  
State Key Laboratory of PV Science and Technology, Trina Solar
- 14:40-15:00 Diamond like Nanocomposite (DLN) Coating as Promising Antireflective  
and Passivative Coating for Large Area Crystalline Silicon Solar Cell  
Utpal Gangopadhyay, Meghnad Saha Institute of Technology
- 15:00-15:20 Recent Progress of Solar PV R&D in Thailand  
Kobsak Sriprapha<sup>1</sup>, Amornrat Limmanee<sup>1</sup>, Taweewat Krajangsang<sup>1</sup>,  
Songkiate Kittisontirak<sup>1</sup>, Aswin Hongsingthong<sup>1</sup>, Yaowanee  
Sangpongsanont<sup>2</sup>, Manit Seapan<sup>2</sup>, Dhirayut Chenvidhya<sup>2</sup>, Surawut  
Chuangchote<sup>2</sup> and Jaran Sritharathikhun<sup>1</sup>  
<sup>1</sup>Solar Energy Technology Laboratory (STL), NECTEC, NSTDA, <sup>2</sup>King  
Mongkut's University of Technology Tonburi (KMUTT)
- 15:20-15:40 break
- Session-AN-2 Chair: Ying Zhao
- 15:40-16:00 Materials Science in Solution Process for Highly Efficient Perovskite Solar  
Cells  
Atsushi Wakamiya, Institute for Chemical Research, Kyoto University
- 16:00-16:20 Materials engineering for efficient and stable halide perovskite solar cells  
Jun Hong Noh<sup>1,2</sup>,

<sup>1</sup>School of Civil, Environmental and Architectural Engineering, Korea University, <sup>2</sup>Division of Advanced Materials, Korea Research Institute of Chemical Technology

- 16:20-16:40 Low-cost and lightweight approaches for solar cells and their applications  
Ching-Fuh Lin<sup>1, 2, 3, 4\*</sup>, Subramani Thiyagu<sup>1</sup>, Hong-Jhang Syu<sup>1</sup>, Jia-Wei Wu<sup>1</sup>, Yi Lai<sup>1</sup>, and Po-Tsun Guo<sup>1</sup>  
<sup>1</sup>Graduate Institute of Photonics and Optoelectronics, <sup>2</sup>Department of Electrical Engineering, <sup>3</sup>Graduate Institute of Electronics Engineering  
<sup>4</sup>Innovative Photonics Advanced Research Center (i-PARC), National Taiwan University
- 16:40-17:00 Status and trends of thin-film on silicon tandem solar cell research in Singapore  
Armin G. Aberle  
Solar Energy Research Institute of Singapore (SERIS), National University of Singapore
- 17:00-17:20 Silicon-Based Multi-Junction Tandem Solar Cells  
Xiaodan Zhang<sup>a,b,c,d\*</sup>, Xin Yao<sup>a,b,c,d</sup>, Shijie Zhu<sup>a,b,c,d</sup>, Bofei Liu<sup>a,b,c,d</sup>, Lisha Bai<sup>a,b,c,d</sup>, Jia Fang<sup>a,b,c,d</sup>, Tiantian Li<sup>a,b,c,d</sup>, Changchun Wei<sup>a,b</sup>, Qian Huang<sup>a,b</sup>, Jian Ni<sup>a,b</sup>, Dekun Zhang<sup>a,b</sup>, Guofu Hou<sup>a,b</sup>, Xinliang Chen<sup>a,b</sup>, Shengzhi Xu<sup>a,b</sup>, Huizhi Ren<sup>a,b</sup>, Guangcai Wang<sup>a,b</sup>, Yi Ding<sup>a,b</sup>, Yuelong Li<sup>a,b,c,d</sup>, Baozhang Li<sup>a,b</sup>, Ying Zhao<sup>a,b,c,d</sup>  
<sup>a</sup> Institute of Photoelectronic Thin Film Devices and Technology of Nankai University, <sup>b</sup> Key Laboratory of Photoelectronic Thin Film Devices and Technology of Tianjin, <sup>c</sup> Key Laboratory of Optical Information and Technology of Ministry of Education, <sup>d</sup> Collaborative Innovation Center of Chemical Science and Engineering (Tianjin)
- 17:20-17:40 Progress in Perovskite/Si tandem solar cells  
Donghwan Kim<sup>1,2</sup>, Hae-Seok Lee<sup>2</sup>, Yoonmook Kang<sup>2</sup>, Soohyun Bae<sup>1</sup>, Sang-Won Lee<sup>1</sup>, Kyung Jin Cho<sup>1</sup>, Jae Keun Hwang<sup>1</sup>  
<sup>1</sup>Department of Materials Science and Engineering, Korea University, <sup>2</sup>KU-KIST GreenSchool, Graduate School of Energy and Environment, Korea University