

The 4th Korea-China-Japan International Workshop on Photovoltaics

September 21 – 22, 2006

**Marriott Hotel
Busan, Korea**

Organized by

Korean Photovoltaics Development Organization

JSPS, The 175th Committee on Innovative PV Power Generation Systems

China Renewable Energy Industries Association (CREIA)

In cooperation with

Korea Ministry of Commerce, Industry and Energy

Korea Energy Management Corporation

Korean Society for New and Renewable Energy

Workshop chair

Jinsoo Song (KIER, Korea)

Makoto Konagai (Tokyo Institute of Technology, Japan)

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Ji-Weon Jeong (LG Chemical Ltd., Korea)

Jae Ho Yun (KIER, Korea)

Sumi Yang (LG Siltron)

TECHNICAL PROGRAM

September 21, Thursday (Room A)

09:00 – 09:30; Opening Session

Opening remark and Welcome address

09:30 – 10:30; Invited Session (20-minute presentations)

Status and Prospect for PV Dissemination in Korea – Seong Ho Lee (KEMCO)

Japan's New National R&D Program for Photovoltaics – I. Skata (NEDO)

[China_1](#) TBD

10:30 – 10:45; Coffee Break

10:45 – 12:00; Technical Session (15-minute presentations)

<Strategy & Infrastructure>

Status and Prospect for PV R&D in Korea - Donghwan Kim (KPVDO)

Trends of PV Activities in Japan - I. Kaizuka (RTS)

<Si solar cells>

Multicrystalline Si Solar Cells – Jun Sin Yi (KPE)

High Efficiency Multicrystalline Silicon Solar Cells - H. Oowada

(Kyocera Corporation)

[China_2](#) TBD

12:00 – 13:30; Lunch

13:30 – 15:30; Technical Session (15-minute presentations)

<Si solar cells>

Development of MWT Multi-crystalline Silicon Solar Cells – Daewon Kim

(Samsung SDI)

Effect of SiNx:H Antireflection Layer on Fired-through Screen-printed Contacts for Crystalline Silicon Solar Cells - M. S. Jeon (TUAT)

[China_3](#) TBD

Optimization of PECVD SiNx for High-Efficiency Multi-crystalline Silicon Solar Cells – Ji-Weon Jeong (LG Chem)

China_4 TBD

<CIGS solar cells>

Research and progress in widegap CIGS solar cells at AIST - S. Niki (AIST)

Development of CIGS thin film solar cells in Korea – Kyung-Hoon Yoon (KIER)

Current Status of CIS-based Thin-film PV Technology in Showa Shell Sekiyu K.K.

– K. Tabuchi (Showa Shell)

15:30 – 15:45; Coffee Break

15:45 – 17:30; Technical Session (15-minute presentations)

<Dye and polymer solar cells>

Recent Study on Dye Sensitized Solar Cells in Kyushu Institute of Technology

– S. Hayase (Kyushu Institute of Technology)

Dye-sensitized solar cells fabricated with gel-type polymeric solid electrolyte and their performance – Ji-Won Lee (Samsung SDI)

Importance of Interfacial Structures for Optimization of Dye-sensitized TiO₂ Solar Cells – S. Yanagida (Osaka University)

Nanostructured Electrodes for High Efficiency Dye-Sensitized Solar Cells

– Nam-Gyu Park (KIST)

Optical and Electrical Properties of Mg-doped C₆₀ and C₆₀/a-C Superlattice Films for Solar Cell Applications - T. Terayama (Toyota Technological Institute)

Effect of thermal annealing on the device performance of P3HT/PCBM polymer solar cell – Sang-Jin Moon (KRICT)

High-Efficiency Polymer Solar Cells Using Solution Processed Titanium Oxide Layer – Kwanghee Lee (Pusan University)

September 22, Friday (Room A)

09:00 – 12:00; Technical Session (15-minute presentations)

<Si Materials>

Process Development for Preparation of Polysilicon in Korea

– Hee Young Kim(KRICT)

Characterization of Cast-grown Polycrystalline Silicon Ingot

- K. Arafune (Toyota Technological Institute)

The effect of crucible configuration on Joule and pinch effects in EMCC process of silicon – B.M. Moon, J.S. Shin, B.H. Kim, and S.M. Lee (KIIT)

<III-V solar cells>

R&D Activities for Super High-efficiency Multi-junction and Concentrator Solar Cells in Japan - M. Yamaguchi (Toyota Technological Institute)

New approaches on III-V Semiconductor Materials and Structures for Super High-efficiency Multi-junction Solar Cells -K. Nishimura (Toyota Technological Institute)

[China_5 TBD](#)

10:30 – 10:45; Coffee Break

10:45 – 12:00; Technical Session (15-minute presentations)

<CIGS solar cells>

High Efficiency CIGS solar cells – Byung Tae Ahn (KAIST)

Fabrication of Cu(In,Ga)Se₂ Thin film Solar Cells by Non-vacuum Particles-based Technique - T. Wada (Ryukoku University)

High-Quality Cu(InGa)Se₂ Thin Films Grown by MBE-Based System

- A. Yamada (Tokyo Institute of Technology)

Recent Activities on CIGS Thin Film Solar Cells at Aoyama Gakuin University

- T. Nakata (Aoyama Gakuin University)

[China_6 TBD](#)

12:00 – 13:30; Lunch

13:30 – 15:00; Technical Session (15-minute presentations)

<Thin film Si solar cells>

[China_7](#) TBD

Procrystalline Si Thin Film Solar Cells - Koeng-Su Lim (KAIST)

Localized Plasma Confinement CVD method for high rate and uniform thin-film crystalline Si - K. Murata (Sanyo Electric Co., Ltd.)

Development of Novel Nanocrystalline 3C-SiC for Solar Cell Applications
- M. Konagai (Tokyo Institute of Technology)

[China_8](#) TBD

ZnO transparent conducting oxides – Donghwan Kim (Korea University)

Preparation of TiO₂ thin films for a protection layer with atomic hydrogen
- S. Nonomura (Gifu University)

15:00 – 15:15; Coffee Break

15:15 – 17:30; Technical Session (15-minute presentations)

<Module, BOS, Demonstration, and Standardization>

Development of Transformerless 10kW PCS

– Seung-Pyo Ryu (Hyundai Heavy Industries)

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Large Area Silicon Thin Film Solar Cell Modules - M. Ichikawa (Kaneka)

Conditions of High-Quality PV Module System based on Failure Analysis

– Hyungkeun Ahn (Konkuk University)

Performance Measurements of state-of-the-art PV Devices - Y. Hishikawa (AIST)

Recent Study on the Integrated Prefab Building Materials Depending on the Cooling Type of PV Module Backside – So-mi, Yi (S-Energy)

Installation and Monitoring 1 MWp PV System – In Chul Lim (Seoul Marine)

Standardization Issues in Photovoltaics

– Su Hyun Baik (Korean Association of Industrial Technology)

[China_10](#) TBD

17:30 – 18:30; Summary Session

18:30 – 21:00; Banquet (Banquet Hall)