

6th International Workshop on the Sustainable Actions for “Year by Year Aging” under Reliability Investigations in Photovoltaic Modules, 2025 (SAYURI-PV 2025)

(As of 2025/09/18)

[Day 1] November 5

9:00- The venue opens / Hanging Your Poster

9:30- General Introduction Takeshi Tayagaki (AIST)

Session I: Reliability of cutting-edge PV Cells and Modules

Chair: Hitoshi Sai (AIST) and Takeshi Tayagaki (AIST)

9:40- Multi-Scale Characterization to Inform PV Reliability and Understand UV Induced Degradation

Dana Kern (NREL)

10:15- TBA

Jean-Nicolas Jaubert (PVEL)

10:50- Challenge of Service Lifetime Prediction for PV modules with POE or EVA

Nozomi Kamiya (Mitsui Chemicals),

Tsuyoshi Shioda (es-Shift Research Institute, Inc)

11:20- Lunch [Self-pay]

Session II: Module reliability for integrated PV

Chair: Takuya Matsui (AIST) and Shogo Ishizuka (AIST)

13:00- Reliability analysis of vehicle-integrated PV

Daisuke Sato (Univ. of Miyazaki)

13:30- Absolute EL Measurements of VIPV

Hidenori Mizuno (AIST)

14:00- Direct detection of vibration and resonance of the solar cells and estimation of the stress accumulation

Kenji Araki (Univ. of Miyazaki)

14:30- Poster Session & Coffee Break

Session III: Field testing

Chair: Masahiro Yoshita (AIST) and Tadanori Tanahashi (AIST)

15:30- Development of an electroluminescence evaluation method as a next coming technology

Yasuaki Ishikawa (Aoyama Gakuin University)

16:00- Current Status of crystalline silicon based photovoltaic modules exposed outdoors in Tosu city, Japan

Yasuo Chiba (AIST)

16:30- Discussions

16:45 End of 1st Day

[Day 2] November 6

Session IV: PV Recycle

Chair: Michio Kondo (Waseda Univ., AIST) and Keiichiro Sakurai (AIST)

9:00- Towards Efficient Recycling of PV Modules through Advanced Pre-treatment and Design-for-Disassembly

Chiharu Tokoro (Waseda Univ., Univ. of Tokyo)

9:25- Technological Development of PV Panel Recycling Using Low-Temperature decomposition

Takeharu Yamashita (Tokuyama)

9:50- Innovative Recycling of Solar Panel Cover Glass into Float Glass

Naoya Kobayashi (AGC)

10:15- Coffee Break

Session V: Fundamentals of Module Failure Modes

Chair: Hidenori Mizuno (AIST) and Takeshi Tayagaki (AIST)

10:30- Spontaneous Glass Breakage in Glass-Glass Modules

Elizabeth Palmiotti (NREL)

11:05- Potential-induced degradation of Si photovoltaic modules with various n-type crystalline Si solar cells

Keisuke Ohdaira (JAIST)

11:35- Lunch [Self-pay]

Session VI: PV System Reliability

Chair: Takashi Oozeki (AIST) and Yasuo Chiba (AIST)

13:00- Influence of Glass Thickness on the non-uniform Snow Load Resistance of Photovoltaic Modules

Samuli Ranta (TUAS)

13:35- Standardization of Electrically Heated PV Modules (Snow-PV)

Akio Sato (VDE) (Online presentation)

14:05- An equivalent circuit model between PV module/string and the ground for discussion on risk of electrical shock

Kazuhiko Kato (AIST)

14:35- Coffee Break

Session VII: Perovskite PVs

Chair: Takurou Murakami (AIST) and Saemi Takahashi (AIST)

14:50- Long-Term Outdoor Performance and Stability of Flexible PSC modules

Yoshihiro Hishikawa (Ritsumeikan University)

15:20- Challenging reliability issues of emergent PV technologies

Takeshi Tayagaki (AIST)

15:50- Discussions

16:05- Closing

Takeshi Tayagaki (AIST)

16:10 End of 2nd Day