



PVSEC-35

International Photovoltaic Science and Engineering Conference

10-15, November 2024
Numazu (Mt. Fuji), Japan



Venue

Plaza Verde Convention Complex in Numazu

1-1-4 Ote-machi, Numazu, Shizuoka 410-0801
Tel: +81-55-920-4100
URL: <https://www.plazaverde.jp/en/>

Important Dates

Deadline for Abstract Submission: May 31, 2024

Abstract Acceptance Notice: **August 29, 2024**

Deadline for Early-bird Registration: **September 30, 2024**

Organizing Committee

Chair	Akira Yamada (Tokyo Inst. Technol., Japan)
	Yukiko Kamikawa (AIST, Japan)
Vice-Chair	Atsushi Wakamiya (Kyoto Univ., Japan)
	Taizo Masuda (Toyota Motor Corp., Japan)

Technical Program Committee

Chair	Yuzuru Ueda (Tokyo Univ. of Science, Japan)
	Noritaka Usami (Nagoya Univ., Japan)
Vice-Chair	Atsushi Wakamiya (Kyoto Univ., Japan)

Technical areas & Keywords

PV in Sustainable Energy System: [Area Chair] Takashi Oozeki (AIST, Japan)

Sub area 1-1: Policy, Market, Finance and Deployment

Energy policy, PV policy, Electricity markets, PV markets, Finance, Modeling and scenarios, Social impacts, Economic impacts, Job creation, Training and education, International collaboration, Sustainability, Environmental impacts, Circular economy, Life cycle assessment, Recycling

Area
1

Sub area 1-2: Grid Integration and Energy Management

Smart grid, Micro grid, Resilience, Grid planning and operations, Energy management system, Combination of renewable energies, Aggregation, Virtual power plant, Demand response, Forecasting, Machine learning for energy management, Smart inverter, Grid interface, Maximum power point tracking, Power electronics

Sub area 1-3: Green Energy Carriers and Storage

Sustainable energy systems, Power to X systems, Solar to gas systems, Solar to chemical energy, Solar to hydrogen systems, Solar to NH₃ systems, Solar energy conversion, Solar energy storage, Energy storage system, Energy carriers, Battery

System Engineering and Field Performance: [Area Chair] Kensuke Nishioka (Univ. Miyazaki, Japan)

Sub area 2-1: Integrated PV and Advanced Applications of Photovoltaics

Net zero energy building, Net zero energy house, Building integrated photovoltaics, Vehicle integrated photovoltaics, PV powered mobility, Agri-photovoltaics, Floating photovoltaics, Space photovoltaics, Space solar power systems, IoT application, Optical wireless power transmission, PV self-powered systems

Area
2

Sub area 2-2: Field Performance of Photovoltaic Systems

Photovoltaic systems, Field performance, Energy rating, Operation and maintenance, Failure detection, Certification, Recycling technologies, Reuse technologies, Waste treatment, Life cycle assessment, Safety issues

Wafer-based Silicon Photovoltaics: [Area Chair] Noritaka Usami (Nagoya Univ., Japan)

Sub area 3-1: Materials, Processes, Fundamentals

Feedstock, Crystal growth, Ingot, Slicing, Wafer, Structuring/Texturing, Light trapping, Anti-reflection coating, Light management, Doping, Ion implantation, Diffusion, Deposition, Epitaxy, Metallization, Surfaces and interfaces, Passivation, Carrier selective contact, Transparent conductive oxide, Defects, Impurities, Materials characterization, Materials design, Materials informatics, Process simulation, Process informatics, Tandem oriented materials and processes (except for perovskite/silicon tandem)

Area
3

Sub area 3-2: Cells and Modules

PERC, PERT, TOPCon, SHJ, IBC, Silicon-based tandem cells, Passivating contact, Carrier selective contact, Light management, Transparent conductive oxide, Device physics, Device simulation, Device characterization, Module materials, Encapsulant, Backsheet, Interconnector, Shingling, Bifacial cells and modules, Lightweight and/or curved modules, Colored modules, Cell and module reliability, Cell and module characterization, Silicon tandem cells and modules (except for perovskite/silicon tandem)

Thin-film Photovoltaics and Modules: [Area Chair] Itaru Osaka (Hiroshima Univ., Japan)

Sub area 4-1: Organic and Inorganic Photovoltaics

Organic photovoltaics, Dye-sensitized solar cells, Thin-film silicon solar cells, Anti-reflection coating, Transparent conductive oxide, Device physics, Device simulation, Materials informatics, Module materials, Cell and module reliability, Cell and module characterization

Area
4

Sub area 4-2: Compound Thin-film Photovoltaics

Compound semiconductors (chalcopyrite, kesterite, etc.), Chalcogenide photovoltaics, Anti-reflection coating, Transparent conductive oxide, Device physics, Device simulation, Materials informatics, Module materials, Cell and module reliability, Cell and module characterization

Sub area 4-3: III-V High-efficiency Devices

III-V photovoltaics (GaAs, InGaP, nitride, etc.), III-V-based multijunction photovoltaics, Concentrator photovoltaics, Epitaxial growth, Wafer bonding, Exfoliation technique, Materials/device/module-level characterizations, III-V device reliability, Device physics, Device simulation



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<https://www.pvsec-35.com>



Perovskite and Emerging Photovoltaics: [Area Chair] Atsushi Wakamiya (Kyoto Univ., Japan)**Sub area 5-1: Perovskite Photovoltaics**

Perovskite materials, Metal-Halide perovskites, Perovskite solar cells, Optical and electronic properties, Materials chemistry, Fabrication methods, Carrier dynamics, Device physics, Theoretical studies

Sub area 5-2: Emerging Materials and New Concepts

Quantum dots, Nanostructures, Superlattice, Intermediate band, Hot carrier, Multiple-exciton generation, Up and down conversion, Bulk photovoltaic effect

Cross Cutting Areas**Sub area CC-1: Perovskite Tandems**

Tandem solar cell with perovskite, silicon photovoltaics, Organic photovoltaics (OPV), CIGS, Metal-Halide perovskites, Wide bandgap semiconductors, III-V semiconductors, Solar modules, Durability, Fabrication and manufacturing, Charge transport material

Sub area CC-2: Artificial Intelligence in PV Development

Materials discovery, Research acceleration, Big-data analysis, Machine learning enabled simulation and modeling, AI-driven optimization, Energy forecasting, Predictive maintenance, Autonomous fault detection

Sub area CC-3: Solar to X; Sciences, Materials and Devices

Solar to hydrogen devices, CO₂ reduced reaction, Solar to NH₃ technologies, Photovoltaics plus electrochemistry, Photocatalyst, Artificial photosynthesis, Photo cathode, Photo anode, Electrolysis, Co-catalyst, Oxide semiconductors, "Solar to chemicals" related matters

Welcome to PVSEC-35

On behalf of the Organizing Committee, I would like to invite you to attend the 35th International Photovoltaic Science and Engineering Conference (PVSEC-35) to be held in Numazu (Mt. Fuji), Japan, from November 10 to 15, 2024. PVSEC-35 will be the largest and most comprehensive PV conference in the Asia-Pacific region in 2024. PVSEC-35 will provide an excellent platform for the world's photovoltaic scientists and engineers to present and share the latest developments in solar PV technologies.



Prof. Akira Yamada
General Chair of PVSEC-35

Registration

The registration fees for PVSEC-35 are listed below. Additional payment is required to attend the tutorials and banquet. The registration form can be found on the PVSEC-35 website. We can accept major credit cards (VISA, MasterCard, etc.).

	Early-bird (Until September 30)	Standard (From September 30)
Regular	JPY 70,000	JPY 80,000
Student	JPY 30,000	JPY 35,000
Tutorial	JPY 10,000	JPY 10,000
Banquet	JPY 10,000	JPY 10,000

Tutorial

The PVSEC-35 Tutorials will be held at the conference venue on Sunday, November 10, 2024. The tutorials are open to all attendees for an additional fee. Presenters and topics are listed below. The scheduled duration of each tutorial is 1 hour and the total fee is JPY 10,000.

Lecturer	Affiliation	Title (tentative)	Lecturer	Affiliation	Title (tentative)
Prof. Y. Ishikawa	Aoyama Gakuin Univ., Japan	Fundamental of solar cells	Prof. A. Masuda	Niigata Univ., Japan	Reliability issues and future prospects of PV modules
Prof. T. Sakurai	Univ. of Tsukuba, Japan	Solar cell characterization	Dr. K. Sakurai	AIST, Japan	Electric vehicle trends and LCA, sector coupling with PV power generation
Prof. X. Zhang	Nankai Univ., China	Perovskite solar cells	Dr. T. Oozeki	AIST, Japan	Policy and future of PV

Sponsorship information

Category	Price Early-bird/ Standard	Logo (web site)	Logo (Conference bags)	Logo (Name tags)	Commercial video	Advertise- ment	Free attendees	Online booth
Diamond Sponsor	800,000 JPY/ 1,000,000 JPY	Extra-large	○	○	○	2p	6	○
Platinum Sponsor	500,000 JPY/ 600,000 JPY	Large	○	-	-	1p	3	○
Gold Sponsor	200,000 JPY/ 240,000 JPY	Medium	-	-	-	1p	2	○
Silver Sponsor	100,000 JPY/ 120,000 JPY	Small	-	-	-	-	1	○



Sponsor welcome

Early-bird discount for sponsorship: **Apply by March 31, 2024 (including provisional applications)**

Further details: <https://www.pvsec-35.com/Sponsors/sponsorship-information.html>