



PVSEC-33

International Photovoltaic Science and Engineering Conference

13-17, November 2022
Nagoya, Japan



Venue Nagoya Congress Center

1-1 Atsuta-nishimachi, Atsuta-ku, Nagoya 456-0036
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URL: <https://www.nagoya-congress-center.jp/en/>

Important Dates

Deadline for Abstract Submission: May 31, 2022

Abstract Acceptance Notice: **August 31, 2022**

Deadline for Early-bird Registration: **September 14, 2022**

Organizing Committee

Chair	Noritaka Usami (Nagoya Univ., Japan)
Vice-Chairs	Izumi Kaizuka (RTS, Japan) Hiroshi Segawa (Univ. of Tokyo, Japan)

Technical Program Committee

Chair	Atsushi Masuda (Niigata Univ., Japan)
Vice-Chairs	Yasuaki Ishikawa (Aoyama Gakuin Univ., Japan) Kensuke Nishioka (Univ. Miyazaki, Japan)

Technical areas & Keywords

Policy, market, deployment, energy management, and related technologies: [Area Chair] Takashi Oozeki (AIST, Japan)

Sub area 1-1: Policy, market and deployment

Area 1 Energy policy, PV policy, Electricity market, PV market, Sustainability, Environmental impacts, Economic impacts, Social impacts, Job creation, Workforce education and diversity, International collaboration, Circular economy

Sub area 1-2: Energy management and related technologies

Energy management system, Energy management for zero emission, Evaluation, Storage, Battery, Smart grid, Integration, Combination of renewable energies, Aggregation, Virtual power plant, Demand response, Forecasting, Machine learning for energy management, Power conditioner system, Maximum power point tracking, Power electronics

Advanced applications and core technologies for massive installation: [Area Chair] Kensuke Nishioka (Univ. Miyazaki, Japan)

Sub area 2-1: Solar to X

Solar to gas, Solar to chemical energy, Solar to hydrogen, Solar CO₂ reduction, solar to NH₃, Solar energy conversion, Photovoltaics plus electrochemistry, Solar energy storage, Energy storage system, Energy carrier

Sub area 2-2: Advanced applications of photovoltaics

Area 2 Net zero energy building, Net zero energy house, Building integrated photovoltaics, Vehicle integrated photovoltaics, PV powered mobility, Agro-photovoltaics, Floating photovoltaics, Space photovoltaics (Application to satellite), Space solar power systems, IoT application, Optical wireless power transmission, Energy self-sufficiency system

Sub area 2-3: Field performance of photovoltaic systems and related issues

Photovoltaic systems, Field performance, Energy rating, Operation and management, Life cycle assessment, Certification, Recycle, Reuse, Waste treatment, Safety issues

Photovoltaic modules, solar cells, advanced materials, sophisticated processes, cell and module characterizations: [Area Chair] Yasuaki Ishikawa (Aoyama Gakuin Univ., Japan)

Sub area 3-1: Wafer-based silicon photovoltaics and related technologies

Area 3 PERC, PERT, SHJ, IBC, TOPCon, passivation, Carrier selective contact, Ingot, Wafer, Light management, Transparent conductive oxide, Device physics, Device simulation, Material and device characterization, Materials and process informatics, Module materials, Bifacial cells and modules, Cell and module reliability, Cell and module characterization

Sub area 3-2: Organic and inorganic thin-film photovoltaics, III-V high-efficiency devices and related technologies

Thin-film silicon photovoltaics, III-V photovoltaics (GaAs, InGaP, nitride), Concentrator photovoltaics, Compound materials, Chalcogenide photovoltaics (chalcopyrite, kesterite), Organic photovoltaics, Dye-sensitized solar cells, Anti-reflection coating, Transparent conductive oxide, Device physics, Device simulation, Materials and process informatics, Module materials, Cell and module reliability, Cell and module characterization

Perovskite and emerging photovoltaics, advanced materials, sophisticated processes: [Area Chair] Tsutomu Miyasaka (Toin Univ. Yokohama, Japan)

Sub area 4-1: Perovskite photovoltaics and related technologies

Area 4 Structure and composition of organometal halide perovskite, Hole and electron transport materials, Exciton transport and electron/hole transfer dynamics, Device physics, Device simulation, Cell and module characterization

Sub area 4-2: Emerging materials and game-change technologies

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



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<https://www.pvsec-33.com>

Welcome to PVSEC-33

On behalf of the Organizing Committee, I would like to invite you to participate in the 33rd International Photovoltaic Science and Engineering Conference (PVSEC-33), which will be held in Nagoya, Japan, from 13 to 17 in November 2022. PVSEC-33 will be the largest and most comprehensive PV conference in 2022 in the Asia-Pacific region.

PVSEC-33 will provide an excellent platform for the world's photovoltaic scientists and engineers to showcase and share the latest developments in solar PV technologies. The conference program encompasses the full range of PV topics, including fabrication, characterization and simulation of PV materials, cells, modules and systems and their reliability, and policies. Furthermore, in the midst of growing expectations for renewable energy toward the realization of a decarbonized society, PVSEC-33 will deal with "integration" and "extension" of PV technologies for mobility, buildings, agriculture, solar to X, and so on. The plenary and invited speakers are globally recognized experts in their respective fields.

As a conference in the new era of post-Corona or with Corona, we will try to provide opportunities that both on-site and on-line participants can enjoy the conference to communicate with colleagues and old/new friends on new results and new ideas. We look forward to seeing you at PVSEC-33.



Prof. Noritaka Usami
General Chair of PVSEC-33

Registration

Registration fees for PVSEC-33 are listed below. Additional payment is necessary for attending the tutorials and banquet. The registration form will be found at the PVSEC-33 website. We can accept major credit cards (VISA, MasterCard, etc).

	Early-bird (Until September 14)	Standard (From September 15)
Regular	JPY 70,000	JPY 80,000
Student	JPY 30,000	JPY 35,000
Online Regular	JPY 70,000	JPY 80,000
Online Student	JPY 30,000	JPY 35,000
Tutorial	JPY 10,000	JPY 10,000
Banquet	JPY 10,000	JPY 10,000

Tutorial

The PVSEC-33 tutorials will be held at the conference venue on Sunday, November 13th, 2022. The tutorials are open to all delegates at an additional fee. The tutorial topics and time schedule are listed below.

Two topics of "PV Materials" and "PV Systems" will be given, and participants can attend either topic.

Time (JST, UTC+9)	PV Materials	PV Systems
10:00-11:45	(T-M-01) Solar Cells: Fundamental to Application for Carbon Neutrality Prof. Takashi Minemoto (Ritsumeikan Univ., Japan)	(T-S-01) Reliability and Testing of PV Modules Dr. Tadanori Tanahashi (AIST, Japan) Mr. Kengo Morita (PVSQ Management, Japan)
13:30-15:15	(T-M-02) Machine Learning and its Application to Research and Development of Photovoltaics - Materials Informatics, Process Informatics and Measurement Informatics for PV - Dr. Kentaro Kutsukake (RIKEN, Japan)	(T-S-02) PV Power Forecasting and its Uncertainty Dr. Hideaki Ohtake (AIST, Japan)
15:15-17:00	(Tentative) (T-M-03) Perovskite Solar Cells -Fundamentals and Applications- Prof. Shuzi Hayase (Univ. Electro-Communications, Japan)	(T-S-03) Promising New Applications of Photovoltaic - Solar to X, Building Integrated PV, Vehicle Integrated PV, Agrivoltaic - Prof. Kensuke Nishioka (Univ. Miyazaki, Japan)

Sponsorship information

Category	Price Early-bird/ Standard	Logo (web site)	Logo (Bags, Name-tags)	Commercial video	Advertise- ment	In-person participation	Online Participation	Online booth
Diamond Sponsor	1,000,000 JPY/ 1,200,000 JPY	Extra-large	○	○	2p	6	10	○
Platinum Sponsor	500,000 JPY/ 600,000 JPY	Large			1p	3	5	○
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: **Applications by March 31, 2022 (including provisional applications)**

Further details: <https://www.pvsec-33.com/Sponsors/sponsorship-information.html>

