First Call for Papers

MOC2025

30th MICROOPTICS CONFERENCE

https://moc2025.com/

Sponsored by ***The Japan Society of Applied Physics (JSAP)***

Organized by ***Microoptics Group, JSAP***

Technically co-sponsored by ***IEEE Photonics Society***

In cooperation with

Optica (formerly OSA) | The Optical Society of Japan | IEICE Electronics Society
IEEE Photonics Society Tokyo Section Chapter | IEEE Photonics Society Kansai Chapter
IEEE Photonics Society Fukuoka Chapter | The Chemical Society of Japan
The Society of Polymer Science, Japan | The Laser Society of Japan
Optoelectronics Industry and Technology Development Association
Japan Optomechatronics Association | Japan Photonics Council (Some organizations are under negotiation.)

Oct. 12 (Sun.) - Oct. 15 (Wed.), 2025
LIGHT CUBE UTSUNOMIYA,
Tochigi, Japan

Paper Deadline: May 16 (Fri.), 2025

LIGHT CUBE UTSUNOMIYA
1-20, Miyamirai, Utsunomiya city,
Tochigi Prefecture, Japan
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https://light-cube.jp/visitors/access/

OBJECTIVE

The 30th MICROOPTICS CONFERENCE (MOC2025) will be held at LIGHT CUBE UTSUNOMIYA in Tochigi Prefecture, Japan from October 12 to 15, 2025. This conference is sponsored by the Japan Society of Applied Physics (JSAP) and organized by Microoptics Group and in cooperation with several academic societies and associations. The MOC2025 is intended to provide a central forum for an update and review of scientific and technical information covering a wide range of microoptics field from fundamental researches to systems and applications.

CATEGORY

The category of the conference covers the following subjects of microoptics;

1. Theory, Modeling, and Design

Aberrations, Dispersion, Beam optics, Guided-wave optics, Gradient-index optics, Diffractive optics, Photonic band, Slow light, Near-field optics, Nonlinear optics, Thermooptics, Plasmonics, Metal optics, Quantum optics/photonics, Biomimetic optics, Metaoptics, Simulation and system design, etc.

2. Materials and Fabrication

Semiconductors, Crystals, Dielectric materials, Polymers, Liquid crystals, Nonlinear materials, Composite materials, Nano-materials, Transparent conductors, Magneto-optic materials, Spin-materials, Metamaterials, Nanocarbons, etc. Micro- and nano-fabrication, Nano-imprint, Laser processing, Heterogeneous bonding, 3D printing, Optical manipulation, etc.

3. Measurement and Sensing

Spectroscopy, Interferometry, Reflectometry, Ultrafast measurement, 3D measurement, Quantum measurement, LiDAR, etc.

4. EO/OE and Active Devices

Lasers, LEDs, VCSELs, Array lasers, Amplifiers, Photo detectors, Terahertz devices, Optical imaging sensors, Solar cells, Energy harvesting devices, etc.

5. Passive Devices

Fibers, Waveguides, Multi/demultiplexers, Add-drop multiplexers, Branching and mixing components, Photonic crystals, Filters, Microlenses, Diffractive optical elements, Isolators, Polarizers, etc.

6. Dynamic and Functional Devices

MEMS, Switches, Modulators, Tunable devices, Wavelength converters, Nonlinear optical devices, Deflectors, Optical buffers, etc.

7. Integration, Packaging, and Si photonics

Monolithic and hybrid integration, Mounting and packaging, Micro-assembly, Wafer-level assembly, 3D integration, etc.

8. System and Design Conception

APPLICATION FIELD

The 28th MICROOPTICS CONFERENCE covers microoptics technologies in the following major topical fields;

A. Optical Communications

Photonic networks, Optical routing, Advanced multiplexing, LAN, FTTH, Wireless optical communication, Mobile networks, Space networks, etc.

B. Optical Interconnects

Chip/board/system interconnects, Active optical cable, etc.

C. Optoelectronic Equipment

Optical storages, Laser and LED printers, Smart sensors, Advanced cameras, Advanced microscopes, etc.

D. Optical Sensing and Processing

Optics for image recognition, Physical measurements, 3D measurements, Sensors and sensing systems, Security systems, Optical computing, Bio- and medical sensing, Tomography, LiDAR, OCT, etc.

E. Displays and Lighting

LCD, Laser/LED/EL displays, MEMS displays, 3D displays, Projection displays, μ-LED displays, Wearable displays, AR/VR-glass , head mounted displays, Flexible displays, Solid state lighting, Illuminations, Appearance design and control, etc.

F. New Applications and Emerging Technologies

Green photonics, Environmental and energy optics, Bio- and medical optics, Nano-photonics, Quantum systems, Next generation and intelligent microoptics, Car optics, Agricultural and fishery optics, Optical wireless power transmission, AI and IoT, etc.

SUBMISSION OF PAPERS

Original papers that have not been previously presented and that describe new technical contributions to the areas covered by the technical descriptions in the aforementioned category will be accepted for presentation. Detailed instructions will be available from the following Web site.

https://moc2025.com/

Papers should be submitted electronically no later than **May 16 (Fri.), 2025**. Authors will be requested to submit a **2-page paper** written in English, including text, figures, tables, and references within a frame of 17 cm x 24 cm. The paper template will be available through the Web site.

POSTER SESSION

In addition to regular oral presentation sessions, a poster presentation session will be planned to stimulate detailed explanation and discussion. The author(s) of papers will be informed of the size of bulletin board for displaying summary, figures, tables, etc., when selected as poster papers.

POST-DEADLINE PAPER

A limited number of post-deadline papers will be accepted for presentation at post-deadline sessions. The latest significant results obtained after the regular deadline are most welcome.

PAPER PUBLICATION

Accepted papers will be published in **IEEE Xplore** in addition to the conference technical digest. The authors would also have a chance to publish an extended, full-length version of the paper presented at MOC2025 in **a special issue of the JJAP**, which is an international journal published by the Japan Society of Applied Physics and IOP publishing. The special issue of the JJAP is planned to be published in 2026.

PAPER AWARDS

The MOC Paper Award will be given to several excellent contributed papers. Moreover, the MOC Student Award will be given to several students who presented excellent papers.

FINANCIAL SUPPORT FOR OVERSEAS STUDENTS

Limited financial support is considered for the presentations by students from overseas. Details will be announced in the Final Call for Papers.

OFFICIAL LANGUAGE

The official language of MOC2025 is English.

CONFERENCE VENUE

The MOC2025 will take place at LIGHT CUBE UTSUNOMIYA, Tochigi, Japan.

About Utsunomiya

Utsunomiya City, located near Tokyo, is known as the "Gyoza City" of Japan, attracting gourmets from all over Japan in search of delicious gyoza. Utsunomiya City is also the center of optical technology in Japan, with several major optical equipment manufacturers based there. Nikko City, a UNESCO World Heritage Site, is also nearby, with its gorgeous shrines, waterfalls, and other beautiful scenery. The area is especially beautiful in the fall, when the brilliant autumn foliage attracts visitors from all over Japan. For detailed sightseeing, visit the following website.
https://discover-utsunomiya.com/

ACCESS

Utsunomiya is approximately 50 minutes by Bullet train from Tokyo or 2 hours 40 minutes and 2 hours 30 minutes by limousine bus from Haneda Airport and Narita Airport, respectively.

FURTHER INFORMATION

The final Call for Papers will be issued in January 2025. The latest information will be also presented on the web site: https://moc2025.com/ (QR code)

CONTACT

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