

Final Call for Papers



MOC2019

24th MICROOPTICS CONFERENCE

<http://moc2019.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

The Optical Society (OSA)
The Optical Society of Japan
IEICE Electronics Society
IEEE Photonics Society Japan Chapter
IEEE Photonics Society Kansai 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
JSPS / The 125th Committee
JSPS / The 130th Committee

Nov. 17 (Sun.) - Nov. 20 (Wed.), 2019
Toyama International Conference Center
Toyama, Japan

Paper Deadline: June 14 (Fri.), 2019

OBJECTIVE

The 24th MICROOPTICS CONFERENCE (MOC2019) will be held at Toyama International Conference Center, in Toyama city, Japan during November 17 - November 20, 2019. 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 MOC2019 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, Thermo-optics, Plasmonics, Metal optics, Quantum optics/photronics, Biomimetic optics, 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, etc.

3. Measurement and Sensing

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

4. Passive Devices

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

5. Dynamic and Functional Devices

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

6. EO/OE and Active Devices

Lasers, LEDs, VCSELs, Array lasers, Amplifiers, Photo detectors, Terahertz devices, Optical imaging sensors, Solar cells, Energy harvesting devices, 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 24th MICROOPTICS CONFERENCE covers microoptics technologies in the following major topical fields;

A. Optical Communications

Photonic networks, Optical routing, Advanced multiplexing, LAN, FTTH, 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, Sensors and sensing systems, Security systems, Optical computing, Bio- and medical sensing, Tomography, etc.

E. Displays and Lighting

LCD, Laser/LED/EL displays, MEMS displays, 3D displays, Projection displays, Wearable 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, Vehicle optics, Agricultural and fishery optics, 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. A detailed instruction will be available on the following Web site:

<http://moc2019.com/>

Papers should be submitted electronically no later than **June 14 (Fri.), 2019**. Authors will be requested to submit **2-page paper** written in English, including texts, figures, tables, and references within a frame of 17 cm x 24 cm. The paper template available on the above website must be used for compliance with JSAP and IEEE Xplore formats.

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 the 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. Latest significant results obtained after the regular deadline are most welcome.

PAPER PUBLICATION

Accepted papers will be published in **IEEE/Xplore** in addition to conference technical digest. The authors also have a chance to publish an extended, full length version of the paper presented at MOC2019 in **a special issue of the JJAP**, which is an international journal published by the Japan Society of Applied Physics and IOP publishing. The papers can partially include the MOC2019 paper and will be published in Aug. 2020.

PAPER AWARDS

Some excellent contributed papers will be awarded the Best Paper Award. Moreover, some excellent papers presented by students will be awarded the Student Paper Award.

FINANCIAL SUPPORT FOR OVERSEAS STUDENTS

Limited financial support is considered for the presentations by students from overseas. Details will be announced on the website:

<http://moc2019.com/>

OFFICIAL LANGUAGE

The official language of MOC2019 is English.

CONFERENCE VENUE

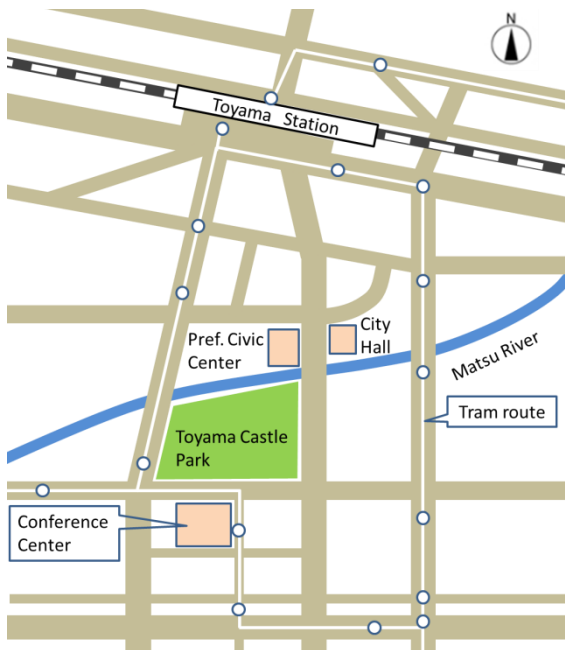
The MOC2019 will take place at Toyama International Conference Center located in the center of Toyama city, Toyama prefecture, Japan.

Toyama International Conference Center

1-2 Ote-machi, Toyama-city, Toyama, Japan

Tel +81 76 424 5931

<https://www.ticc.co.jp/english/access/>



ABOUT TOYAMA

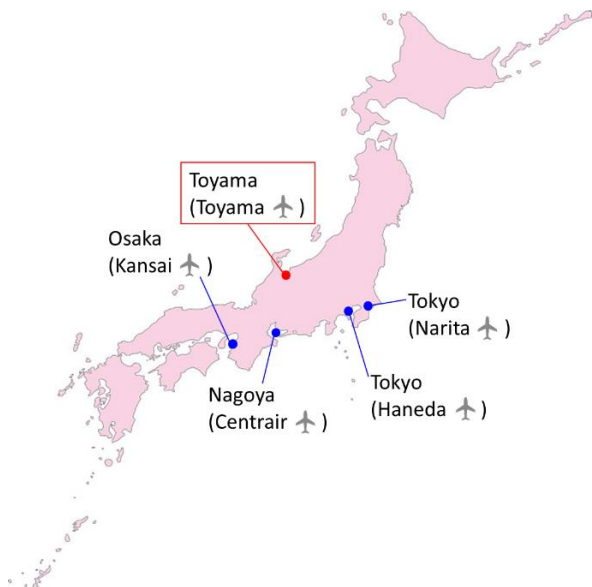
Toyama city is the capital city of Toyama prefecture. It's a historical, middle size city located between Japan Sea and Tateyama mountains and famous for seafood (red snow crab and sushi) and beautiful sceneries. You can enjoy hot springs, autumn leaves, trekking, Gokayama Gassho-style houses (UNESCO World Heritage) nearby. For detail on sightseeing, visit <http://foreign.info-toyama.com/en/>



ACCESS

There are 4 international flight routes from Dalian, Seoul, Shanghai and Taipei to Toyama airport. From other cities outside Japan, take a flight to Narita, Haneda, Kansai or Chubu Centrair airports and an express train to Toyama. Trams are available in the city. For detailed information, please visit the following website:

<http://foreign.info-toyama.com/en/access/>



FURTHER INFORMATION

The latest information on the conference will be also presented on the web site:

<http://moc2019.com/>

CONTACT

MOC2019 Registration Desk

KNT-CT Global Travel Co., Ltd.

Sumitomo-shoji Kanda-Izumi-cho Bldg.13F 1-13

Kanda-Izumi-cho, Chiyoda-ku, Tokyo 101-0024, Japan

Phone: +81-3-6891-9354, Fax: +81-3-6891-9409

E-mail: moc2019@or.knt.co.jp

PLENARY TALKS

Benjamin J. Eggleton, The University of Sydney
"A Renaissance in Brillouin Photonics for On-Chip
Signal Processing and Sensing"

Waguih S. Ishak, Corning Incorporated
"Innovations in Optics for the Connected World"

Susumu Noda, Kyoto University
"Progress in Photonic-Crystal Lasers"

INVITED TALKS

Sheng-L. Huang, National Taiwan University
"Skin Cancer Detection Using Cellular Resolution
Optical Coherence Tomography"

Daniel Kuchta, IBM
TBD

Mordecai M. Segev, Technion
"Topological Insulator Laser"

Cheng Wang, City University of Hong Kong
"High-Speed Electro-Optics Based on Lithium Niobate
Nanophotonics"

Uwe Zeitner, Fraunhofer IOF
"Micro- and Nano-Structures for High-End Optics"

Bao-P. Zhang, Xiamen University
"Green VCSELs Based on Nitride Semiconductors"

Jing Zhang, Ghent University
"Heterogeneous Integration in Silicon Photonics
through Micro-Transfer-Printing"

Above invited speaker list is as of mid February.
Updated list will be on the web site.

SPECIAL OPEN SESSIONS on SUNDAY

■ MOC SCIENCE SCHOOL IN TOYAMA "LIGHT AND LASER"

Nov. 17 (Sun.) 10:00 – 12:00

Open to public, especially high school
and university students.

MOC attendees are welcome,
but talks will be given in Japanese.

- 1) *Sending by Light, Observing by Laser*
- *From Internet to Smartphones* -
Kenichi Iga, Professor Emeritus,
Tokyo Institute of Technology
- 2) *Organic Light Emitting Diodes*
- *For New Era Displays* -
Hiroyuki Okada, Professor, University of Toyama
- 3) *Observing Gravitational Waves with Laser*
Interferometers
Takaaki Kajita, **Nobel Laureate in Physics**,
Director of Institute for Cosmic Ray Research
(ICRR),
Professor, The University of Tokyo

■ SPECIAL SYMPOSIUM "SENSING BY LIGHT"

Nov. 17 (Sun.) 14:00 – 17:20

Talks will be given in English.

- 0) Introductory Talk
Kenichi Iga, Tokyo Institute of Technology
- 1) Light for Detecting Neutrinos and Gravitational Waves
Takaaki Kajita, **Nobel Laureate in Physics**,
The University of Tokyo
- 2) LiDAR - A Key to AI-Mobile -
Toshihiko Baba, Yokohama National University
- 3) VCSEL Sensing for 3D Face Recognition
Connie J. Chang-Hasnain, University of
California, Berkeley
- 4) Biophotonic Imaging and Sensing
Ken-Tye Yong, Nanyang Technological
University

AWARD CEREMONY

Award ceremony will be held at the end of the conference.

MICROCONCERT AND CONFERENCE PARTY

Evening of Nov. 19 (Tuesday)

“MICROCONCERT” : One hour concert will be performed by Machida Philharmony Baroque Ensemble (MPB) after the technical session. Attendees and their families/friends are cordially invited (Free of charge).

“CONFERENCE PARTY” : A buffet style party will open right after the concert. Registration required / ¥3,000 per person.

REGISTRATION

Registration Fees

	Before/On Oct. 14, 2019	After Oct. 15, 2019
Conference (General)	¥47, 000	¥52, 000
(Student, Retiree)	¥17, 000	¥20, 000
Conference Party	¥3, 000	¥3, 000

The conference fee includes admission to MOC2019 and a Technical Digest.

MOC2019 Organizing Committee entrusts **KNT-CT Global Travel Co., Ltd.** with a part of the management.

Those who wish to attend MOC2019 should register online at <http://moc2019.com/>

If you have any questions, please contact

MOC2019 Registration Desk

KNT-CT Global Travel Co., Ltd.

Sumitomo-shoji Kanda-Izumi-cho Bldg.13F 1-13

Kanda-Izumi-cho, Chiyoda-ku, Tokyo 101-0024, Japan

Phone: +81-3-6891-9354, Fax: +81-3-6891-9409

E-mail: moc2019@or.knt.co.jp

All payment should be made in Japanese yen by one of the following methods:

1. Bank transfer

(For overseas attendees)

Bank Name: Sumitomo Mitsui Banking Corporation

Suzuran Branch (Branch Code: 760)

Account Name: KNT-CT Global Travel Co., Ltd.

Account No.: Ordinary Deposit No. 6103295

Swift Code: SMBCJPJT

(For domestic attendees)

三井住友銀行 すずらん支店 (店番号 760)

口座番号 : 普通 6103295

口座名 : 株式会社 KNT-CT グローバルトラベル

2. Credit card

Master Card, VISA, American Express, Diners Club and JCB are available. Personal checks are NOT accepted.

Pre-registration, by **October 14, 2019**, is encouraged and will be entitled to reduced fees. Upon receipt of registration information and payment, MOC2019 Registration Desk will send an e-mail of confirmation which should be printed and presented at the Conference Registration Desk.

REGISTRATION CANCELLATION POLICY

No refunds of the registration fee will be made for any reasons whatever. In case of registrant unable to attend the conference, Technical Digest (PDF format) will be sent after the conference.

HOTEL ACCOMMODATIONS

KNT-CT Global Travel Co., Ltd. will be the official agent for hotel accommodations and other travel arrangements.

MOC2019 Accommodation Desk

KNT-CT Global Travel Co., Ltd.

Open: Monday - Friday 9:30 am - 5:30 pm (Japan time)

Closed: Saturdays, Sundays and National holidays

Phone: +81-3-6891-9354, Fax: +81-3-6891-9409

E-mail: moc2019@or.knt.co.jp

Reservation should be made online no later than **October 20, 2019** at <http://moc2019.com/>. Method of payment is via credit card. (Master Card, VISA, American Express, Diners Club and JCB are available.) Balance of room charge will be charged after **October 27, 2019**, together with handling charge (¥500 per room).

Hotel Name	Code	Room Type	Room Charge	Hotel Location
ANA Crowne Plaza Toyama	1S	Single	Sun.-Wed. ¥15,400 Sat. ¥16,500	15 min. walk from JR Toyama Station 2 min. walk to the venue
		Delux Twin	Sun.-Wed. ¥22,000 Sat. ¥23,100	
		(Single use)	Sun.-Wed. ¥28,600 Sat. ¥30,800	
Daiwa Roynet Hotel Toyama	2S	Single	Sat.&Sun. ¥9,900 Mon.-Wed. ¥9,350	15 min. walk from JR Toyama Station 5 min. walk to the venue

Toyama Dai-ichi Hotel	3S	Single	Sat.&Sun. ¥12,100 Mon.-Wed. ¥11,000	10 min. walk from JR Toyama Station 6 min. walk to the venue
Apa Villa Hotel Toyama-Ekimae	4S	Single	Sat. ¥8,600 Sun. ¥7,900 Mon.-Wed. ¥8,100	5 min. walk from JR Toyama Station 13 min. walk to the venue

The above rates are per room, including breakfast, service charge and consumption tax. Handling charge is not included. Please refer to <http://moc2019.com/> for hotel location information.

HOTEL CANCELLATION REFUND POLICY

Any kind of cancellation or reservation change must be submitted in writing to MOC2019 Accommodation Desk, **KNT-CT Global Travel Co., Ltd.** If you cancel the reservation, the accommodation fee will be refunded after deducting the following cancellation fee. Please note that the handling charge will not be refunded.

- * Up to 21 days prior to the check-in date:
No cancellation charge
- * 20 - 8 days prior to the check-in date:
20% of one night accommodation fee
- * 7 - 2 days prior to the check-in date:
50% of one night accommodation fee
- * 1 day prior to the check-in date:
100% of one night accommodation fee
- * On the day of occupancy or no notice given:
100% of one night accommodation fee

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*All domestic members are also organizing committee members.

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