ADVANCE PROGRAM

MOC '15

20th MICROOPTICS CONFERENCE

http://www.comemoc.com/moc15/

Sponsored by the Japan Society of Applied Physics (JSAP)
Organized by Microoptics Group, JSAP

INTERNATIONAL YEAR OF LIGHT 2015

Technically co-sponsored by

- IEEE Photonics Society

In cooperation with

- International Commission for Optics
- The Optical Society
- Optical Society of Korea
- Optical Society of Japan
- IEEE Photonics Society Japan Chapter
- IEICE Electronics Society
- 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
- JSPS / The 125th Committee
- JSPS / The 130th Committee

Oct. 25 (Sun.) - Oct. 28 (Wed.), 2015

FUKUOKA INTERNATIONAL CONGRESS CENTER

Fukuoka, Japan

MOC '15 Agenda At-A-Glance

October 25 (Sun.)		October 26 (Mon.)	
8:30		8:30	Registration Open
9:00		9:00	Opening
9:30		9:30	A: Plenary
10:00		10:00	
10:30		10:30	
			Break
11:00		11:00	B: Imaging and Sensing
11:30		11:30	
12:00		12:00	
12:30		12:30	
13:00	Registration Open	13:00	Lunch
13:30		13:30	
14:00	Microoptics Review (Tutorial)	14:00	C: Novel Devices and Applications
14:30		14:30	
15:00		15:00	
15:30	Break	15:30	
16:00	Microoptics Review (Tutorial)	16:00	Break
16:30		16:30	D: Guided Optics
17:00		17:00	
17:30		17:30	
			Break
18:00	Get Together	18:00	E. Special Session
18:30		18:30	
19:00		19:00	
19:30		19:30	
20:00		20:00	
20:30		20:30	

MOC '15 Agenda At-A-Glance

October 27 (Tue.)		October 28 (Wed.)	
8:30	Registration Open	8:30	Registration Open
9:00	F: Light Sources	9:00	J: Optical Interconnects
9:30		9:30	
10:00		10:00	
10:30	Break	10:30	Break
11:00	G: Waveguide Devices	11:00	K: Fabrication Technology and Components
11:30		11:30	
12:00		12:00	
12:30		12:30	
13:00	Lunch	13:00	Lunch
13:30		13:30	
14:00	H: Poster Odd (13:45-15:00) Even (15:00-16:15)	14:00	L: Passive and Functional Devices
14:30		14:30	
15:00		15:00	
15:30		15:30	Break
16:00	Break	16:00	PD: Post Deadline
16:30	Micro Concert	16:30	Award/Closing
17:00		17:00	
17:30	Conference Party	17:30	
18:00		18:00	
18:30		18:30	
19:00		19:00	
19:30		19:30	
20:00		20:00	
20:30		20:30	

Technical Program

The 20th MICROOPTICS CONFERENCE (MOC '15) will be held at FUKUOKA INTERNATIONAL CONGRESS CENTER, Fukuoka, Japan on October 25 - October 28, 2015. This conference is sponsored by the Japan Society of Applied Physics (JSAP) and organized by Microoptics Group, JSAP and in cooperation with several academic societies and associations.
The MOC '15 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.
The latest information will be available on the following web site:

http://www.comemoc.com/moc15/

Microoptics Review

Important topical fields of microoptics are lectured as microoptics review to be held in Room 502/503 on Sunday, 25 October. Students are free to attend this tutorial without the registration.

"Fundamentals of semiconductor light emitting devices"
T. Miyamoto, *Tokyo Inst. Tech., Japan*

"High efficiency organic light-emitting diodes with fluorescent emitters"
H. Nakanotani, *Kyushu Univ., Japan*

"Quantum physics in microoptics"
S. Iwamoto, *Univ. Tokyo, Japan*

"Fundamentals of optical waveguide and key points in photonic device design"
H. Takahashi, *Sophia Univ., Japan*

"Active MMI devices -concept, proof, and recent progress-"
K. Hamamoto, *Kyushu Univ., Japan*

Plenary Session

Plenary session will be held in International Conference Room on Monday, 26 October. The following papers are invited as the plenary talks.

"History and recent progress on $LiNbO_3$ modulators"
M. Izutsu, *JSPS / Waseda Univ., Japan*

"Evolution of small lasers and resonators"
Y.-H. Lee, *KAIST, Korea*

"Emerging fibre technology for the Petabit/s era"
D. Richardson, *Univ. Southampton, UK*

Special Session

A special session will be held on Monday, 26 October, which focuses on **"Challenge for novel organic optoelectronics - prospect for future organic lasers-"**. This session is cosponsored by the JST-ERATO ADACHI Molecular Exciton Engineering Project.

Organizers

C. Adachi, *Kyushu Univ., Japan*
S. Yokoyama, *Kyushu Univ., Japan*
Y. Oki, *Kyushu Univ., Japan*

Invited Talks

"Organic semiconductor lasers"
I. Samuel, *St Andrews Univ., Scotland*

"Organic single-crystal light-emitting field-effect transistors"
S. Hotta, *Kyoto Inst. Tech., Japan*

"Light emitting transistor for lasers"
E. Namdas, *Univ. Queensland, Australia*

"Future prospects of organic and perovskite based solid-state lasers"
T. Riedl, *Univ. Wuppertal, Germany*

"Recent progress in organic electronics and photonics: A perspective on the future of organic devices"
J.-L. Bredas, *KAUST, Saudi Arabia*

ERATO exciton

As a related event, **"OPERA Special Seminar"** will be held on October 24 at Kyushu Univ. in Fukuoka. For more information, please visit the MOC'15 web site.

Oral Presentation

Oral session is to be held in International Conference Room. The presentation time (including discussion) will be 30 minutes for invited papers, 15 minutes for regular papers, and 10 minutes for post deadline papers. All the speakers are requested to present the paper with a data projector. Prior to the starting time of the session, the speakers are asked to contact the session chairs and to confirm the connection between their computer and the projector.

Poster Session

Poster session will be held in Room 502/503 and 5F-lobby in the afternoon of Tuesday, 27 October. For the convenience of the participants, this session will be divided into two parts. The first half (13:45-15:00) is for authors with the paper of odd-number (H1, H3, …) and the second half (15:00-16:15) is for authors with the paper of even-number (H2, H4, …). Authors should stay by turns in the vicinity of the bulletin board for discussion. Each author is requested to display materials on a 180 cm wide and 210 cm high bulletin board.

Post Deadline Papers

A limited number of post deadline papers will be accepted for the post deadline oral session or the poster session.

Latest significant results obtained after the regular deadline are most welcome. Post deadline papers should be submitted electronically. A detailed instruction as well as the paper template is available from the following Web site:

http://www.comemoc.com/moc15/

The deadline for submission is **September 28 (Mon.), 2015**.

Special Issue

A special issue on Microoptics of the Japanese Journal of Applied Physics (JJAP) is scheduled for publication in Aug. 2016. Authors of papers for MOC '15 are encouraged to submit original papers to the special issue. The instructions for preparation of manuscript will be given to the authors. The deadline for submission of manuscripts is 15 January, 2016. Submitted papers will be reviewed based on the JJAP standard.

Paper Awards

Some excellent contributed papers will be awarded the Best Paper Award and some excellent papers presented by students will be awarded the Student Paper Award upon application. Moreover, some excellent papers presented by young researchers will be awarded the IEEE Photonics Society Japan Chapter Young Scientist Award upon application.

Financial Support for Overseas Students

Thanks to the support from Takano Eiichi Optical Science Funds, MOC '15 will be able to provide limited financial support for student presenters in MOC '15. The applicants must be full-time students living overseas. Student presenters who are interested in getting this support should submit the application form (available at http://www.comemoc.com/moc15/) after receiving the acceptance notice of the submitted paper from MOC '15.

Free Circulation of Scientists

To secure ICO endorsement, the organizers have provided assurance that MOC '15 will be conducted in accordance with IUPAP principles as stated in the ICSU-Document "Universality of Science" (sixth edition, 1989) regarding the free circulation of scientists for international purposes. In particular, no bona fide scientist will be excluded from participation on the grounds of national origin, nationality, or political considerations unrelated to science.

Official Language

The official language of MOC '15 is English.

Photograph

No photographing is permitted during the oral and poster sessions.

Social Events & Exhibition

Get Together

"Get Together" will be held in 5F-lobby in the evening of Sunday, 25 October. All the attendees of MOC '15 are cordially invited.

MOC Award Ceremony

MOC Award Ceremony will be held in International Conference Room at 16:30, Wednesday, 28 October.

Micro Concert

"Micro Concert" will be performed by Machida Philharmony Baroque Ensemble (MPB) in International Conference Room, 16:30-17:30 Tuesday 27, October. All the attendees of MOC '15 and their accompanying family are invited to the concert.

Conference Party

In the evening of Tuesday, 27 October, Conference Party starts at 17:30 right after the concert at 5F-lobby. Participants who want to attend the party are requested to make registration. The party registration fee is ¥3,000 per person.

Technical Exhibition

Table-top technical exhibition is planned during MOC '15. Take this opportunity to see the latest products and technologies in relation to microoptics. Exhibition will be held in 5F-lobby. For information about exhibiting at this conference, please contact:

MOC '15 Registration Desk
Event & Convention House, Inc.
Shuwa-Okachimachi Bldg. 8F
4-27-5, Taito, Taito-ku, Tokyo 110-0016, Japan
Phone: +81-3-3831-2601, Fax: +81-3-5807-3019
E-mail: regdesk@moc2015.com

Technical Sessions

Sunday, 25 October

Room 502/503 (5F)

14:00-18:00 Microoptics Review (Tutorial)

TU1 **Fundamentals of semiconductor light emitting devices**
14:00 T. Miyamoto, *Tokyo Inst. Tech, Japan*

TU2 **High efficiency organic light-emitting diodes with fluorescent emitters**
14:45 H. Nakanotani, *Kyushu Univ., Japan*

Break (15:30-15:45)

TU3 **Quantum physics in microoptics**
15:45 S. Iwamoto, *Univ. Tokyo, Japan*

TU4 **Fundamentals of optical waveguide and key points in photonic device design**
16:30 H. Takahashi, *Sophia Univ., Japan*

TU5 **Active MMI devices -concept, proof, and recent progress-**
17:15 K. Hamamoto, *Kyushu Univ., Japan*

5F Lobby

18:00-19:00 Get Together

MOC '15

October 25 - October 28, 2015
FUKUOKA INTERNATIONAL
CONGRESS CENTER
Fukuoka, Japan

Important Deadlines

Hotel Accommodations:	September 23, 2015
Early Registration:	September 28, 2015
Post Deadline Papers:	September 28, 2015

Technical Sessions

Monday, 26 October

International Conference Room (5F)

9:00-9:15 Opening Remarks
Conference Co-chairs:
R. Katayama, *Fukuoka Inst. Tech.*
M. Itoh, *NTT Corp.*

9:15-10:45 Session A: Plenary
Chairs: R. Katayama, *Fukuoka Inst. Tech.*
M. Itoh, *NTT Corp.*

A1 9:15 **History and recent progress on $LiNbO_3$ modulators** (Plenary)
M. Izutsu, *JSPS / Waseda Univ.*

A2 9:45 **Evolution of small lasers and resonators** (Plenary)
Y.-H. Lee, *Korea Advanced Institute of Science and Technology (KAIST)*

A3 10:15 **Emerging fibre technology for the Petabit/s era** (Plenary)
D. Richardson, *Univ. Southampton*

Break (10:45-11:00)

11:00-12:45 Session B: Imaging and Sensing
Chairs: E. Acosta, *Univ. Santiago de Compostela*
N. Mori, *Konica Minolta, Inc.*

B1 11:00 **Optical manipulation with two beam traps in microfluidic polymer systems** (Invited)
M. K. Arvelo[1,2], M. Matteucci[2], K. T. Sørensen[2], B. Bilenberg[3], C. Vannahme[2], A. Kristensen[2], and K. Berg-Sørensen[1], *[1]DTU Physics, Technical University of Denmark, [2]DTU Nanotech, Technical University of Denmark, [3]NIL Technology*

B2 11:30 **High-resolution and simultaneous measurement in the depth direction using virtual phase conjugation for optical tomography**
Y. Goto[1], A. Okamoto[1], A. Shibukawa[2], A. Tomita[1], and M. Takabayashi[3], *[1]Hokkaido University, [2]California Institute of Technology, [3]Kyushu Institute of Technology*

B3 11:45 **In-vivo human skin imaging by monochromatic source optical coherence tomography**
K. Osawa[1], H. Minemura[1], D. Tomita[2], T. Shimanaka[2], T. Suzuki[2], N. Matsuura[2], and K. Watanabe[1], *[1]Hitachi, Ltd., [2]Hitachi-LG Data Storage, Inc.*

B4 12:00 **Ultra-thin multi-aperture depth monitoring camera modules with megapixel resolution**
A. Bräuer, A. Brückner, F. Wippermann, and A. Oberdörster, *Fraunhofer Institute IOF*

B5 12:15 **Dual beam single-mode vertical cavity surface emitting lasers using high-index contrast grating**
S. Inoue[1], A. Matsutani[2], H. Ohtsuki[3], T. Miyashita[3], and F. Koyama[1], *[1]Photonics Integration System Research Center, Tokyo Institute of Technology, [2]Semiconductor and MEMS Processing Center, Technical Department, Tokyo Institute of Technology, [3]SAMCO, Inc.*

Technical Sessions

Monday, 26 October

B6 12:30 **Speckle reduction using twin green laser diodes and oscillation of MEMS scanning mirror for pico-projector**
J.-Y. Lee[1], T.-H. Kim[2], J.-U. Bu[2], and Y.-J. Kim[1], *[1]Yonsei University, [2]SenPlus Ltd.*

Lunch (12:45-14:00)

14:00-16:00 **Session C: Novel Devices and Applications**
Chairs: Y.-J. Kim, *Yonsei Univ.*
S. Ura, *Kyoto Inst. Tech.*

C1 14:00 **Passive radiative cooling below ambient air temperature under direct sunlight** (Invited)
S. Fan, *Stanford Univ.*

C2 14:30 **Lasing in a ZnO membrane microcavity with designable shape fabricated by focused ion beam milling**
T.-C. Chang[1], Y.-Y. Lai[1], Y.-H. Chou[1,2], and T.-C. Lu[1], *[1]Department of Photonics, National Chiao Tung University, [2]Institute of Lighting and Energy Photonics, National Chiao Tung University*

C3 14:45 **Parity-time optical metamaterial devices**
Z. J. Wong[1], L. Feng[1], R.-M. Ma[1], Y. Wang[1,2], and X. Zhang[1,2], *[1]University of California Berkeley, [2]Lawrence Berkeley National Laboratory*

C4 15:00 **Electrically driven surface plasmon polaritons circuits**
K. Kwon, K. Choi, J.-B. You, J. Shin, and K. Yu, *Korea Advanced Institute of Science and Technology (KAIST)*

C5 15:15 **Tunable terahertz metamaterials based on ultra-subwavelength graphene-dielectric structures**
L. Liu, H. and H. T. Hattori, *University of New South Wales*

C6 15:30 **Fabrication and measurement of vertical split-ring resonators for light manipulation and metasurface** (Invited)
P. C. Wu[1], W.-L. Hsu[1], W. T. Chen[1], Y.-W. Huang[1], C. Y. Liao[1], W.-Y. Tsai[1], A. Q. Liu[2], N. I. Zheludev[3], G. Sun[4], and D. P. Tsai[1,5], *[1]National Taiwan University, [2]Nanyang Technological University, [3]University of Southampton, [4]University of Massachusetts Boston, [5]Academia Sinica*

Break (16:00-16:15)

16:15-17:45 **Session D: Guided Optics**
Chairs: A. Bräuer, *Fraunhofer IOF*
Y. Ando, *Fujikura Ltd.*

D1 16:15 **Photonic lanterns for mode-division multiplexing** (Invited)
S. G. Leon-Saval, *Sydney Univ.*

D2 16:45 **Full mode analysis of vector components of degenerated LP modes in few mode fibers from intensity profile through angled polarizer**
Y. Kokubun[1], T. Watanabe[2], K. Morita[3], and R. Kawata[3], *[1]Yokohama National University, Faculty of Eng., [1]Yokohama National University, Graduate School of Eng., [3]Yokohama National University, College of Engineering Sciences*

D3 17:00 **First demonstration of electrically controlled mode switching**
R. Imansyah, L. Himbele, H. Jiang, and K. Hamamoto, *Kyushu University*

D4 17:15 **1×8 silicon-silica hybrid thermo-optic switch with multi-chip configuration based on optical phased array**
S. Katayose, Y. Hashizume, and M. Itoh, *NTT Corporation*

D5 17:30 **Demonstration of magneto-optical switch with amorphous silicon waveguides on magneto-optic garnet**
E. Ishida[1], K. Miura[1], Y. Shoji[2], T. Mizumoto[1], N. Nishiyama[1], and S. Arai[2], *[1]Department of Electrical and Electronic Engineering, Tokyo Institute of Technology, [2]Quantum Nanoelectronics Research Center, Tokyo Institute of Technology*

Break (17:45-18:00)

18:00-20:30 Session E: Special Session
"Challenge for novel organic optoelectronics - prospect for future organic lasers-"
Chairs: C. Adachi, *Kyushu Univ.*
S. Yokoyama, *Kyushu Univ.*
Y. Oki, *Kyushu Univ.*

E1 18:00 **Organic semiconductor lasers** (Invited)
I. Samuel, *St Andrews Univ.*

E2 18:30 **Organic single-crystal light-emitting field-effect transistors** (Invited)
S. Hotta, *Kyoto Inst. Tech.*

E3 19:00 **Light emitting transistor for lasers** (Invited)
E. B. Namdas, *The University of Queensland*

E4 19:30 **Future prospects of organic and perovskite based solid-state lasers** (Invited)
T. Riedl, *University of Wuppertal*

E5 20:00 **Recent progress in organic electronics and photonics: a perspective on the future of organic devices** (Invited)
J.-L. Bredas, *King Abdullah University of Science and Technology*

Technical Sessions

Tuesday, 27 October

International Conference Room (5F)

9:00-10:45 Session F: Light Sources
Chairs: M. De Micheli, *CNRS*
T. Suhara, *Osaka Univ.*

F1 9:00 **Techniques for optoelectronic performance evaluation in InGaN-based light-emitting diodes (LEDs)** (Invited)
J.-I. Shim[1], and D.-S. Shin[2], *[1]Dept. of Electronics, Hanyang University ERICA Campus, [2]Dept. of Appl. Phys., Hanyang University ERICA Campus*

F2 9:30 **Graphene-covered microfiber for passive mode-locking at 1.55 μm and 2 μm**
W. Ni, Y. Wang, and S. Yamashita, *The University of Tokyo*

F3 9:45 **Ultraviolet lasing from spherical ZnO microcrystal produced by laser ablation in air**
D. Nakamura, T. Tanaka, T. Ikebuchi, T. Ueyama, F. Nagasaki, M. Higashihata, H. Ikenoue, and T. Okada, *Kyushu University*

F4 10:00 **Comparative study of five & three quantum wells AlGaInAs/InP mode-locked lasers**
J. Akbar[1], L. Hou[2], and A. E. Keely[2], *[1]Hazara University Mansehra, [2]University of Glasgow*

F5 10:15 **Large-scale garnet single crystal with high transparency in fiber laser operation wavelength**
A. Funaki[1], K. Kabayama[1], T. Kizaki[1], G. Villora[2], and K. Shimamura[2], *[1]Fujikura Ltd., [2]National Institute for Materials Science*

F6 10:30 **DBR laser with over 20nm wavelength tuning range**
S. Liang, L. Han, L. Qiao, J. Xu, H. Zhu, and W. Wang, *Institute of Semiconductors, Chinese Academy of Sciences*

Break (10:45-11:00)

11:00-12:45 Session G: Waveguide Devices
Chairs: J.-I. Shim, *Hanyang Univ.*
K. Kato, *Kyushu Univ.*

G1 11:00 **Nonlinear integrated optics in proton exchange waveguides on $LiNbO_3$** (Invited)
M. De Micheli, *CNRS*

G2 11:30 **Silicon microring resonator-loaded Mach-Zehnder modulator with interleaved pn junction**
H. Homma, R. Gautam, T. Arakawa, and Y. Kokubun, *Yokohama National University*

G3 11:45 **Novel adjustment structure and method for InP-based Mach-Zehnder interferometer polarization splitter**
K. Watanabe[1], Y. Nasu[2], Y. Ohiso[1], and R. Iga[1], *[1]NTT Corporation*

G4 12:00 **Single-trench waveguide TE-TM mode converter for GaInAsP/InP waveguide optical isolator**
K. Masuyama[1], Y. Shoji[2], and T. Mizumoto[1], *[1]Graduate School of Science and Engineering, Tokyo Institute of Technology, [2]Quantum Nanoelectronic Research Center, Tokyo Institute of Technology*

G5 12:15 **GaAsP tunable distributed Bragg reflector laser with ITO thin-film heater**
M. Uemukai, and T. Suhara, *Osaka University*

G6 12:30 **Optical add-drop multiplexer integrating silicon waveguide optical circulators and Bragg reflector**
K. Kato[1], Y. Shoji[2], and T. Mizumoto[1], *[1]Dept. of Electrical and Electronic Engineering, Tokyo Institute of Technology, [2]Quantum Nanoelectronics Research Center, Tokyo Institute of Technology*

Lunch (12:45-13:45)

Room 502/503 (5F) and 5F Lobby

13:45-16:15 Session H: Poster Session
Chairs: K. Hamamoto, *Kyushu Univ.*
S. Iwamoto, *Univ. Tokyo*

(13:45-15:00) Odd numbers: 1st half
(15:00-16:15) Even numbers: 2nd half

H1 **Propagation characteristics for quantized Laguerre-Gauss beams using liquid crystal optical devices**
A. Saito[1], A. Tanabe[2], M. Kurihara[2], N. Hashimoto[2], and K. Ogawa[1], *[1]Japan Women's University, [2]CITIZEN Holdings Co., Ltd*

H2 **Optical duplicate system for satellite-ground laser communication: reduction of the effects of atmospheric turbulence and simplification of the optical ground station**
T. Nakayama[1], Y. Takayama[2], C. Fujikawa[1], and K. Kodate[3], *[1]Sch. of Eng., Tokai University, [2]Sch. of Inf. and Telecommunication Eng., Tokai University, [3]The University of Electro-Communications*

H3 **Influence of slow-light feedback on noise properties of VCSEL with a transverse coupled cavity**
H. Ibrahim[1,2], M. Ahmed[2], and F. Koyama[1], *[1]Tokyo Institute of Technology, [2]Minia University*

H4 **Coupled-mode analysis of grating-position-shifted cavity-resonator-integrated guided-mode resonance filter**
K. Asai[1], K. Kintaka[2], J. Inoue[1], and S. Ura[1], *[1]Kyoto Institute of Technology, [2]National Institute of Advanced Industrial Science and Technology*

H5 **Complex response of cavity resonator integrated guided mode resonance filter**
H. Okuda, J. Inoue, and S. Ura, *Kyoto Institute of Technology*

H6 **Design of efficient photo-elastic modulator using quasi-1D phononic crystal cavity**
I. Kim[1], S. Iwamoto[1,2], and Y. Arakawa[1,2], *[1]Institute of Industrial Science, University of Tokyo, [2]Institute for Nano Quantum Information Electronics, University of Tokyo*

H7 **Orbital angular momentum and polarization multiplexing in microholographic recording**
R. Katayama, *Fukuoka Institute of Technology*

Technical Sessions

Tuesday, 27 October

H8 **Numerical simulations on 3D shift multiplexed self-referential holographic data storage: shift multiplexing properties along z-axis**
T. Eto[1], M. Takabayashi[1], A. Okamoto[2], M. Bunsen[3], and T. Okamoto[1], *[1]Kyushu Institute of Technology, [2]Hokkaido University, [3]Fukuoka University*

H9 **Plasmonic energy nanofocusing for high-efficiency laser fusion ignition**
K. Tanabe, *Kyoto University*

H10 **Design and characterization of reading glasses with extended-depth-of-field**
S. Furukawa, and S. Komatsu, *Waseda University*

H11 **Femtosecond soliton formation by higher-order soliton compression in linear dispersion decreasing fiber**
S. Md. Salimullah[1], and M. Faisal[2], *[1]Bangladesh Army International University of Science and Technology, [2]Bangladesh University of Engineering and Technology*

H12 **Microscopic Raman spectroscopy of graphene enhanced by gold nanoparticles and micro glass bead**
H. Matsumura, S. Yanagiya, H. Kishikawa, and N. Goto, *Tokushima University*

H13 **Electro-optic side-chain polymers containing adamantyl groups and high-hyperpolar chromophores via the Huisgen reaction and their optical properties**
S. Takeuchi[1], A. M. Spring[2], K. Yamamoto[2], and S. Yokoyama[2], *[1]Kyushu University, [2]Institute for Materials Chemistry and Engineering, Kyushu University*

H14 **Synthesis and characterization of Sb doped ZnO microspheres by pulsed laser ablation**
F. Nagasaki, T. Shimogaki, T. Tanaka, T. Ikebuchi, T. Ueyama, Y. Fujiwara, M. Higashihata, D. Nakamura, and T. Okada, *Kyushu University*

H15 **Detection of high-refractive index media by a surface plasmon sensor using a one-dimensional metal diffraction grating**
S. Mito[1], A. Motogaito[1,3], H. Miyake[2,3], and K. Hiramatsu[1,3], *[1]Graduate School of Engineering, Mie University, [2]Graduate School of Regional Innovation Studies, Mie University, [3]The Center of Ultimate Technology on nano-Electronics, Mie University*

H16 **Pulsed oscillation of organic dye VCSEL excited by blue LD**
M. Tanizawa, R. Takahashi, T. Maruyama, and K. Iiyama, *Kanazawa University*

H17 **Novel polymers for polymer light- emitting diodes**
B. Somchob[1], N. Wongsang[1], S. Sahasithiwat[2], and R. Jitchati[1], *[1]Ubon Ratchathani University, [2]National Metal and Materials Technology Center*

H18 **Temperature dependent luminescent characteristics of Eu^{2+}-doped $CaAl_2Si_2O_8$ blue phosphor**
J. H. Lee, W. T. Hong, J. Y. Mun, and H. K. Yang, *Pukyong National University*

H19 **Orange-red light emitting europium doped calcium molybdate phosphor prepared by high energy ball milling method**
W. T. Hong, J. H. Lee, H. I. Jang, S. J. Park, J. S. Joo, and H. K. Yang, *Pukyong National University*

H20 **Foldable and electrically switchable polymer dispersed liquid crystal materials for holographic recording**
W.-C. Su, and K.-T. Kuo, *National Changhua University of Education*

H21 **Effects of deposition temperature on the structural, optical, and electrical properties of hydrogenated of Ga-doped ZnO film**
J.-R. Tsai[1], N.-F. Shih[2], and R.-H. Yeh[1], *[1]Asia University, [2]Hsiuping University of Science and Technology*

H22 **EQE response and photovoltaic performance of plasmonic silicon solar cells based on depositing with aluminum, indium, and silver nanoparticles**
C.-H. Hu[1], W.-J. Ho[1], C.-W. Yeh[1], Y.-Y. Lee[1], H.-J. Syu[2], and C.-F. Lin[2], *[1]National Taipei University of Technology, [2]National Taiwan University*

H23 **Dry etching for germanium waveguides by using CHF_3 inductively coupled plasma**
A. S. Idris, H. Jiang, and K. Hamamoto, *Kyushu University*

H24 **Effect of laser exposure condition on formation of holographic memory by angle-multiplexing recording using liquid crystal composites**
A. Ogiwara[1], and M. Watanabe[2], *[1]Kobe City College of Technology, [2]Shizuoka University*

H25 **Periodic 3D nanostructuration of optical surfaces by holographic two-photon polymerization**
Y.-H. Lee[1], C.-L. Lin[2], Y.-J. Liu[3], and P. L. Baldeck[4], *[1]Electrical and Communications Engineering, Feng Chia University, [2]Central Taiwan University of Science, [3]Department of Automatic Control Engineering, Feng Chia University, and Technology, [4]University Grenoble*

H26 **Effect of polymer concentration on selective reflection spectra in cholesteric liquid crystals**
A. Ogiwara[1], and H. Kakiuchida[2], *[1]Kobe City College of Technology, [2]National Institute of Advanced Industrial Science and Technology (AIST)*

H27 **Emission wavelength selection for InGaAs quantum dots by anodic-aluminum-oxide membrane**
T. S. Lay, J. Y. Hsing, K. Y. Chuang, T. E. Tzeng, and K. L. Yang, *[1]National Chung Hsing University*

H28 **Metrology techniques for refractive microlenses and microlens array manufacturing**
M.-S. Kim, L. Allegre, J. Sunarjo, W. Noell, and R. Voelkel, *SUSS MicroOptics SA*

H29 **Improved extension of DOF performance by apodized wavefront coding**
T. Tsukasaki, and S. Komatsu, *Waseda University*

H30 **Development of optical biosensor based on photonic crystal made of TiO_2 using liquid phase deposition**
K. Aono, S. Aki, K. Sueyoshi, H. Hisamoto, and T. Endo, *Osaka Prefecture University*

Technical Sessions

Tuesday, 27 October

H31 **Nanoimprinted two-dimensional photonic crystal for detection of fibrinogen using antigen-antibody reaction**
T. Endo, K. Sueyoshi, and H. Hisamoto, *Osaka Prefecture University*

H32 **Densely multiplexed refractive index biosensors using lateral Bragg gratings on SOI**
M. M. Astudillo[1], H. Takahisa[1], H. Okayama[1,2], and H. Nakajima[1], *[1]Waseda University, [2]Oki Electric Industry Co., Ltd.*

H33 **Fabrication of gold-deposited plasmonic crystal based on nanoimprint lithography for label-free biosensing application**
K. Nishiguchi, K. Sueyoshi, H. Hisamoto, and T. Endo, *Osaka Prefecture University*

H34 **Non-overlapping lensless synthetic aperture digital holography**
H. Yoshino, R. Suyama, T. Wakasugi, and S. Komatsu, *Waseda University*

H35 **A novel approach for the high speed 3D measurement using a linescan-based chromatic confocal microscopy**
K. S. Kim, T. Kim, C. Choi, and B. H. Jeon, *Samsung Electronics*

H36 **Reflection-type fiber-optic multimode interference structure with rounded end-face: a temperature-sensing study**
S. Taue, T. Takahashi, and H. Fukano, *Okayama University*

H37 **Virtual interferogram-generation algorithm for phase-shifting digital holography**
J. Nozawa[1], A. Okamoto[1], M. Toda[2], Y. Kuno[2], and A. Tomita[1], *[1]Hokkaido University, [2]Second Production Engineering Development Dept., Aisin Seiki Co., Ltd.*

H38 **A fiber Bragg grating temperature sensor using a vertical-cavity surface-emitting laser with temperature stabilization**
T. Yamada, S. Tsuchiya, and T. Mizunami, *Kyushu Institute of Technology*

H39 **One port ring refractive index sensor with attached sub-ring**
H. Takahisa[1], M. Tsutsui[1], M. M. Astudillo[1], H. Okayama[1,2], and H. Nakajima[1], *[1]Waseda University, [2]Oki Electric Industry Co., Ltd.*

H40 **Phase distribution measurement based on wavefront correction using tabu search**
N. Yoda, and S. Komatsu, *Waseda University*

H41 **Measurements of fine-particle-size using the image processing of laser diffraction image**
K. Tsubaki, *Toyo University*

H42 **Spectral domain optical coherence tomography with a white light developed for optical device fabrications**
T. Nishi[1], N. Ozaki[1], H. Ohsato[2], E. Watanabe[2], N. Ikeda[2], and Y. Sugimoto[2], *[1]Wakayama University, [2]National Institute for Materials Science*

H43 **Liquid analytes filling process in suspended-core silica fibers**
T. Nemecek, M. Komanec, and S. Zvanovec, *Czech Technical University in Prague*

H44 **Low-cost strategy for time delay adjustment of STED microscopy using digital oscilloscope**
G.-J. Choi[1], W.-S. Lee[1], G. Lim[1], H. Moon[2], Y.-P. Park[2], and N.-C. Park[1], *[1]Yonsei University, [2]Center for Information Storage Device, Yonsei University*

H45 **Charged iridium complexes for organic amine sensor application**
W. Sombat, K. Wongkhan, and R. Jitchati, *Ubon Ratchathani University*

H46 **Light field microscope for 3D profile measurement of micro-structured array**
Y. Hu, H. Gao, S. Yuan, and R. Shi, *Beijing Institute of Technology*

H47 **Optimization of diffraction efficiency and coupling efficiency in spatial mode conversion for photonic cross connecter**
Y. Zhao[1], A. Okamoto[1], T. Oda[1], A. Tomita[1], M. Bunsen[2], and S. Honma[3], *[1]Hokkaido University, [2]Fukuoka University, [3]Yamanashi University*

H48 **Mach-Zehnder interferometer Si structures with weighted sampled grating waveguides featuring FLC cladding**
K. Sakakibara[1], Y. Hayama[1], M. Takeda[1], A. Kato[2], and K. Nakatsuhara[1], *[1]Kanagawa Institute of Technology, [2]The National Institute of Advanced Industrial Science and Technology (AIST)*

H49 **Proposal of novel optical mode demultiplexer based on angled-multimode interference (a-MMI) waveguide**
H. Jiang, T. Oiwane, and K. Hamamoto, *Kyushu University*

H50 **Design of optical isolator with strip-loaded waveguide employing nonreciprocal guided-radiation mode conversion**
Y. Okada[1], K. Kobayashi[1], Y. Shoji[2], T. Mizumoto[2], and H. Yokoi[1,3], *[1]Shibaura Institute of Technology, [2]Tokyo Institute of Technology, [3]SIT Research Center for Green Innovation*

H51 **Design criteria for wavelength independent mmi mode converter**
K. Tanabe, Y. Chaen, R. Sakata, R. Tanaka, H. Jiang, and K. Hamamoto, *Kyushu University*

H52 **Preliminarily propagation loss evaluation of core-top etched waveguide for step-core LP_{21} mode converter**
R. Sakata, K. Tanabe, R. Tanaka, H. Jiang, and K. Hamamoto, *Kyushu University*

H53 **The study of effects of hydrogen loading time to the photosensitivity in optical fiber in term of writing time**
P. Rutthongjan[1], P. Sudwilai[1], and O.-a. Tangmettajittakul[2], *[1]Thai-Nichi Institute of Technology, [2]Furukawa FITEL (Thailand) Co., Ltd.*

H54 **Mechanical characteristics of MU-type MCF connector**
K. Sakaime[1], R. Nagase[1], K. Watanabe[2], and T. Saito[2], *[1]Chiba Institute of Technology, [2]Furukawa Electric Co. Ltd*

Technical Sessions

Tuesday, 27 October

H55 **Robust waveguide beam splitter using shortcuts to adiabaticity**
H.-C. Chung[1], R.-D. Wen[2], X. Chen[2], and S.-Y. Tseng[1], *[1]National Cheng Kung University, [2]Shanghai University*

H56 **An air-gap wire-grid polarizer with high optical performance in the visible region**
M. Shinkawa, Y. Satoh, and A. Sakai, *Ricoh Company, Ltd.*

H57 **Absorbance-meter constructed by PDMS**
H. Higuchi[1], H. Nomada[1], H. Yoshioka[1], K. Morita[2], and Y. Oki[1], *[1]Kyushu University, [2]USHIO Inc.*

H58 **Light propagation characteristics in photonic crystal fiber with graded air hole diameters**
H. Yokota, K. Yoneya, K. Higuchi, and Y. Imai, *Ibaraki University*

H59 **A low loss butt-joint connection by using a graded-index photonic crystal fiber**
K. Higuchi, H. Yokota, K. Yoneya, and Y. Imai, *Ibaraki University*

H60 **A stable packaged high-Q microfiber coil resonator**
X.-Y. Lu, and L. A. Wang, *National Taiwan University*

H61 **Fabrication of domain inverted ridge waveguide in ion-sliced $LiNbO_3$ for wavelength conversion devices**
K. Tanaka, and T. Suhara, *Osaka University*

H62 **Numerical analyses of all-optical retiming switches using quasi-phase matched devices**
Y. Fukuchi, A. Enda, and M. Yamamoto, *Tokyo University of Science*

H63 **Memristive switching in planar devices based on vanadium dioxide thin films using near IR laser pulses**
J. Kim[1], K. Park[2], S. Jo[2], B.-J. Kim[3], and Y. W. Lee[1,2], *[1]Pukyong National University, [2]Interdisciplinary Program of Biomedical Mechanical & Electrical Engineering, Pukyong National University, [3]Mobrik Co. Ltd.*

H64 **Fast wavelength stabilization of tunable lasers with the internal wavelength locker**
R. Kimura[1], Y. Tatsumoto[1], K. Sakuma[1], H. Onji[1], M. Shimokozono[2], H. Ishii[2], and K. Kato[1], *[1]Kyushu University, [2]NTT Device Technology Laboratories, NTT Corporation*

H65 **Dynamic characteristics of all-optical feedforward fast automatic gain control scheme for multicore erbium-doped fiber amplifiers**
K. Kitamura, K. Udagawa, and H. Masuda, *Shimane University*

H66 **Theoretical modelling of photon-photon resonance on active multimode interferometer laser diode toward 40Gbps**
B. Hong[1], M. N. Uddin[1], T. Kitano[1], A. Tajima[2], H. Jiang[1], and K. Hamamoto[1], *[1]Kyushu University, [2]NEC corporation*

H67 **Wavelength stabilization within 0.05 GHz with photo-mixing technique and laser current controlling**
J. Tsuboi, T. Kuboki, and K. Kato, *Kyushu University*

H68 Hybrid thin silicon nitride and electro-optic polymer waveguide modulators
M. Ishino[1], and S. Yokoyama[2], *[1]Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, [2]Institute for Materials Chemistry and Engineering, Kyushu University*

H69 Characterization of ion implantation quantum well intermixing for carrier confinement of VCSEL
S. Moriwaki, M. Saitou, S. Kunisada, and T. Miyamoto, *Tokyo Institute of Technology*

H70 Demonstration of photon-photon resonance peak enhancement by waveguide design modification on active multimode interferometer laser diode
T. Kitano[1], M. N. Uddin[1], B. Hong[1], A. Tajima[2], H. Jiang[1], and K. Hamamoto[1], *[1]Kyushu University, [2]NEC Corp.*

H71 Emission properties of distributed-feedback plastic waveguide lasers fabricated with imprint lithography
M. Nakazumi, and K. Yamashita, *Kyoto Institute of Technology*

H72 Synchronous THz wave combiner consisting of arrayed photomixers
J. Haruki, K. Sakuma, and K. Kato, *Kyushu University*

H73 Compact and robust phase stabilization system for high-frequency carrier generation using an integrated lightwave circuit
Y. Fujimura[1], K. Sakuma[1], S. Takeuchi[1], K. Kato[1], S. Hisatake[2], and T. Nagatsuma[2], *[1]Kyushu University, [2]Osaka University*

H74 A study of creative solar-light/solar-thermal separator and its energy storage system
C.-W. Wang, C.-H. Chen, C.-J. Chiou, and T.-Y. Chiu, *National Chung Cheng University*

H75 Silicon waveguide polarization rotating Bragg grating with chirp, phase shift section or super-structure scheme
H. Okayama[1,2], Y. Onawa[1,2], D. Shimura[1,2], H. Yaegashi[1,2], and H. Sasaki[1,2], *[1]Oki Electric Industry Co., Ltd., [2]PETRA*

H76 Reducing coupling loss between a silicon-cored fiber and a silica optical fiber
J.-H. Chen, Y.-T. Sun, and L. A. Wang, *National Taiwan University*

H77 Investigating the radiation tolerance of a laser array for an optically reconfigurable gate array
K. Akagi, and M. Watanabe, *Shizuoka University*

H78 Gap plasmon excitation into plasmonic waveguide using Si waveguide
K. Okuda, T. Okamoto, and M. Haraguchi, *Tokushima University*

H79 Degradation of signal quality due to pump-phase fluctuation on non-degenerated fiber parametric phase-sensitive amplifier repeaters
Y. Okamura, and A. Takada, *Tokushima University*

Technical Sessions

Tuesday, 27 October

H80 **Influence of chromatic dispersion on optical transmission of 16QAM signals interleaved with reference light**
Y. Okamura[1], N. Ishimura[1], Y. Mitsui[1], M. Hanawa[2], and A. Takada[1], *[1]Tokushima University, [2]University of Yamanashi*

H81 **ONU power saving considering sleep period limitation in QoS-aware cyclic sleep control with PI controller**
T. Kikuchi, and R. Kubo, *Keio University*

H82 **Dynamic wavelength allocation technique with multicast-capable AWG router for energy-efficient intra-datacenter networks**
T. Uesugi, and R. Kubo, *Keio University*

H83 **Single-shot detection of spatially quadrature amplitude modulated signals in holographic data storage**
T. Yamamoto, K. Yosidomi, K. Kanno, and M. Bunsen, *Fukuoka University*

H84 **Widening the angle of view in wavefront coding**
Y. Uemura, and S. Komatsu, *Waseda University*

H85 **Compound parabolic concentrator design for RGBW LEDs light mixing**
A.-C. Wei[1], S.-C. Lo[1], P.-F. Hung[1], J.-Y. Lee[1], C.-M. Li[2], H.-C. Huang[2], and H.-Y. Yeh[2], *[1]National Central University, [2]Atomic Energy Council*

H86 **Wireless power transmission between a NIR VCSEL array and silicon solar cells**
M. Hirota[1], S. Iio[1], Y. Ohta[1], Y. Niwa[1], and T. Miyamoto[2], *[1]Nissan Motor Co., Ltd., [2]Tokyo Institute of Technology*

H87 **Extended depth of field for laser-scanning barcode reader with wavefront coding**
W. Hashimoto, H. Sugita, and S. Komatsu, *Waseda University*

H88 **Plenoptic cameras for imaging through aberrated systems**
H. Al-Ameryeen, J. Arines, and E. Acosta, *University of Santiago de Compostela*

H89 **Information processing by using mutually-coupled optoelectronic systems**
M. Tezuka[1], K. Kanno[2], and M. Bunsen[2], *[1]Fukuoka University, [2]Depertment of Electronics Engineering and Computer Science, Fukuoka University*

Break (16:15-16:30)

International Conference Room (5F)

16:30-17:30 **Micro Concert**

5F Lobby

17:30-19:30 **Conference Party**

9:00-10:45 **Session J: Optical Interconnects**
Chairs: T.-C. Lu, *National Chiao Tung Univ.*
T. Mizunami, *Kyushu Inst. Tech.*

J1 9:00 **Optical RAM-enabled cache memory and optical routing for chip multiprocessors** (Invited)
N. Pleros, *Aristotle Univ. Thessaloniki*

J2 9:30 **Sub-gigahertz beam switching with transverse-mode coupled cavity VCSELs**
M. Nakahama[1], X. Gu[1], T. Sakaguchi[1], A. Matsutani[2], and F. Koyama[1], *[1]P&I Lab., Tokyo Institute of Technology, [2]Semiconductor and MEMS Processing Center, Tokyo Institute of Technology*

J3 9:45 **Ultra wide mode-hop free tuning around 1550-nm telecom wavelength using high-speed MEMS-VCSELs**
S. Paul[1], J. Cesar[1], C. Gierl[1], M. T. Haidar[1], B. Koegel[2], C. Neumeyr[2], M. Ortsiefer[2], and F. Kueppers[1], *[1]Technische Universitaet Darmstadt, [2]VERTILAS GmbH*

J4 10:00 **Polarization dependence of germanium waveguide propagation characteristics in the 1600-1700 nm wavelength regions**
T. Okumura, K. Oda, J. Kasai, M. Sagawa, and Y. Suwa, *Hitachi, Ltd*

J5 10:15 **Coupled mode analysis of high-speed transverse coupled cavity VCSEL**
S. Hu, and F. Koyama, *Tokyo Institute of Technology*

J6 10:30 **Effect of metal side claddings on emission decay rate of single quantum dots embedded in a subwavelength semiconductor waveguide**
T. Yamamoto[1], Y. Ota[1], S. Ishida[2], N. Kumagai[1], S. Iwamoto[1,3], and Y. Arakawa[1,3], *[1]Institute for Nano Quantum information Electronics, University of Tokyo, [2]Research Center for Advanced Science and Technology, University of Tokyo, [3]Institute of Industrial Science, University of Tokyo*

Break (10:45-11:00)

11:00-12:45 **Session K: Fabrication Technology and Components**
Chairs: J. E. Batubara, *Bina Nusantara Univ.*
S. Yasuda, *Fuji Xerox Co., Ltd.*

K1 11:00 **Prototyping and replication of polymer freeform micro-optical components** (Invited)
J. V. Erps, *Vrije Universiteit Brussel*

K2 11:30 **Direct write grayscale lithography for arbitrary shaped micro-optical surfaces**
H.-C. Eckstein, M. Stumpf, P. Schleicher, S. Kleinle, A. Matthes, U. D. Zeitner, and A. Bräuer, *Fraunhofer Institute IOF*

K3 11:45 **Experiment on three-dimensional display using spatial cross modulation method with an optical random diffuser**
H. Sakuma[1], A. Okamoto[1], A. Shibukawa[2], H. Funakoshi[3], Y. Goto[1], Y. Kan[1], and A. Tomita[1], *[1]Hokkaido University, [2]California Institute of Technology, [3]Gifu University*

Technical Sessions

Wednesday, 28 October

K4 12:00 **High Abbe number and high refractive index organic-inorganic nanocomposite films**
B. Cai[1], and O. Sugihara[2], *[2]University of Shanghai for Science and Technology, [2]Utsunomiya University*

K5 12:15 **Micro-optics: key enabling technology for photolithography** (Invited)
R. Voelkel, *SUSS MicroOptics SA*

Lunch (12:45-14:00)

14:00-15:45 Session L: Passive and Functional Devices
Chairs: N. Pleros, *Aristotle Univ. Thessaloniki*
M. Bunsen, *Fukuoka Univ.*

L1 14:00 **Direct femtosecond laser writing in metallic nanoparticle-containing films for photonic device fabrication** (Invited)
R. R.-Rojo[1], J. L.-Rodriguez[1], I. R.-Mendoza[1], L. R.-Fernandez[2], and A. Oliver[2], *[1]Centro de Investigación Científica y de Educación Superior de Ensenada, [2]Universidad Nacional Autónoma de México*

L2 14:30 **Fabrication of periodically-poled structures in MgO(8mol%):c-LiTaO$_3$ crystal and waveguide SHG devices**
T. Oka, and T. Suhara, *Osaka University*

L3 14:45 **EO Raman-Nath spatial light modulator with 1024 pixels using cascaded periodically-poled three-stage gratings**
M. Okazaki[1], and T. Suhara[2], *[1]SCREEN Holdings Co., Ltd., [2]Osaka University*

L4 15:00 **Electro-optic polarization conversion type modulator using domain-inverted 8 mol% MgO doped congruent LiTaO$_3$**
T. Inoue, and T. Suhara, *Osaka University*

L5 15:15 **Tunable hyperchromatic microlens array for compact 2D spectrometry**
P.-H. C.-Nguyen, A. Seifert, and H. Zappe, *University of Freiburg*

L6 15:30 **Array-antenna-electrode electro-optic modulator for next-generation millimeter-wave wireless links**
T. Inoue, H. Murata, and Y. Okamura, *Osaka University*

Break (15:45-16:00)

16:00-16:30 Session PD: Post Deadline Papers
Chairs: K. Hamamoto, *Kyushu Univ.*
S. Iwamoto, *Univ. Tokyo*

16:30-16:45 MOC Award Ceremony

16:45-17:00 Closing Remarks
Program Co-chairs:
K. Hamamoto, *Kyushu Univ.*
S. Iwamoto, *Univ. Tokyo*

Registration Fees

	Before/On Sept. 28, 2015	After Sept. 29, 2015
Conference (General)	¥42, 000	¥47, 000
(Student, Retiree)	¥12, 000	¥15, 000
Extra Copy of Digest	¥6, 000	¥6, 000
Conference Party	¥3, 000	¥3, 000

The conference fee includes admission to MOC '15 and a copy of Technical Digest.
MOC '15 Organizing Committee entrusts **Event &Convention House, Inc.** with a part of the management.
Those who wish to attend MOC '15 should register online at

http://www.comemoc.com/moc15/

If you have any questions, please contact:

MOC '15 Registration Desk
Event & Convention House, Inc.
Shuwa-Okachimachi Bldg. 8F
4-27-5, Taito, Taito-ku, Tokyo 110-0016, Japan
Phone: +81-3-3831-2601, Fax: +81-3-5807-3019
E-mail: regdesk@moc2015.com

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

1. Bank Transfer

(For overseas attendees)

Bank Name: Bank of Tokyo-Mitsubishi UFJ
Kanda-Ekimae Branch (010)
Account Name: EC House
Account No.: Ordinary Deposit No. 1730721
Phone: +81-3-3256-5111
Swift Code: BOTKJPJT

(For domestic attendees)

三菱東京 UFJ 銀行神田駅前支店（店番号 010）
口座番号：普通 1730721
口座名：EC ハウス事務局

2. Credit Card

Master Card, VISA, American Express, JCB, and Diners Club are available. Personal checks are NOT accepted.
Pre-registration, by **September 28, 2015**, is encouraged and will be entitled to reduced fees. Upon receipt of registration information and payment, MOC '15 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 the event of registrant unable to attend the conference, a copy of Technical Digest will be sent after the conference.

Hotel Accommodations

MOC '15 Accommodation Desk

Kintetsu International Co., Ltd. will be the official agent for hotel accommodations and other travel arrangements.

Kintetsu International Co., Ltd.
Open: Monday - Friday 9:30 am - 5:30 pm (Japan time)
Closed: Saturdays, Sundays and national holidays
Phone: +81-3-6891-9305, Fax: +81-3-6891-9405
E-mail: ecc5-15@or.knt.co.jp

Reservation should be made online no later than **September 23, 2015** at http://www.comemoc.com/moc15/. Method of payment is via credit card. (Master Card, VISA, American Express, JCB, and Diners Club are available.) Balance of room charge will be charged after September 29, 2015.

Hotel Name	Code	Room Type	Room Charge	Hotel Location
Yaoji Hakata Hotel	1S	Single Twin	¥8,700 ¥15,200	5 minute walk from JR Hakata Station
Sunroute Hakata	2S	Single Twin	¥9,100 ¥16,700	1 minute walk from JR Hakata Station
Nishitetsu Inn Tenjin	3S	Single Twin	¥7,700 ¥14,200	6 minute walk from Subway Tenjin Station 3 minute walk from Nishitetsu Fukuoka (Tenjin) Station
Solaria Nishitetsu	4S	Single Twin	¥19,000 ¥30,900	3 minute walk from Subway Tenjin Station

The above rates are per room, including breakfast, service charge and consumption tax. Please refer to http://www.comemoc.com/moc15/ for hotel location information.

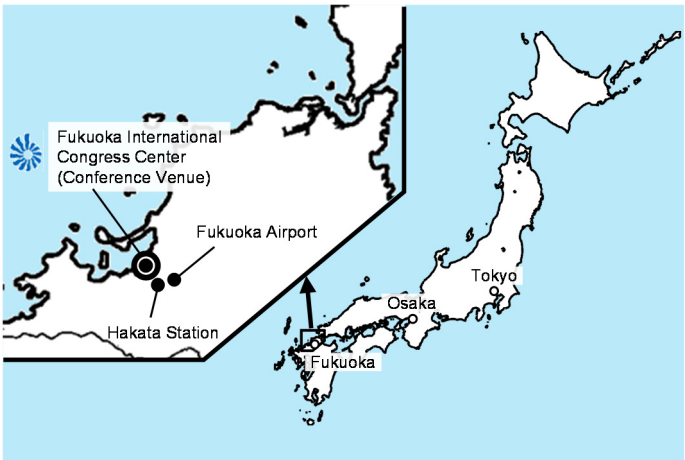
Hotel Cancellation Refund Policy

Any kind of cancellation or reservation change must be submitted in writing to MOC '15 Accommodation Desk, Kintetsu International Co., Ltd. If you cancel the reservation, Kintetsu International Co., Ltd. will refund the accommodation fee after deducting the following cancellation fee.

* Up to 14 days prior to the check-in date:
  No cancellation charge
* 13 - 2 days prior to the check-in date:
  20% of one night accommodation fee
* 1 day prior to the check-in date:
  80% of one night accommodation fee
* On the day of occupancy or no notice given:
  100% of one night accommodation fee

Conference Venue

The MOC'15 will take place at Fukuoka International Congress Center. Fukuoka is located in the northern part of Kyushu Island (Japan's third largest island, located south west of the main island). Fukuoka has regular flights to and from major domestic and overseas cities. It takes about 2 hours from Narita or Haneda Airport and about 1 hour from Kansai Airport to reach Fukuoka Airport. It also takes about 5 hours from Tokyo and about 2.5 hours from Shin-Osaka to Hakata Station (the central station of Fukuoka) by bullet train (Shinkansen).



Fukuoka International Congress Center
2-1 Sekijo-machi, Hakata-ku, Fukuoka 812-0032, Japan
TEL：+81-92-262-4111, FAX：+81-92-262-4701
http://www.marinemesse.or.jp/eng/congress/
http://www.welcome-fukuoka.or.jp/english/

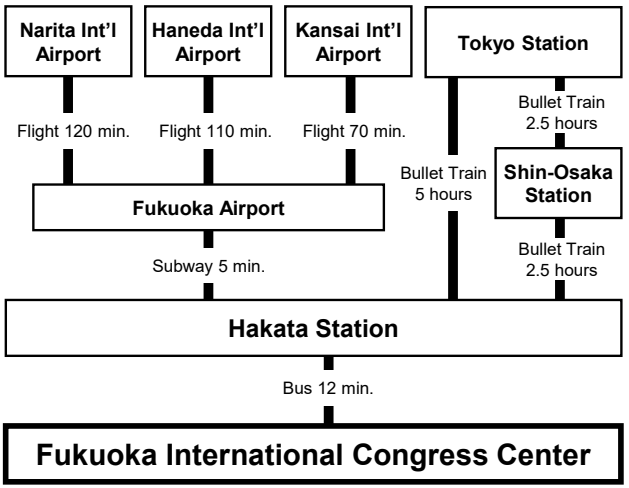
Access Map

From Fukuoka Airport

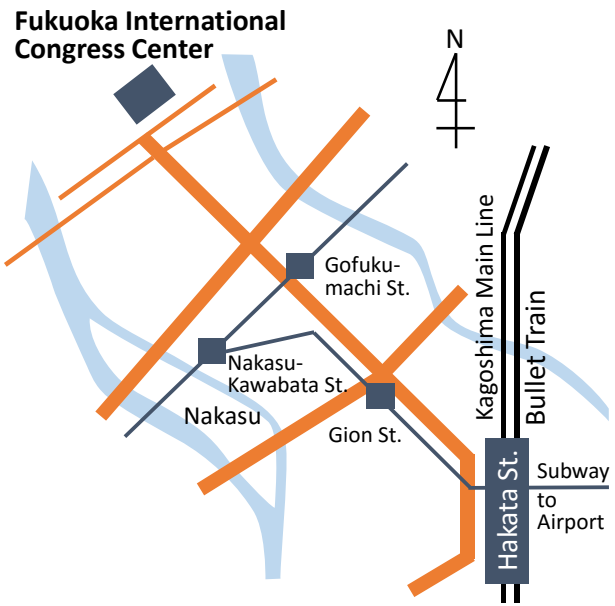
1. Take subway to Hakata Station.
2. Take bus bound for Hakata Pier or Chuo Pier at bus stop E.
3. Get off at Kokusai Center / Sunpalace-mae or International Congress Center / Sunpalace-mae.

From Hakata Station

1. Take bus bound for Hakata Pier or Chuo Pier at bus stop E.
2. Get off at Kokusai Center / Sunpalace-mae or International Congress Center / Sunpalace-mae.



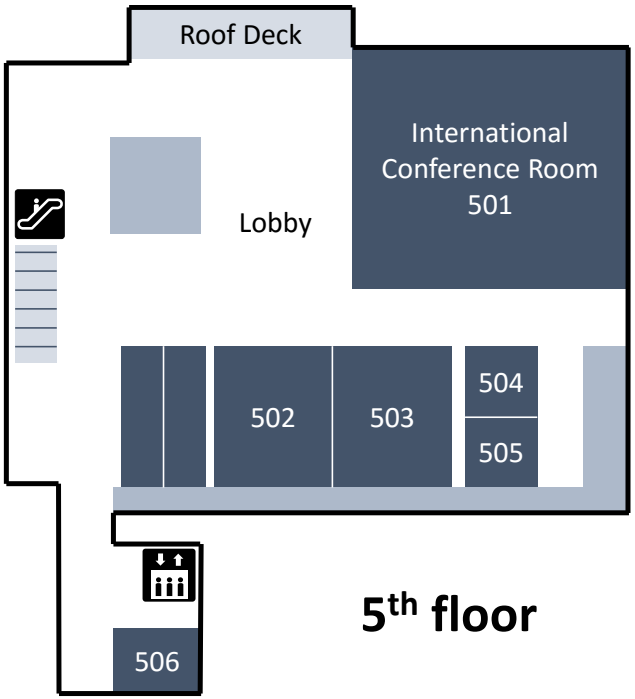
Map around Hakata Station and Conference site



Conference site locates at 2.4km from Hakata Station

Floor Map

All conference rooms are located on the 5th floor of the Fukuoka International Congress Center.



Schedule of Conference Rooms

International Conference Room (Room 501)
Oral Session, Oct. 26-28
Micro Concert, Oct. 27

Room 502, 503
Microoptics Review (Tutorial), Oct. 25
Poster Session, Oct. 27

Room 504, 505
Conference Office, Oct. 25-28

5F Lobby
Registration Desk, Oct. 25-28
Get Together, Oct. 25
Break, Oct. 25-28
Exhibition, Oct. 26-28
Poster Session, Oct. 27
Conference Party, Oct. 27

General Information

Visa

Visitors from countries whose citizens must have visas should apply to a Japanese consular office or diplomatic mission in their respective country. For details, please contact your travel agent or the local consular office in your country.

Climate

The weather in Fukuoka during the period of the conference is typically sunny with temperature ranges between 13°C and 21°C.

Currency Exchange

Only Japanese yen (JPY, ¥) is acceptable at regular stores and restaurants. Certain foreign currencies may be accepted at a limited number of hotels, restaurants and souvenir shops. You can exchange your currency with Japanese yen at foreign exchange banks and other authorized money exchangers on presentation of your passport.

Traveler's Checks and Credit Cards

Traveler's checks are accepted only by leading banks and major hotels in principal cities, and the use of traveler's checks in Japan is not as popular as in some other countries. VISA, Master Card, Diners Club, and American Express are widely accepted at hotels, department stores, shops, restaurants and nightclubs.

Tipping

In Japan, tips are not necessary anywhere, even at hotels and restaurants.

Electrical Appliances

Japan operates on 100 volts for electrical appliances. The frequency is 50 Hz in eastern Japan including Tokyo, and 60 Hz in western Japan including Fukuoka.

Further Information

The latest information on the conference will be also presented on the Web site.

http://www.comemoc.com/moc15/

Contact

MOC'15 Conference Co-chair
Ryuichi Katayama (Fukuoka Inst. Tech.)
Phone: +81-92-606-3135
E-mail: r-katayama@fit.ac.jp

Secretariat
Yukio Ogura
2325-26 Shimokawai-cho, Asahi-ku, Yokohama 241-0806, Japan
Phone: +81-80-5412-0844
E-mail: ogura@comemoc.com

MOC ’15 Committee Members

ORGANIZING COMMITTEE

Conference Co-chairs

R. Katayama (Fukuoka Inst. Tech.)
M. Itoh (NTT Corp.)

Members

Y. Ando (Fujikura Ltd.)
M. Bunsen (Fukuoka Univ.)
T. Endo (Mitsubishi Electric Corp.)
M. Haruna (Osaka Univ.)
K. Hotate (Univ. Tokyo)
H. Kanamori (Sumitomo Electric Ind., Ltd.)
K. Kato (Kyushu Univ.)
K. Kishino (Sophia Univ.)
K. Kodate (Univ. Electro-Communications)
Y. Koike (Keio Univ.)
S. Komatsu (Waseda Univ.)
K. Kuroda (Utsunomiya Univ.)
T. Maeda (Waseda Univ.)
K. Maru (Kagawa Univ.)
N. Mori (Konica Minolta, Inc.)
M. Naya (FUJIFILM Corp.)
N. Nishida (Univ. Tokushima)
H. Nishihara (Osaka Univ.)
K. Nishizawa (Tokyo Univ. Science, Suwa)
S. Nunoue (Toshiba Corp.)
Y. Okino (Kansai Univ.)
M. Ota (Canon Inc.)
S. Ozawa (Furukawa Electric Co., Ltd.)
H. Takahashi (Oki Electric Industry Co., Ltd.)
H. Tsukamoto (Nikon Corp.)
K. Tsunetomo (Nippon Sheet Glass Co., Ltd.)
Y. Uenishi (NTT Electronics Corp.)
K. Ueyanagi (TSS Co., Ltd.)
S. Ura (Kyoto Inst. Tech.)
M. Watanabe (AIST)
I. Yamaguchi (Toyo Seiki Seisaku-Sho, Ltd.)
T. Yamazaki (Olympus Corp.)
S. Yasuda (Fuji Xerox Co., Ltd.)
T. Yatagai (Utsunomiya Univ.)

INTERNATIONAL ADVISORY COMMITTEE

R. Baets (Univ. Gent)
J. E. Bowers (UCSB)
S. Fleming (Univ. Sydney, retired)
M. T. Flores-Arias (Univ. Santiago de Compostela)
M. Izutsu (JSPS / Waseda Univ.)
B. Y. Kim (KAIST)
M. Kujawinska (Warsaw Univ. Tech.)
Y. Liu (National Tsing Hua Univ.)
Y.-P. Park (Yonsei Univ.)
D. N. Payne (Univ. Southampton)
G. C. Righini (IFAC-CNR and Enrico Fermi Center)

H. K. Shin (Opticis Co., LTD)
C. G. Someda (Galilean Academy of Sciences, Humanities and Arts)
W. J. Stewart (FREng, FInstP, FIET, FOSA)
Y. Suematsu (Tokyo Inst. Tech.)
H. Thienpont (Vrije Univ. Brussel)
C. S. Tsai (UC Irvine)
T. Uchida (Inst. Appl. Opt.)
S. C. Wang (National Chiao Tung Univ.)

PROGRAM COMMITTEE

Co-chairs

K. Hamamoto (Kyushu Univ.)
S. Iwamoto (Univ. Tokyo)

Domestic Members

Y. Arakawa (ICO, Univ. Tokyo)
H. Fuji (Sharp Corp.)
K. Goto (Tokai Univ., retired)
Y. Handa (Canon Inc.)
G. Hatakoshi (Toshiba Corp.)
N. Honda (IEEE PS, NTT West Corp.)
K. Iga (Tokyo Inst. Tech.)
T. Ishigure (Keio Univ.)
E. Katayama (FurukawaElectricCo.,Ltd.)
K. Kato (Kyusyu Univ.)
S. Kawai (Opto eCollege Corp.)
S. Kimura (Toshiba Corp.)
S. Kogo (Konica Minolta, Inc.)
Y. Kokubun (Yokohama National Univ.)
M. Kuwata (Mitsubishi Electric Corp.)
T. Miyamoto (Tokyo Inst. Tech.)
T. Mizumoto (Tokyo Inst. Tech.)
H. Nakajima (Waseda Univ.)
K. Ogawa (Japan Women's Univ.)
S. Ryu (IEEE PS, SoftBank Telecom Corp.)
A. Sakai (Ricoh Co., Ltd.)
A. Sakamoto (Fujikura Ltd.)
H. Shoji (Sumitomo Electric Ind., Ltd.)
O. Sugihara (Utsunomiya Univ.)
T. Suhara (Osaka Univ.)
T. Suzuki (Hitachi Ltd.)
H. Takahashi (Sophia Univ.)
Y. Tsuchiya (Nagoya Inst. Tech.)
Y. Uozu (Mitsubishi Rayon Co., Ltd.)
K. Yamamoto (Osaka Univ.)
S. Yamashita (IEEE PS, Univ. Tokyo)
K. Yokomori (JST)
T. Yoshihiro (FUJIFILM Corp.)

*Domestic Members are also Organizing Committee Members.

Overseas Members
E. Acosta (Univ. Santiago de Compostela)
J. E. Batubara (Bina Nusantara Univ.)
A. Bräuer (Fraunhofer IOF)
C. J. Chang-Hasnain (UC Berkeley)
K.-S. Chiang (City Univ. Hong Kong)
S. Jackson (Univ. Sydney)
Y.-J. Kim (Yonsei Univ.)
T.-C. Lu (National Chiao Tung Univ.)
Y. Luo (Tsinghua Univ.)
J. Mohr (Karlsruher Institut für Technologie)
H. Ottevaere (Vrije Univ. Brussel)
N.-C. Park (Yonsei Univ.)
J. J. G. M. van der Tol (Eindhoven Univ. Tech.)
K. Yu (KAIST)

LOCAL STEERING COMMITTEE
Chair
K. Kato (Kyushu Univ.)
Advisors
H. Furuta (Fukuoka Univ., retired)
K. Kurosawa (Miyazaki Univ., retired)
T. Okada (Kyushu Univ.)
Members
M. Bunsen (Fukuoka Univ.)
K. Hamamoto (Kyushu Univ.)
Y. Ishida (Yasukawa Electric Corp.)
R. Katayama (Fukuoka Inst. Tech.)
S. Kubodera (Miyazaki Univ.)
T. Mizunami (Kyushu Inst. Tech.)
H. Nakajima (Waseda Univ.)

MOC '15 Registration Desk
Event & Convention House, Inc.
Shuwa-Okachimachi Bldg. 8F
4-27-5, Taito, Taito-ku, Tokyo 110-0016, Japan
Phone: +81-3-3831-2601, Fax: +81-3-5807-3019
E-mail: regdesk@moc2015.com