## Call for Papers



DC 2018 Laser Display and ighting Conference o Yokohama, Japan April 2018



# The 7th Lase and Lighting Conference

The 7th Laser Display

April 24 (Tue.) – 27 (Fri.), 2018 Pacifico Yokohama / Yokohama, Japan

Paper Submission Deadline: Jan.26 (Fri.) 2018

Co-located with Optics & Photonics International Congress 2018

OPTICS & PHOTONICS International Exhibition (OPIE 2018) will be held simultaneously on April 25(Wed)-27 (Fri) at Pacifico Yokohama.

Sponsored by The Optical Society of Japan (OSJ)



Co-Sponsored by The Japan Society of Applied Physics



Organized by Laser Display Technology Group (LDT) of Optical Society of Japan (OSJ)



In cooperation with

The Laser Society of Japan / Consortium of Visible Laser Diode Applications

(\*Some other societies and associations are under negotiation.)

#### **CONFERENCE CO-CHAIRS**

Kazuo Kuroda (Utsunomiya Univ.), Hiroshi Murata (Osaka Univ.)

#### **SCOPE**

LDC 2018 covers the laser display / lighting technology in the following major topical fields;

#### A. Lasers and light sources

Visible lasers, LED, Solid-state light sources, Phosphor, Fluorescent materials, Wavelength conversion materials, Optoelectronic materials

### B. Optical components

Spatial light modulator, High-speed scanner, MEMS, Active-matrix integration, Projection components, Display drivers and interfaces

#### C. Imaging / Lighting Technologies and Devices

Projector, 3D imaging, Holography, Head worn display, Eyewear, Laser backlight unit

#### D. Image / Lighting Quality and Human Vision

Speckle, Color speckle, Image quality evaluation, Color reproduction, Color management, Color appearance, Eye safety, Laser safety

#### **E. Systems and Applications**

Projection TV, LCD, 3D, Projector, Head mounted display, Eyewear, Lighting technology, Touch technology, Biomedical imaging, Industrial imaging, Laser entertainment, AR, VR, MR, XR, Wearables

#### F. Novel and emerging technologies

#### G. Special session

The special session of automotive applications is held.

#### H. Joint sessions

The session for 3D display / imaging is held with cooperation of IP (Information Photonics) committee. That with IoT and LEDIA is under negotiation.

#### PLENARY SPEAKER

-Hidenori Kawanishi (Sharp, Japan)

"IR/R/G/B Laser Diodes for Multi-Wavelength Applications"

#### **INVITED SPEAKER**

#### Joint Session with LEDIA, IoT-SNAP

-Takao Sawa (Japan Agency for Marine-Earth Sc. and Tech., Japan) "Laser Diode Based Underwater Optical Wireless Communication"

-Mitsuru Sugawara (QD Laser, Japan)

"Recent Progress of Retinal Imaging Laser Technology"

#### **Special Session for Automotive**

-Takuya Kitazono (Stanley, Japan)

"Laser scanning headlamps"

-Shin-ichi Nagahama (Nichia Corp., Japan)

'GaN-based laser diodes for automotive applications'

-Josef Schug (Lumileds Corp., Netherland)

"Dynamic laser-based lighting for automotive headlamps"

#### Ordinary session

-Masahiro Murayama (Sony, Japan)

"Tentative: W-class green and blue laser diodes"

-Jiyang Wang (Shandong Univ., China)

"High efficiency green laser output from self-frequency doubling crystal"

-Matthew E. Brand (MERL, U.S.A.)

"Optimized Algorithm for Freeform Optics"

-Jan Heller (Jenoptik, Germany)

"Our capabilities in production of components and sub-assemblies for LIDAR"

-Youichi Ochiai (Tsukuba Univ., Japan)

"Fairy Lights in Femtoseconds: Tangible Holographic Plasma"

-Zhaomin Tong (Shanxi Univ., China)

The Development of Speckle Reduction Technologies in Our Group for Laser Projection Displays: a Short Summary

-Jamieson Christmas (DARQI, U.K.)

"Laser Holographic Head Up Displays

-Nan-Ei Yu (Gwangju Inst. Sc.and Tech., Korea)

"Development of RGB Light source for Head-Up Display at Automobile"

#### **FURTHER INFORMATION**

The latest information on the conference will be announced on the Web site

http://ldc.opicon.jp/