

CALL FOR PAPERS

Laser Display and Lighting Conference 2020
(LDC2020)



Laser Display and Lighting Conference 2020

Introduction

The Laser Display and Lighting Conference (LDC) is an international conference on laser displays, laser lighting, and related technologies. The 1st, 2nd, 4th, and 6th to 8th LDC were held in Yokohama, Japan in 2012, 2013, 2015, 2017 to 2019 respectively, and the 3rd in Taichung, Taiwan in 2014, the 5th in Jena, Germany in 2016. The 9th Laser Display and Lighting Conference (LDC2020) will be held on April, 21st – 24th, 2020 in Yokohama, Japan, at Pacifico Yokohama.

The LDC 2020 is intended to provide a central forum for the update and review of scientific and technical information on laser display and lighting covering a wide range of fields from fundamental research to systems and applications. The conference is sponsored by the Optical Society of Japan in cooperation with several academic societies and associations.

For details, please come to our web-site;

<https://ldc.opicon.jp/>

Chairs

Conference chair	co-chair	Kazuo Kuroda
	co-chair	Hiroshi Murata
Steering committee	co-chair	Kazuhisa Yamamoto
	co-chair	Norihiro Ohse
Program committee	co-chair	Tetsuya Yagi
	co-chair	Sunao Kurimura
	co-chair	Fergal Shevlin
	co-chair	Shining Zhu

Sponsors

Sponsored by

The Optical Society of Japan

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

Co-located conferences

Optics and Photonics International Congress (OPIC) 2020 is a FIVE days event, including FIFTEEN cutting edge conferences. OPIC 2020 provides access to the very latest products, research and initiatives in the optics and photonics sector. It also offers you the opportunity for face-to-face interaction with those driving the future of optics and photonics technology. And Optics and Photonics International Exhibition (OPIE) 2020, an exciting trade and technology exhibition featuring leading players from across the globe, will be held at the great hall next to the conferences place. That may bring you good opportunities to touch the state of the art products and technologies in the sector. By registering for LDC 2020, you can participate in all international conferences.

Important deadlines

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Regular Paper Submission: 28th January 2020

Post deadline Paper Submission: 5th March 2020

Early Registration: 7th April 2020

Contact Us

LDC 2020 Secretariat Desk

ldc[at]opicon.jp

Scope

LDC 2020 covers the laser display / lighting technology in the following major topical fields;

A. Light sources and components

Visible lasers, LED, solid-state light sources, phosphor, wavelength conversion materials, for displays and automotive applications. Optoelectronic components, such as spatial light modulator, high-speed scanner, MEMS, projection components, display drivers and interface are also included.

B. Imaging / Lighting

Display, projector, lighting, and 3D imaging including light field, integral photography, and holography. Evaluation and reduction technologies of speckle and color speckle. Color management for laser based display and lighting. Laser safety and standardization are also included.

C. Smart Systems

Display, projector, lighting, 3D imaging, holography, and IoT systems for smart society, which are integrated with other functional devices or technologies, such as AI analysis/control, signal processing, various sensors (e.g., camera, TOF and LiDAR), human interface, wired/wireless microwave/millimeter wave/optical communication devices or interfaces, or wired/wireless optical power supplies. Design, algorithm, or components particularly applied for the above smart systems are also included.

D. AR, MR, VR, ... XR technologies

AR (Augmented Reality), MR (Mixed Reality), and VR (Virtual Reality)... These concepts are collectively called XR (eXtended or "X" Reality). XR technologies opening a new market and having a great impact on life style. New platforms using XR technologies (relevant hardware, software technologies and their applications).

E. Visible light communication (VLC) technologies and systems

Principles, devices, components, systems and sub-systems for VLCs. Consumer and industrial applications such as 5G, IoT, mobility, LiFi and underwater. VLC technologies with sensing and power transmission are also included.

F. Laser Technology for Automotive Applications

Automotive laser applications, including lighting, displays, and sensing. Lighting applications include headlights, rear lights, as well as other functional lighting devices for use in adverse weather conditions. Applications involving both lighting and displays include road surface projectors. Sensing applications of particular attention are those for use in autonomous vehicles, such as ToF-based

LiDAR, as well as FMCW LiDAR. Light-based vehicle-to-vehicle communication will also be featured in this session.

G. Novel and emerging technologies and applications

Novel and emerging technologies and applications of laser lighting and display. Components and optics. Entertainment, education, medical, social applications and others.

Joint session

The session is held with cooperation of the other committees. The detail will be determined.

Plenary Session

Under negotiation

Basically, TWO talks are planned, one is focused on the light source and the other on the system.

Invited Talks

Under negotiation

LDC 2020 Abstract Book (Free Access)

The abstract book of LDC 2020 will be published in SPIE. Digital Library on June to August 2020. The book is free access for convenience of all researchers in this field.

LDC 2020 Special Issue of Optical Review

The special issue on Laser Displays will be published in Nov/Dec, 2020 issue of OPTICAL REVIEW, the journal edited by the LDC committee and is distributed by Springer. All the authors of LDC 2020 are strongly encouraged to submit the original papers to the special issue. Please note that all submissions will be peer-reviewed following the editorial policy of OPTICAL REVIEW. The submissions from invited speakers are also welcome. Manuscript should follow Optical review submission guidelines "Instructions for Preparation of Manuscript" and be submitted in the electronic form on the internet.

Submission Deadline: TBD (E. May, 2020)

A detailed instruction will be available from the following Web site:

<http://myosj.or.jp/en/publication/optical-review/>

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