

Laser Display and Lighting Conference 2024

LDC 2024

Sponsored by
The Optical Society of Japan



Honorary Chair
Kazuo Kuroda

The University of Tokyo, Japan



Conference Co-Chair
Hiroshi Murata

Mie University, Japan



Conference Co-Chair
Fergal Shevlin

DYOPTYKA, Ireland

Welcome to the 13th Laser Display and Lighting Conference, LDC 2024!

LDC is an international conference on laser displays, laser lighting, and related technologies. The 1st LDC was held in Yokohama, Japan in 2012. After that, LDCs were held in Yokohama, Japan (2013, 2015, 2017~2019), in Taichung, Taiwan (2014), and in Jena, Germany (2016). The 9th and 10th LDC were intended to be held in Yokohama, Japan, but switched to be on-line conferences owing to the COVID-19 situation. The 11th LDC was held as a hybrid on-line and in-person conference in 2022. The 12th LDC was held in Yokohama in-person. Then, LDC 2024 is also being held as an in-person conference in Yokohama from 23rd to 26th April 2024. LDC 2024 is sponsored by the Optical Society of Japan, in cooperation with several academic societies and associations, and is operated by the Laser Display Research Group, the Optical Society of Japan.

LDC 2024 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.

A total of 40 papers will be presented during the 4-day conference, consisting of 2 keynote talks, 22 invited papers, and 16 contributed papers. Several papers will be also presented as posters. It is notable that number of submissions is almost the same with before and during the COVID-19 pandemic, which is due to the kind interest and great support from the LDC community to recover from the difficult situation caused by COVID-19. A few post-deadline papers may be accepted.

In LDC 2024, a special session focusing on advanced XR and Metaverse technologies will be held on the 24th, where we will have stimulating invited talks from expert speakers. An exciting special session entitled 'Laser Applications for Moving Platforms' will also be held with a number of distinguished speakers on 26th April. In these special sessions, state-of-the-art visible laser technology for XR, Metaverse and moving target applications, will be presented, and discussed. After all the technical sessions, a ceremony for the LDC Best Paper Award and the LDC Student Award will be held for exceptional papers commended for their outstanding achievement.

We would like to extend our sincere thanks to all the presenters and participants of LDC 2024 for their contribution to the success of the conference. We also express our sincere thanks to the Takano-Eiichi Hikari-Kagaku-Kikin (Optical Science Foundation), the Japanese Society of Applied Physics, for the financial support. We hope that all the attendees enjoy the conference.

HONORARY CHAIR

Kazuo Kuroda *Utsunomiya Univ.*

CONFERENCE CHAIR

<Co-Chairs>

Hiroshi Murata *Mie Univ.*

Fergal Shevlin *DYOPTYKA*

STEERING COMMITTEE

<Co-Chairs>

Kazuhisa Yamamoto *Osaka Univ.*

Norihiro Ohse *Sony Group Corp.*

<Members>

Makio Kurashige *Dai Nippon Printing*

Atsushi Motogaito *Mie Univ.*

Fumio Narusawa *HIOKI E.E. Corp.*

Keizo Ochi *Consortium of Visible Laser Diode Applications*

Kayo Ogawa *Japan Women's Univ.*

Shouichi Ozawa *Nikka Joho*

Shinji Saito *Toshiba Corp.*

Ichiro Sato *Bosch Corp.*

Tsutomu Shimura *Univ. of Tokyo*

Naoto Jikutani *Ricoh Industrial Solutions*

Takunori Taira *National Inst. of Natural Science*

Masashi Wada *Gooch & Housego Japan*

PROGRAM COMMITTEE

<Co-Chairs>

Sunao Kurimura *National Inst. for Materials Science*

Tetsuya Yagi *Nichia Corp.*

Shining Zhu *Nanjing Univ.*

<Vice Co-Chairs>

Hirotsugu Yamamoto *Utsunomiya University*

Kenji Yamamoto *Tokushima Univ.*

Tatsushi Hamaguchi *Mie Univ.*

Muneharu Kuwata *Mitsubishi Electric Corp.*

<Members>

Abdelmalek Hanafi *BMW, Forschungs- und Innovationszentrum*

Atsushi Satou *Iwasaki Electric*

Eiji Hase *Tokushima University*

Frank Fischer *BST*

Hidekazu Hatanaka *Ushio*

Junichi Kinoshita *Osaka Univ.*

Katsuyuki Kambe *Solidray*

Lung-Han Peng *National Taiwan Univ.*

Masafumi Ide *Lamda Works*

Masaru Kuramoto *Stanley Electronics*

Masato Ishino *Osaka Univ.*

Osamu Matoba *Kobe University*

Ray-Hua Horng *National Yang Ming*

Chiao Tung University

Satoshi Ouchi *Hitachi Corp.*

Seika Tokumitsu *Oxide*

Shining Zhu *Nanjing University*

Tetsuo Shimizu *Epson*

Takaaki Ishigure *Keio Univ.*

Tomoyuki Miyamoto *Tokyo Inst. Tech.*

Yasuaki Kumamoto *Osaka University*

Young-Joo Kim *Yonsei University*

ADVISORY MEMBERS

Ray-Hua Horng *National Chung Hsing Univ.*

Yasuhiro Koike *Keio Univ.*

Shigeo Kubota *Oxide Corp.*

Takashige Omatsu *Chiba Univ.*

Brian Schowengerdt *Univ. of Washington*

Hiroaki Sugiura *Mitsubishi Electric Corp.*

Toshiaki Suhara *Osaka Univ.*

Andreas Tünnermann *Fraunhofer Institute, IOF*