

Call for Papers

OWPT2023



The 5th Optical Wireless and Fiber Power Transmission Conference

April 18 (Tue.) - 21 (Fri.), 2023
Online/Venue hybrid, in Japan

(Venue: PACIFICO Yokohama)

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

Sponsored by

*Optical Wireless Power Transmission Committee,
The Laser Society of Japan*

In cooperation with

Study Group of Optical Wireless Power Transmission



OWPT2023 will be held as one of conferences of the
OPTICS & PHOTONICS International Congress 2023
(OPIC2023).

Extended paper submission deadline:
Jan. 27 (Fri.), 2023
(ver. 20230117)

INTRODUCTION

The Optical Wireless and Fiber Power Transmission Conference (OWPT) is an international conference on optical wireless power transmission, optical fiber power transmission, and related technologies.

The 5th Optical Wireless and Fiber Power Transmission Conference (OWPT2023) will be held on April 18 (Mon.) - 21 (Fri.), 2023 as an online/venue hybrid conference in Japan as one of the conferences of the OPTICS & PHOTONICS International Congress 2023 (OPIC2023).

The OWPT Conference is intended to provide a central forum for updating and reviewing scientific and technical information on optical wireless power transmission and optical fiber power transmission by covering a wide range of fields from fundamental research to systems and applications.

This conference is sponsored by the Optical Wireless Power Transmission Committee, and The Laser Society of Japan in cooperation with several academic societies and associations.

PLENARY TALK

Tom Nugent (PowerLight Technologies)

“The present and future of laser power beaming: capabilities & customers”

Paul Leisher (Freedom Photonics)

“Progress in diffraction-limited high power, high efficiency diode lasers operating at eyesafe wavelengths for wireless power transmission, optical communication, and LIDAR”

SPECIAL TALKS

Susumu Noda (Kyoto University)

“High power operation of photonic-crystal surface-emitting laser”

Yuji Tanabe (Aeterlink Corp.)

“Practical applications of far-field wireless power transfer system “AirPlug™” ”

INVITED TALKS

Simon Fafard (Broadcom)

“Recent laser power converter developments and applications for OWPT”

J. B. Rosolem (Centro de Pesquisa e Desenvolvimento em Telecomunicações(CPQD))

“Hollow core fibers for PoF applications: a practical view”

Paul Crump (Ferdinand Braun Institut)

“Power scaling in GaAs-based semiconductor lasers”

Tetsuya Takeuchi (Meijo University)

“Status and prospects of blue Vertical-Cavity Surface-Emitting Lasers”

Carlos Algora (Universidad Politécnica de Madrid (Spain))

“Status of photovoltaic laser power converters”

Jun Wang (Sichuan University)

“High-performance laser power converters”

Jonathan Nydell (PHION Technologies Corp.)

“Achieving fault tolerance in WPT systems: requirements and solutions”

Masato Ishino (Osaka University)

TBD

SCOPE

The optical wireless and fiber power transmission conference covers optical power transmission technologies and its related subjects as shown in the following fields.

A. Devices and components

Light sources, Solar cells / photovoltaic devices, Optical Components, Modules, Theory, Design, Material, Fabrication process, etc.

B. Systems and subsystems

Optical wireless / fiber power transmission, Non-optical wireless power transmission, Communication for optical power transmission, Safety system, etc.

C. Applications

IoT, Consumer/industrial equipment, Automotive and vehicles, Drone, Robot, Medical implantable, Underwater, Harsh environment, Space solar power system, etc.

D. Others

Standardization, Regulations, and Novel / emerging topic related to the OWPT conference.

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 conference scope will be accepted for presentation. Detailed instructions will be available from the conference Web site.

Papers should be submitted through the below Web site no later than ~~Jan. 13 (Fri.)~~ **Jan. 27 (Fri.), 2023**. Authors will be requested to submit a **2-page paper** written in English, including text, figures, tables, and references. The paper template will be available through the Web site.

<https://owpt.opicon.jp/paper-submission/>

POSTER SESSION

In addition to regular oral presentation sessions, poster presentation sessions will be planned to stimulate detailed explanations and discussion. The poster session is planned using the e-poster system.

POST DEADLINE PAPERS (*Under consideration)

A limited number of post-deadline (PD) papers will be accepted for presentation. Papers should be submitted to Program co-chairs (ike-ken@cripi.denken.or.jp; kogawa@fc.jwu.ac.jp) as an attached file before the deadline.

OFFICIAL LANGUAGE

The official language of the OWPT conference is English.

CONFERENCE VENUE

The OWPT2023 will be held as an **online/venue hybrid conference**. You can attend the conference online or by coming to the below conference venue.

The OWPT2023 takes place at PACIFICO Yokohama, Yokohama city, Kanagawa prefecture, JAPAN. Yokohama city, the center of Kanagawa prefecture is located south of Tokyo. PACIFICO Yokohama is conveniently located about 40 min. by Limousine Bus from Haneda Airport and 90 min. from Narita Airport.

PACIFICO Yokohama

1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-0012, Japan
<http://www.pacifico.co.jp/english/index.html>



REGISTRATION

Registration Fees (Details are under consideration)

Membership

	Before/On Apr. 7, 2023	After Apr. 8, 2023
General	¥56,000	¥61,000
Student (presenter), Retiree	¥19,000	¥22,000

Nonmember

	Before/On Apr. 7, 2023	After Apr. 8, 2023
General	¥66,000	¥71,000
Student (presenter), Retiree	¥22,000	¥24,000

*To apply as a student, you need a recommendation from your supervisor.

*There is an additional fee to attend the welcome reception and conference banquet.

In OPTICS & PHOTONICS International Congress 2023 (OPIC2023), over 11 international conferences are going to be held simultaneously. By registering for OWPT2023, you can participate in all international conferences, but abstract of other conferences are not included.

<https://opicon.jp/conferences>

EXHIBITION

OPTICS & PHOTONICS International Exhibition (OPIE'23) will be held on **April 19 (Wed.) - 21 (Fri.), 2023** at PACIFICO Yokohama, Japan.

FURTHER INFORMATION

The latest information on the conference will be announced on the web site:

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

CONTACT

Please contact from Web site.

<https://owpt.opicon.jp/contact/>

or

Takeo Maruyama

OWPT2023 Steering committee chair

School of Electrical, Information and Communication Engineering, Kanazawa University

Kakuma-machi, Kanazawa, Ishikawa 920-1192, Japan

Phone: +81-76-234-4886

Email: maruyama@ec.t.kanzawa-u.ac.jp

RESULTS OF PREVIOUS OWPT

OWPT2022 (hybrid conference)

Number of Papers: 39 / Domestic: 21, Overseas: 18

Number of Participants: 83 / Domestic: 50, Overseas: 33

OWPT2021 (online conference)

Number of Papers: 45 / Domestic: 24, Overseas: 17

Number of Participants: 117 / Domestic: 59, Overseas: 58

OWPT2020 (only distribution of Technical Digest)

Number of Papers: 37 / Domestic: 26, Overseas: 11

Number of Participants: 50 / Domestic: 33, Overseas: 17

OWPT2019

Number of Papers: 56 / Domestic: 40, Overseas: 16

Number of Participants: 90 / Domestic: 66, Overseas: 24

The detail of the previous Optical Wireless and Fiber Power Transmission Conference (OWPT) was shown in "About" menu of conference web site;

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

OWPT2023 COMMITTEE MEMBERS

Organizing Committee

Co-chairs

T. Miyamoto (Tokyo Tech)
M. Matsuura (Univ. Electro-Communications.)

Steering Committee

Chair

T. Maruyama (Kanazawa Univ.)

Program Committee

Co-chairs

K. Ikeda (Central Research Institute of Electric Power Industry)
K. Ogawa (Japan Women's Univ.)

Members

A. Masakazu (Miyazaki Univ.)
A. Ishibashi (Hokkaido Univ.)
S. Uchida (Chiba Inst. Tech.)
T. Kageyama (Lumentum)
N. Yokouchi (Furukawa Electric)
G. Hatakoshi (Toshiba Corp., retired)
M. Hirota (Kyushu Univ.)
M. Miyoshi (Nagoya Inst. Tech.)
N. Mori (Yamashita Denso)
T. Yamaguchi (Kogakuin Univ.)
H. Yamada (Tohoku Univ.)
K. Yokomori (Ricoh, retired)
N. D. Hoa (Kyushu Univ.)
H. Helmers (Fraunhofer)
S. Fafard (Broadcom Inc.)
C.-L. Wu (MH GoPower Company Ltd.)
S. J. Sweeney (Univ. Glasgow)
T. Nugent (PowerLight Technologies)
C. Klamouris (Fibergy GmbH)
J. B. Rosolem (CPQD)
V. Khorenko (AZUR SPACE Solar Power GmbH)
C. Vázquez (Univ. Carlos III de Madrid)
P. Leisher (Freedom Photonics LLC)