

Call for Papers

OWPT2021



The 3rd Optical Wireless and Fiber Power Transmission Conference

April 19 (Mon.) - 22 (Thu.), 2021
Online, hosted in Japan

<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



OWPT2021 will be held as one of conferences of the
OPTICS & PHOTONICS International Congress 2021
(OPIC2021).

Post-deadline Paper: Mar. 15 (Mon.), 2021

(ver. 20210225)

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 3rd Optical Wireless and Fiber Power Transmission Conference (OWPT2021) will be held on April 19 (Mon.) - 22 (Thu.), 2021 as an online conference hosted in Japan as one of the conferences of the OPTICS & PHOTONICS International Congress 2021 (OPIC2021).

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 researches to systems and applications.

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

PLENARY TALK

H. Haas Univ. Strathclyde

“The road towards zero-energy gigabit wireless transceivers”

SPECIAL TALKS

C. Davlantes Reach Labs

“Augmenting the performance of microwave wireless power networks by incorporating metasurface-based mesh nodes”

H. Fujimoto The University of Tokyo

“In-wheel motor EV and dynamic charging using wireless power transfer”

INVITED TALKS

P. Jaffe Naval Research Laboratory

“Power beaming and space applications”

V. Khorenko, et al. AZUR SPACE Solar Power

“Industrial advancement of III/V metamorphic technology for high efficiency infrared laser power converters”

A. Kudryashov Institute of Geosphere Dynamics RAS

“Free-space laser communication systems”

S. Sweeney, et al. University of Surrey

“Optical wireless power at eye-safe wavelengths: Challenges and opportunities”

H. Helmers Fraunhofer

“III-V based photonic power converters”

T. Nugent PowerLight Technologies

“Improving performance metrics for power beaming”

M. Miyoshi Nagoya Institute of Technology

“GaN-based solar cells and their application to optical wireless power transmission system”

Y. Shoji AIST

“Novel low-cost fabrication method (H-VPE) of III-V photovoltaic devices”

S. Fafard, et al. Broadcom

“Power and spectral range options for optical power converter products”

A. Tonini, et al. Diamond Fiber

“High power single mode expanded beam fiber optic connectors for Power over Fiber applications”

P. Leisher Freedom Photonics LLC

“Longitudinal current crowding in high power diode lasers”

SCOPE

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, and Fabrication process etc.

B. Systems and subsystems

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

C. Applications

IoT, Consumer/industrial equipment, Automotive and vehicles, Drone, Robot, Medical implantable, Under water, Harsh environment, and 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. A detailed instruction will be available from the conference Web site.

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

Papers should be submitted through the below Web site no later than **Jan. 21 (Thu.), 2021** ~~Jan. 14 (Thu.), 2021~~. Authors will be requested to submit **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 session will be planned to stimulate detailed explanation and discussion. Poster session is planned using 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 (m.matsuura@uec.ac.jp; maruyama@ec.t.kanazawa-u.ac.jp) as an attached file no later than **Mar. 15 (Mon.), 2021**

OFFICIAL LANGUAGE

The official language of OWPT conference is English.

CONFERENCE VENUE

The OWPT2021 will be held as an **online conference**.

REGISTRATION

Registration Fees (Details are under consideration)

	Presenter	Audience
General	¥20, 000	¥20, 000
Student, Retiree	¥10, 000	¥0

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

In OPTICS & PHOTONICS International Congress 2021 (OPIC2021), over 10 international conferences are going to be held simultaneously. By registering for OWPT2021, 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'21) will be held on **June 30 (Wed.) - July 2 (Fri.), 2021** ~~April 21 (Wed) - 23 (Fri), 2021~~ 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

Tomoyuki Miyamoto,
OWPT2021 Conference co-chair

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RESULTS OF PREVIOUS OWPT

OWPT2020

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

Number of Participants: 50 / Domestic: 40, Overseas: 10

*OWPT2020 was held only by distribution of the Technical Digest to registrants by considering COVID-19 outbreak.

OWPT2019

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

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



(OWPT2019)

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/>

OWPT2021 COMMITTEE MEMBERS

Organizing Committee

Co-chairs

T. Miyamoto (Tokyo Tech)

Members

T. Maruyama (Kanazawa Univ.)
M. Matsuura (Univ. Electro-Communications)
M. Arai (Univ. of Miyazaki)
T. Motohiro (Nagoya Univ.)
K. Ogawa (Japan Women's Univ.)
S. Uchida (Chiba Inst. Tech.)
H. Yamada (Tohoku Univ.)

Program Committee

Co-chairs

T. Maruyama (Kanazawa Univ.)
M. Matsuura (Univ. Electro-Communications)

Members

M. Arai (Univ. of Miyazaki)
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G. Hatakoshi (Waseda Univ.)
H. Helmers (Fraunhofer ISE)
M. Hirota (Kyushu Univ.)
K. Ikeda (CRIEPI)
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M. Kohtoku (Furukawa Electric Co., Ltd.)
W. Kubo (TUAT)
S. Miyajima (Tokyo Tech)
N. Mori (Yamashita Denso. Corp.)
T. Nugent (PowerLight Technologies)
K. Ogawa (Japan Women's Univ.)
J. Sheldakova (Inst. Geosphere Dynamics RAS)
S. J. Sweeney (University of Surrey)
T. Takeuchi (Meijo Univ.)
T. Tayagaki (AIST)
S. Uchida (Chiba Inst. Tech.)
J. Wu (MH GoPower Company Ltd.)
H. Yamada (Tohoku Univ.)
K. Yokomori (NPEO)
T. Yamaguchi (Kogakuin Univ.)