# Submission Deadline: 27 January 2023 https



# OBJECTIVE

Recent progress in high-power laser technology and the advent of X-ray free electron lasers have energetically advanced our understanding of matter in extreme environments. Materials dynamically compressed by high-power laser irradiation, which reach ultra-high pressure and temperature states or warm dense matter states, are closely related not only to plasma physics and material science but also to earth and planetary science and inertial confinement fusion researches. Since such materials are highly complex systems, they are interdisciplinary research interests where both experimental and computational contributions are essential. In the scientific research area, we recognize that it is beneficial to hold a conference to promote international and interdisciplinary collaboration and overview the current status and prospects of the related fields. Thus, we propose to hold an international conference at the annual HEDS meeting with a topical focus on "Matter in Extreme Conditions". The conference aims to discuss a definite theme with distinguished overseas scientists with experiences in high-pressure science, shock physics, materials science, earth and planetary science, first-principles calculations, high-power lasers, and X-ray free electron lasers, increasing the number of foremost participants in related fields.

INTERNATIONAL CONFERENCE ON HIGH ENERGY DENSITY SCIENCES 2023 (HEDS2023) is organized to share recent advances in science and technology on the matter under extreme high-energy-density conditions. The conference will be held on April 18- 21, 2023, at Pacifico Yokohama, with the sponsorship of the Laser Society of Japan, and Institute of Laser Engineering, Osaka University.

## SCOPE

HEDS2023 covers the high energy density sciences with high power lasers and its applications in the following major topical fields;

- A) Dynamic and static high pressure
- B) Warm dense matter
- C) Simulation and modeling
- D) Planetary science
- E) Material sciences and applications
- F) Facility, diagnostics, and other technological advances

# **COMMITTEE MEMBERS**

Conference Chair Ryosuke Kodama (Osaka Univ.)

Steering Committee Chair Yasuhiko Sentoku (Osaka Univ.)







Contact address : <u>heds2023@lie.osaka-u.ac.jp</u>

REGISTRATION Registration Fees

		On/Before 7 April 2023	After 8 April 2023
General	Member*	¥56, 000	¥61,000
	Non-Member	¥66, 000	¥71,000
Student,	Member*	¥19,000	¥22,000
Retired	Non-Member	¥22, 000	¥24,000

\*Member of specialized International Conference Organizations

OPTICS&PHOTONICS International Congress 2023 (OPIC2023) https://opicon.jp/

13 international conferences held simultaneously. By registering for this conference, you can participate in all international conferences.

- □ ALPS The 12th Advanced Lasers and Photon Sources
- □ BISC The 8th Biomedical Imaging and Sensing Conference
- □ CPS-SNAP Cyber Physical Systems enabled by

# Sensing/Network/AI and Photonics Conference 2023

□ HEDS - International Conference on High Energy Density Science 2023

- □ ICNN International Conference on Nano-photonics and Nano-optoelectronics 2023
- □ LDC Laser Display and Lighting Conference 2023
- LSC Conference on Laser and Synchrotron Radiation Combination Experiment 2023
- LSSE Laser Solutions for Space and the Earth 2023
- OMC The 10th Optical Manipulation Conference and Structured Materials
- OPTM Optical Technology and Measurement for Industrial Applications 2023
- OWPT Optical Wireless and Fiber Power Transmission Conference 2023
- □ TILA-LIC Tiny Integrated Laser and Laser Ignition Conference 2023
- □ XOPT International Conference on X-ray Optics and Applications 2023

### SUBMISSION OF PAPERS

A 300-word abstract form should be submitted though OPIC2023 web. If you have anything to ask, please contact to "heds2023@lie.osaka-u.ac.jp". The abstract template will be available through the Web site.

## POSTER SESSION

The author(s) of poster presentations will be informed of the size of bulletin board for displaying summary, figures, tables, etc., when selected as poster papers.

#### POST DEADLINE PAPERS

A limited number of post deadline papers will be accepted for presentation at post deadline sessions.

#### OFFICIAL LANGUAGE

The official language of HEDS2023 is English.

#### PLENARY, INVITED TALKS and FURTHER INFORMATION

The speakers and latest information on the conference will be presented on the Web site,

"https://www.ile.osaka-u.ac.jp/heds2023/".

## LOCATION OF CONFERENCE SITE

The HEDS2023 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

http://www.pacifico.co.jp/english/index.html 1-1-1 Minato Mirai, Nishi-ku, Yokohama 220-0012, Japan Transportation Guide: TEL +81-45-221-2166, Info.:+81-45-221-2155& FAX +81-45-221-2136