

# XXXIV ICPIG & ICRP-10



XXXIV International Conference on  
Phenomena in Ionized Gases (XXXIV ICPIG)  
10th International Conference on Reactive  
Plasmas (ICRP-10)

**JULY 14TH SUN. —**  
**19TH FRI. ,2019**

**SAPPORO EDUCATION AND  
CULTURE HALL,  
SAPPORO, HOKKAIDO, JAPAN**

**WEB** <http://icpig2019.qe.eng.hokudai.ac.jp/>



## FIRST ANNOUNCEMENT

### Welcome to XXXIV ICPIG & ICRP-10

The Joint Conference of XXXIV International Conference on Phenomena in Ionized Gases (XXXIV ICPIG) and the 10th International Conference on Reactive Plasmas (ICRP-10) will be held in Sapporo, Japan, July 14–19, 2019. Since 1953, ICPIG has been a discussion forum for nearly all fields of plasma science. The XXXIV edition of ICPIG will be a joint conference with ICRP, organized with the scope covering the fundamentals and applications of reactive plasmas. The joint conference will be a precious opportunity to cover both modelling and experiments, from the fundamentals of plasma elementary processes, basic data and discharge physics, to applications with the plasma processing of surfaces and particles, high pressure and thermal plasma processing, radiation sources, plasma medicine, atmospheric and stellar plasmas, environmental protection and pollution control, plasma aerodynamics, and non-thermal plasmas in fusion devices.

## CONFERENCE FORMAT

The scientific program will consist of invited lectures that are general (45 min) and topical (30 min) and contributed papers that will be presented orally (15 min) and in poster presentations. Approximately 90 oral slots will be available in the conference timetable for contributed papers. Authors are requested to submit an abstract (up to two pages) by February 25, 2019. Two arranged sessions and lectures by the winners of the von Engel & Franklin Prize and the Reactive Plasma Award will also be scheduled. In addition, five satellite workshops (atomic and molecular data, diagnostics, thin films, nanomaterials, and simulation) will be held on Sunday, the 14th and Saturday, the 20th.

## SPECIAL ISSUE

The authors of the invited lectures and arranged sessions are invited to submit a full paper for a special issue of Plasma Sources Science and Technology (PSST) or Japanese Journal of Applied Physics (JJAP), both published by IOP Publishing. Please notice the different scopes of the two journals when making your choice. All papers need to be within the scope of the selected journal. The authors of contributed presentations (oral/poster) can submit an original paper for the conference special issue, which will be published in JJAP. Submitted papers will be subject to the usual peer-review processes of the journals. All papers published in PSST are set online as a regular within 24 hours after acceptance. The special issue is build up incrementally by linking the accepted papers to the special issue page. Therefore, publishing in the special issue is not delaying publication.

## VENUE

XXXIV ICPIG / ICRP-10 will be held in the Sapporo Education and Culture Hall, located in central Sapporo, Hokkaido, Japan. Hokkaido, the northernmost island of Japan, has been a popular destination for Japanese tourists for decades, but it has become one of the most popular tourist destinations for foreign repeat visitors and first-time foreign visitors. Participants will enjoy the mild sunny climate (with low humidity), excellent foods, beer, whisky, and the beautiful nature of Hokkaido.

## IMPORTANT DATES

Second announcement: January 2019  
Abstract submission: February 25, 2019  
Notification of acceptance: Mid-April, 2019  
Notification of presentation style (oral/poster): Mid-May, 2019  
Early registration: May 31, 2019  
Final announcement: End of June 2019

## CONFERENCE TOPICS

### FUNDAMENTALS

- 1) Elementary processes and fundamental data
- 2) Thermodynamics and transport phenomena
- 3) Plasma wall interactions, electrode and solid/liquid surface effects
- 4) Chemical processes in plasmas
- 5) Plasmas in/with liquid
- 6) Collective and nonlinear phenomena

### MODELLING, SIMULATION, AND DIAGNOSTICS

- 7) Modelling and simulation techniques
- 8) Plasma diagnostic methods

### PLASMA SOURCES AND DISCHARGE REGIMES

- 9) Astrophysical, geophysical, and other natural plasmas
- 10) Low-pressure plasmas
- 11) High-frequency discharges
- 12) Non-equilibrium plasmas and microplasmas at high and atmospheric pressures
- 13) Thermal plasmas
- 14) Complex and dusty plasmas, ion-ion plasmas, mixed phase plasmas
- 15) Plasma created by external sources of ionization

### APPLICATIONS

- 16) Plasma processing of surfaces and particles (etching and deposition)
- 17) High-pressure and thermal plasma processing
- 18) Plasma lamps and radiation sources
- 19) Medical, biological, agricultural, and environmental applications
- 20) Plasma power and pulsed power technology
- 21) Particle sources and aeronautical applications
- 22) Emerging technologies

## REGISTRATION FEE (BEFORE MAY 31, 2019)

Regular participants: JPY50,000

Students: JPY25,000

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