



First Announcement

ICRP-9/GEC-68/SPP-33

**9th International Conference
on Reactive Plasmas /
68rd Gaseous Electronics Conference /
33th Symposium on Plasma Processing**

October 12-16, 2015

**Hawaii Convention Center
Honolulu, U. S. A.**



*image courtesy of Hawaii Tourist Authority / Dana Edmunds



**Sponsored by
The Japan Society of Applied Physics
American Physical Society**

**ICRP-9 Supported by:
Plasma Electronics Division,
The Japan Society of Applied Physics
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Kyushu University, Japan
Plasma Nanotechnology Research Center,
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Plasma Medical Science Global Innovation Center,
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Grant-in-Aid for Scientific Research on
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<http://www.plasma.engg.nagoya-u.ac.jp/icrp-9/>

General Information

The International Conference on Reactive Plasmas (ICRP) has taken place by the initiative of the Division of Plasma Electronics, the Japan Society of Applied Physics since 1991. The 1st ICRP was held in Nagoya, the 2nd in Yokohama (1994), the 3rd in Nara (1997), and the most recent conference (8th ICRP) in Fukuoka (2014). Some former ICRPs were held as international joint conferences: the 5th ICRP was with ESCAMPIG at Grenoble (2002) and the 7th was with the Gaseous Electronics Conference (GEC) at Paris in 2010.

The Symposium on Plasma Processing (SPP) is a domestic annual Japanese meeting that has been held by the Division of Plasma Electronics since 1984. The joint ICRP and SPP conference aims to gather researchers and engineers, involved in various aspects of reactive plasmas and their applications. The joint conference also aims to facilitate the exchange of information and ideas among them within an international framework.

The subjects covered in this conference are the entire field of reactive plasmas and their applications to various materials processing such as surface modification, etching and deposition with emphasis on basic phenomena, technologies, and the underlying basic physics and chemistry. Furthermore, the subjects have been extended to bio- and/or medical application of plasmas. This conference particularly encourages papers dealing with basic properties of the plasma itself, its generation and control, fundamental processes in the plasma, and plasma-solid/liquid interactions. Papers dealing with specific results of processing should place emphasis on the related plasma characteristics in obtaining the results.

The 9th ICRP will take place in October 12-16, 2015, in Hawaii, U.S.A., as a co-located conference with the 68th GEC. This conference will also be held as a joint conference with the 33rd Symposium on Plasma Processing, since the 4th ICRP in 1998. The conference site will be at Hawaii Convention Center at Honolulu.

Topics

The ICRP-9/GEC-68/SPP-33 will consist of a series of oral sessions (composed of both invited and contributed papers), poster sessions, and several arranged sessions on selected topics. Sessions will be organized around coherent subjects in order to facilitate useful discussions and focus on appropriate solutions to problems.

Conference Topics

1 Atomic and Molecular Processes

- 1.1 Electron and photon collisions with atoms and molecules: excitation
- 1.2 Electron and photon collisions with atoms and molecules: ionization
- 1.3 Heavy particle collisions
- 1.4 Dissociation, recombination and attachment
- 1.5 Distribution functions and transport coefficients for electrons and ions
- 1.6 Other atomic and molecular collision phenomena

2 Plasma Science

- 2.1 Nonequilibrium kinetics of low-temperature plasmas
- 2.2 Basic plasma physics phenomena in low-temperature plasmas
- 2.3 Plasma boundaries: sheaths, boundary layers, others,
- 2.4 Gas phase plasma chemistry
- 2.5 Plasma-surface interactions
- 2.6 Plasma diagnostic techniques
- 2.7 Modeling and simulation
- 2.8 Glows: dc, pulsed, microwave, others
- 2.9 Capacitively coupled plasmas
- 2.10 Inductively coupled plasmas
- 2.11 Magnetically-enhanced plasmas: ECR, helicon, magnetron, others
- 2.12 High pressure discharges: dielectric barrier, discharges, coronas, breakdown, sparks
- 2.13 Microdischarges: dc, rf, microwave
- 2.14 Thermal plasmas: arcs, jets, switches, others
- 2.15 Plasmas in liquids
- 2.16 Negative ion and dust particle containing plasmas
- 2.17 Other plasma science topics

3 Plasma Applications

- 3.1 Plasmas for light production: laser media, glows, arcs, flat panels and novel sources
- 3.2 Plasma etching
- 3.3 Plasma deposition
- 3.4 Plasma ion implantation
- 3.5 Green plasma technologies: environmental and energy applications
- 3.6 Plasma processing for photovoltaic applications
- 3.7 Biological applications of plasmas
- 3.8 Plasma applications in medicine
- 3.9 Plasma propulsion and aerodynamics
- 3.10 Plasmas for nanotechnologies, flexible electronics and other emerging applications

Contributed Papers

Contributed papers will be presented as 15-minute oral talks or in poster sessions. Authors are requested to submit a GEC-style abstract to the AIP website by June 19, 2015. A preference for oral/poster may be indicated. The final decision will be communicated to the corresponding author. In addition to GEC abstract submission, authors are required to submit a two-page manuscript for ICRP proceedings volume (in a two-column, camera-ready form) no later than June 19th, 2015. Further details will be given in the second announcement.

Abstracts and Proceedings

Regular participants will be given both the GEC abstracts and the ICRP conference proceedings, which contain invited and contributed papers. The abstracts and proceedings will be handed out upon the registration at the conference.

JJAP Special Issue

Papers published in the ICRP conference proceedings may also be submitted to a special issue "Plasma Processing" of the Japanese Journal of Applied Physics (JJAP).

Language

The official language of the conference is English. All presentations and printed materials should be prepared in the official language.

Registration Fee

The early registration fee for regular participants will be 550 USD per person. The reduced early fee for full-time students will be 275 USD per person.

Conference Site

The conference will be held at the Hawaii Convention Center in Honolulu, U.S.A. Other site information, such as accommodations around the conference site, will be provided at the GEC web site:

<http://gec2015.wordpress.drake.edu/>

Accommodation

A room block has been reserved at the Ala Moana Hotel, at \$155 (Kona Tower) and \$175 (Waikiki Tower) per night + tax. The cut-off date for the special rate is September 11, 2015 or when the block is filled, whichever comes first. Early reservations are strongly recommended.

Second Announcement

The second announcement will contain more details, such as the scientific program, registration procedure, accommodation, transportation, visa information, and guidelines for preparing abstracts. It will be issued in April/May 2015.

Calendar of Events

First announcement	Feb 2015
Second announcement	April/May 2015
GEC abstract deadline	June 19 2015
Two-page papers deadline for a ICRP proceedings (a two-column, camera-ready form)	June 19 2015
Deadline for student travel support	June 21 2015
Registration starts	July 1 2015
Notification of acceptance	August 2015
Final announcement/program	September 2015
ICRP-9/GEC-68/SPP-33	October 12-16 2015
Papers deadline for JJAP special issue	November 2015

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