## First Announcement

# GEC-68/ICRP-9/SPP-33

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

## October 12-16, 2015

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



#### [image courtesy of Hawaii Tourist Authority / Dana Edmunds]





## American Physical Society The Japan Society of Applied Physics

http://gec2015.wordpress.drake.edu/ http://www.plasma.engg.nagoya-u.ac.jp/icrp-9/

#### **General Information**

The 68th Gaseous Electronics Conference (GEC) will take place October 12-16, 2015, in Hawaii, U.S.A., as a co-located conference with the 9th International Conference on Reactive Plasmas (ICRP) and the 33rd Symposium on Plasma Processing (SPP). This is the third co-located meeting of GEC/ICRP after Maui (Hawaii, 1998) and Paris (France, 2010). The conference will be held at the Hawaii Convention Center in Honolulu.

The GEC is a special conference of the American Physical Society, which promotes the exchange of scientific information and viewpoint concerning basic phenomena in the field of gaseous electronics. It has been held annually since 1948. The ICRP has taken place by the initiative of the Division of Plasma Electronics, the Japan Society of Applied Physics, since 1991. The SPP is known as an annual Japanese domestic meeting, which has also been held by the Division of Plasma Electronics since 1984.

The subjects covered in this joint conference are the entire field of gaseous electronics, including charged-particle collisions, 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 applications 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.

### **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 discussions and focus on appropriate solutions to a variety of problems.

### **Abstract Sorting Categories**

#### 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 Plasma boundaries: sheaths, boundary layers, others
- 2.3 Basic plasma physics phenomena in low-temperature plasmas
- 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, coronas, discharges, 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 APS 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 the GEC abstract submission, authors have the opportunity to submit a two-page manuscript for the ICRP proceedings (in a two-column, camera-ready form) no later than June 19, 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 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 and retirees 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 on 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	March 2015
Second announcement	April/May 2015
GEC abstract deadline	June 19, 2015
Two-page papers deadline for ICRP proceedings	
(in two-column, camera-ready form	n) June 19, 2015
Deadline for student travel support	June 21, 2015
Notification of acceptance	August 2015
Registration start	July 1, 2015
Final announcement/program	September 2015
GEC-68/ICRP-9/SPP-33 Octo	ober 12-16, 2015
Paper deadline for JJAP special issue	November 2015

#### **GEC Executive Committee**

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## **GEC Local Organizing Committee**

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[image courtesy of Hawaii Tourist Authority / Kirk Lee Aeder]



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