



First Announcement

ICRP-7/GEC-63/SPP-28

**7th International Conference
on Reactive Plasmas /
63rd Gaseous Electronics Conference /
28th Symposium on Plasma Processing**

October 4-8, 2010

**Maison de la Chimie
Paris, France**



Sponsored by

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

<http://www.plasma.engg.nagoya-u.ac.jp/icrp-7/>

General Information

The International Conference on Reactive Plasmas (ICRP) has been held in Japan since 1991, organized on the initiative of the Division of Plasma Electronics, The Japan Society of Applied Physics: the 1st in Nagoya, the 2nd in Yokohama, 1994, the 3rd in Nara, 1997 and the 6th in Matsushima, 2006. The ICRP has been also held as joint conference, i.e., the 4th ICRP with GEC and the 5th ICRP with ESCAMPIG in Hawaii, 1998 and Grenoble, 2002, respectively. The Symposium on Plasma Processing (SPP) is an annual domestic meeting, which has also been held by the Plasma Electronics Division since 1984. The joint conference ICRP/SPP is aimed at bringing together the researchers and engineers involved in various aspects of reactive plasmas and their applications, and at facilitating the exchange of information and ideas among them within an international framework.

Subjects cover the entire field of reactive plasmas and their applications to surface modification, etching, deposition, and other materials processing, with emphasis on basic phenomena and technologies and the underlying basic physics and chemistry. The conference particularly encourages papers dealing with basic properties of the plasma itself, its generation and control, fundamental processes in the plasma, and plasma-solid interactions; papers dealing with specific results of processing should place emphasis on the related plasma characteristics in obtaining the results.

The 7th International Conference on Reactive Plasmas will be held in October 4-8, 2010, in Paris, France, joined with the 63rd Gaseous Electronics Conference and the 28th Symposium on Plasma Processing. The conference site "Maison de la Chimie" is located in downtown of Paris, one of the famous cities in the world.

Topics

The ICRP-7/GEC-63/SPP-28 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 and biomedical applications of plasmas
- 3.8 Plasma propulsion and Aerodynamics
- 3.9 Plasmas for nanotechnologies, flexible electronics and other emerging applications

Contributed Papers

Contributed papers will be mainly presented in poster sessions but some will be selected as oral presentations. The authors are requested to submit GEC style abstract to the AIP website not later than the deadline (will be around early in June, 2010). The decision will be notified to the author. In addition to GEC abstract submission, authors are required to submit a two-page manuscript for a ICRP proceedings volume (in a two-column, camera-ready form) (will be around early in June, 2010). Further details will be given in the second announcement.

Abstracts and Proceedings

Both the GEC abstracts and the ICRP conference proceedings containing invited and contributed papers will be distributed to regular participants 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, and will be used for all presentations and printed materials.

Registration Fee

The early registration fee for regular participants will be 350 Euro per person, while that for full-time students will be 180 Euro per person.

Conference Site

The conference will be held at the Maison de la Chimie in Paris, France. Accommodations will be found at several hotels of different categories as following web site:

<http://gec-icrp2010.polytechnique.fr/home/accomodation/>

Second Announcement

The second announcement will contain details of the

scientific program, registration procedure, hotel accommodations, and guidelines for preparing abstracts.

It will be mailed in April 2010.

Calendar of Events

First announcement	March 2010
Preliminary application deadline	March 2010
Second announcement and call for papers	April 2010
GEC abstract deadline	June 2010
Two-page papers deadline for a ICRP proceedings (a two-column, camera-ready form)	June 2010
Notification of acceptance	August 2010
Registration and hotel reservations open	June-July 2010
Final announcement/program	September 2010
Papers deadline for special issue JJAP	October 2010

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