

REGISTRATION FEE

The early registration fee for regular participants will be 520 EUR per person. The reduced early fee for students and retirees will be 250 EUR per person.

ACCOMMODATION

Room contingents in different hotels are pre-reserved for conference participants. Please check the webpage www.gec2016.de/hotels for further information.

WORKSHOPS

- 1) Future Challenges in Plasma Physics
Uwe Czarnetzki et al.
- 2) Plasma Kinetics
Toshiaki Makabe et al.
- 3) Pulsed high power plasmas for the synthesis of nanostructured thin films
Peter Awakowicz et al.
- 4) Plasma-chemistry to electrify the chemical industry,
Richard van de Sanden, David Graves et al.

STUDENT TRAVEL ASSISTANCE

The GEC is committed to support student participation and offers monetary assistance to student attendees/presenters only. Advisors may request partial reimbursement of travel expenses for students attending and presenting papers at the GEC. To request support, student advisors must send a letter of application and a copy of the student's abstract (plain text when submitting via email, please do NOT send raw LaTeX). Requests must be sent by June 10, 2016 to Verena M. Scharf.

DEADLINES

Registration	► open
Abstract submission	► June 10, 2016
Student travel grant request	► June 10, 2016
Best student paper award nomination	► June 10, 2016
Post deadline	► July 10, 2016
Notification of acceptance	► August 2016
Final announcement / program	► Sept. 2016

PLASMA SCHOOL

The International School on Low Temperature Plasma Physics: Basics and Applications will be held at Physikzentrum Bad Honnef October 1-6. Its Master Class "Plasma synthesis of nanoparticles" will be October 7-8. Further information can be found at plasma-school.org

ORGANIZING COMMITTEE

Uwe Czarnetzki (Chair)
Dirk Luggenhölscher (Vice-Chair)
Susanne Hentrich (Organization)
Verena M. Scharf (Organization)

Marc Böke
Ralf Peter Brinkmann
Thomas Mussenbrock
Volker Schulz-von der Gathen
Achim von Keudell
Jörg Winter

More detailed information: www.gec2016.de

GEC-69 OFFICE

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First Announcement

October 10-14, 2016

Ruhr-Universität Bochum
Germany

► www.gec2016.de

sponsored by



RESEARCH DEPARTMENT
Plasmas with Complex Interactions





GENERAL INFORMATION

The 69th GEC will be hosted by Ruhr-Universität Bochum at October 10-14, 2016. Located in the midst of the dynamic, hospitable metropolitan area of the Ruhr, in the heart of Europe, the Ruhr-Universität Bochum (RUB) with its 20 faculties, RUB's disciplinary institutional units, is home to 5,600 employees and over 41,000 students from 130 countries. All the great scientific disciplines are united on one compact campus.

TOPICS

For 68 years, the GEC has been an invaluable resource to the plasma and collision community, and continues to have a leadership presence in traditional areas such as plasma phenomena, low pressure processes, plasma chemistry, surface interactions, atomic and molecular interactions, simulation, and diagnostics. In recent years, the GEC has also taken a leadership role in emerging areas of plasma science including biological and environmental applications and atmospheric plasma systems. The GEC-69 will consist of a series of oral sessions (composed of both invited and contributed papers), poster sessions and arranged sessions on selected topics (workshops on Monday). 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 Non-equilibrium kinetics of low temperature plasmas
- 2.2 Basic plasma physics phenomena in low-temperature plasmas
- 2.3 Plasma boundaries: sheaths, double layers, others
- 2.4 Gas phase plasma chemistry
- 2.5 Plasma-surface interactions
- 2.6 Plasma diagnostic techniques
- 2.7 Plasma 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 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

ABSTRACT SUBMISSION

Contributed papers may be given orally in a 15-minute timeslot (12 minutes for presentation and 3 minutes for questions) or as a poster. For either mode, authors must submit an abstract, which briefly but accurately describes new scientific work.

Abstracts can be submitted through our online portal at abstracts.aps.org for contributed and abstracts.aps.org/invited for invited speakers.

Participants will be given APS Bulletin with the conference program and abstracts of invited and contributed talks and posters.

