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.

EXECUTIVE COMMITTEE

Chair: M. Vukovic, TEL Technology Center America Chair Elect: T. Kirchner, York University Secretary: U. Czarnetzki, Ruhr-University Bochum Secretary Elect: E. Scime, West Virginia University Past Secretary: K. Bartschat, Drake University Treasurer: M. Schulz, Missouri University of Science & Technology DAMOP: T. Miller, Boston College Inst. for Sci. Res. A. Bourdon, Ecole Polytechnique A. Harris, Illinois State University Kallol Bera, Applied Materials, Inc. Matthew Hopkins, Sandia National Laboratories Mounir Laroussi, Old Dominion University Koichi Sasaki, Hokkaido University



CALENDAR OF EVENTS

- First announcement **Registration starts**
- Second announcement GEC abstract deadline
- Application student support
- Deadline for student travel support >

Notification of acceptance

Final announcement / program

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

GEC-69 OFFICE

Research Department "Plasmas with Complex Interactions" Building NABF 05/692 Universitätsstraße 150 | D-44801 Bochum

Fon +49 (0)234 32-26218 Fax +49 (0)234 32-14175

gec2016@rub.de www.gec2016.de

- January 2016 Feb 15, 2016
 - April 2016
 - June 10, 2016
 - June 10, 2016

June 10, 2016

August 2016

Sept. 2016



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

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 10, 2016. A preference for oral/poster may be indicated. The final decision will be communicated to the corresponding author.

ABSTRACTS AND PROCEEDINGS

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

