

GENERAL INFORMATION

The 70th Gaseous Electronics Conference is 6-10 November 2017 in Pittsburgh, PA, hosted by West Virginia University, with Monday workshops and Tue-Fri scientific program. By car, the conference venue is 20 min from PIT airport, 15 min from city center, and 1 hr from WVU. Pittsburgh's multiple universities and established cultural institutions lie on the Allegheny Plateau, where Ohio, Allegheny, and Monongahela Rivers join, surrounded by wooded hills of the Appalachian Mountains.

GEC is a special meeting of the Atomic, Molecular and Optical Physics Division of the American Physical Society. GEC promotes the invaluable exchange of scientific information, viewpoints, and approaches (experimental, theoretical, modeling, and numerical simulation) regarding physical and chemical processes and dynamics taking place in partially ionized, collisional plasma and between the atoms, molecules, charged particles, photons, waves, and fields. In recent years, the GEC has also been a leading venue for reporting on emergent areas of plasma-biotechnology, plasma medicine, plasma-metal catalysis, & atmospheric-pressure plasma systems.

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/molecular collision phenomena

2. Plasma science

- 2.1 Non-equilibrium kinetics of low temp plasmas
- 2.2 Basic phenomena in low-temp plasmas
- 2.3 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/dust particle-containing plasma
- 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 Photovoltaic-application plasma processing
- 3.7 Biological/biomedical applications of plasma
- 3.8 Plasma propulsion and aerodynamics
- 3.9 Plasma nanotechnology, flexible electronics and other emerging applications

PROGRAM

Consists of oral sessions (of both invited and contributed papers), poster sessions, Allis Prize Talk, Monday workshops on selected topics, and Wednesday evening discussion on the Plasma Data Exchange Project and LXCat platform.

15:00 - 19:00 GEC2017 Registration (Monday)

18:00 - 20:00 Welcome Reception (Monday)

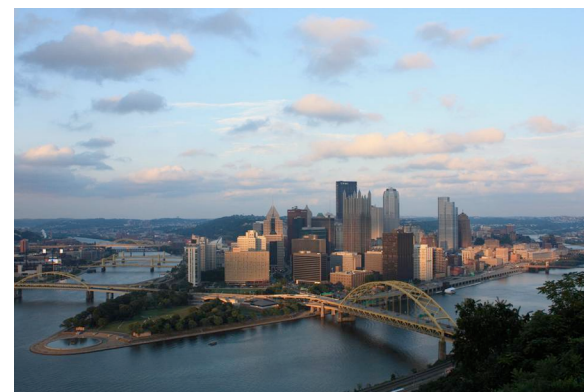
18:30 -22:30 Reception + Banquet (Thursday)

CONTRIBUTED PAPERS

Contributed papers will be presented as 15-min oral talks or as posters. Authors submitted GEC-style abstracts to APS's website by 2 June. Poster boards: 8ft(2.6m) horiz x 4ft(1.3m) vertical

BOOK OF ABSTRACTS

Participants receive a copy of the APS Bulletin listing the conference program and abstracts of invited and contributed talks and posters.



<https://www.visitpittsburgh.com/>

Recently named one of the Best Places to Travel in 2016 by *Travel+Leisure*, rated the nation's "#1 Food City" by *Zagat* and named among the "Top Destinations on the Rise" by *TripAdvisor*, it's easy to see why everyone's talking about Pittsburgh.



Final Announcement

ACCOMMODATION

(please help fill our room block at DoubleTree)

DoubleTree by Hilton Pittsburgh – Green Tree
500 Mansfield Ave, Pittsburgh, PA 15205 USA
pittsburghgreentree.doubletree.com
TEL: +1-412-922-8400 FAX: +1-412-922-8981
Room rate (\$145 plus tax) valid until 20 Oct.
The rooms have two (2) queen beds.

MONDAY WORKSHOPS

- (9-12:30) Linking academia and industry
- (9-12:30) Technical writing skills
- (2-5:30) Practical challenges for industry
- (2-5:30) Linking theory & experiment

EXECUTIVE COMMITTEE

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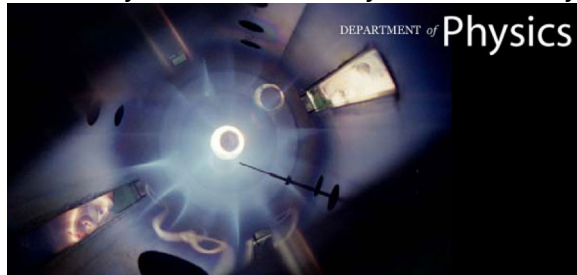
GEC-70 OFFICE

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CONFERENCE SERVICES

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Hosted by WVU Plasma Physics Laboratory



70th Annual GEC - Pittsburgh, Pennsylvania

DoubleTree by
Hilton Pittsburgh – Green Tree
pittsburghgreentree.doubletree.com

November 6 – 10, 2017

www.apsgec.org/gec2017

CALENDAR OF EVENTS

September	Finalized-program announced
October 20	Hotel reservation cut-off date
November 3	Last day to cancel registration

ORGANIZING COMMITTEE

Mark Koepke (mkoepke@wvu.edu) – Chair
Saralyn Stewart – Conference Planner
Earl Scime (WVU)
Julian Schulze (WVU and RUB)
Gottlieb Oehrlein (Univ Maryland)
Costel Biloiu (Applied Materials)

Visa Letters of Invitation –

Upon request, a personalized invitation letter will be sent to you. Please contact:
Ms. Viola Bryant (ymbryant@mail.wvu.edu)
and Prof. Earl Scime (escime@wvu.edu)