



Europhysics Conference on Atomic and Molecular Physics of Ionized Gases

July 15-19, 2014
Greifswald, Germany

General Information

The ESCAMPIG (Europhysics Conference on Atomic and Molecular Physics of Ionized Gases) is an international biennial conference of the EPS (European Physical Society). The conference topics comprise basic and applied plasma research ranging from atomic and molecular processes in plasmas and plasma surface interaction to self-organization in plasmas and to the new research lines with low and high pressure plasma sources.

The XXII ESCAMPIG is organized jointly by the Institute of Physics of the University of Greifswald (IfP), the Leibniz Institute for Plasma Science and Technology (INP Greifswald) and the Max Planck Institute for Plasma Physics (IPP), Greifswald branch. The International Scientific Committee and the Local Organizing Committee cordially invite you to attend the conference in Greifswald, Germany from July 15 to 19, 2014.

Conference Topics

1. Atomic and molecular processes in plasmas
2. Transport phenomena, particle velocity distribution function
3. Physical basis of plasma chemistry
4. Plasma surface interaction (boundary layers, sheaths, surface processes)
5. Plasma diagnostics
6. Plasma and discharges: theory and simulation
7. Self-organization in plasmas, dusty plasmas
8. Upper atmospheric plasmas and space plasmas
9. Low pressure plasma sources
10. High pressure plasma sources
11. Plasma and gas flows
12. Laser produced plasmas

Conference Format

The conference includes plenary invited general and topical lectures, poster sessions, and workshops. Some contributed papers covering relevant issues will be selected by the International Scientific Committee and authors will be asked to give a short (hot-topic) oral presentation.

Greifswald

Greifswald is situated in the northeastern part of the German federal state Mecklenburg-Vorpommern, close to the most beautiful water sports area between the two largest islands, Rügen and Usedom. The old university town and hanseatic city offers visitors, Greifswald's inhabitants, students and scientists an inviting, creative atmosphere.

Venue

The conference will take place in the town hall in Greifswald's old theatre district. The venue is close to the city centre and near the accommodation for delegates. There are some nice hotels with different star ratings in the area and also several guest houses. Details will be published closer to the conference dates and on the website.

Travel

Berlin and Hamburg International Airports can be reached within 2.5 h by train and car. A detailed timetable for the train connections can be obtained at the travel service of the Deutsche Bahn from: www.reiseauskunft.bahn.de. To reach Greifswald by car it is easiest to take the motorway A20. An alternative air connection is to arrive in Germany via Munich and take a connecting flight to Rostock/Laage which is approx. 100 km from Greifswald.

Accommodation

There are various hotels with different star ratings in the area. For accommodation reservation, please use the form on the conference website. Early booking is strongly recommended. In case you have a car you may want to consider staying at one of the many bed and breakfast places available in the region.

www.escampig2014.org



Invited Speakers with Preliminary Titles

General Invited Lecture

Laifa Boufendi (France)

Dusty plasma for nanotechnology

Francisco J. Gordillo-Vazquez (Spain)

Electrical discharges above the clouds: kinetics and optical spectra

Yuri Lebedev (Russia)

Microwave discharges at low pressures and peculiarities of the processes in strongly non-uniform plasma

Miran Mozetic (Slovenia)

Application of extremely non-equilibrium plasmas in processing of nano and biomedical materials

Leanne Pitchford (France)

Modeling micro-discharges/dielectric barrier discharges

Yi-Kang Pu (China)

Determination of electron properties from optical emission spectroscopy – Possibilities and Limitations

Jürgen Röpcke (Germany)

Applications of (external cavity) quantum cascade lasers in plasma diagnostics

Topical Invited Lecture

Annarita Laricchiuta (Italy)

Elementary processes in nitrogen and air plasmas

Srdjan Marjanović (Serbia)

Transport of electrons and positrons in gases and liquids

Monica Magureanu (Romania)

Degradation of pharmaceutical compounds in water by non-thermal plasma treatment

Sander Nijdam (The Netherlands)

Multi-dimensional experimental studies on streamers

Martin Sabo (Slovakia)

Selective formation of positive and negative ions in corona discharge and its application in atmospheric pressure chemical ionisation for IMS and MS

Julian Schulze (Germany)

Heating dynamics and process control in capacitively coupled plasmas driven by customized voltage waveforms

Xin Tu (United Kingdom)

Plasma-catalysis for CO₂ conversion: understanding plasma-catalyst interactions from a physical and chemical perspective

Petr Vašina (Czechia)

Non-monotonous evolution of hybrid PVD–PECVD process

The William Crookes Prize

ESCAMPIG awards the William Crookes Prize to a mid-career researcher who has been recognized to have made major contributions on the scientific topics covered by the ESCAMPIG. The ISC is seeking nominations for the prize.

Social Events

All registered participants and accompanying persons are invited to the welcome reception and the conference excursion.

Welcome Reception

The Welcome Reception will be held at the town hall on Tuesday July 15, 7-8 pm. The town hall is close to the city center in Greifswald's old theater district.

Conference Dinner

The Conference Dinner will take place on the evening of Thursday, July 17, at the "Alte Brauerei" (old brewery) in the Hanseatic city of Stralsund. Stralsund is approx. 30 min from Greifswald, a shuttle will be organized. The "Alte Brauerei" was built in 1880 and is still used for the brewing of the well-known beer of Stralsund. From the rooftop you will have a spectacular view over the historic center of Stralsund (UNESCO World Heritage) and the island of Rügen. Participants are required to register to the conference dinner using the registration form online.

Conference Excursion

The participants can either register for a sailing trip through the "Greifswald Bodden" (max. 50 persons) or an excursion to the "Ozeaneum", a renowned maritime museum in Stralsund incl. a visit of the historic center of Stralsund.

Accompanying Persons

For now two programs are planned, depending on the number of participants: the historic center of Greifswald and a tour to the scenic island of Rügen incl. the famous chalk cliff "Königstuhl". Additional information can be found on the conference website.

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Workshops

Plasma surface interaction at sputtering processes

Wednesday, July 16, 5-7 pm

Convener: Holger Kersten (University of Kiel, Germany)

- Hynek Biederman (Czech Republic)
- Ante Hecimovic (Germany)
- Daniel Lundin (Sweden)
- Anne-Lise Thomann (France)
- Thomas Trottenberg (Germany)

Diagnostics of reactive/electronegative plasmas

Thursday, July 17, 5-7 pm

Convener: Achim von Keudell (Ruhr-University Bochum, Germany)

- Ane Aanesland (France)
- Franko Greiner (Germany)
- Edmund Schüngel (USA)
- Dirk Wunderlich (Germany)

ABSTRACT SUBMISSION IS NOW OPEN

The abstracts of the contributions to the conference should be submitted before February 22, 2014 following the guidelines and the template file that are available on the conference website. All contributed papers will be reviewed by the International Scientific Committee.

Conference Abstracts

Both invited and contributed papers will be published as proceedings in a conference abstract book by EPS (Europhysics Conference Abstracts). The invited lectures will be published as regular papers in a special issue of Plasma Sources Science and Technology (PSST).

Registration Fees

The conference fee includes registration, welcome reception, excursion, coffee breaks and all lunches during the conference. A limited number of grants will be available for students with a letter of recommendation from their supervisors. Please register online via the conference website www.escampig2014.org. Payments can be made via credit card or bank transfer.

	Early before April 18, 2014	Late after April 18, 2014
Regular Participants	450 €	500 €
EPS Members	400 €	450 €
Students	300 €	350 €
Accompanying Persons	150 €	150 €

International Scientific Committee

Jürgen Meichsner (chair), Germany
 Yuri Akishev, Russia
 Mark Bowden, United Kingdom
 Gheorghe Dinescu, Romania
 Richard Engeln, The Netherlands
 Peter Hartmann, Hungary
 Savino Longo, Italy
 Dragana Maric, Serbia
 Štefan Matejčík, Slovakia
 Stéphane Pasquiers, France
 Carlos Pintassilgo, Portugal
 Isabel Tanarro, Spain

Local Organizing Committee

André Melzer (chair), IfP, University of Greifswald
 Birger Buttenschön, IPP
 Kathrin Ehmann, INP
 Liane Glawe, INP
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Important Deadlines

Abstract Submission: February 22, 2014
 Nominations for Crookes Prize:
 February 22, 2014
 Acceptance Notification: March 14, 2014
 Early Registration: April 18, 2014

www.escampig2014.org



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