



ESCAMPIG XXI

July 10-14, 2012

Viana do Castelo, Portugal

Europhysics Conference on the Atomic and Molecular Physics of Ionized Gases

Conference organization

International Scientific Committee

Jürgen Meichsner (chair), Germany
Annemie Bogaerts, Belgium
Stéphane Pasquiers, France
Peter Hartmann, Hungary
Giorgio Dilecce, Italy
Vasco Guerra, Portugal
Gheorghe Dinescu, Romania
Yuri Akishev, Russia
Štefan Matejčík, Slovakia
Mark Bowden, United Kingdom
Dragana Maric, Serbia
Francisco Gordillo-Vázquez, Spain

Local Organizing Committee

Vasco Guerra (chair), Lisboa
Pedro Almeida, Funchal, Madeira
Luís Lemos Alves, Lisboa
Mário Lino da Silva, Lisboa
Luís Marques, Braga
Maria João Martins, Lisboa
Carlos Daniel Pintassilgo, Porto

Conference format

The Conference includes plenary invited general and topical lectures, poster sessions, and workshops on “air plasma chemistry” and “plasma for sustainable environment.” A short number of outstanding contributed papers covering relevant issues will be selected by the International Scientific Committee and authors will be asked to give a short (15 minutes) hot-topic oral presentation. Contributed papers are to be presented in poster sessions and will be published in Europhysics Conference Abstracts (ECA) in electronic form, to be distributed to participants at the beginning of the conference.

escampig2012@ist.utl.pt

Welcome to ESCAMPIG 2012

General information

The Europhysics Conference on the Atomic and Molecular Physics of Ionized Gases - ESCAMPIG - is an international conference being celebrated since 1973. It is now a biennial conference of the European Physical Society (EPS). The wide variety of conference topics on basic and applied plasma science spans 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.

ESCAMPIG XXI is organized by Instituto de Plasmas e Fusão Nuclear from Instituto Superior Técnico, Universidade Técnica de Lisboa, Universidade do Porto, Universidade do Minho and Universidade da Madeira.

The working language of the conference will be English and, consequently, all the conference oral presentations and the written material will be given in English. According to the tradition of this conference, all activities and events will take place under one roof to help the scientific communication.

The International Scientific Committee and the Local Organizing Committee cordially invite you to attend the conference in Viana do Castelo and to submit an abstract on your latest scientific achievements.

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

<http://escampig2012.ist.utl.pt>



Venue

Location and date

The conference will be held in Castelo de Santiago da Barra, a XVIth century pentagonal fortification in Viana do Castelo, Portugal, which holds a modern congress centre. Its parking lot is available for participants with a car. The conference starts with a welcome reception on tuesday, July 10, 2012, at 7pm, and finishes at 1pm on saturday, July 14.

Viana do Castelo

Viana do Castelo forms an ideal base to explore the beautiful surrounding region. Its well-preserved historical center exhibits a harmonious mixture of architectonic styles, from gothic to art-déco, with beautiful manor houses and tile panels (azulejos). The nearby ruins of the Iron Age settlement "citânia de Sta. Luzia", the medieval center and Gustave Eiffel's iron bridge are further distinctive marks of this lovely town where the extremes meet.

How to reach Viana do Castelo

Viana do Castelo is easily reached by airplane, train (7 daily trains from Porto), bus, car and boat. The nearest airport is the Francisco Sá Carneiro Airport in Porto (OPO).

TAP Air Portugal offers a discount on airplane tickets to ESCAMPIG participants flying to Porto or Lisboa. Ask the LOC for the promotional code.

Passport and visa

Citizens having passport from certain countries need a visa to enter Portugal. If you need assistance to obtain a visa, please contact as soon as possible the LOC asking for a formal letter of invitation (escampig2012@ist.utl.pt).

Important deadlines

Abstract Submission: February 24th, 2012
Grants for PhD students: February 24th, 2012
Nominations for Crookes prize: March 2nd, 2012
Acceptance Notification: March 16th, 2012
Early Registration: April 16th, 2012
Payment deadline for inclusion in the proceedings: May 15th, 2012
Submission of papers for PSST: July 30th, 2012

Invited speakers

General invited lectures

Michael Bonitz (Christian-Albrechts-Universität zu Kiel, Germany)

Complex plasmas - a laboratory for self-organization

Roberto Celiberto (Politecnico di Bari, Italy)

Electron-molecule collision processes in non-equilibrium molecular plasmas

Ute Ebert (Centrum Wiskunde & Informatica in Amsterdam, The Netherlands)

Thunderstorms as electron accelerators and the discharge zoo above the clouds

Carlos Matos Ferreira (IPFN, Instituto Superior Técnico, Lisboa, Portugal)

Microwave driven air-water plasmas

William G. Graham (Queen's University Belfast, UK)

Plasmas in Liquids and their Applications

Kostya Ostrikov (CSIRO Materials Science and Engineering, Australia)

Small energy for small things: plasma nanoscience for a sustainable future

Nikolai Trushkin (State Research Center of Russian Federation TRINITI, Russia)

Steady-state and pulsed-periodical regimes for generation of non-thermal plasma jets at atmospheric pressure

Topical invited lectures

Jan Benedikt (Ruhr-Universität Bochum, Germany)

Plasma chemistry in the effluent of a He/O₂ microplasma jet: the role of VUV photons

Thierry Callegari (Université Paul Sabatier, Toulouse, France)

Generation, annihilation and motion of self-organized filaments in dielectric barrier discharges

Olivier Guaitella (Ecole Polytechnique, Palaiseau, France)

N and O atoms adsorbed under plasma exposure: a model system to investigate surface reactivity

František Krcma (Brno University of Technology, Czech Republic)

Generation of pin hole discharges in liquids

Ester Marotta (Università di Padova, Italy)

Decomposition of mixtures of organic compounds in atmospheric plasma

Bogdana Mitu (National Inst. for Lasers, Plasma and Radiation Physics, Romania)

Plasma deposition of carbon-based materials: diagnostic studies

João Santos Sousa (Queen's University Belfast, UK)

Cold atmospheric pressure plasma jets as sources of reactive oxygen species for biomedical applications

Francisco Tabares (As.Euratom/Ciemat. Madrid, Madrid)

Application of nitrogen-containing plasmas to Fusion Plasma Research



Registration

Conference fees

A fee reduction will be applied to EPS members and PhD students. A limited number of grants will be available to support PhD students. The deadline for application is February 24th, 2012. The conference fee includes registration, welcome reception, excursion, coffee breaks, all lunches during the conference and the EPS proceedings.

	Early	Late
Regular participants	450€	500€
EPS Members	400€	500€
Students	300€	410€
Accompanying Persons	150€	150€

How to register

Registration can be made following the link https://pco.abreu.pt/CLIENTES/abreu/formularios/form_122304079.php.

This link is available at the Registration section of the conference website. Payments can be made by credit card or by bank transfer.

Contributions

Abstract submission

Contributed papers should be submitted electronically via website, as extended abstracts (A4 format) with 1-2 pages, following the guidelines and the template files available in the conference website. Non-conforming submissions will be desk-rejected without review. Contributed papers will be refereed by the International Scientific Committee and may be rejected on scientific grounds.

Conference abstracts

Both invited and contributed papers will be published as proceedings in electronic format by EPS (Europhysics Conference Abstracts). Invited papers, selected workshop papers and selected hot topic papers presented at the 21st European Conference on the Atomic and Molecular Physics of Ionized Gases (ESCAMPIG XXI) will be considered for publication in a Special Issue of Plasma Sources Science and Technology. Each paper submitted will be refereed using the usual standards of quality for the journal. IOP Publishing will manage the peer-review of the special issue.

Workshops

Plasmas for sustainable environment

Wednesday, July 11, 17-19h.

Conveners: Antoine Rousseau (LPP, Ecole Polytechnique, Palaiseau, France) and Elena Tatarova (IPFN, Instituto Superior Técnico, Lisboa, Portugal).

Air plasma chemistry

Thursday, July 11, 17-19h.

Conveners: Fabrizio Esposito (Istituto di Metodologie Inorganiche e Plasmi, Bari, Italy) and Mário Lino da Silva (IPFN, Instituto Superior Técnico, Lisboa, Portugal).

Social program

Welcome reception and excursion

All registered participants and accompanying persons are invited to the welcome party and to the conference excursion. The former will be held on the evening of July 10th. The conference excursion will be a guided tour to the historical center of Guimarães, declared World Heritage by UNESCO, first capital of Portugal (12th century) and European Capital of Culture in 2012.

Conference dinner

The conference dinner will take place on the evening of Thursday, July 12th, at Quinta de São João, just 5 kms from the centre of Viana do Castelo. The "Quinta" has a lovely open-air garden with grapevines, various trees and traditional granite benches. It belongs to Restaurante Camelo, well known for serving regional specialties. Quinta de São João has been awarded several gastronomic prizes for the quality of its excellent food.

The participants are required to register to the conference dinner using the registration form.

Accompanying persons

Optional programs for accompanying persons will be prepared and could additionally be arranged with the LOC upon request.

Accommodation

A number of rooms have been reserved at various hotels at special prices for the accommodation of the participants and their accompanying persons. Rooms can be booked using the same link as for the registration. Detailed information on the hotels and booking will be available at the website. Early booking is strongly recommended.

In case you have a car you may want to consider staying at one of the many farms and manor houses available in the region.

Cancellation policy

Before June 15, 2012: there will be no cancellation costs

From June 16 to June 30: 50% refund

From 1st July on: no refund

No-show: no reimbursement will be made

Conference sponsors

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and Technology



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Prizes

William Crookes prize

ESCAMPIG awards the William Crookes prize to a mid-career researcher who has been recognized to have made major contributions to the scientific topics covered by the ESCAMPIG. The prize is co-sponsored by the European Physical Society (EPS) and Plasma Sources Science and Technology.

The ISC is seeking nominations for the prize! The nomination package should be sent by email to the Chair of the International Scientific Committee (meichsner@physik.uni-greifswald.de) by March 2nd, 2012.

EPS poster prize

EPS grants one Poster Prize to award the PhD student (defined by the registration) presenting the best poster at the conference.

Student nominations to the EPS poster prize should be sent to the LOC before July 1st, 2012.

Spread the word!

Help us publicize the ESCAMPIG XXI! Download the ESCAMPIG XXI announcements and poster from our [website](#) and distribute them in your network of contacts. Include a link to the ESCAMPIG XXI website on your web pages!

