

23rd Europhysics Conference on Atomic and Molecular Physics of Ionized Gases



Scientific Programme

July 12-16, 2016 Bratislava, Slovakia

Sponsors

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Local Organizers

Department of Experimental Physics
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Comenius University in Bratislava
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 Ministry of Education,
Science, Research and Sport
of the Slovak Republic



Local Organizing Committee

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Isabel Tanarro

Germany

Russia

United Kingdom

Romania

The Netherlands

Hungary

Italy

Serbia

Slovakia

France

Portugal

Spain

ISC meetings

ICPIG ISC meeting - 13th July, 6:00pm

ESCAMPIG ISC meeting - 15th July, during lunch

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 include 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. ESCAMPIG XXIII is organized jointly by the Society for Plasma Research and Applications and the Department of Experimental Physics, Comenius University in Bratislava. Bratislava is capital of Slovakia in close proximity to Vienna and Budapest with old-town charm, sophisticated restaurants, traditional pubs, good music ranging from jazz to opera, stylish people, and a human scale. All this, and the blue Danube as a backdrop.

Venue and Social Programme

The 23rd ESCAMPIG will take place in Hotel Saffron located in Bratislava, the capital of the Slovak Republic. The hotel is only a few minutes walk from the historical centre of Bratislava. The large congress hall will host both the lectures and poster sessions. Moreover, the conference participants will have a possibility to accommodate in Hotel Saffron for a reduced price; more than 100 rooms will be available for accommodation.

Hotel Saffron

Radlinského 27, (entrance from Fazuľová st.)

811 07 Bratislava

Slovakia

Social Programme for Accompanying Persons

13th July, 10:00am, start from Hotel Saffron, sightseeing of the Bratislava old town, visit of the Bratislava Castle, guided tour with professional tourist guide, in English. Return back to the hotel at 1:00pm for lunch.



15th July, 10:00am, start from Hotel Saffron, leaving by car/bus to the Devín Castle, walk around the castle and along the Moravia river where the Memorial of “Zelezna Opona” is located, guided tour with professional tourist guide, in English. Return back to the hotel at 1:00pm for lunch.



Sightseeing - www.visitbratislava.com

Guided tour in historical trains - www.presporacik.sk

Bratislava Castle - www.visitbratislava.com/places/bratislava-castle

Devín Castle - www.visitbratislava.com/places/devin-castle

Accommodation

Hotels with Special Offers for ESCAMPIG XXIII

A. HOTEL SAFFRON****

Radlinského 27

811 07 Bratislava

+421 2 212 99 301

www.hotelsaffron.sk

B. RADISON BLU CARLTON HOTEL

Hviezdoslavovo nám. 3

81102 Bratislava

+421 2593 900 000

www.radissonblu.com

C. HOTEL SOREA REGIA****

Kráľovské údolie 6

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www.sorea.sk/bratislava

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<http://letnebytovanie.sk/en/>

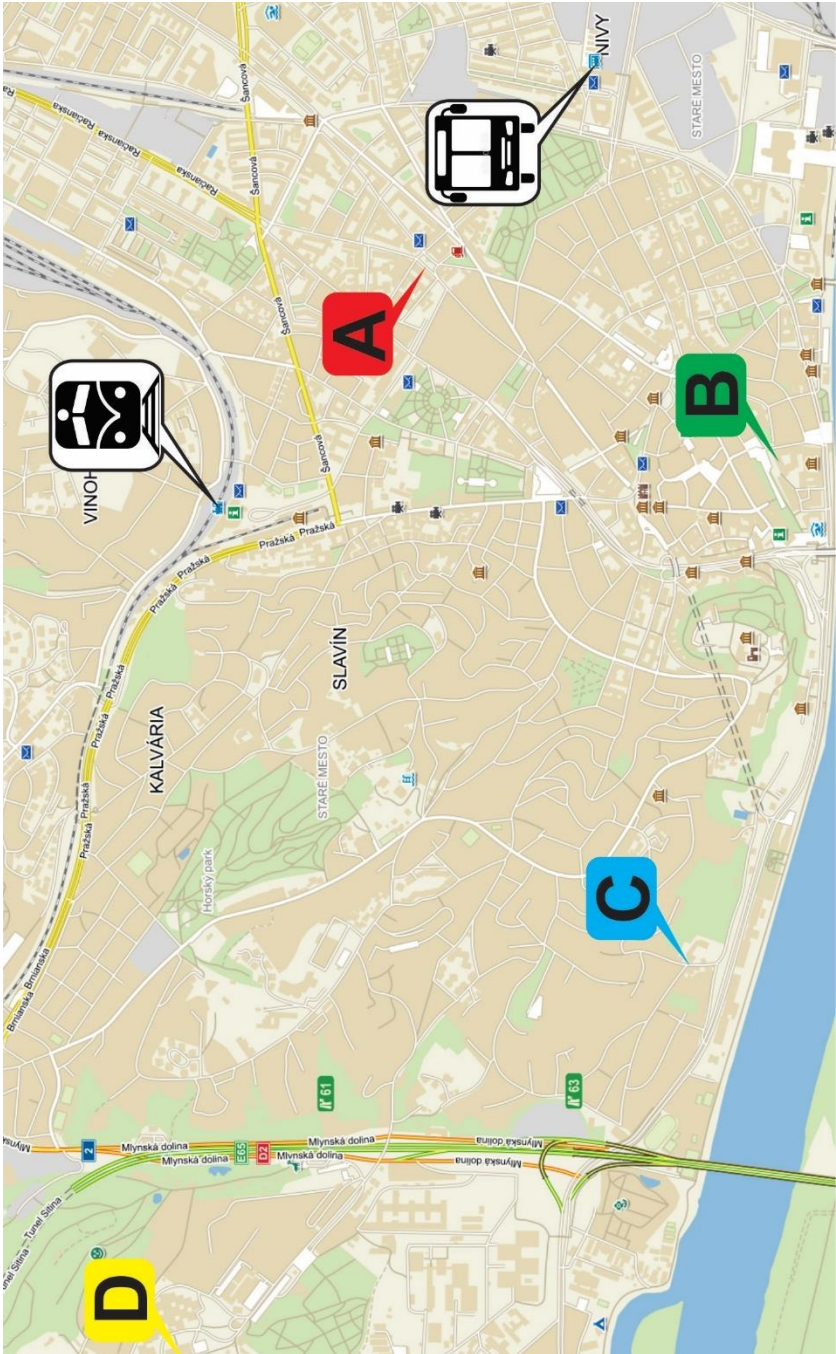
Taxi

In Bratislava there are many taxi companies and the cars do not use any unified colour but they always have a taxi sign. Often, it is significantly cheaper to phone order a taxi than to take one directly in the street. Especially the services of taxis waiting for clients at the airport or train stations are expensive. If you want to use taxi we recommend a phone order from companies such as:

- Taxi4U - +421 903 991 111

- Radio Taxi - +421 915 987 303

- Easy Taxi - +421 918 555 555 (flat rate €5 per one ride within the city; cannot be ordered in advance)



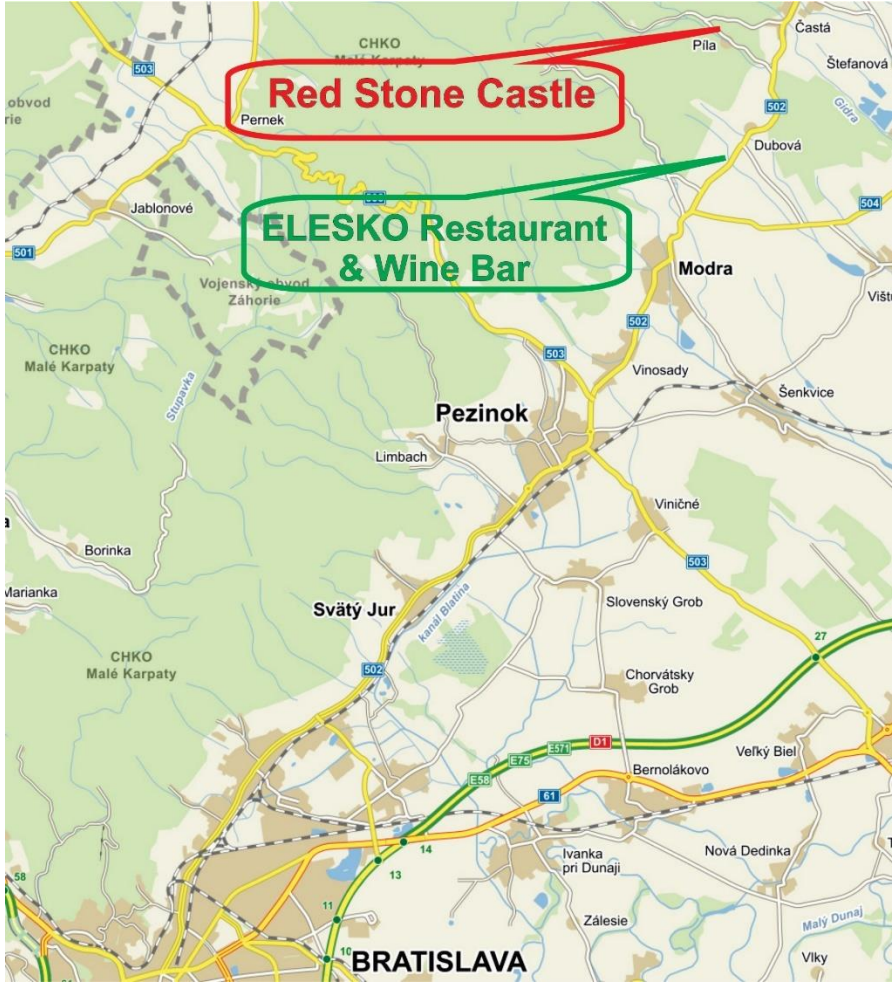
Conference Excursion

Conference participants are welcome to visit the Red Stone Castle Museum, located approx. 45 minutes travel by bus from Bratislava. A guided tour through the historical rooms of the castle will be the main programme, with free walk around the castle. The excursion will take place on Thursday, 14th July afternoon.

Conference Dinner

The conference dinner will be held on 15th July, Friday evening and it is necessary to register for this event and pay an extra fee of 50 €. The ESCAMPIG XXIII participants are welcome to visit the ELESKO Restaurant in beautiful surroundings directly in vineyards near Modra. This life style centre built in unique modern architecture is attractive not merely to wine lovers. In the middle of vineyards, on the area of 1,000 m² the ZOYA MUSEUM of contemporary art can be found.

The participants will have the opportunity to taste “the most home-made” ordinary food of remarkable quality and of course Elesko, exclusively attributive wine which is the product of ecological agriculture. Leaving from Hotel Saffron on Friday at 6:30pm by busses, heading directly for ELESKO restaurant and back later evening, ~ at midnight.



Prizes and Grants

The William Crookes Prize (ESCAMPIG XXIII, 2016)

We are pleased to announce the William Crookes Prize 2016 that has been awarded to **Vasco Guerra (Portugal)** for his major contributions on the scientific topics covered by the ESCAMPIG, in particular, for the outstanding contribution to the modelling of molecular low-temperature plasmas, such as the self-consistent kinetic modelling of N_2 , O_2 , N_2-O_2 , and $Ar-O_2$ plasmas under discharge and post-discharge conditions including the strong coupling between electron and vibrational kinetics, together with chemical and ion kinetics.

Crookes Prize Lecture

Vasco Guerra (Portugal)

Modeling of N_2-O_2 - Ar -plasmas - volume and surface kinetics

The prize is co-sponsored by the European Physical Society (EPS) and the Institute of Physics Publishing through Plasma Sources Science and Technology (PSST).

EPS Young Researcher Grants

The EPS Conference Committee will award two grants of 250 € to young researchers who received their PhD less than 6 years ago. The two awardees at the ESCAMPIG XXIII will be:

Dr. Joao Santos Sousa (LPGP, CNRS, Univ. Paris-Sud, Université Paris-Saclay), with a talk about "Electron properties in atmospheric pressure plasma jets determined by Thomson scattering"

Dr. Goran Sretenović (University of Belgrade), with a talk about "Electric field diagnostics of helium plasma jets"

EPS Poster Prize

The EPS Conference Committee will award a poster prize of 200 € to one PhD student participating at ESCAMPIG XXIII and presenting a poster prepared by himself. Those who are eligible for this prize are asked to mention this in the online abstract submission form.

Scientific Programme

Tuesday, 12th July

13:00 Registration

19:00 Welcome Reception

Wednesday, 13th July

9:00 Opening

Chair: Štefan Matejčík

9:15 GL1

Annemie Bogaerts

Modeling of CO₂ plasmas

10:00 TL1

Daniil Marinov

Plasma-surface interaction: Heterogeneous processes of atmospheric gases

10:30 HT1

Andrew Gibson

The role of surface interaction probabilities in reactive plasma modelling

10:45 Coffee Break

Chair: Kinga Kutasi, Carlos Pintassilgo

11:15 GL2

Alexander Piel

Dynamics of dusty plasmas

12:00 TL2

Alejandro Luque

Beads and glows: the dynamics of streamer channels

12:30 HT2

Erwan Pannier

Measurements and modeling of CO₂ splitting efficiency in high pressure nanosecond repetitively pulsed discharges

12:45 HT3

Alexey Zotovich

Comprehensive study of CF₄/Ar and CHF₃/Ar DF CCP discharges

13:00	Lunch
14:15	Poster Session I
16:00	Coffee Break
Chair: Marija Radmilovic-Radjenovic	
16:20	Workshop I Joao Santos Sousa Electron properties in atmospheric pressure plasma jets determined by Thomson scattering
16:40	Workshop I Goran Sretenović Electric field diagnostics of helium plasma jets
17:00	Workshop I Matej Klas Characterization of microdischarges from DC up to radio frequency in compressed ambient air
17:20	Workshop I Mario Janda Cross-correlation spectroscopy study of the Transient Spark discharge
17:40	Workshop I Georgi Trenchev 3D model of a reverse-vortex flow gliding arc plasmatron
18:00	ISC – ICPIG Meeting Individual Dinner

Thursday, 14th July

Chair: Nikolay Dyatko, Savino Longo

9:00	GL3 Nadja Balucani The reactions of atomic oxygen with alkenes and alkynes: primary products, branching ratios and role of intersystem crossing
9:45	TL3 Paola Diomede Modeling of tailored ion energy distributions for plasma processing applications
10:15	HT4 Bart Klarenaar Dynamics of the vibrational excitation in a pulsed CO ₂ glow discharge
10:30	HT5 Igor Adamovich Electron density measurements in nanosecond pulse discharges near liquid water surface
10:45	Coffee Break
11:15	Poster Session II
13:00	Lunch
14:15	Excursion - Red Stone Castle
19:00	Individual Dinner

Friday, 15th July

Chair: Bogdana Mitu, Richard Engeln

9:00 GL4
Christophe Laux
Transitions between the corona, glow, and spark regimes of Nanosecond Repetitively Pulsed discharges in air at atmospheric pressure

9:45 TL4
Ionut Topala
Atmospheric pressure plasma jets for life science

10:15 HT6
Carlos Pintassilgo
Modelling of the temporal evolution of the gas temperature in N₂ discharges

10:30 HT7
Thomas Wegner
Electronegativity during the E-H transition in inductively coupled RF oxygen discharges

10:45 Coffee Break

Chair: Isabel Tanarro, Nevena Puac

11:15 GL5
Jaime de Urquijo
Progress in the validation/derivation of cross sections for ions and electrons in pure gases and gas mixtures of atmospheric and bioplasmas

12:00 TL5
Jörn Winter
Characterisation of microplasma jets by infrared absorption spectroscopy

12:30 HT8
L.C.J. Heijmans
Plasma Particle Lofting

12:45 HT9
František Krčma
Novel plasma source for generation of discharge in liquids

13:00 Lunch
ISC – ESCAMPIG meeting

14:15	Poster Session III
16:00	Coffee Break
Chair: Nigel J. Mason	
16:20	Workshop II Nigel J. Mason Electron driven processes in plasmas; What we know and what we need to explore.
16:40	Workshop II Roberto Celiberto Electron-impact processes in aerospace and fusion plasmas
17:00	Workshop II Jean-Paul Booth Vibrational excitation in O ₂ and Cl ₂ inductively-coupled plasmas and DC discharges
17:20	Workshop II Stephan Denifl Dissociative electron attachment to molecules and clusters: current knowledge and future challenges
17:40	Workshop II Marian Danko Electron induced emission of Balmer lines and Fulcher α bands of H ₂
18:00	Free Time
19:30	Conference Dinner

Saturday, 16th July

Chair: Juergen Meichsner

9:00 GL6

Vasco Guerra

Modeling of N₂-O₂ plasmas -- volume and surface kinetics

9:45

TL6

Radek Plasil

Experimental study of recombination of H₃⁺, H₂D⁺, HD₂⁺ and D₃⁺ ions in low temperature afterglow plasma in He/Ar/H₂/D₂ gas mixture

10:15

TL7

Shishpanov Alexander

Long tube ignition processes at low gas pressure

10:45

Coffee Break

Chair: Stephane Pasquiers

11:15

GL7

Jean-Michel Pouvesle

Atmospheric Plasma Jets for Therapeutic Applications from the discharge to the treatments: issues and challenges

12:00

TL8

Nikola Škoro

Heavy-particle collisions in water vapour discharges at low pressures

12:30

HT10

Mate Vass

Experimental mapping of electron swarms

12:45

HT11

Diego Mantovani

Plasma deposition of silver-DCL as robust antibacterial coatings for health applications

13:00

Closing Ceremony, Awarding of Poster Prize Winner

13:15

Lunch

Poster Sessions

Wednesday, 13th July

01. Atomic and molecular processes in plasmas

P01-01-01	Michal Ďurian	Evolution of the continuum radiation spectra of H ₂ and D ₂ with electron energy
P01-01-02	Michal Lacko	Dicyclohexyl phthalate fragmentation by electron impact
P01-01-03	Michal Lacko	Electron induced dissociation of 2,4,6-trichloroanisole
P01-01-04	Juraj Országh	Electron Impact Excitation of Nitrous Oxide
P01-01-05	Peter Papp	Electron Ionisation and Electron Attachment Dissociation of Iron Pentacarbonyl Clusters
P01-01-06	Anita Ribar	Electron attachment to doped Neon clusters
P01-01-07	Michal Stano	Study of 2,4,6-Trichloroanisole by Ultraviolet Photoelectron Spectroscopy

02. Transport phenomena, particle velocity distribution function

P01-02-01	Luís Alves	Intercomparison of calculation techniques of the electron Boltzmann equation for the analysis of swarm parameters in CO ₂
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04. Plasma surface interaction (boundary layers, sheaths, surface processes)

P01-04-01	Lucia Bónová	Alignment mechanism of carbon nanowalls synthesized by atmospheric PECVD method
P01-04-02	Gilles Cartry	H ⁻ negative-ion surface production in low pressure hydrogen plasmas
P01-04-03	Oleksandr Galmiz	Bactericidal effect of plasma treatment on inner side of PTFE tubes
P01-04-04	Veronika Medvecká	Plasma assisted preparation of metal oxide nanofibers
P01-04-05	Anna Zahoranová	Low-temperature reduction of Graphene Oxide by atmospheric pressure hydrogen plasma

05. Plasma diagnostics

P01-05-01	Pavel Dvořák	Fluorescence measurements of atomic hydrogen radicals in active environments ignited at atmospheric pressure
P01-05-02	Xavier Aubert	Determination of boron atom density in the ground state in a H ₂ /B ₂ H ₆ microwave plasma at high pressure and high microwave power
P01-05-03	Jean-Paul Booth	Gas Temperature Measurements in Oxygen Plasmas by Doppler-Resolution Two-Photon Laser-Induced Fluorescence

P01-05-04	Nikolay Britun	Optimizing the plasma-assisted CO ₂ decomposition by microwave power modulation
P01-05-05	Nikola Cvetanovic	Spectroscopic investigation of surface dielectric barrier discharge with liquid electrodes in argon
P01-05-06	Tomáš Morávek	The study of pre-breakdown phase of coplanar dielectric barrier discharge on various surfaces
P01-05-07	Jan Voráč	Advanced spectroscopy of non-equilibrium discharges at dielectric surface

06. Plasma and discharges: theory and simulation

P01-06-01	Kostyantyn Korytchenko	Spark discharge detonation initiation models
P01-06-02	Sebastian Nemschokmichal	Simulation of laser photodeachment of negative ions in helium-oxygen barrier discharges and comparison to the experiment
P01-06-03	Haruaki Akashi	Secondary ionisation coefficient in atmospheric pressure oxygen dielectric barrier discharges
P01-06-04	Jan Čech	Residual heat contribution to the memory effect of DBD microdischarges: numerical and experimental study
P01-06-05	Aranka Derzsi	Experimental and simulation study of capacitively coupled oxygen discharges driven by tailored voltage waveforms
P01-06-06	Paola Diomede	Diffusion models for CO ₂ vibrational kinetics in low temperature plasma
P01-06-07	Nikolay Dyatko	Theoretical study of plasma parameters in a dc glow discharge and post-discharge in argon-nitrogen mixtures
P01-06-08	Jakub Hromadka	Computational study of mutual interaction of plasma sheaths in multicomponent plasma

07. Self-organization in plasmas, dusty plasmas

P01-07-01	Lev Dyachkov	Coulomb cluster confined in a cusp magnetic trap in microgravity under action of an electric field
P01-07-02	Anatoly Filippov	Electrostatic interaction of two spherical charged macroparticles in equilibrium plasmas
P01-07-03	Anatoly Filippov	Screening of microparticle charge in a humid air ionized by an external ionization source
P01-07-04	Rickard Gunnarsson	The influence of pressure and gas flow on size and morphology of titanium oxide nanoparticles synthesized in a highly ionized sputter plasma
P01-07-05	L.C.J. Heijmans	The plasma charging of deposited particles
P01-07-06	Dmitry Kalanov	Resonance radiation transport in the contracted glow discharge in argon: modelling and experiment

08. Upper atmospheric plasmas and space plasmas

P01-08-01	Mustafa Selim	Ion-acoustic waves in plasma with a q-nonextensive nonthermal electron velocity distribution
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09. Low pressure plasma sources

P01-09-01	Kostiantyn Achkasov	Plasma generation using solid state microwave technology: design and performance of ECR- and collisional-type plasma sources in matrix configuration
P01-09-02	Shishpanov Alexander	Effect of illumination by visible-spectrum light on the breakdown in long discharge tubes
P01-09-03	Mark Bowden	Mode structure of a cylindrically-symmetric Transparent Cathode Discharge
P01-09-04	Mark Bowden	Comparison of neutralising sources for neutral beam etching

10. High pressure plasma sources

P01-10-01	Declan Diver	Air discharge plasmas used in remote treatment of Salmonella Enteridis in liquid droplets
P01-10-02	Ladislav Moravský	Interaction of negative corona discharge in air with water
P01-10-03	Nevena Puač	Influence of third metal electrode on dielectric barrier helium plasma jet at atmospheric pressure
P01-10-04	Matus Samel	Non-radioactive source of electrons at atmospheric pressure
P01-10-05	Zlata Tučeková	Field enhancement in triple point of Diffuse Coplanar Surface Barrier Discharge electrode system

11. Plasma and gas flows

P01-11-01	Dmitrii Kuznetsov	Plasma-chemical conversion of carbon disulphide by pulsed corona discharge in a gas flow
P01-11-02	Gustavo Simiema de Freitas Barbosa	Creation and evaluation of construction guidelines using CFD for low pressure plasma gas feed-in systems to homogenize the precursor gas flow
P01-11-03	Alasdair Wilson	Ionization fronts in a non-linear gas-MHD plasma interactions code

12. Laser produced plasmas

P01-12-01	Karima Annou	Generation of magneto-acoustic waves by laser-plasma interaction
P01-12-02	Mohamed Khedr	Spectral characteristics of fragmentation of kidney stones by laser induced shock wave

Thursday, 14th July

01. Atomic and molecular processes in plasmas

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|-----------|------------------|--|
| P02-01-02 | Giorgio Dilecce | Rate constants of quenching and vibrational relaxation in the OH($A^2 \Sigma^+$, $v=0,1$) manifold with various colliders |
| P02-01-03 | Ridha Horchani | Few-body physics with ultracold potassium rubidium mixtures |
| P02-01-04 | Hsiang Shun Chou | Relativistic many-body calculations of the transition rates for the Zn-like ions |

02. Transport phenomena, particle velocity distribution function

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|-----------|-----------------|--|
| P02-02-01 | Malika Benhenni | Transport and dissociation coefficients of helium, neon and argon dimer cations in their parent gases for low temperature modeling |
| P02-02-02 | Vasco Guerra | CO ₂ electron impact cross sections: a complete and consistent set and an assessment of dissociation |

03. Physical basis of plasma chemistry

- | | | |
|-----------|-------------|---|
| P02-03-01 | Nuno Pinhão | Measurement of the gas temperature in DBD discharges in CH ₄ /CO ₂ /He mixtures: influence of power supply and helium concentration |
|-----------|-------------|---|

04. Plasma surface interaction (boundary layers, sheaths, surface processes)

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|-----------|-------------------|---|
| P02-04-01 | Menouar Hanafi | The study of the catalytic reforming process using the bifunctional catalyst Pt/Re for obtaining high octane number of the gasoline |
| P02-04-02 | Haruo Itoh | Charge accumulated on Dielectric-electrode and secondary ionization coefficient |
| P02-04-03 | Aboubakar Kone | Investigation of the interaction of He/Ne plasma jet with a copper plate |
| P02-04-04 | Roch Kwiatkowski | Interaction of pulsed plasma-ion streams with different energy fluxes with SiC and CFC samples |
| P02-04-05 | Juergen Meichsner | Secondary negative ions in oxygen CCP |

05. Plasma diagnostics

- | | | |
|-----------|--------------------------|---|
| P02-05-01 | Juan Manuel Díaz Cabrera | Improving the measurement of I-V characteristic curves of Langmuir probes immersed in cold plasmas |
| P02-05-02 | Kais Abderrahmane | Characterization of a low-pressure microwave collisional-type coaxial plasma source used for decontamination in food industry |
| P02-05-03 | Merlan Dosbolayev | Contact diagnostics of pulsed plasma |
| P02-05-04 | Nikolay Dyatko | Radial profiles of the Ne metastable atom number density in a dc glow discharge |
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P02-05-05	Kristaq Gazeli	Evaluation of the influence of the gas flow rate and the electrical parameters of a pulsed power supply on the optical emission of atmospheric pressure guided ionization waves
P02-05-06	Dmitry Kalanov	Application of the Line Ratios Method for Spatially Resolved Measurements of Resonance and Metastable State Densities
P02-05-07	Manfred Kettlitz	On the influence of gas flow rate on the behaviour of dielectric barrier discharges
P02-05-08	Gordana Majstorovič	Rotational and gas temperature of molecular hydrogen in aluminium hollow cathode glow discharge
P02-05-09	Kento Mori	Modulation level dependence of fluctuation of interactions between plasmas and nanoparticles grown in amplitude modulated discharges
06. Plasma and discharges: theory and simulation		
P02-06-01	Laurent Garrigues	Negative ion extraction from the plasma electrode surface: analysis of the influence of parameters used in Particle-In-Cell simulations
P02-06-02	Constantinos Lazarou	Investigation of the influence of electron impact cross section from different databases on the simulation results of helium barrier discharge with dry air impurities
P02-06-03	Igor Melnyk	Simulation of physical processes in anode plasma in high voltage glow discharge electron sources
P02-06-04	Thomas Mussenbrock	Phase mixing and negative power absorption in inductive discharges
P02-06-05	Zeljka Nikitovic	Reduced mobility of He^+ in CF_4
P02-06-06	Jiting Ouyang	Comparison of Trichel pulse in negative corona and self-pulsing oscillation in hollow cathode discharge
P02-06-07	Marija Radmilovic-Radjenovic	Breakdown voltage in sulfur hexafluoride
P02-06-08	Belkacem Saghi	Modeling discharge process in the Xe- Cl_2 DBD using simplified plasma chemistry
07. Self-organization in plasmas, dusty plasmas		
P02-07-01	Nicolas Heim	Influence of nitrogen impurity on current and pattern in a neon dielectric barrier discharge
P02-07-02	Miguel Jiménez-Redondo	Modeling of plasma deposited analogues of interstellar carbonaceous dust
P02-07-03	Takashi Kojima	Effects of discharge power on transport characteristics of clusters in the downstream region of multi-hollow SiH_4 discharges
P02-07-04	Gennadiy Sukhinin	Plasma polarization around dust particle in an external electric field: new self-consistent method

08. Upper atmospheric plasmas and space plasmas

P02-08-01	Francisco J. Gordillo-Vázquez	Modelling of the plasma chemistry induced by radially and temporally resolved positive streamers in low pressure air
P02-08-02	Francisco-Javier Pérez-Invernón	Electrodynamical model of lightning-induced upper atmospheric glow discharges

09. Low pressure plasma sources

P02-09-01	Gwenael Fubiani	Scaling laws for the extraction of a negative ion beam from the plasma electrode surface in high brightness negative ion sources
P02-09-02	Kinga Kutasi	Guiding the afterglow through a small diameter tube
P02-09-03	Juslan Lo	2.45 GHz ECR coaxial plasma source : obtaining high density and uniform plasma
P02-09-04	Nikola Skoro	Emission properties of low pressure low-current DC discharge in n-butanol vapour

10. High pressure plasma sources

P02-10-01	Kévin Ihaddadene	X-rays Produced by Strong Peak Electric Fields in Streamer Discharges
P02-10-02	WooSeok Kang	Spatio-Temporal Characteristics of Plasma Generated over an Electrolyte
P02-10-03	Antonina Malinina	Gas- discharge atmospheric pressure plasma in a mixture of mercury diiodide vapor with helium - exciplex source of radiation in blue- violet spectral range
P02-10-04	Gordana Malovic	Modification of the dentin surface of human teeth by atmospheric pressure plasma needle
P02-10-05	Dmitry Tereshonok	Investigation of arc binding to the tungsten cathode at atmospheric pressure

11. Plasma and gas flows

P02-11-01	Harry Nizard	Structure of Metal-Dielectric Nanocomposite Coatings Obtained by Gas Phase Condensation (GPC) and PECVD processes
P02-11-02	Guaitella Olivier	Role of electric field in the fluid dynamics of a kHz-driven He jet
P02-11-03	Florian Sigeneger	Modelling of an RF plasma jet at atmospheric pressure using complementary approaches

12. Laser produced plasmas

P02-12-01	Mohamed Mahmoud	Study of Plasma Formation in Potassium Vapor Excited by Nanosecond Resonant Laser Pulses.
P02-12-02	Mihály András Pocsai	Ionisation processes of Rubidium in strong electromagnetic fields

Friday, 15th July

01. Atomic and molecular processes in plasmas

P03-01-01	Nickolay Aleksandrov	Recombination of hydrocarbon ions with electrons in high-voltage nanosecond discharge afterglow
P03-01-02	Seisembayeva Madina	Electron capture process in the dense semiclassical hydrogen plasma
P03-01-03	Daniil Marinov	Highly vibrationally excited O ₂ molecules in low pressure oxygen plasmas: 1. Broad-band absorption spectroscopy.
P03-01-04	Stéphane Pasquiers	Dissociation kinetics of acetone in a sub-atmospheric pressure nitrogen plasma
P03-01-05	Susumu Suzuki	Measurement of Collisional Quenching Rate Coefficient of by H ₂ O
P03-01-06	Martina Zámečnicková	Formation of LiHe ⁺ by radiative association of metastable He(2 ³ P) with Li ⁺ involving triplet- π symmetry
P03-01-07	Anatoly Zavilopulo	Positive ions formation during dissociation of PTCDA molecule by electron impact

02. Transport phenomena, particle velocity distribution function

P03-02-01	Yui Okuyama	Effects of gas purity on negative ion mobility in O ₂
P03-02-02	Masheyeva Ranna	Connection of the cage correlation functions with the diffusion coefficient of Yukawa liquids

03. Physical basis of plasma chemistry

P03-03-01	Nuno Pinhão	Oxidation of clofibrac acid in water by electrical discharge and gamma radiation
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04. Plasma surface interaction

(boundary layers, sheaths, surface processes)

P03-04-01	Veronica Satulu	Plasma-induced graft polymerization of silver nanoparticles dispersed in ethylene glycol onto polymeric foils for antimicrobial surfaces
P03-04-02	Julia Shevchenko	The growth of tungsten oxide superficial structures
P03-04-03	Silviu-Daniel Stoica	Influence of H ₂ flow rate on the morphology of carbon films obtained by PECVD in a low pressure RF plasma jet
P03-04-04	Nikolai Tarasenko	Gas-liquid interfacial discharge plasma: application for synthesis and surface engineering of nanoparticles
P03-04-05	Antonio Tejero-del-Caz	Mass independence in the radial-to-orbital motion transition in cylindrical Langmuir probes immersed in collisionless plasmas

05. Plasma diagnostics

P03-05-01	Michal Angus	Study of the Lyman band system in Vacuum UV emissions of H ₂ -Ar glow discharge
P03-05-02	Bratislav Obradovic	Effect of gas flow rate on atmospheric pressure barrier discharge in helium

P03-05-03	Branislav Pongráč	Optical diagnostics of ns-pulsed discharge generated in liquid phase
P03-05-04	Nevena Puač	Optical emission diagnostics of N ₂ plasma used for textile pretreatment
P03-05-05	Stefan Raggli	Using plasma diagnostics to correlate the manufacturing process of a Mo magnetron sputtering target to the PVD process parameters
P03-05-06	Arthur Salmon	Nitric oxide production rate of pulsed nanosecond and microsecond discharge in atmospheric pressure air
P03-05-07	Eugen Stamate	Plasma diagnostics during magnetron sputtering of aluminum doped zinc oxide
P03-05-08	Milan Tichý	Detection of TiO ₂ nanoparticles by the laser beam scattering
P03-05-09	Robert Tschiersch	Characterization of self-stabilized single barrier discharge filaments in plane-to-plane electrode configuration by correlated electrical, optical and surface charge diagnostics

06. Plasma and discharges: theory and simulation

P03-06-01	Adriana Annusova	Highly vibrationally excited O ₂ molecules in low pressure oxygen plasmas: 2. Self-consistent model
P03-06-02	Kodanova Sandugash	Control of the state of charged dust particles via additional alternating external field
P03-06-03	Erik Shalenov	Dielectric function and reflectivity of dense xenon plasma
P03-06-04	Florian Sigener	Influence of the CO ₂ dielectric barrier discharge conditions on the CO production
P03-06-05	Dmitry Tereshonok	Prebreakdown phenomena in bubble clusters
P03-06-06	Matej Tripsky	Particle-in-cell Monte Carlo collision simulations of ICRF discharge initiation in tokamaks and stellarators
P03-06-07	Chyhin Vasyil	Influence of electronic processes on current pulsation of negative corona

07. Self-organization in plasmas, dusty plasmas

P03-07-01	Sita Sundar	On the wakes of grain in streaming collisional plasma
P03-07-02	Sita Sundar	Anisotropy in MHD turbulence due to magnetic field
P03-07-03	Isabel Tanarro	Processing by electron bombardment of a-C:H interstellar dust analogues grown by PECVD
P03-07-04	Yerbolat Usenov	Analysis of self-organized microdischarge structures in DBD on the basis of pair correlation functions
P03-07-05	Sergei Valin	Discharge stratification in noble gases as the convergence of the electron phase trajectories to attractors
P03-07-06	Robert Wild	Interaction between controlled and self-organised discharges in a barrier discharge

08. Upper atmospheric plasmas and space plasmas

P03-08-01	Ionut Topala	Spectroscopic studies of gas phase and deposited films in He/H ₂ /CnH _{2n+2} atmospheric pressure plasmas
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09. Low pressure plasma sources

P03-09-01	Ignacio Gabriel Vicente Gabás	Cold cathode toroidal electron beam source sustained by a low pressure wire anode discharge
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P03-09-03	Kenji Yamaki	Effects of hydrogen content on mass density of a-C:H films deposited using Ar ⁺ H ₂ + C ₇ H ₈ Plasma CVD
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10. High pressure plasma sources

P03-10-01	Jiří Šperka	Cavity atmospheric pressure self-pulsing spark plasma jet: construction and application
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P03-10-02	Maksim Usachonak	Determination of plasma parameters needed for the forming of the EBG plasma structures
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P03-10-03	Maksim Usachonak	Determination of biologically active components in the dc and self-oscillating air plasma jets
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P03-10-04	Hidetsugu Yagi	Preparation of carbon films by microwave-plasma assisted chemical vapour deposition in chamber-less system
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11. High pressure plasma sources

P03-11-01	Sergey Stepanyan	Hydrodynamic effects induced by nanosecond sparks in air
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P03-11-02	Alexander Pal	Energy conversion in e-beam created plasma
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12. Laser produced plasmas

P03-12-01	Marijana Gavrilovič	Dynamics of laser induced bubble - influence of sample material
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P03-12-02	Sonja Jovičević	Diagnostics of laser induced lead plasma
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Tue, 12 th July		Wed, 13 th July		Thu, 14 th July		Fri, 15 th July		Sat, 16 th July	
9:00		9:00	Opening	9:00	GL3 N. Balucani	9:00	GL4 C. Laux	9:00	GL6 V. Guerra
		9:15	GL1 A. Bogaerts	9:45	TL3 P. Diomedea	9:45	TL4 I. Topala	9:45	TL6 R. Plasil
		10:00	TL1 D. Marinov	10:15	HT4 B. Klarenaar	10:15	HT6 C. Pintassilgo	10:15	TL7 A. Shishpanov
		10:30	HT1 A. Gibson	10:30	HT5 I. Adamovich	10:30	HT7 T. Wegner		
10:45		10:45	Coffee Break	10:45	Coffee Break	10:45	Coffee Break	10:45	Coffee Break
		11:15	GL2 A. Piel	11:15	<i>Poster Session II</i>	11:15	GL5 J. de Urquijo	11:15	GL7 J.-M. Pouvesle
		12:00	TL2 A. Luque			12:00	TL5 J. Winter	12:00	TL8 N. Škoro
		12:30	HT2 E. Pannier			12:30	HT8 L.C.J. Heijmans	12:30	HT10 M. Vass
		12:45	HT3 A. Zotovich			12:45	HT9 F. Krčma	12:45	HT11 D. Mantovani
13:00	R e g i s t r a t i o n	13:00	Lunch	13:00	Lunch	13:00	Lunch ISC – ESCAMPIG Meeting	13:00	Closing Ceremony, awarding of the poster prize winners
		14:15	<i>Poster Session I</i>			14:15	<i>Poster Session III</i>	13:15	Lunch
		16:00	Coffee Break			16:00	Coffee Break		
		16:20	W I J. Santos Sousa	14:15	Excursion Red Stone Castle	16:20	W II N. Mason		
		16:40	W I G. Sretenovic			16:40	W II R. Celiberto		
		17:00	W I M. Klas			17:00	W II J.-P. Booth		
		17:20	W I M. Janda			17:20	W II S. Denifl		
		17:40	W I G. Trenchev			17:40	W II M. Danko		
					18:00	Free Time			
19:00	Welcome Reception	18:00	ISC – ICPIG Meeting Individual Dinner	19:00	Individual Dinner	18:30	Conference Dinner <i>Departure from hotel to Elesko</i>		

