

# Poster session II - Thu 14<sup>th</sup> July

## 01. Atomic and molecular processes in plasmas

P02-01-02	Giorgio Dilecce	Rate constants of quenching and vibrational relaxation in the $\text{OH}(A^2\Sigma^+, v=0,1)$ 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

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	$\text{CO}_2$ 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 $\text{CH}_4/\text{CO}_2/\text{He}$ mixtures: influence of power supply and helium concentration
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## 04. Plasma surface interaction (boundary layers, sheaths, surface processes)

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

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 $\text{He}^+$ in $\text{CF}_4$
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 <sub>2</sub> 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 <sub>4</sub> 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