

# Poster session III - Fri 15<sup>th</sup> 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 <sub>2</sub> 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 <sub>2</sub> O
P03-01-06	Martina Zámečníková	Formation of LiHe <sup>+</sup> by radiative association of metastable He(2 <sup>3</sup> P) with Li <sup>+</sup> involving triplet- $\pi$ 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 <sub>2</sub>
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 <sub>2</sub> 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 <sub>2</sub> -Ar glow discharge
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P03-05-02	Bratislav Obradovic	Effect of gas flow rate on atmospheric pressure barrier discharge in helium
P03-05-03	Branislav Pongrac	Optical diagnostics of ns-pulsed discharge generated in liquid phase
P03-05-04	Nevena Puač	Optical emission diagnostics of N <sub>2</sub> plasma used for textile pretreatment
P03-05-05	Stefan Ragg	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 <sub>2</sub> 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
<b>06. Plasma and discharges: theory and simulation</b>		
P03-06-01	Adriana Annusova	Highly vibrationally excited O <sub>2</sub> 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 Sigeneger	Influence of the CO <sub>2</sub> 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 stellerators
P03-06-07	Chyhin Vasyil	Influence of electronic processes on current pulsation of negative corona
<b>07. Self-organization in plasmas, dusty plasmas</b>		
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 Ussenov	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 <sub>2</sub> /CnH <sub>2n+2</sub> 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
P03-09-03	Kenji Yamaki	Effects of hydrogen content on mass density of a-C:H films deposited using Ar <sup>+</sup> H <sub>2</sub> + C <sub>7</sub> H <sub>8</sub> Plasma CVD

## 10. High pressure plasma sources

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

## 11. High pressure plasma sources

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

## 12. Laser produced plasmas

P03-12-01	Marijana Gavrilovič	Dynamics of laser induced bubble - influence of sample material
P03-12-02	Sonja Jovičević	Diagnostics of laser induced lead plasma