XXI Europhysics Conference on the

Atomic and Molecular
Physics of Ionized Gases

Tuesday 10 July to
Saturday 14 July 2012
at Castelo de Santiago da Barra
Viana do Castelo, Portugal
http://escampig2012.ist.utl.pt

PROGRAMME
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.

Conference organization

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.

International Scientific Committee

Jürgen Meichsner (chair), Germany
Annemie Bogaerts, BeNeLux, Baltic States and Nordic Countries
Stéphane Pasquiers, France, Andorra
Peter Hartmann, Hungary, Austria, Switzerland
Giorgio Dilecce, Italy, Greece, Israel
Vasco Guerra, Portugal
Gheorghe Dinescu, Romania, Bulgaria
Yuri Akishev, Russia, Belarus, Georgia, Ukraine, other former USSR States
Štefan Matejcik, Czech Republic, Poland, Slovakia
Mark Bowden, United Kingdom, Ireland
Dragana Maric, Serbia, Bosnia-Herz., Croatia, Montenegro, Slovenia
Francisco Gordillo-Vázquez, Spain

Local Organizing Committee

Vasco Guerra (chair), Lisboa
Pedro Almeida, Funchal, Madeira
Edgar Felizardo, Lisboa
André Janeco, Lisboa
Luís Lemos Alves, Lisboa
Mário Lino da Silva, Lisboa
Luís Marques, Braga
Carlos Daniel Pintassilgo, Porto
Rafael Saavedra, Lisboa
Miguel Santos, Lisboa
Social events

Welcome reception

Tuesday, July 10th, 19:00-20:00

The welcome reception will be held at Convento de São Domingos. The convent is located at Largo de São Domingos, 5 minutes walking both from the Castelo de Santiago da Barra congress centre and from the city center. It will include tasting Solar de Merufe green wine (“vinho verde”).

Wine tasting

Wednesday, July 11th, 19:00-19:30

A short wine tasting event will be held at Castelo de Santiago da Barra. Alvarinho wine of Palácio da Brejoeira will be served.

Conference dinner

Thursday, July 12th, 20:00-23:30

The conference dinner will take place at Quinta de São João, 5 kms from Viana do Castelo. Departure is scheduled to 19:30 from the congress centre.

Excursion

Friday, July 13th, 14:30-19:30

The conference excursion will be a guided tour to the historical center of Guimarães, declared World Heritage by UNESCO. Founded in the 4th century, Guimarães became the first capital of Portugal in the 12th century.

The William Crookes prize

ESCAMPIG XXI promotes the third edition of the “William Crookes' prize,” to be awarded to a mid-career researcher who has been judged to have made major contributions on the scientific topics covered by the ESCAMPIG.

The 2012 William Crookes Prize has been awarded to Dr. Antoine Rousseau, for his major contributions on the coupling plasma-catalysis and its application to air treatment.
ESCAMPPIG XXI conference programme

Tuesday, July 10th

16:30-18:30 Registration, castelo de Santiago da barra
19:00-20:00 Welcome reception, convento de S. Domingos

Wednesday, July 11th

8:45-9:15 Opening
9:15-10:45 Chairs: Juergen Meichsner and Raoul Franklin
GL.1 C. M. Ferreira, “Microwave driven air-water plasmas”
TL.1 Jan Benedikt, “Plasma chemistry in the effluent of a He/O2 microplasma jet: the role of VUV photons”
HT.1 Nikolay Dyatko, “Experimental and theoretical study of the influence of nitrogen admixture on characteristics of dc glow discharge in rare gases at intermediate pressures”
10:45-11:15 Coffee break
11:15-13:00 Chairs: Giorgio Dilecce and Mike Bowden
GL.2 Nikolai Trushkin, “Steady-state and pulsed-periodical regimes for generation of non-thermal plasma jets at atmospheric pressure”
TL.2 Ester Marotta, “Decomposition of mixtures of organic compounds in atmospheric plasma”
TL.3 Francisco Tabares, “Application of nitrogen-containing plasmas to Fusion Plasma Research”
13:00-14:30 Lunch
14:30-16:15 Poster session 1
16:15-16:45 Coffee break
16:45-19:00 Chairs: Antoine Rousseau and Elena Tatarova
HT.2 Uroš Cvelbar, “Plasma reshaping carbon: The role of plasma species in surface interactions with carbon”

**Workshop 1: Plasmas for sustainable environment**

W1.1 Claudia C. Luhrs, "Microwave Plasma Produced Materials For Energy Applications"

W1.2 Jayr Amorim, "Ozone Measurements by Absorption Spectroscopy Applying Dielectric Barrier Discharges at Atmospheric Pressure for Sugarcane Bagasse Treatment"

W1.3 Evgenia Benova, "Cylindrical and coaxial surface-wave-sustained plasma for environmental applications"

W1.4 María Dolores Calzada, Hydrogen production from ethanol decomposition by a surface wave discharge at atmospheric pressure"

W1.5 Igor Kossyi, "Multispark discharge in water as a method of environmental sustainability problems solution"

W1.6 Richard Engeln, "Plasma-assisted CO2 processing for energy storage"

W1.7 Xavier Duten, "Diphasic process combining a fluidized catalytic bed and a plasma at atmospheric pressure for the degradation of volatile organic compounds"

19:00-19:30 Wine tasting, castelo de Santiago da Barra

**Thursday, July 12th**

9:00-10:45 Chairs: Štefan Matejčík and Annemie Bogaerts

GL.3 Roberto Celiberto, “Electron-molecule collision processes in non-equilibrium molecular plasmas”

TL.4 Olivier Guaitella, “N and O atoms adsorbed under plasma exposure: a model system to investigate surface reactivity”

TL.5 João Santos Sousa, “Cold atmospheric pressure plasma jets as sources of reactive oxygen species for biomedical applications”

10:45-11:15 Coffee break

11:15-13:00 Chairs: Peter Hartmann and Yuri Akishev

GL.4 Michael Bonitz, “Complex plasmas - a laboratory for self-organization”
TL.6  Thierry Callegari, “Generation, annihilation and motion of self-organized filaments in dielectric barrier discharges”

HT.3  Pedro Almeida, “Self-organization as an intrinsic feature of DC glow microdischarges: modelling appearance of different spot patterns”

HT.4  Tomas Hoder, “Comparison of pulsed and sinusoidal operated barrier discharges”

13:00-14:30 Lunch

14:30-16:15 Poster session 2

16:15-16:45 Coffee break

16:15-19:00 (Fabrizio Esposito and Mário Lino da Silva)

HT.5  Arnaud Bultel and Julien Annaloro, “Elaboration of collisional-radiative models: illustration and results for flows related to planetary entry situations into Earth and Mars atmospheres”

Workshop Boris F. Gordiets: Air plasma chemistry

W2.1  Carlos Matos Ferreira and Mario Capitelli, “The contributions of B. Gordiets to plasma kinetics”

W2.2  António Varandas, “Recent progress on accurate ab initio-based potentials and dynamics: atmospheric NxOy triatomic systems and beyond”

W2.3  Annarita Laricchiuta, “Electron-impact excitation cross sections for air kinetics”

W2.4  Fabrizio Esposito, “Rovibrationally detailed cross sections of atom-diatom collisions concerning air species”

W2.5  Mário Lino da Silva, “Modeling of diatom-diatom collisions using the Forced Harmonic Oscillator method, and application to high temperature kinetics applications”

W2.6  Christophe Laux, “Radiative transition probabilities and electron-impact excitation cross-sections for the VUV systems of N_2”

20:00-23:30 Conference dinner, Quinta de S. João
Friday, July 13th

9:00-10:45 Chairs: Francisco Gordillo-Vázquez and Juergen Meichsner

GL.5 Ute Ebert, “Thunderstorms as electron accelerators and the discharge zoo above the clouds”

GL.6 Antoine Rousseau, Crookes Prize Lecture, “Streamers and discharges at liquid and solid interfaces”

HT.6 Julian Schulze, “Ionization by drift and ambipolar electric fields in electronegative capacitive radio frequency plasmas”

10:45-11:15 Coffee break

14:30-16:15 Poster session 3

13:00-14:30 Lunch

14:30-19:30 Excursion, Guimarães

Saturday, July 14th

9:00-10:45 Chairs: Stéphane Pasquiers and Vasco Guerra

GL.7 Kostya Ostrikov, “Small energy for small things: plasma nanoscience for a sustainable future”

TL.7 Bogdana Mitu, “Plasma deposition of carbon-based materials: diagnostic studies”

TL.8 Frantisek Krcma, “Generation of pin hole discharges in liquids”

10:45-11:15 Coffee break

11:15-12:30 Chairs: Dragana Maric and Gheorghe Dinescu

HT.7 Mark J. Kushner, “Control of Electron, Ion and Photon Distributions in Low Pressure Plasmas Using Pulsed Power”

HT.8 Masaru Hori, “High-speed synthesis and crystalinity control of nanographene using inliquid plasma in alcohol”

GL.8 William G. Graham, “Plasmas in Liquids and their Applications”

12:30-13:00 Closing
Poster session 1

Wednesday, July 11th, 14:30-16:15

1. Atomic and molecular processes in plasmas

P1.1.1 Jaime de Urquijo, José Luis Hernández-Ávila, Eduardo Basurto, Gerardo Ruiz-Vargas and Antonio Juárez, “Effective ionization coefficients and limiting field strength of SF₆- N₂O and CF₃-SF₆-N₂ mixtures”

P1.1.2 Toshitsugu Gunji, Satoru Iizuka, “Conversion of CO₂ to methane by a low-pressure hollow-cathode discharge”

P1.1.3 Miguel Jiménez-Redondo, Esther Carrasco, Víctor J. Herrero, Isabel Tanarro, “Energy distributions of neutrals and ions in H₂/D₂ hollow cathode discharges”

P1.1.4 V. Laporta, J. Tennyson, R. Celiberto, “Resonant vibration excitation cross sections and rate coefficients for electron–CO and CO₂ scattering”

P1.1.5 Koichi Sasaki and Renge Asakawa, “Optical emission intensity of molecular hydrogen in a recombining hydrogen plasma”

P1.1.6 A. Luque, F. J. Gordillo-Vázquez, “Mesospheric electric breakdown and delayed sprite ignition caused by associative electron detachment”

P1.1.7 Esther Carrasco, Víctor J. Herrero, Isabel Tanarro, “Time resolved diagnostics and kinetic modeling of the ignition transient of a H₂+10%N₂ square wave modulated hollow cathode discharge”

P1.1.8 Ž. Nikitović, V. Stojanović and Z. Lj. Petrović, “Modeling in Ar/H₂ discharge”

P1.1.9 C. Foissac, J. Kríštof, A. Annušová, P. Veis and P. Supiot, “Kinetics of N₂(B³Πg) and N₂(C³Πu) states in N₂-Ar discharges sustained by a RF helical coupling device”

P1.1.10 A. Annušová, C. Foissac, J. Kríštof, P. Veis and P. Supiot, “Vibrational Distribution Function of N₂(C³Πu, ν’') state in N₂-Ar discharge created by a RF helical coupling device”

P1.1.11 D. A. Little, J. Tennyson, “Electron Collisions with N₂⁺: Temperature Dependent Processes”

P1.1.12 S. Lovascio, N. Blin-Simiand, L. Magne, F. Jorand, P. Jeanney, S. Pasquiers, “Ethanol decomposition in Air Dielectric Barrier Discharges: experimental study and kinetic modelling”
2. Transport phenomena, particle velocity distribution function

P1.2.1 J. Amorim and J. Loureiro, “Broadening of hydrogen lines produced by $\text{H}_2^+ + \text{H}_2 \rightarrow \text{H}_3^+ + \text{H}$ reaction with an energy-dependent cross section”

P1.2.2 B. Bernecker, A. Piquemal, “Interactive diagnostics for a pulsed electron beam transport in plasma”

P1.2.3 S. Mazouffre, D. Gerst, S. Cuynet, M. Cirisan, “Plasma drift in a low-pressure magnetized RF discharge”

P1.2.4 G. Afsahi, H. Behnejad, A. H. Jalili, L. A. Viehland, “Gaseous ion mobility of $\text{SO}_2^+$ ions in He and Ar”

P1.2.5 Hirotake Sugawara, “Stochastic scattering process to induce inward electron flow in electron conduction path between antiparallel gradient magnetic fields”

P1.2.6 A. Takeda, N. Ikuta, “PT and SST Electron Energy Distribution and Transport Properties in Lucas-Saelee Model Gas”

P1.2.7 Y. Okuyama, M. Sabo, S. Suzuki, Š. Matejčík, H. Itoh, “Measurement of negative ion mobility in ultra high purity $\text{O}_2$ at atmospheric pressure”

P1.2.8 I. V. Schweigert, A. L. Alexandrov, “Afterglow of rf discharge with nanoparticles”

P1.2.9 A. Janeco, N. R. Pinhão, V. Guerra, “Study of the electron kinetics in He/CH$_4$/CO$_2$ mixtures for Syngas production”

P1.2.10 R. Rincón, H.V. Nguyen, N. Bonifaci, F. Aitken, V. M. Atrazhev, K. van Haeften, “Mobility of negative and positive ions in liquid and gaseous Helium at 4.5 K under different pressures”

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

P1.4.1 Chyhin Vasyl, “Physical mechanisms of negative corona complicated current pulsation”


P1.4.7  S. Chekour, A. Tahraoui, B. Zaham, “Dust grains trapping in magnetized electrostatic sheaths”


P1.4.9  M. Palmucci, R. Snyders, S. Konstantinidis, “Time- and energy-resolved mass spectrometry study of a reactive high-power impulse magnetron sputtering discharge”

P1.4.10  D. M. Thomas, C. T. N. Willis, J. E. Allen, M. Coppins, “The Bohm criterion for flowing plasmas”

P1.4.11  M. Inoue, M. Ito, T. Ohta, M. Hori, “Film properties of indium-zinc-oxide films using RF magnetron sputtering evaluated by optical diagnostics in gas phase”

P1.4.12  Kishor Kumar K, L. Couedel, C. Arnas and F. Onofri, “Tungsten nanoparticle formation in plasma discharges”

5. Plasma diagnostics

P1.5.1  J. Y. Zhang, R. Ichiki, Y. Kawai, “Sheath potential measurements in negative ion plasma”

P1.5.2  A. Nikiforov, L. Li, Q. Xiong, N. Britun, R. Snyders, Ch. Leys, X. P. Lu, “Time and spatial resolved laser induced spectroscopy of O atoms and OH radicals in 13.56 MHz RF plasma jet”

P1.5.3  J. Muñoz, J. Margot, and M. Chaker, “Absorption spectroscopy measurement of argon metastable and resonant atomic densities in a low pressure Ar/N_2 ICP”

P1.5.4  Jean-Paul Booth, Nshant Sirse, Quentin Delivre and Pascal Chabert, “Gas temperature and electron density measurements in Ar and Ar-Cl_2 ICP discharges”

P1.5.5  M. J. Sadowski, K. Czaus, K. Malinowski, E. Skladnik-Sadowska, J. Zebrowski, “Energy-, mass- and time-resolved measurements of fast ions emitted from plasma discharges”
P1.5.6 M. A. Ridenti, J. A. Souza-Corrêa, J. Amorim, “Measurements of the Ar$^+$ energy distribution from an atmospheric surface wave discharge in pure Ar and Ar-O$_2$ mixture”

P1.5.7 L. Li, A Nikiforov, Q. Xiong, N. Britun, R. Snyder, X. Lu and C. Leys, “LIF spectroscopy of OH radicals and the electron temperature in the effluent of atmospheric RF JET in Ar-H$_2$O mixtures”

P1.5.8 G. Wattieaux, L. Boufendi, “Electrical characterization of the correlation between the dust particles size and the plasma sheath impedance in a capacitively coupled radiofrequency dusty discharge”

P1.5.9 M. Kettlitz, H. Höft, T. Hoder, K.-D. Weltmann, and R. Brandenburg, “Comparison of pulsed and sinusoidal operated barrier discharges”

P1.5.10 A. Mahjoub, A. Gouveia, N. Carrasco, C.D. Pintassilgo, L. Marques, M. M. D. Ramos, L. L. Alves, G. Cernogora, “RF capacitively coupled plasmas in N$_2$-H$_2$ mixtures”

P1.5.11 J. Winter, A. Hecimovic, T. de los Arcos, M. Böke, V. Schulz-von der Gathen, A. Pflug, “Instabilities in high power pulsed magnetron plasmas”

P1.5.12 N. Britun, T. Godfroid, and R. Snyders, “Time-resolved optical emission spectroscopy of a surfaguide flowing gas microwave discharge”

P1.5.14 S. Hübner, E. A. D. Carbone, J. M. Palomares, J. J. A. M. van der Mullen, “Approaching the edges of a surfatron microwave plasma by Thomson scattering”

P1.5.15 Mark W. Kelly, James C. Richley and Michael N.R. Ashfold, “C/H/O plasmas for diamond growth: density measurements of key plasma species using cavity ring down and optical emission spectroscopy”

P1.5.16 Tsv K Popov, M Mitov, A Bankova, P Ivanova, M Dimitrova, S Rupnik, J Kovačič, T Gyergyek, M Čerček, F M Dias, “Langmuir probe evaluation of the negative ion density in oxygen gas discharge magnetized plasma”

P1.5.17 A.V. Pipa, T. Hoder, J. Koskulics, M. Schmidt, R. Brandenburg, “Experimental estimation of capacitances in pulsed barrier discharges”

P1.5.18 T. Hoder, J. Paillol, R. Brandenburg, “On the discharge mechanism and electric field strength development in negative corona Trichel pulses in atmospheric pressure air”
P1.5.19 S. Ponduri, S. Welzel, F. Brehmer, M. Ma, M.C.M. van de Sanden, R. Engeln, “Fuel synthesis through CO$_2$ reduction in a plasma expansion”

P1.5.20 T. Defais, C. Noël, T. Belmonte, G. Henrion, “Threshold ionization mass spectrometry and optical emission spectroscopy characterization of Ar/O$_2$/N$_2$ microwave discharge”

P1.5.21 Kh. Tarnev, I. Koleva, St. Lishev, Ts. Paunska, S. Iordanova, A. Shivarova, “Mode transition in a small-radius planar-coil inductively-driven discharge”

6. Plasma and discharges theory and simulation


P1.6.2 Mustapha Zakari, Hubert Caquineau, Pierre Ségur, Frédéric Bras, Nicolas Gherardi, Nicolas Naudé and Pierre Descamps, “Numerical modelling of an atmospheric pressure plasma reactor using control volume methods and unstructured grids”

P1.6.3 S. Mohr, E. Schuengel, J. Schulze, U. Czarnetzki, “The influence of field reversals on the DC self bias in capacitive RF-discharges”

P1.6.4 M. M. Becker, F. Sigeneger, D. Loffhagen, “On the description of electron transport in fluid models”

P1.6.5 P. Diomede, P. A. Delattre, E. V. Johnson, J. P. Booth, S. Longo, D. J. Economou, M. Capitelli, “Hybrid model of parallel plate RF discharges in H$_2$: effect of DC and tailored voltage waveforms”

P1.6.6 R. Westermann, R. Engeln, M.C.M. v.d. Sanden, “Processes in subsonic expanding thermal argon plasmas”

P1.6.9 Z. Bonaventura, M. Duarte, A. Bourdon, M. Massot, S. Descombis, T. Dumont, “Numerical simulation of the interaction of two streamer discharges in air”

P1.6.10 F. Tholin, A. Bourdon, “Numerical simulation of successive nanosecond pulsed discharges in air at atmospheric pressure”


P1.6.13 M. Baeva, A. Bösel, J. Ehlbeck, D. Loffhagen, “Self-consistent 2D fluid modelling of a microwave excited plasma in argon”

7. Self-organization in plasmas, dusty plasmas
P1.7.1 B. Fleury, N. Carrasco, T. Gautier, A. Mahjoub, G. Cernogora, “On the influence of CO on a dusty N$_2$-CH$_4$ CCP RF discharge”

P1.7.2 V. Nosenko, A. V. Ivlev, G. E. Morfill, “Microstructure of a liquid complex (dusty) plasma under shear”

P1.7.3 A. Melzer, A. Schella, J. Schablinski, D. Block, A. Piel, “Phase transitions in finite particle clusters in dusty plasmas”


P1.7.5 A. Gouveia, A. Mahjoub, N. Carrasco, L. Marques, L.L. Alves, G. Cernogora, C.D. Pintassilgo, “Experimental characterization of capacitively coupled radio-frequency discharges in N$_2$-CH$_4$”

P1.7.6 Bp Pandey, S. V. Vladimirov and Aa Samarian, “Shear driven instabilities in dusty plasmas”

P1.7.7 R. Wild, L. Stollenwerk, “Breakdown of order in a self-organised barrier discharge”

P1.7.8 J. T. Ouyang, S. W. Xu, X. X. Duan, I. Aslam and F. He, “Evolution of filamentary pattern in glow dielectric barrier discharge system”

8. Upper atmospheric plasmas and space plasmas


P1.8.2 Bp Pandey and S. V. Vladimirov, “Plasma magnetisation and Farley-Buneman instability”

P1.8.3 A. G. Oreshko, “The acceleration of charged particles in plasma at the separation of charges and generation of electrical domains”

P1.8.4 A. G. Oreshko, “The effects of anomalous passing of ball lightning through absorbing filters and generation of dark spherical formation”

P1.8.5 D. Resendes, J. Loureiro, M. Lino da Silva and B. Lopez, “Gaussian superposition model for electron density profiles of hypersonic entries in Earth’s atmosphere”

9. Low pressure plasma sources

P1.9.1 S. I. Gritsinin, A. M. Davydov and I. A. Kossyi, “Advances of contemporary gas-discharge fundamental physics and based on them new microwave plasma sources”
Yoshio Watanabe and Tomohiro Yamaguchi, “Effect on the electrode characteristics by the metal ring encircling the electrode”

Mikhail Pustylnik, Lujing Hou, Alexei Ivlev, Leonid Vasilyak, Hubertus Thomas, Gregor Morfill and Vladimir Fortov, “High-voltage nanosecond pulse discharge in a low-pressure preionized medium”

L. Schiesko, P. Franzen, U. Fantz and NNBI Team, “Investigation of the plasma parameters in the expansion region of a negative hydrogen ion source for fusion”

S. Briefi, U. Fantz, G. Lieder, “Investigations of indium halides as radiator in ICPs for lighting applications”

Vasco Guerra, Namjun Kang, Minwook Lee, Soo-ghee Oh and André Ricard, “Kinetics of the nitrogen pink afterglow in the presence of oxygen impurities”

J. Schulze, E. Schüngel, S. Siepa, U. Czarnetzki, “Coupling effects in inductive discharges with RF substrate biasing”

Ts. Paunska, A. Shivarova, Kh. Tarnev, “2D self-consistent model of a hydrogen discharge inductively driven by a planar coil”

Z. El Otell, M. D. Bowden, N. St. J. Braithwaite, “A simple optical emission spectroscopy technique for detecting EEDF changes in low-pressure pulsed-RF plasma”

10. High pressure plasma sources

Ronald M. Gilgenbach, David Chalenski, Y.Y. Lau, Sonal Patel, Adam Steiner, David Yager-Eliorraga, Matt Weis, Peng Zhang, Ian Rittersdorf and Jacob Zier, “Magneto Rayleigh-Taylor instability in dense plasmas”

A. Hamdan, T. Belmonte, C. Noël, G. Henrion, “Bubble dynamics created by plasma in heptane”

S.I.Gritsinin, A.M.Davydov, I.A.Kossyi, “Microwave coaxial plasma source (physics and applications)”

Sebastien Mitea, Monika Zeleznik, Mark Bowden, Paul May, Neil Fox, Chantal Fowler and Bob Stevens, “Diamond-based microhollow cathode discharges”

T. Verreycken, R. M. van der Horst, A. H. F. M. Baede, E. M. van Veldhuizen, P. J. Bruggeman, “Time and spatially resolved OH density in a nanosecond pulsed discharge in atmospheric pressure He-H₂O mixtures”

V. Uvarin, D. Kuznetsov, S. Lyubutin, B. Slovikskii, “Compact generator of 240 kV atmospheric pressure nanosecond discharge”
P1.10.10 H. Akashi, T. Yoshinaga, A. Oda, “Effect of secondary electron emission on atmospheric pressure oxygen dielectric barrier discharges”

P1.10.11 N. A. Bogatov, “Threshold measurements of discharges from floating metal particles in a homogeneous electric field in air”

Poster session 2

Thursday, July 12th, 14:30-16:15

1. Atomic and molecular processes in plasmas

P2.1.1 S. Béchu, A. Soum-Glaude, A. Bès, P. Svarnas, M. Bacal, A. Lacoste, “Surface mechanisms investigation for negative ion production”

P2.1.2 C. Küllig, K. Dittmann and J. Meichsner, “High and low electronegativity mode in cc-rf oxygen plasma”

P2.1.3 S. Suzuki, Y. Koizumi, H. Itoh, “Collisional quenching rate coefficient of N2(A^3Σ_u^+) by xylene”

P2.1.4 Jelena Maljkovic, F Blanco, Gustavo Garcia, Bratislav Marinkovic and Aleksandar Milosavljevic, “Relative differential cross sections for elastic electron scattering by furan”

P2.1.5 V. Stojanović, Z. M. Raspopović, J. Jovanović, Ž. Nikitović and Z. Lj. Petrović, “Detachment rate for negative ions in Ar/BF3 discharges”

P2.1.6 G. Bandelow, R. Schneider, J. Meichsner, “Modeling and sensitivity studies of cc-rf CF4 plasma”

P2.1.7 H. Terças, J. T. Mendonça and V. Guerra, “Classical rotons due to light fluctuation and plasma-like effects in cold atomic traps”

P2.1.8 Alexandre Chicheportiche, Bruno Lepetit, Malika Benhenni, Florent Xavier Gadéa and Mohammed Yousfi, “Integral cross sections of He+/He and He2+/He interaction systems for optimization of low temperature plasma sources for biomedical uses”

P2.1.9 M. Asandulesa, I. Topala, Y. M. Legrand, M. Dobromir, N. Dumitrascu, “About the polymerization of aromatic compounds under atmospheric plasma conditions”

P2.1.10 B. Lopez, M. Lino da Silva, V. Guerra, J. Loureiro, “Coupled hydrodynamic/state-specific high-temperature modeling of nitrogen vibrational excitation and dissociation”
3. Physical basis of plasma chemistry

P2.3.1 Stefan Tinck, Werner Boullart, Annemie Bogaerts, “Modeling SiCl₄/O₂ plasmas used for depositing SiO₂ coatings or mask damage recovery”

P2.3.2 H. Testrich, V. Stranak, R. Hippler, J. Meichsner, “The reactivity of thin plasmapolymerized ethylenediamine films”

P2.3.3 V. Mazankova, V. Sazavska, L. Radkova, F. Krcma, “Plasmachemical removal of corrosion layers from brass”

P2.3.4 D. Piroi, M. Magureanu, N.B. Mandache, V.I. Parvulescu, “Toluene oxidation by non-thermal plasma combined with palladium catalysts”

P2.3.5 Kanako Sekimoto and Mitsuo Takayama, “Formation of hydrogen cyanide HCN under limited discharge conditions in non-reduced ambient air”

P2.3.7 I. Topala, R. Jijie, B.G. Rusu, V. Pohoata, N. Dumitrascu, “Structure-function relationships in the case of plasma modified proteins”

P2.3.8 N. Derkaoui, C. Rond, O. Brinza, M. Wartel, A. Gicquel, “Chemical kinetics of H₂/CH₄ plasmas for high pressure/high power growth conditions used in diamond MPACVD”

P2.3.9 E. Gazza, E. Marotta, C. Ceretta, E. Ceriani, V. Shapoval, M. Schiorlin and C. Paradisi, “Characterization of non-thermal atmospheric plasmas applied for the degradation of organic pollutants in air and in water with Optical Emission Spectroscopy (OES)”

P2.3.10 N. R. Pinhão, A. Janeco, L. M. Redondo, H. Canacsinh, J. Branco, “Influence of the voltage waveform of a DBD discharge on the conversion of CH₄ and CO₂”

P2.3.11 J. Meichsner and H. Testrich, “Gas phase products and kinetics in ethylenediamine plasma polymerization”

P2.3.12 D. C. Schram, “Plasma chemistry and astrophysical plasmas: differences and similarities”

P2.3.13 L. Nemcova, F. Krcma, C. P. Kelsey, W. G. Graham, “Enhancement of plasma generated H₂O₂ in water by the addition of ethanol”

P2.3.14 J. Jánský, A. Bourdon, “Simulation of helium discharge dynamics in thin dielectric tubes at atmospheric pressure and discharge interaction with tube surface”

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

P2.4.1 André Ricard and J.P Sarrette, “Transmission through hollow tubes of N-atoms produced by N₂ and Ar-1%N₂ flowing microwave afterglows”

P2.4.2 F. Kassubek, J. Lehmann, “Application of entropy production maximisation to evaporation of atoms”

P2.4.3 A. Groza, A.Surmeian, C.Diplasu, C.Luculescu, A.Tempez, M.Ganciu, “Evidence of aluminum oxides formation at polymer/Al substrate interface in atmospheric pressure discharges”

P2.4.4 N. Brémare, S.Y. Hyun, P. Boubert, “High enthalpy air plasma / SiC surface interactions”
P2.4.5 Thomas Tillocher, Judith Golda, Philippe Lefaucheux, Bertand Boutaud, Pierre Ranson and Rémi Dussart, “Investigations in SF$_6$ and Cl$_2$/Ar plasmas used for titanium deep etching by means of mass spectrometry”

P2.4.6 J. M. Díaz Cabrera, M. V. Lucena Polonio, J. I. Fernández Palop, R. Morales Crespo, M. A. Hernández, A. Tejero-del-Caz and J. Ballesteros, “Experimental study of the transition of the ion current to a cylindrical Langmuir probe from the orbital to the radial theory”

P2.4.8 A Ahmad, P Kumar, C Pardanaud, M Carrère, J M Layet, D Eon, A Gicquel, R Engeln and G Cartry, “Negative-ion surface production in hydrogen plasma: production mechanisms on different carbon surfaces”

P2.4.9 D. Marinov, V. Guerra, O. Guaitella, A. Rousseau, “Ozone production in O$_2$ plasma at low pressure: surface or gas phase mechanism?”

P2.4.10 A. Granier, S. Jacq, D. Li, M. Carette, A. Goullet, “Investigation of plasma surface interactions in pulsed O$_2$/TTIP low pressure ICP plasma by time resolved optical emission spectroscopy”

P2.4.11 D Marinov, D Lopatik, O Guaitella, M Hübner, Y Ionikh, J Röpcke and A Rousseau, “Surface vibrational relaxation of N$_2$ studied by infrared titration with time resolved Quantum Cascade Laser diagnostics”


5. Plasma diagnostics

P2.5.1 S. S. Ivković, B. M. Obradović, and M. M. Kuraica, “Electric field measurement in multipeak mode of DBD in helium-hydrogen mixture”

P2.5.2 N. Cvetanović, B. M. Obradović, M. M. Kuraica, “Detection of energetic hydrogen atoms in a pulse glow discharge”

P2.5.3 Bang-Dou Huang, Xi-Ming Zhu, Wen-Cong Chen, Yi-Kang Pu, “Spatially-resolved measurement of electron density in a microwave-excited Ar/Kr split-ring resonator microplasma”
P2.5.5 G. Dilecce, P.F. Ambrico, M. Simek and S. De Benedictis, “OH density measurement by LIF and time-resolved broad band absorption spectroscopy in atmospheric pressure DBD with He(Ar)-H$_2$O and small O$_2$ additions”

P2.5.6 M. Šimek, G. Dilecce, V. Prukner, P.F. Ambrico, S. De Benedictis, V. Babický, J. Schmidt, “Temporal evolution of the N$_2$(C$^3$Π_u) vibrational levels produced by single surface streamer in N$_2$-O$_2$ mixtures”

P2.5.7 A Surmeian, C Diplasu, A Groza, A Tempez, P Chapon, M Ganciu, “The afterglow plasma of pulsed hollow cathode discharge - a high density metastable source”

P2.5.8 A. Soum-Glaude, S. Béchu, A. Bès, K. Hassouni, A. Lacoste, “H atom density measurement using a combination of optical emission spectroscopy and Langmuir probes diagnostics”

P2.5.9 C. Küllig, T. Wegner, K. Dittmann and J. Meichsner, “Instabilities in cc-rf oxygen plasma”

P2.5.10 M. Dünnbier, J. Winter, S. Iseni, A. Schmidt-Bleker, K-D Weltmann, S. Reuter, “Space resolved ozone detection in the effluent of a cold atmospheric pressure plasma jet”

P2.5.11 S. Nemschokmichal, J. Meichsner, “Temporal and spatial resolved density of the metastable N$_2$(A$^3$Σ$^+_u$) molecule in barrier discharges”

P2.5.12 Isabelle Géraud-Grenier, François Faubert and Véronique Massereau-Guilbaud, “Generation and characterization of hydrogen amorphous carbon nitrile particles and mass spectrometric study of the CH$_4$/N$_2$ radio-frequency plasma”

P2.5.13 S. Jacq, C. Cardinaud, L. LeBrizoual, A. Granier, “Kinetics of H atoms in pulsed CH$_4$ – H$_2$ plasmas”

P2.5.15 Zh. Kiss’ovski, A. Ivanov, St. Kolev, “Probe diagnostics of a small microwave discharge at atmospheric pressure”

P2.5.16 Erik Wagenaars, Timo Gans, Deborah O’Connell, Kari Niemi, “Atomic nitrogen measurements in an atmospheric-pressure plasma jet”

P2.5.17 M. Bogaczyk, G. B. Sretenović, H.-E. Wagner, “Townsend-like and glow-like diffuse discharge modes in barrier discharges operating in helium”

P2.5.18 M. Bogaczyk, S. Nemschokmichal, G. B. Sretenovic, J. Meichsner, H.-E. Wagner, “Spatio-temporally resolved investigation of surface charges, N$_2$(A$^3$Σ$^+_u$) metastables and the discharge development in diffuse N$_2$ barrier discharges”
6. **Plasma and discharges theory and simulation**

P2.6.1 F. Pechereau, J.Jánský, A.Bourdon, “Numerical study of the influence of plane dielectric obstacles in the path of a streamer discharge in air at atmospheric pressure”


P2.6.3 G. J. M. Hagelaar, J. Gregório, D. Douai, “Modeling of ITER glow discharge cleaning”

P2.6.4 C. Rond, N. Derkaoui, R. Salem, F. Benedic, A. Michau, K. Hassouni, A. Gicquel, “Modelling of microwave plasma used for thick highly boron doped diamond deposition”

P2.6.5 A. Markosyan, S. Dujko, U. Ebert, “High order fluid model for ionization fronts in streamer discharges”

P2.6.6 P. Simon, A. Bogaerts, “Modelling of an atmospheric pressure dc glow discharge”

P2.6.7 J. Claustre, M. Paulin, B. Chaudhury, G. Fubiani, J.P. Boeuf, “Particle-In-Cell Monte Carlo Collision model on GPU (Graphics Processing Units) - Application to a low temperature magnetized plasma”

P2.6.8 B. Chaudhury, J.P. Boeuf, G. Fubiani, J. Claustre, “Currents through a magnetic filter in a low temperature plasma from a Particle-In-Cell Monte Carlo Collisions model”

P2.6.9 L. Garrigues, N. Oudini, G.J.M. Hagelaar, and J.P. Boeuf, “Ion and fast atom beams in an End-Hall ion source: a numerical study”

P2.6.10 L. L. Alves, B. Debord, F. Gérôme, R. Jamier, F. Benabid, “Modelling of microwave-driven micro-plasmas in HCPCF”
P2.6.11 N. Oudini, A. Meige, A. Aanesland, J.L. Raimbault, P. Chabert, L. Garrigues, and G.J.M. Hagelaar, “One-dimensional Particle-In-Cell simulations of the sheath dynamic in ion-ion plasmas”

P2.6.12 L. Garrigues, P. Coche, G.J.M. Hagelaar, and J.P. Boeuf, “A particle test Monte-Carlo model to understand electron-wave interactions in a Hall Effect Thruster”

P2.6.13 Raoul Franklin, “Two Dimensional Plasma Configurations”

P2.6.15 José Gregório and Leanne Pitchford, “Modelling of cathode boundary layer discharges in Kr/Cl₂ mixtures”

7. Self-organization in plasmas, dusty plasmas

P2.7.1 H. Tawidian, M. Mikikian, T. Lecas, I. Géraud-Grenier, V. Massereau-Guilbaud, “Dust particle growth kinetics in a sputtering discharge using Ar or Kr”

P2.7.3 V. I. Arkhipenko, Y. A. Safronau, L. V. Simonchik, I. M. Tsuprik, “Self-organization of the anode spots and fluctuations of dc glow discharge parameters in atmospheric pressure helium”

P2.7.4 Dmitry Lopatik, Frank Hempel, Brankica Sikimić, Ilija Stefanović, Jörg Winter and Jürgen Röpcke, “On the hydrocarbon kinetics in dust producing symmetrically driven rf plasmas”

P2.7.5 Shinya Iwashita, Giichiro Uchida, Julian Schulze, Edmund Schüngel, Peter Hartmann, Kazunori Koga, Masaharu Shiratani, Zoltán Donkó, Uwe Czarnetzki, “Development of dust particle manipulation method in capacitively coupled plasmas via the Electrical Asymmetry Effect”

P2.7.6 L. D'yachkov, S. Savin, M. Myasnikov, O. Petrov, V. Fortov, A. Kaleri, A. Borisenko, “Coulomb clusters in a cusp magnetic trap under microgravity condition”

P2.7.7 O. Levasseur, A. Bouarouri, N. Naudé, R. Clergereaux, N. Gherardi and L. Stafford, “Organization of dielectric barrier discharges in the presence of structurally-inhomogeneous wood substrates”

8. Upper atmospheric plasmas and space plasmas

P2.8.1 E. Schüngel, S. Mohr, J. Schulze, U. Czarnetzki, “Capacitive H₂ and H₂SiH₄ plasmas driven by electrically asymmetric voltage waveforms”

P2.8.2 A. V. Klochko, J. Lemainque, S. M. Starikovskaia, “Experimental study of fast gas heating in a capillary nanosecond discharge”
P2.8.3  N. Sasaki, M. Nogaku, A. Yoshimura, Y. Uchida, “Characteristics of small-bore glow discharge positive columns in neon-nitrogen gas mixtures”

P2.8.5  L. Colina Delacqua, M. Redolfi, A. Michau, G. Lombardi, K. Ouaras, K. Hassouni, X. Bonnin, “Design and qualification of a low pressure / high density ECR dipolar plasma reactor used for synthesis of mixed material dust”

P2.8.6  A. Lacoste, S. Béchu, G. Regnard, A. Bès, J. Pelletier, “Top-to-tail microwave plasma sources with extended operating conditions”


P2.8.8  A. Oda, H. Kousaka Numerical, “Simulation on fundamental properties in low-pressure radio-frequency CH₄ plasmas for diamond-like carbon films”


P2.8.10 A. Aanesland, L. Popelier, N. Oudini and P. Chabert, “Space charge neutralisation of continuous dual ion beams”

10. High pressure plasma sources

P2.10.2 R. Rincón, M. Sáez, M. D. Calzada, “Argon plasmas produced by a microwave (2.45 GHz) TIAGO torch as function of gas flow and microwave input power”

P2.10.3 Yu. Akishev, G. Aponin, M. Grushin, V. Karalnik, A. Petryakov, N. Trushkin, “Three stages in development of a surface DBD in dense gases excited by a single negative high-voltage pulse”

P2.10.4 Helena Tresp, Malte U. Hammer, Kristian Wende, Mareike A. Ch. Hänisch, Jörn Winter, Ansgar Schmidt-Bleker, Kai Masur, Thomas von Woedtke, Klaus-Dieter Weltmann and Stephan Reuter, “Plasma-generated reactive species in liquids by a gas shielded atmospheric pressure plasma jet effluent”

P2.10.5 S. Stepanyan, I. Kosarev, S. Starikovskaia, “Electric field evolution in surface nanosecond dielectric barrier discharge”

P2.10.6 L. Simonchik, L. Pitchford, Y. Safronau, “Effect of the cathode surface temperature on the cathode fall layer parameters”

P2.10.7 F. Brehmer, S. Welzel, M. van der Schans, S. Ponduri, M.C.M. van de Sanden, R. Engeln, “CO₂ dissociation studies in dielectric barrier discharges”
P2.10.8 V. Stepanova, J. Vorac, P. Slavicek, “Modification of the properties of animal fibers using dielectric barrier discharge at atmospheric pressure”

P2.10.9 M. Teodorescu, E. R. Ionita, M. Bazavan, G. Dinescu, “Current-voltage characteristics of a RF plasma jet discharge with bare electrodes at low and atmospheric pressure”

P2.10.10 M. Santos, C. Noël, T. Belmonte, L. L. Alves, “Surface-wave discharges in helium at atmospheric pressure: simulations vs experiments”

**Poster session 3**

**Friday, July 13th, 11:15-13:00**

1. Atomic and molecular processes in plasmas

P3.1.1 A. Bekstein, J. de Urquijo, F. J. Gordillo-Vázquez, G. Ruiz-Vargas, “Influence of pressure on the formation of negative ions in water vapour”


P3.1.3 A. Bekstein, C. Villavicencio, J. Figueroa, J. de Urquijo, “Electron detachment in N₂O”

P3.1.4 Charles Klett, Zixian Jia, Sylvain Touchard, Arlette Vega, Michael Redolfi, Khaled Hassouni and Xavier Duten, “Oxidation of an acetaldehyde/acylene equimolar mixture by an atmospheric non-thermal plasma discharge”

P3.1.6 E. A. D. Carbone, J. M. Palomares, S. Hübner, J.J.A.M. van der Mullen, “Unravelling in situ atomic and molecular kinetics by LCIF and Thomson scattering”

P3.1.7 T.T.J. Clevis, S. Nijdam, U. Ebert, “Slow decay of radiation after a pulsed streamer discharge in pure nitrogen”


P3.1.9 Mário Lino Da Silva, Dzmitry Tsyhanou, Vasco Guerra and Jorge Loureiro, “An improved kinetic model for highly ionized N₂-CH₄ shocked flows”
4. Plasma surface interaction (boundary layers, sheaths, surface processes)

P3.4.1 S. Welzel, S. A. Starostin, H. de Vries, M.C.M. van de Sanden, R. Engeln, “Gas phase studies during roll-to-roll processing of polymers in air-like atmospheric pressure DBDs”

P3.4.3 E. C. Neyts, A. Bogaerts, “Understanding plasma growth of SWNTs: effect of electric field and ion bombardment”

P3.4.5 Francisco Dias, Neli Bundaleska, Rafael Saavedra, Elena Tatarova, Carlos Ferreira and Jayr Amorim, “Pretreatment of sugarcane biomass by atmospheric pressure microwave plasmas”

P3.4.7 Johannes Berndt, Eva Kovacevic, Hamid Acid, Thomas Strunskus and Laifa Boufendi, “Low temperature plasmas as a source for nanostructured organic surfaces with controlled wettability”

P3.4.8 Brankica Sikimić, Igor Denysenko, Ilija Stefanović, Jörg Winter, “The effect of the thin film at the electrodes on the sheath size and ion flux in an argon plasma afterglow”

P3.4.10 Naoki Nakashima, Moe Shibata, Toshihiro Takamatsu, Ryota Sasaki, Hidekazu Miyahara, and Akitoshi Okino, “High-speed reduction of oxide film and surface hydrophilization using atmospheric multi-gas plasma jet”

P3.4.11 D. Marinov, O. Guaitella, C. Corbella, T. de los Arcos, A. von Keudell, A. Rousseau, “Probing adsorption and reactivity of nitrogen atoms on silica surface under plasma exposure”


5. Plasma diagnostics

P3.5.1 S. Nguyen-Kuok, S. Fedorovich, V. Chinnov, “Determining electron temperature and density in RF plasma torches”

P3.5.3 I.M.F. Bragança, P.A.R. Rosa, F.M. Dias, L.L. Alves, “Experimental and modelling characterization of micro-EDM plasmas”

P3.5.4 G. D. Stancu, D. A. Lacoste, C. O. Laux, “Investigations of carbon monoxide emission in methane flames stabilized by nanosecond pulsed discharges using Mid-IR QCLAS”

P3.5.5 O. Levasseur, L. Stafford, N. Gherardi, and N. Naudé, “Diagnostic of atmospheric-pressure He discharges controlled by dielectric barriers in presence of porous wood samples”


P3.5.7 M. Procházka, L. Blahová, F. Krčma, R. Přikryl, “In-situ monitoring of thin film depositon process using optical emission spectroscopy”

P3.5.8 J. Kluson, P. Kudrna and M. Tichý, “Gas flow velocity in the low pressure hollow cathode plasma jet sputtering system”

P3.5.9 Arnaud Bultel, Vincent Morel, “Collisional-radiative modeling of a thermal Helium beam penetrating the edge plasma of a Tokamak”

P3.5.10 J. Bredin, L. Popelier, V. Godyak, P. Chabert and A. Aanesland, “Evolution of electron temperature and negative ion density through a magnetic barrier”

P3.5.11 M. Hübner, D. Marinov, O. Guaitella, N. Lang, A. Rousseau, J. Röpcke, “A temperature study of a low pressure, pulsed dc plasma using quantum cascade laser absorption spectroscopy (QCLAS)”

P3.5.12 E. A. D. Carbone, S. Hübner, E. Iordanova, N. de Vries, M. Jimenez-Diaz, J. M. Palomares and J.J.A.M. van der Mullen, Discrepancies between different electron Temperature diagnostics: probing the Electron Energy Distribution Function”

P3.5.13 P. Dankov, Zh. Kiss’ovski, “Hairpin probe sensitivity for determination of plasma density”

P3.5.14 Lanoir Maaloul, Luc Stafford, and Andranik Sarkissian, “Investigation of the role of sputtered particles on the plasma properties during rf-magnetron sputtering of Zn and ZnO targets”

P3.5.15 J. Ferreira, L. Stafford, and R. Leonelli, “Optical emission spectroscopy of the flowing afterglow of a microwave N₂/O₂ plasma used for the modification of GaN nanowires”

P3.5.16 B. Sikimić, I. Stefanović, and J. Winter, “Measurement of ion fluxes in plasmas with nanoparticles”
6. Plasma and discharges theory and simulation

P3.6.1 A. I. V. Schweigert, V. I. Demidov, I. D. Kaganovich, “Active control of electron energy distribution function in dc discharge using an auxiliary electrode”

P3.6.2 B. Loncar, A. Vasic, S. Stankovic, G. Ilić, “The influence of dielectric properties of commercial vacuum interrupters”

P3.6.3 B. Loncar, M. Vujisic, S. Stankovic, G. Ilić, “Influence of gas parameters on the spark gap functioning”

P3.6.5 M. Savić, M. Radmilović-Radjenović, M. Šuvakov, Z.Lj. Petrović, “First steps in obtaining Monte Carlo model of RF breakdown”

P3.6.7 B. Rojas, A. Bekstein, J. de Urquijo, “A genetic algorithm to optimize the fitting of avalanches observed from a pulsed Townsend experiment”


P3.6.9 M. Atanasova, E. A. D. Carbone, G. Degrez and J.J.A.M. van der Mullen, “Effect of the driving frequency on an atmospheric pressure RF capacitively coupled plasma in Argon”

P3.6.10 Arnaud Bultel, Julien Annaloro, Yacine Babou, Damien Lequang, “Modeling of the excitation non equilibrium of CO₂ plasma flows obtained in high enthalpy wind tunnels”
7. Self-organization in plasmas, dusty plasmas

P3.7.4 P. Selyshchev, “Droplet growth in vapor under irradiation”

P3.7.6 P. G. C. Almeida, M. S. Benilov and M. J. Faria, “Self-organization as an intrinsic feature of DC glow microdischarges: predicting self-organization in different gases”

9. Low pressure plasma sources

P3.9.1 E. Felizardo, E. Tatarova, J. Henriques, F. M. Dias, S. Espinho, C. M. Ferreira and B. Gordiets, “UV Emission from Microwave Plasmas”

P3.9.2 R. Rincon, H. V. Nguyen, N. Bonifaci, F. Aitken, V. M. Atrazhev, K. van Haeften and J. Eloranta, “Cryoplasma in Helium at 4.5 K under different pressures”

P3.9.3 I. Sheykin, K. Dittmann, J. Meichsner, D. Loffhagen, “Fluid modeling of a ccrf discharge in oxygen”

P3.9.4 A. Shishpanov, A. Meshchanov, Y. Ionikh, “The breakdown in a long non-shielded discharge tube in low-pressure nitrogen”

P3.9.5 Sudeep Bhattacharjee, Indranuj Dey, Krishanu Roy Chowdhury, “Observation of electron localization and asymmetric frequency sideband generation in bounded microwave-plasma interaction”

P3.9.6 Shail Pandey and Sudeep Bhattacharjee, “Transition from interpulse plasmas to afterglows in a pulsed microwave discharge”

P3.9.7 O. Leroy, B. Debord, P. Leprince, C. Boisse-Laporte, L. L Alves, R. Jamier, F. Gérome, F. Benabid, “Generation of plasmas in 100 µm core diameter capillaries using a microwave excitation based on a surfatron”

P3.9.9 Aurel Salabas, “Plasma potential structure under the shower-head RF electrode”

10. High pressure plasma sources


P3.10.2 M. Sabo, Y. Okuyama, Š. Matejčik, “NO+ generation and monoaromatic volatile organic compounds detection by IMS with positive corona discharge in wire to plate geometry”

P3.10.3 Julio Henriques, Elena Tatarova, Ana Dias, Francisco Dias, Carlos Ferreira and Claudia Luhrs, “Carbon nanostructures synthesized by a microwave plasma torch”
P3.10.4 O. Nedybaliuk, V. Chernyak, E. Martysh, T. Lisitchenko, O. Aktan, S. Orlovska, “Plasma assisted combustion of paraffin mixture”

P3.10.5 O. Solomenko, O. Nedybaliuk, V. Chernyak, E. Martysh, T. Lisitchenko, V. Demchina and V. Kudryavzev, “Plasma reforming of ethanol/water mixture in the plasma-liquid system with reverse vortex air/CO$_2$ flow of “tornado” type with liquid electrode”

P3.10.6 F. Pontiga, H. Moreno, K. Hadji, K. Yanallah, A. Castellanos, “Experimental study of positive corona discharge in mixtures of CO$_2$ and N$_2$”

P3.10.7 I. Marinov, O. Guaitella, A. Rousseau and S. Starikovskaia, “Spectroscopic and shadowgraphic investigation of nanosecond underwater discharge”

P3.10.8 A. S. Chiper and G. Popa, “Trapped gas-induced effects under pulsed DBD dynamics”

P3.10.9 V. Sarron, E. Robert, D. Riès, S. Dozias, J.M. Pouvesle, “Transfer of pulsed atmospheric-pressure plasma stream generated by a plasma gun”

P3.10.10 O. Guaitella, A. Bourdon, A. Rousseau, “Consequences of slightly different ground configurations on the propagation of ionisation waves inside capillary tubes”

11. Plasma and gas flows

P3.11.1 T. Lapushkina, A. Erofeev, S. Poniaev, “Plasma control of supersonic body streamline”

P3.11.2 T. Lapushkina, A. Erofeev, S. Poniaev, “Local MHD influence on shock waves position”

P3.11.3 M. Erofeev, V. Skakun, D. Schitz, V. Tarasenko, “Optical characteristics of atmospheric pressure dielectric barrier discharge plasma in Ar flow”

P3.11.4 M. D. Bowden, D. C. Barthaud, J. Kowal, “Application of microplasmas for satellite propulsion”

P3.11.5 S. Reuter, J. Winter, A. Schmidt-Bleker, H. Tresp, M. U. Hammer, K.-D. Weltmann, “Controlling the ambient air affected reactive species composition in the effluent of an argon plasma jet”

P3.11.6 F. Sigeneger, J. Schäfer, R. Foest, K.-D. Weltmann, D. Loffhagen, “Study on the formation of thin films using an rf non-thermal plasma jet at atmospheric pressure”
P3.11.7 Å. Fredriksen, N. Gulbrandsen, W. Miloch, A. Hansen, E. Scime, “Plasma flows in expanding magnetic field: simulations, probe and Laser Induced Fluorescence (LIF) measurements”

P3.11.8 E. Stamate and M. Salewski, “NOx reduction by ozone injection and direct plasma treatment”

P3.11.9 Arnaud Bultel, Julien Annaloro, Vincent Morel, Pierre Omaly, “Relaxation of excited states calculated with CoRaM-Air, the CORIA’s Collisonal-Radiative model for air”

P3.11.10 I. Prysiazhnevych, V. Chernyak, V. Yukhymenko, “Influence of the discharge current and gas flow rate on the non-equilibrium level of plasma of the transverse arc in air at atmospheric pressure”

P3.11.11 Julien Annaloro, Arnaud Bultel, Pierre Omaly, “State-to-state modeling of a nitrogen plasma applied to the atmospheric entry problems”

12. Laser produced plasmas

P3.12.1 Yan Xu, Jiyan Zhang, “Analysis of the measured iron opacity data”


P3.12.4 E. Nedanovska, D. Riley, T. Morgan, L. Hüwel, W. Graham, “Thomson scattering and emission spectroscopy of laser sparks induced in pure He and He-N₂ mixtures at 1atm”


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<td>Welcome reception</td>
<td>Wine tasting</td>
<td></td>
<td>Conference dinner</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
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</tbody>
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