

## **POSTER SESSIONS 1: Tuesday 3, 13h30 – 15h30**

### **1 - Plasma sources and discharges (plasma generation)**

**1-1** - Development of distributed ferromagnetic enhanced inductively coupled plasma source for plasma processing, *Gennadiy Sukhinin, Mikhail Isupov, Ivan Yudin, Alexander Fedoseev*

**1-2** - Microwave Plasma Reactor for Atmospheric-Pressure Carbon Dioxide Decomposition, *Sina Mohsenian, Juan Trelles*

**1-3** - Influence of current modulation on arc instabilities in dc plasma spray torch, *Fabrice Mavier, Fadi Zoubian, Vincent Rat*

**1-4** - Contribution to the study of the electric arc displacement, *Mohamed BOUKHLIFA, Romaric Landfried, Thierry Leblanc, Philippe Testé*

**1-5** - Experimental Study on insulation properties of C4F7N/N2 mixture substituting SF6 in insulation, *tian shuangshaung, Cressault Yann, Zhang Xiaoxing, Xiao Song, Li Yi, Zhang Ji, Chen Qi*

**1-6** - Development and characterization of a 3D-printed compact atmospheric plasma reactor, *Fadi Zoubian, Hervé Rabat, Olivier Aubry, Nicolas Dumuis, Sébastien Dozias, Dunpin Hong*

**1-7** - Electric arc conductivity in a three-phase AC plasma torch operating on a mixture of air and methane, *Viktor Popov, Sergey Popov, Alexander Surov, Dmitry Subbotin, Eugeny Serba, Nikita Obraztsov*

**1-8** - Temporal analysis of DC- and Microwave-driven plasma micro-discharges, *Antoine SIMON, Th. Callegari, Romain PASCAUD, Laurent LIARD, Olivier PASCAL*

**1-9** - Study of emitted radiations in High Intensity Discharge (HID) Lamps, *Antoine SAHAB, Mohamad Hamady, Georges Zissis, Yann Cressault*

### **2 - Advances and challenges in plasma diagnostics**

**2-1** - Effect of plasma torch operating parameters on plasma jet velocity at torch nozzle exit, *Jérôme Betouille, Simon Goutier, Michel Vardelle*

**2-2** - Investigations of Stark Profiles of Argon Lines using Laser-Induced Plasma, Thomson Scattering and Optical Emission Spectroscopy, *Mamadou Sankhe, Tomek Pieta, Stéphane Pellerin, Krzysztof Dzierzega, Maxime Warwel*

**2-3** - Experimental characterization of double pulse laser-induced plasmas, *AURELIEN FAVRE, Vincent Morel, Gilles Godard, Arnaud Bultel*

**2-4** - Experimental characterization of a surface-wave sustained Argon-N2-H2 mixture plasma column at atmospheric pressure, *Jong Hern MUN, Mathieu Masquère, Philippe TEULET, Yann Cressault*

**2-5** - Impact of the substrate on the discharge characteristics in an atmospheric-pressure helium plasma jet: Optical diagnostics, *Julien Cosimi, Frédéric Marchal, Nofel Merbahi, Mohammed Yousfi*

**2-6** - Synthesis of N-B substituted single wall carbon nanotubes by electric arc: plasma diagnostic, *Soumaya Ben Nasr, Gourari Djamel Eddine, Valensi Flavien, Yann Cressault, Lotfi Beji, Riadh Hannachi, Manitra Razafimanana, Sébastien JOULIE, Marc MONTHIOUX*

**2-7** - Measurement of the gas temperature of neutrals in reactive plasmas by moderate-resolution OES, *Andrey Miakonikh, Konstantin Rudenko*

### **3 - Advances and challenges in plasma modeling and simulation**

**3-1** - An electric arc upon opening contacts of a low-voltage switch model, *Jessica Almurr, David Rochette, William Bussière*

**3-2** - 3D simulation of a point to plane air corona discharge, *Olivier Eichwald, Olivier Ducasse, Joseph Marie PLEWA*

**3-3** - Nonequilibrium effects in the arc in crossflow, *Vyasaraj Bhigamudre, Juan Trelles*

**3-4** - Modelling of the plasma parameters of an arc discharge with sputtered metal-graphite anode, *Alexander Fedoseev, Nikon Demin, Salavat Sakhapov, Alexey Zaikovskii, Dmitriy Smovzh*

**3-5** - Energy and momentum transport in thermal arcs: a simple method for modelling, *YOUSSEF ABDO, Laurent Fulcheri, Vandad Rohani*

**3-6** - Calculation of electron-impact excitation and ionisation cross sections and reaction rate coefficients for C, N and O atoms, *ALI HLELI, Philippe TEULET, Yann Cressault, Riahi Riadh, Ghalila Hassen*

**3-7** - H2020 NanoDome project: a comprehensive multiscale approach to the modelling of nanoparticle synthesis in gas phase, *Francesco Strappaveccia, Francesco Galleni, Emanuele Ghedini*

**3-8** - A novel approach for the estimation of nanoparticle evaporation through the Method of Moments, *Francesco Galleni, Francesco Strappaveccia, Emanuele Ghedini*

**3-9** - Numerical Simulation of Triple DC Plasma Torch System, *LEE YONG HEE, Kim Tae-Hee, Choi Sooseok*

**3-10** - Numerical optimization of Mean Absorption Coefficient in Air using Planck Modified Mean Function, *narjisse kabbaj, Yann Cressault, Philippe TEULET, Frank Reichert*

**3-11** - Numerical Analysis of SF<sub>6</sub> Decomposition Process in a Cement Kiln Reactor Combined with Thermal Plasma, *Juyoung Ko, Sooseok Choi, Tae-Hee Kim*

**3-12** - A robust method to compute the 2T reactive thermal conductivity of SF<sub>6</sub> plasma, *Gabriel Vanhulle, Yann Cressault, Ph Teulet*

**3-13** - A Multi-Stage approach for DBD modelling, *Andrea Cristofolini, Arturo Popoli*

**3-14** - Theoretical study of molecular spectra in nitrogen, *Abdel Majid Kassir, Yann Cressault, Mathieu Masquère, Philippe TEULET*