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Stéphane PASQUIERS CNRS researcher since 1988 LPGP South Paris University (Paris 11) Orsay - France

S. Pasquiers was born in Paris in November 1962. He graduated from the South Paris University (Paris 11) in 1985 and achieved his PhD degree in 1987 at the *Laboratoire de Physique des Gaz et des Plasmas* (LPGP, CNRS and Univ. Paris 11). He was working on the physics of low pressure microwave discharges and the propagation of surface waves under the supervision of Prof. J. Marec. He joined the CNRS in 1988 to work as a research scientist in the team of Dr. V. Puech (LPGP), working on high power XeCI lasers energised by photo-triggered discharges, and thereafter on HF/DF lasers (discharge equilibrium and stability, plasma kinetics and chemistry). Since 1999, he is involved in researches about pollution control by non-thermal plasmas and coupling with catalysis (de-NO_x and de-VOC processes), hydrocarbon reforming, and ignition of combustion. At the present time his main scientific interests, for various applications, are : pulsed discharge physics at high pressure (0.1–10 bars), non-thermal plasma kinetics in atmospheric gases, decomposition processes and kinetics of hydrocarbons and VOCs. He is now Research Director in CNRS and manager of the DIREBIO research team at LPGP.

Some relevant publications

Kinetics of organic molecules in pulsed plasmas of nitrogen or N₂/O₂ mixtures at near atmospheric pressure

S. Pasquiers et al., Plasma Physics and Controlled Fusion, 55 (2013) 124023 (10pp). Role of quenching of metastable states in acetaldehyde decomposition by a nonequilibrium nitrogen plasma at sub-atmospheric pressure

W. Faider *et al.*, Journal of Physics D : Applied Physics, 46 (2013) 105202 (16pp). **Propane dissociation in a non-thermal high pressure nitrogen plasma**

N. Moreau *et al.*, Journal of Physics D : Applied Physics, 43 (2010) 285201 (14pp). <u>OH kinetic in high-pressure plasmas of atmospheric gases containing C2H6 studied</u> by absolute measurement of the radical density in a pulsed homogeneous discharge

L. Magne *et al.*, Journal of Physics D : Applied Physics, 42 (2009) 165203 (17pp). <u>Plasma reactivity and plasma-surface interactions during treatment of toluene by a</u> <u>dielectric barrier discharge</u>

N. Blin-Simiand *et al.*, Plasma Chemistry and Plasma Processes, 28 (2008) p.429-466. Importance of pre-ionisation for the non-chain discharge pumped HF laser

B.Lacour *et al.*, Applied Physics B : Lasers and Optics, 72 (2001) p.289-299. **Experimental and theoretical investigations of a XeCI phototriggered laser** R.Riva *et al.*, Journal of Physics D : Applied Physics, 28 (1995) p.856-872.



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