MODELLING AND CHARACTERIZATION OF ELEMENTARY MICROWAVE PLASMA SOURCES AT MEDIUM PRESSURE (1 TO 50 TORR) FOR HIGH RATE DEPOSITION.

Ortega A.M.¹, Bes A.¹, Bechu S.¹, Lacoste A.²

¹LPSC ²University Grenoble-Alpes

The 2D and 3D distribution of a set of elementary plasma sources enables its use in large area deposition and etching processes. The use of such sources at medium pressure requires both an impedance matching between the plasma and the source and a uniform plasma distribution. In this work the modelling techniques are employed to study and design plasma sources for medium pressure. Experimental characterization of different source geometries are used to validate the models.