

TRANSFER PHENOMENA OF MATERIAL BETWEEN THE ELECTRODES
 IN A CORONA DISCHARGE ; APPLICATION TO SURFACE TREATMENT
 AND CATALYTIC PROCESSES

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ABSTRACT SUBMITTED :

In the formation of chemical products from plasma discharges, catalytic reactions which occur at the electrodes could be usefully employed in order to increase the chemical yield.

However, the degradation of an electrode also depends on its nature and this is an aspect which cannot be neglected in the design of a plasma reactor. This aspect is developed here by presenting the results of a study which shows, in the case of a corona discharge plasma, the way in which electrodes are degraded (sputtering, migration...), how this can vary with the electrodes materials, notably how the nature of one electrode may affect the degradation of the other.