

## **DISCHARGE OF VARIOUS STREAMING-GASES IN THE ATMOSPHERE**

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The plasma purification of air-pollution is studied with the flowing gases of automobile exhaust fumes and chimney smokes.

When the contaminated gases are streaming into the one end of tube, the plasma is generated by the electrode system in the atmosphere of tube inside.

Two kinds of electrode system are introduced: one is the cylindrical hollow electrode inserted into the tube inside and the other is a long tungsten wire set at the center of tube inside. High voltage pulses are applied to these electrodes for the generation of plasma.

In the experiment, the plasma generations are investigated with the characteristics of current-voltage and the scale of plasma flame according to the sort of flowing gases, the flowing speed of gases, and the electrode structures.<sup>1</sup>

1. Han Sup Uhm, "Atmospheric Plasma and Its Applications", Journal of the Korean Vacuum Society, Vol. 15, No. 2, 2006, pp. 117-138.