



OZONE GENERATION BY WIRE-TO-CYLINDER CORONA REACTOR WITH N₂+O₂ MIXTURE.

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Abstract: The UV-visible spectroscopy in the range from 190 to 320 nm was utilized to detect the ozone formation, in wire-to-cylinder corona reactor with negative polarity. The effect of N₂+O₂ mixture on ozone production has been investigated. The maximum production of ozone was already corresponding to 70% of oxygen in the gas mixture for any applied voltage from 4,5 to 7 Kv.

Experimental set up: Figure 1 shows the different parts of the experimental used.

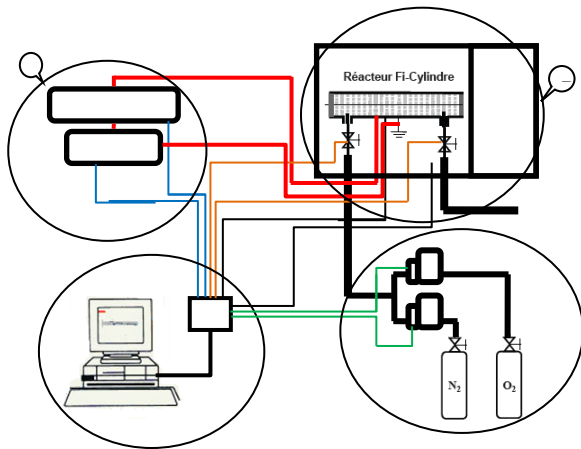


Figure 1. Schematic of the experimental set-up.

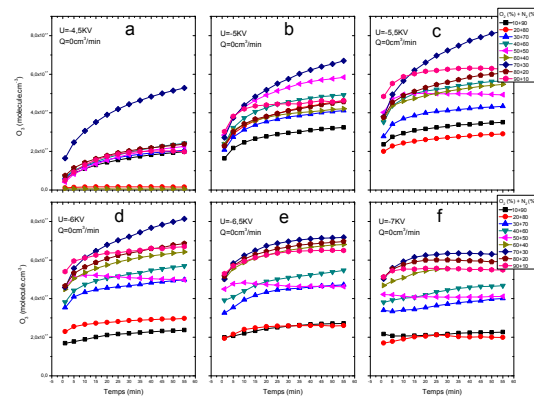


Figure 2. Ozone concentration vs the time.

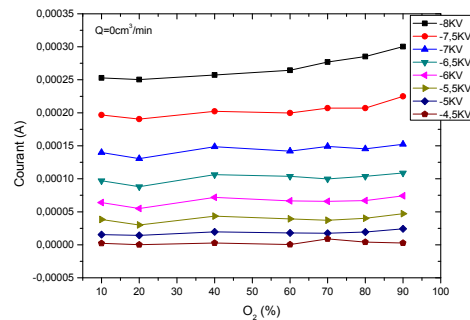


Figure 3. Electric current vs oxygen percentage