## Accepted Manuscript

Title: Pilot scale degradation of mono and multi volatile organic compounds by surface discharge plasma/TiO<sub>2</sub> reactor: investigation of competition and synergism

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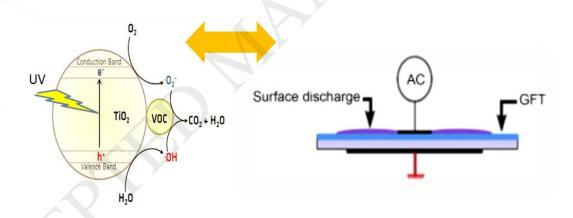


### ACCEPTED MANUSCRIPT

Pilot scale degradation of mono and multi volatile organic compounds by surface discharge plasma/TiO<sub>2</sub> reactor: investigation of competition and synergism

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### Graphical abstract



A nonthermal plasma surface discharge (NPSD) coupled with photocatalysis

## **Highlights**

- Removal of pollutant in air mixture by photocatalysis and plasma is investigated
- Synergetic effect of combined system is explored.
- The by-products of each binary mixture were identified and evaluated.
- Monitoring of mineralization and ozone has been done at pilot scale.

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