

BTEX (Benzene, Toluene, Ethylbenzene and Xylene) Degradation by Cold Plasma

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Abstract : The volatile organic compounds - BTEX (Benzene, Toluene, Ethylbenzene, and Xylene) petroleum derivatives, have high rates of toxicity, which may carry consequences for human health, biota and environment. In this direction, this paper proposes a method of treatment of these compounds by using corona discharge plasma technology. The efficiency of the method was tested by analyzing samples of BTEX after going through a plasma reactor by gas chromatography method. The results show that the optimal residence time of the sample in the reactor was 8 minutes.

Keywords : BTEX, degradation, cold plasma, ecological sciences

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