DETERMINATION OF PHENOLIC COMPOUNDS IN AL-DIWANIYA RIVER AND DEGRADATION THESE COMPOUNDS VIA HETEROGENEOUS PHOTOCATALYTIC PROCESS USING TIO2 SUSPENSION.

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ABSTRACT

The Phenols and its derivatives consider a hazard pollutants that spoil in river waters. The hazard due to high stability of phenols compounds towards natural biological degradation.

Six stations were selected along the Al-Diwaniya River in section passing through the city. The station involves the pipes of wastewater of hospitals and factories.

The result showed the elevation of phenols concentration in some stations, so to mineralization of phenolic compounds, a photocatalytic degradation process was obtained by using heterogeneous system. Include the TiO₂ suspension and UV – radiation which was an efficient comparison with other methods.