



CONVERSION OF CHLORINATED AROMATIC DERIVATIVES ON METALLIC OXIDES CATALYSTS

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Abstract

The legislative requirements concerning removal of gas emissions containing halogenated organic compounds from environment led to intensification of research towards catalytic incineration of these pollutants. An analysis of the research in the field conducted in order to study the behavior of transitional metal oxides is carried out including the main factors that influence the oxidation reaction of organic compounds such as: temperature, the amount of catalytic active component, the type of catalytic system, the presence of water vapors. The catalytic system as V_2O_5/TiO_2 as well as the bimetallic catalytic systems of $V_2O_5-WO_3/TiO_2$ type, specific for gas de-nox through catalytic reduction (SCR-DeNO_x) exhibit efficiencies in the process of catalytic conversion of chlorinated aromatic compounds VOC-Cl.

Keywords: chlorinated volatile organic compounds, catalytic oxidation, vanadia-supported titania catalysts, selective catalytic reduction.

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