

**SELECTIVE REDUCTION OF NO ON Rh/ALUMINA CATALYSTS:
EFFECT OF METAL LOADING**

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ABSTRACT

Kinetic experiments for the selective catalytic reduction (SCR) of NO with C₃H₆ were performed on two Rh/alumina catalysts with different metal loading, namely 0.5wt.% and 2.0wt.% Rh, so as to examine the effect of metal loading on the SCR performance of Rh/alumina catalysts. The experimental results show a strong positive effect of metal loading on the NO reduction activity of Rh/alumina. A 10-fold increase in NO reduction and C₃H₆ oxidation activity for 4-fold increase in metal loading (2.0wt.% vs. 0.5wt.% Rh) was observed, implying the presence of structure-sensitive reactions on the Rh sites.