



INTRINSIC PROPERTIES OF NOBLE METAL IN CATALYTIC SELECTIVE REDUCTION OF NO BY PROPENE IN LEAN BURN CONDITIONS

Anne Giroir-Fendler^{1*}, Helleh Saadallah¹, Adela Haleta²

¹*Laboratoire d'Application de la Chimie à l'Environnement (LACE) UMR 5634 – CNRS - UCB
Lyon 1 – Campus de la Doua, 43 Boulevard du 11 novembre 1918 - 69622 Villeurbanne Cedex -
France;* ²*"Gh. Asachi" Technical University of Iasi, Faculty of Industrial Chemistry, Blvd.D.
Mangeron, 71A, 700050 Iasi, Romania*

Abstract

A silica support was impregnated with a rhodium, palladium, iridium or platinum salt. The four catalysts were tested for the selective reduction of NO by C₃H₆. The results obtained showed that noble metal can reduce NO in N₂O and N₂ at low temperature. The most active was the platinum but the major product was nitrous oxide. Iridium, rhodium and palladium were not so active but better selectivity in N₂ were obtained.

Keywords: NO SCR, metal supported catalysts, platinum, rhodium, iridium, palladium, silica

* Author to whom all correspondence should be addressed: Phone/Fax: (33)472431586;
e-mail: anne.giroir-fendler@univ-lyon.fr