

## Selective hydrogenation of pyrolysis gasoline on different catalytic systems

Anca APREOTESEI – GHITAU, Gabriela FOCSANEANU, Simona LEPADAT and Veronica STĂNIȘTEANU

*National Oil Company "Petro" – Incerp Reaserch, Subsidiay of Ploiesti, 2000, Ploiesti, Romania*

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**Abstract** Tests results on different hydrogenation catalytic systems using pyrolysis gasoline as feedstock are presented in the paper. The main catalytic systems, Pd/Al<sub>2</sub>O<sub>3</sub>, Pt/Al<sub>2</sub>O<sub>3</sub> and Ni/Al<sub>2</sub>O<sub>3</sub>, were tested in the following conditions: Temperature (60-180)°C, Pressure (25-45) barg, LHSV (2-5)h<sup>-1</sup>, H<sub>2</sub>/feedstock ratio (150-200) NI/l.

In the case of Ni/Al<sub>2</sub>O<sub>3</sub>, it was observed a decrease of dienes content (expressed by dienes number) from 19.8 in feedstock to 0.12 in liquid product, and the olefins content (expressed by bromine number) a decrease to 12 in liquid product comparative with 60.5 in the feedstock.

*Keywords:* hydrogenation, catalytic system, pyrolysis gasoline.

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