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THE EVALUATION OF POLLUTION LEVEL, AGE AND TURNOVER EFFECTS ON CO, CO_2 AND HC EMISSIONS LEVEL GENERATED BY PASSENGER CARS

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Abstract

To enable strategies that provide emissions level reduction from passenger cars many researchers pay attention to factors like degree of pollution, age or turnover which can influence them. The purpose of this study is to analyze the influence of those factors on CO, CO_2 and HC emissions level generated by passenger cars. The authors studied the emissions level generated by Dacia Logan passenger cars, made during the period 2004-2007, equipped with spark ignition engines, assigned to emission standards EURO3 (E3) and EURO4 (E4). The results obtained using a linear mixed effects model, showed a significant influence of cars age, pollution degree and the interaction between these factors on emissions level.

Key words: cars age, emissions of CO, CO_2 and HC, linear mixed effects model, passenger cars, pollution degree

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