## **RESEARCHES ON THE IMPACT OF HYPERMILING TECHNIQUES AND FUEL** SAVING DEVICES IN ORDER TO REDUCE POLLUTION IN URBAN AREAS

## Catalin Zaharia<sup>1</sup>, Adrian Clenci

## UDC:629.1.02

**ABSTRACT:** Techniques for super-economical driving are often known as hypermiling and very dedicated drivers can achieve astonishing economy through rigorous use of such techniques. Any method that contributes to the reduction of  $CO_2$  emissions and which can be commercialised in a sensitive manner, must be applied to save the environment. Tests in both U.S. and Europe have shown ecodriving to reduce fuel consumption and emissions by up to 30%. In the meantime, European regulations set the emissions requirements for new vehicles at 130 g  $CO_2$ /km, with an additional 10 g  $CO_2$ /km to be achieved by additional complementary measures, including gear shift indicators. At this time there is little knowledge of how much fuel could be saved by the introduction of gear shift indicators, and there is no consensus on how these savings should be quantified.

Within this context, this paper presents a point of view on the need of on-board vehicle's indications for improving the driving style in order to reduce fuel consumption and pollutant emissions.

KEYWORDS: hypermiling techniques, driving style, pollutant emission, fuel economy

<sup>&</sup>lt;sup>1</sup>*Received: September 2012, Accepted: September 2013.*