

A CONTRIBUTION TO MODELLING OF BEHAVIOUR OF VEHICLE DRIVER

Authors

Miroslav DEMIĆ¹, Djordje DILIGENSKI², Ivan DEMIĆ¹, Milan DEMIĆ¹

¹ University of Kragujevac, Mechanical Engineering Faculty, Kragujevac, Serbia. Tel.: +381 34 330487. Fax: +381 34 333192. E-mail: demic@kg.ac.yu,

² Vinca Institute of Nuclear Sciences, Dept. for I.C. Engines and Vehicles, Belgrade, Serbia. Tel./Fax: +381 11 3440244. E-mail: diligens@vin.bg.ac.yu,

Abstract

This paper presents an attempt of designing a reliable nonlinear driver model so as to provide conditions for a thorough research of phenomena related to the system Driver-Vehicle-Road. The suggested driver model is based on variable sample of incremental correction of the vehicle trajectory according to the actual vehicle direction of motion and influence of driver on steering wheel with variable vehicle velocity.

Keywords

Vehicle, driver, model, dynamic simulation