

A CONTRIBUTION TO ANALYSIS OF BEHAVIOUR OF THE DYNAMIC SYSTEM: DRIVER-VEHICLE-ROAD**Authors**

Miroslav DEMIC¹, Djordje DILIGENSKI², Ivan DEMIC¹, Milan DEMIC¹

¹University of Kragujevac, Mechanical Engineering Faculty, Serbia

²Vinca Institute of Nuclear Sciences, Dept. for I.C. Engines and Vehicles, Belgrade, Serbia

Abstract

A study of dynamic system “driver-vehicle-road” is strongly linked to the traffic safety. The attention has lately been paid to this issue and it leads to the introduction of new vehicle concepts equipped with stability, traction and brake forces control, etc. In order to provide conditions for thorough research of dynamic vehicle behaviour this paper will presents a contribution to detailed investigation of mutual links that exist in the system during the ride on variable curve trajectory. The suggested vehicle model is based on variable sample of incremental correction of vehicle trajectory according to the actual vehicle direction of motion and driver influence on steering wheel.

Keywords

vehicle, driver, dynamic simulation,