ABSTRACT
The fast development of car technology has caused a steady increase in the speed of vehicles and increasingly higher demands on braking and traction. International studies show that every increase in average speed causes increase in personal injury accidents. Yet the present transport infrastructure in general and asphalt pavement surface texture characteristics in particular have not accompanied this development. In wet weather, the coefficient of friction between the pavement and a vehicle tyre can be quite low. At a certain speed, namely the aquaplaning speed, the coefficient of friction drops practically to zero. This means that there is no real contact between the pavement surface and the vehicle tyre.

The main aim of this paper is to search the effect of asphalt concrete pavement surface texture on skid resistance. To reach this aim, the skid resistance is defined in the first chapter, then the relationship between skid resistance and accidents are explained. Third chapter deals with the development of a new model for skid resistance using not only the microtexture parameters but also the macrotexture parameters of asphalt concrete road surfaces. At the end, how the micro- and macrotexture of asphalt concrete pavement affect the skid resistance of road is evaluated.

KEY WORDS: Skid Resistance, Surface Texture, Asphalt Concrete Pavements