

## **HISTORICAL BACKROUD OF PAVEMENTS DEVELOPMENT**

### **G. Tsohos\***

Emeritus Professor, Aristotle University of Thessaloniki (ATh), GR

\* ATh, Department of Civil Engineering, 54124 Thessaloniki, Greece,

### *ABSTRACT*

The road construction is one of the most ancient human activities. The human society has early understood the importance of a road network. The Roman Empire based its duration among others-laws, discipline-on a road network of about 87.000km.

The new era of pavement construction begun in the 18<sup>th</sup> century by a number of genius engineers like Telford, McAdam.

The invention of vehicle (1885) gave an enormous impulse to the development on the road engineering. Te extend use of materials-bitumen, concrete-and much more the application of new design methods indispensable to cover the nowadays demands on both speed and weight of the existing vehicles.

Today the pavement techniques must also confront the factor environment namely emissions, energy consumption, health potential effect.

The future challenges are: research on asphalt rejuvenators, .expansion in application of bioasphalt, .low energy asphalt mixes, .use of the NANO-techniques