

## ELECTRIC DRIVE VEHICLES

Stefan WÓJTOWICZ

**ABSTRACT** *Electric motor efficiency and development of modern energy storage system cause that electrical vehicles become the technical and economic substitute to gasoline cars. The generalized prospect of electrical vehicles advancement is presented in this article. The various arguments in favor of and against them are shown. The development of electric drive vehicles is the one of the major research subjects in the Electrotechnical Institute. The research on electric drives with implementation of novel solutions in the area of power electronics, steering, new generation of motors and IT are performed. The special attention is put on power, energy storage and energy management systems. The solutions shown here are applicable in new models of commercial vehicles, e.g. locomotives, tramways and trolleybuses.*

**Keywords:** *electric vehicles, effectivity of electric drives, energy stores*