PROBLEMY KOLEJNICTWA
RAILWAY REPORTS Zeszyt 180 (September 2018) ISSN 0552-2145 (print) ISSN 2544-9451 (on-line)

Dears Readers

This "Problemy Kolejnictwa" is another issue in which full texts of articles are presented in both the Polish and English language version. Thus the Editors pursue the main goal of the publication, i.e. the dissemination of research results and current technical knowledge in the rail transport area to benefit the widest possible range of readers in Poland and abroad.

Issue no. 180 contains seven articles. The first of them, written by specialists from Instytut Kolejnictwa (Railway Research Institute) presents the analysis of an excessive wear of turnout switch rails. The outcomes of laboratory tests and the finite element analysis method (FEM) were used in it. The second article, prepared by specialists from scientists of AGH University of Science and Technology and Railway Research Institute features research of exploitation properties of a new generation of pantograph contact strips.

Two articles in this issue refer to the diagnostics of railway superstructure elements. The authors of the first one, from the University of Economics and Innovation in Lublin (WSEI) and Rzeszow University of Technology, present a new method of evaluating concrete sleepers' damage.

The topic of diagnostics is also contained in the article written by a research team from Lviv Polytechnic National University, which deals with rail diagnostic methods focusing on the method known as Magnetic Flux Leakage (MFL). A very interesting cross-cutting article written by Railway Research Institute's specialists refers to the impact of the presence of sulphur content in construction elements used in infrastructure and rolling stock. Another article outlines issues connected with transport networks planning in TEN-T network nodes in the border region between Łódź and Kielce voivodships. The final article was prepared by Warsaw University's of Techology scholars, which analyses the possibilities of better use of the energy returned to the contact line during regenerative braking.

I wish you an interesting and inspiring read
Andrzej Massel, Ph.D. Eng. Editor-in-Chief