

Dear Readers

We are presenting you the 185th issue of Railway Reports, thus closing our work in 2019. The end of the year is an opportunity to sum up and assess the research potential of the Railway Research Institute on the background of the challenges to face ahead. This issue contains four articles dealing with key aspects of the Institute's activity.

The first article written by R. Barcikowska discusses the sources of financing research from funds earmarked from research and development activity. The next one, prepared by M. Pawlik and W. Rzepka describes processes of products' compliance assessment in the rail transport in Poland and Europe, including sources of requirements in force. On this background, the Railway Research Institute's powers in this respect are presented.

The article written by W. Szulc and M. Fiedziuk describes reasons why the research test ground was established and also current tasks and possibilities of the Railway Research Institute's test track near Żmigród. There the track alignment and infrastructure are characterised in the context of conducted research. I. Mikłaszewicz and J. Siwiec from the Structure and Materials Laboratory of the Railway Research Institute wrote an article showing tests of internal stresses in rails and in rail welded connections.

Traditionally, our Railway Reports is open to authors from various research centres both in Poland and abroad who specialize in rail transport research. This group includes an article by R. Domin, Y. Domin, G. Chermiak from Volodymyr Dahl East Ukrainian National University, concerning a new construction solution of bogies for flat wagons and the impact of this solution on quiet running. Furthermore, we are presenting an article by W. Koc from Gdańsk University of Technology regarding the transition curves on railways in the aspect of performance possibilities.

The process of heat exchange in rail disc brakes affects the effectiveness of their operation. Numerical and experimental analysis of this process is the subject of an article by A. Wolff and J. Kukulski, whereas an article by R. Licow and F. Tomaszewski describes the possibilities of identifying defects in the rail running surface by means of a vibroacoustic signal.

*Wishing you an interesting read,
Editor-in Chief
Andrzej Massel*