

Impact on the development of the research and experimental facilities and production.

In the period from 2020 to 2024, scientific and laboratory equipment was updated, funds from the fund of its own production were spent on the implementation of promising scientific and research works.

The main scientific results in this area were published in 4 scientific articles indexed in Scopus and/or WoS; 10 scientific articles published in professional scientific publications of Ukraine of category B; 1 patent, 6 certificates, 1 decision on state registration of the Agreement on the transfer (alienation) of property rights to the work were obtained.

Key scientific results are presented in the following works:

Sulym A., Khozia P., Tretiak E., Pišték V., Fomin O., Kučera P. (2021) Aspects of Strength Testing of Tank Containers in Compliance with the UN Navigation Rules and Regulations. Journal of Marine Science and Engineering. 9, 349. P.1-18. DOI: <https://doi.org/10.3390/jmse9030349>

Orlov O.V., Sulym A.O. Methods for determining the fatigue strength of long-wheelbase platform wagons. Collection of scientific works "Rail rolling stock". Publisher: State Enterprise "UkrNDIV", Kremenchuk, 2022. Issue 25. P. 66–79. DOI: <https://doi.org/10.47675/2304-6309-2022-25-66-79>

Patent of Ukraine No. 145252 for a utility model, IPC (2006.01) B61K 9/08, G01M 17/08, G01L 25/00, G01B 7/16. Device for calibration of strain gauge circuits for testing the impact of rolling stock on the railway track / Sulym A.O., Khozia P.O., Tretyak E.V., Stoletov S.O., Rechkalov V.S., registered 11/25/2020, publ. No. 22/2020, publication date 11/25/2020, application number u 2020 04232, application submission date 07/10/2020

Vodyannikov Yu.Ya., Khozia P.O., Rechkalov V.S., Stoletov S.O., Murchkov S.V. Assessment of the resource of freight cars under unsystematic loading in operation. Collection of scientific works "Rail rolling stock". Publisher: State Enterprise "UkrNDIV", Kremenchuk, 2022. Issue 25. P. 153-172. DOI: <https://doi.org/10.47675/2304-6309-2022-25-153-172>

Bagrov M.O. Problematic issues of the application of technical regulations in the field of railway transport. Collection of scientific papers "Rail rolling stock". Publisher: State Enterprise "UkrNDIV". Kremenchuk, 2024. Issue 28. P. 42-49. DOI: <https://doi.org/10.47675/2304-6309-2024-28-42-49>

Sulym A., Khozia P., Strynzha A., Pavlenko Yu., Stoletov S. Improvements to the procedure for determination of the residual lifetime of railway vehicles. Collection of scientific papers of the State University of Infrastructure and Technologies. Series "Transport Systems and Technologies", 2023. Issue 41. P. 180-194. DOI: <https://doi.org/10.32703/2617-9059-2023-41-15>

Decision on state registration of the Agreement on the transfer (alienation) of property rights to the work

№ 6502. Computer program “Software for determining the fatigue resistance reserve factor when conducting in-service strength tests of rolling stock “Kf_proch_gost”/ Donnik E. O., Vodyannikov Yu. Ya., Rechkalov V. S., Tretyak E. V., date of registration. 02/21/2022

Investments in scientific equipment and future research work allowed to expand the range of research work performed, in particular, as a result of this, it became possible to successfully pass the initial accreditation of the inspection body of SE “UkrNDIV” (NAAU Accreditation Certificate dated April 20, 2023 No. 70488, type A, valid until April 19, 2028) and obtaining appointment certificates of a conformity assessment body to perform certain conformity assessment tasks as a third party, as defined in the technical regulations on the safety of rolling stock of railway transport and the technical regulations on the safety of railway transport infrastructure (letters No. 3431-07/73; 3431-07/74 dated August 19, 2024. The link is <https://astr.me.gov.ua/CommonDocs/Docs/View/33003/50294/0/23>).