

## **International acknowledgment of research achievements.**

The obtained results of scientific research correspond to the world level, which enables SE “UkrNDIV” to work and involve both domestic and foreign partners. The recognition of research achievements at the international level is evidenced by long-term cooperation with many well-known companies and institutions of the CIS countries, Georgia, the Baltic States, France, Germany, Czech Republic, Slovakia, Poland, USA, China, India, Canada, international institutions in the field of railway transport - the International Union of Railways (UIC), and railway administrations of friendly countries.

In 2020-2024, research and development work was carried out under contractual terms with foreign companies from Azerbaijan, Georgia, Estonia, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Slovakia, the Czech Republic, the United States of America, and France.

During 2020-2024, scientists in the engineering and technology field published 16 articles indexed in the international scientific and metric database Scopus. Key works include:

Sulym A., Lomonos A., Bialobrzheskyi O., Safronov O., Khozia P. Analysis of technical solutions for the implementation of on-board energy storage on the electric stock. Naukovyi Visnyk Natsionalnogo Hirnychogo Universytetu. 2020. № 3. P. 59-66. <https://doi.org/10.33271/nvngu/2020-3/059>

Fomin O., Lovska A., Safronov O., Soroka O. Study of the dynamic loading of the load-bearing structure of a flat wagon during transportation by sea. EUREKA: Physics and engineering. 2020. № 6 (31). P. 41-49. <https://doi.org/10.21303/2461-4262.2020.001512>

Panchenko S., Fomin O., Vatulia G., Lovska A., Bagrov A., Fedosov-Nikonov D., Rubin A. Defining patterns in the dynamic load and strength of the bearing structure of a covered freight car with a filler in the girder beam. Eastern-European Journal of Enterprise Technologies. 2021. Vol. 6. № 7 (114). P.68-76. <https://doi.org/10.15587/1729-4061.2021.243866>

Martynov I., Gerlici J., Trufanova A., Petukhov V., Kravchenko K., Shovkun V., Safronov O. Methodology for maintaining the dynamic characteristics of passenger cars. KOMUNIKACIE - Scientific Letters of the University of Zilina. 2023. №25 (2). P. 95-102. <https://doi.org/10.26552/com.C.2023.027>

Sulym A., Bialobrzheskyi O., Khozia P., Lomonos A. Saving energy resources during operation of rolling stock of underground electrified transport. Naukovyi Visnyk Natsionalnogo Hirnychogo Universytetu. 2024. № 5. P. 65-71. <https://doi.org/10.33271/nvngu/2024-5/065>

Sulym A., Khozia P., Fomin O., Khara M., Burlutskyi O. New Approach to Determining the Rational Parameters of the On-Board Capacitive Energy Storage for a Metro Train. TRANSPORT MEANS 2023. PART II, Proceedings of the 27<sup>th</sup> International Scientific Conference, 04-06-October, 2023. P.733-738. <https://doi.org/10.5755/e01.2351-7034.2023.P2>

Sulym A., Khozia P. Analysis of management strategies for energy exchange processes in electric rolling stock with on board capacitive energy storages. Conference proceedings. 2021 IEEE 2nd KhPI Week on Advanced Technology. (September 13-17, 2021). Kharkiv, Ukraine. P.109-114. <https://doi.org/10.1109/KhPIWeek53812.2021.9569992>

The results of the Institute's research have been approved and tested at numerous international scientific conferences, including those co-founded by the Institute: “Actual Problems and Prospects of Innovative Development of Economy and Technology in the Context of Ukraine's Integration into the European Research and Production Area”. Participated in 26 international conferences, 10 of which were held abroad (<https://ukrndiv.com.ua/wp-content/uploads/2025/02/11-UCHAST-U-KONFERENTSIYAH-ZA->

[PERIOD-Z-2020-2024.pdf](#)). Based on the results of the work of international experts, the Institute received a 4\* certificate of recognition of excellence in Europe.

The achievements of the testing center in the field of testing of railway transport equipment are recognized by European research centers: “Baltic Testing Center” LLC, ‘HUTA BANKOWA Sp. z’ LLC. UkrNDIV, the certification body for railway products, has joint research and development activities on conformity assessment with Aktobe Rail and Structural Plant LLP (Kazakhstan) and Amsted Rail Company, Inc (USA).

The activities of the Institute's conformity assessment bodies, accredited by the National Accreditation Agency of Ukraine within the framework of ILAC MRA, are recognized not only at the European but also at the international level.

The further activities of the Institute are aimed at enhancing the stronger image of the Enterprise and its authority as a European level institution within Ukraine and worldwide.