Preface

The International Scientific and Practical Conference "Energy-optimal technologies, logistic and safety on transport" was held in Lviv on November 09-10, 2023 in a mixed (online and offline) format.

The conference is initiated by the Lviv Polytechnic National University, the Ukrainian State University of Science and Technology (USUST), and the Non-Governmental Organization “Linia102.Ua”. Co-organizers of the conference also are the Railway Research Institute (Warsaw) and the Faculty of Transport of Warsaw University of Technology.

The conference aims to facilitate the sharing of expertise and collaboration among scientists and practitioners within the transportation sector. This initiative seeks to expedite Ukraine's post-war recovery and enhance the integration of its transportation network into the Trans-European transport network.

The conference invited directors and representatives from manufacturing enterprises, scientific institutions, and educational establishments involved in Ukraine's transportation industry, as well as participants from the European Union. Leading European transport industry experts were also welcome to engage in discussions. Throughout the conference, the focus was on presenting and discussing new theoretical and experimental research findings, addressing current challenges in scientific and technological advancements within the following scientific and practical ways:

- Energy-efficient technologies, energy management, and energy efficiency in transport;
- Interoperability, safety, and certification in transport, environmental safety in transport, barrier-free access to transport infrastructure;
- Modern technologies of transportation organization and logistics, interaction of transport and manufacturing enterprises;
- Modeling and computer engineering, modernization and repair of transport facilities, materials science, and extension of the resource of structural elements.

The indicated directions are especially actual and relevant for the transport complex for the Lviv region, Ukraine, and all EU countries.

The need for this conference arose in connection with the reform of the railway transport of Ukraine in accordance with the requirements of EU legislation. This implies a new model of the railroad market, the expected entry into the market of competitive, efficient, mobile participants – both of private and public ownership.

The format of the conference provided for the expansion of the site for establishing close links between scientists, manufacturers of products for transport, logistics operators, and other transport companies. These relations had been created during the previous conferences held on June 18-19, 2018, and September 19-20, 2019.

Participants of the conference discussed topics for improving the efficiency of the companies operating in the transport industry. Leading European speakers, representatives of scientific organizations and transport companies, and other participants shared their best practices with the audience.

All this will contribute to Ukraine's post-war recovery by fostering the exchange of innovative solutions and advanced expertise in the transportation sector. This aids in the rapid restoration and development of infrastructure, a pivotal factor in strengthening the economy and maintaining stability post-conflict. Furthermore, the collaboration among conference participants facilitates the establishment of strategic partnerships and joint projects aimed at revitalizing and modernizing the transportation system, opening new prospects for development not only in Ukraine but in general in the European Union.

We hope that this scientific issue will be useful for both scientists and product manufacturers and will help to develop the transport industry.

See you at the following conferences.

Best regards,

Oleh Voznyak,
Chairman of NGO «Linia102.ua» Board,
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