

6 October, 2022

26th International
Scientific Conference
Transport Means 2022

Automotive and Railway Transport

Chairman – Dr. **S. Japertas**

Co-Chairman – Prof. **V. Lukoševičius**

10.00 – 18.00	Session
11.40 – 12.00	Coffee Break
13.40 – 14.00	Coffee Break
15.40 – 16.00	Coffee Break

Performance Tests of the Tesla Autopilot and VW Travel Assist on a Rural Road

D. Paula, **T. König**, **M. Bauder**, **F. Petermeier**, **H.-G. Schweiger**, University of Ingolstadt, CARISSMA Institute of Electric, Connected and Secure Mobility (C-ECOS) (Germany), **T. Kubjatko**, University of Zilina (Slovak Republic)

Efficiency of the Hydrogen Compression Facility Based on the Metal-Hydride Technology for Fueling Hydrogen Powered Transport

B. Tymoshevskyy, **M. Tkach**, **D. Kostenko**, Admiral Makarov National University of Shipbuilding (Ukraine)

Analysis of the Influence of the Selective Reduction System (SCR) Application for a Diesel Engine on the Emission Level of Nitrogen Oxides (NOx)

M. Dziwiątkowski, **D. Szpica**, Bialystok University of Technology (Poland)

Heat Transfer Consideration in the Modelling of a Piston Pneumatic Engine Operation

M. Korbut, **D. Szpica**, Bialystok University of Technology (Poland)

Introduction of a Protection System for Rear-Facing Seats in Autonomous Car Crashes

S. Himmetoglu, Hacettepe University (Turkey)

Female Modelling and Protection in Road-Traffic Accidents

S. Himmetoglu, Hacettepe University, **F.N. Şen**, Turkish Aeronautical Association University, **F.T. Ozer**, Hacettepe University (Turkey)

Integration of Muscle Tone into a Multi-Body Head-and-Neck Model for Crash Applications

S. Himmetoglu, Hacettepe University (Turkey)

Acceptance of Autonomous Vehicles in Turkey

S. Himmetoglu, **E.N. Zengin**, **O. Özkök**, **B.S. Kara**, Hacettepe University (Turkey)

Development of a Mathematical Tool to Measure Crash Severity in Frontal Impacts

S. Himmetoglu, **G. Dugan**, Hacettepe University (Turkey)

Profitability Analysis of Using Electric Vehicles in Urban Distribution Systems

P. Pryciński, **J. Murawski**, **M. Nader**, **G. Sierpiński**, Warsaw University of Technology (Poland)

Numerical Analysis of the Strength of the Crankshaft of a Four-Stroke Internal Combustion Engine

K. Cieślak, **T. Knefel**, **J. Nowakowski**, University of Bielsko-Biala (Poland)

Selected Method for Evaluation of Vehicle's Automated Driving Systems

J. Janura, **T. Zavodjančík**, **P. Vertaľ**, **E. Kolla**, University of Zilina (Slovak Republic)

Pedestrian Target Systems for Active Vehicle Safety Testing

T. Zavodjančík, **J. Janura**, **P. Vertaľ**, **E. Kolla**, University of Zilina (Slovak Republic)

On the Development of Electric Vehicles for the Tourism Industry

R. Zaripov, **A. Tkachuk**, **S. Miller**, **S. Zigangirov**, Torighyrov University (Kazakhstan), **P. Gavrilovs**, Riga Technical University (Latvia)

Evaluating the Quality of Design and Manufacture of Agricultural Tractors by Vibration Characteristics

V. Migal, Kharkiv Kharkiv Petro Vasylenko National Technical University of Agriculture, **Shch. Arhun**, **A. Hnatov**, Kharkiv National Automobile and Highway University (KhNAHU), **M. Shuliak**, Kharkiv Kharkiv Petro Vasylenko National Technical University of Agriculture (Ukraine)

Determination of the Stress State of the Body of a Hopper Car Transported by Sea

A. Lovska, Ukrainian State University of Railway Transport, **O. Fomin**, State University of Infrastructure and Technologies, **D. Skurikhin**, Ukrainian State University of Railway Transport (Ukraine)

Special Features of the Vertical Loading on a Flat Car Transporting Containers with Elastic-Viscous Links in their Interaction Units

O. Fomin, State University of Infrastructure and Technologies, **A. Lovska**, **D. Skurikhin**, **V. Nerubatskyi**, **D. Sushko**, Ukrainian State University of Railway Transport (Ukraine)

Determining the Set of Elements for Automatic Monitoring and Diagnosing the Relay Interlocking System

V. Malovichko, **R. Rybalka**, **N. Malovichko**, **K. Honcharov**, Ukrainian State University of Science and Technologies (Ukraine)

Design of a Steel-Steel Adapter for a Light Rail-Road Vehicle

J. Dižo, **M. Blatnický**, **J. Fiačan**, University of Zilina (Slovak Republic), **S. Semenov**, **E. Mikhailov**, Volodymyr Dahl East Ukrainian National University (Ukraine)

Estimating the Effect of Technical Controls on Improving the Operational Efficiency of Locomotive Diesel Generators

A. Bogajevskiy, **S. Arhun**, **S. Ponikarovska**, Kharkiv National Automobile and Highway University (KhNAHU)

Comparative Analysis of Methods for Regulating the Heating Power of Turnouts

R. Muhitovs, **I. Rankis**, Riga Technical University, **M. Mezitis**, **G. Strautmanis**, **V. Iriskovs**, Transport Academy (Latvia)

Decision-making to Assess the Technical Condition of Locomotive Equipment in Conditions of Uncertainty

O. Krashenin, **O. Obozny**, **O. Shapatina**, **I. Kramchanin**, **O. Lagereva**, Ukrainian State University of Railway Transport (Ukraine)

The Effect of the Human Personality of a Locomotive Driver on the Professional Integrity Level

V. Brusentsov, **V. Puzyr**, **Y. Datsun**, **O. Brusentsov**, Ukrainian State University of Railway Transport (Ukraine)

Substantiation of the Parameters of the Bench for Testing of Railway Wheels for Contact and Fatigue Strength

S. Raksha, **P. Anofriev**, **O. Kuropiatnyk**, **K. Glavatskij**, **V. Bohomaz**, **O. Posmitiukha**, **S. Volkova**, Ukrainian State University of Science and Technologies (Ukraine)

Determination of the Chemical Composition and Impact Strength of the M-24 Bolts for Fastening the Rubber-Cord Coupling of EMU Trains

P. Gavrilovs, **J. Eiduks**, **G. Srautmanis**, **D. Gorbacovs**, Riga Technical University (Latvia)

Mathematical Models of VHF/UHF Radio Wave Propagation in Cellular Mobile Communication Networks

A. Vasiljevs, **K. Otersone**, Riga Technical University (Latvia)

Experimental Investigations of Radio Coverage Conditions in 5G Cellular Mobile Communication Networks for Railway Application

K. Otersone, **A. Vasiljevs**, Riga Technical University (Latvia)

Innovative Technologies for the Introduction of High-Speed Train Operation (on the Example of Track Maintenance in the Plan)

M. Kurhan, **D. Kurhan**, **M. Husak**, **N. Hmelevska**, Ukrainian State University of Science and Technologies (Ukraine)

International Passenger Railway Connections in Poland after 1989

A. Soczówka, **P. Chyliński**, Railway Research Institute (Poland)

Prediction of the Lifetime of Shock Absorbers of Tracked Vehicles Using the Degradation Data

X. P. Cu, Le Quy Don Technical University (Vietnam), **Z. Vintr**, University of Defence in Brno (Czech Republic), **H. A. Bui**, University of Fire Fighting and Prevention (Vietnam)

The Position of Eigenvalues in the Gaussian Complex Plane Depending on the Change of the Coefficients of the Homogeneous Linear Differential Equation in Transport Application Using Matlab

J. Kulička, University of Pardubice (Czech Republic)

Structural Design, Simulation and Numerical comparison of the dynamic analysis of high-speed railway bridges using ABAQUS and Caldintav 3.0 software

K. Gunasekaran, KTU (Lithuania), **J. Goicolea**, Technical University of Madrid (Spain), **P. Griškevičius**, KTU (Lithuania)

Aspects of Safety in Autonomous Driving Systems

N.H. Venkatesh, KTU (Lithuania)

Analysis of Problem Related to Experimental Data Processing in the Study of the Rolling Stock Influence on the Track

I. Bondarenko, "Futurum Ukraine" Non-governmental Organization (Ukraine), **R. Keršys**, KTU (Lithuania), **L. Neduzha**, Ukrainian State University of Science and Technologies (Ukraine)

Fatigue Analysis of a Tanker Semi-Trailer Structure

V. Lukoševičius, KTU, **V. Liesionis**, **V. Navickas**, Astra LT AB (Lithuania)

Investigation of the Active Suspension in Small Cars

S. Zajankauskas, **A. Povilionis**, **V. Lukoševičius**, KTU (Lithuania)