Time (EEST, UTC+3)	15 September 2022: First Day of the Conference			
10:30 – 11:00	Welcome Coffee and Registration (ROOM: SRC 602)			
11:00 – 13:00	**PLENARY SESSION:** *Room*: SRC 307 ***Virtual Room***: https://liedm.zoom.us/my/transbaltica			
	Opening Speech	• **Assoc. Prof. Paulius Skačkauskas**, Scientific Committee of the 13th International Scientific Conference "Transbaltica 2022: Transportation Science and Technology"		
	Welcome Speech	• **Prof. Dalius Navakauskas**, Vice-Rector for Research and Innovation of the VILNIUS TECH • **Prof. Olegas Prentkovskis,** Dean of the VILNIUS TECH Faculty of Transport Engineering		
	Plenary Session Speakers: • **Dr. Justas Nugaras**, Ministry of Transport and Communications (Lithuania) • **Marius Beniulis**, Volvo Trucks Lietuva (Lithuania) • **Dr. Viktor Skrickij**, VILNIUS TECH Transport and Logistics Competence Centre (Lithuania)			
13:00 – 14:00	Break: Refreshments and Snacks (ROOM: SRC 602)			
14:00 – 16:30	**PARALLEL SESSIONS**			
	Room SRC 307: In-Person	*Virtual Room 1: Vehicle Engineering and Dynamics* https://liedm.zoom.us/my/transbaltica001	*Virtual Room 2: Combustion in Engines, Energy, Emissions* https://liedm.zoom.us/my/transbaltica002	*Virtual Room 3: Logistics and Transportation* https://liedm.zoom.us/my/transbaltica003
16:45	Dinner (ROOM: SRC 602)			

Time (EEST, UTC+3)	16 September 2022: Second Day of the Conference			
9:30 – 10:00	Welcome Coffee (ROOM: SRC 602)			
10:00 – 12:00	**PARALLEL SESSIONS**			
	Room SRC 307: In-Person	*Virtual Room 1: Intelligent Vehicles and Infrastructure, Aerospace Technologies* *https://liedm.zoom.us/my/transbaltica004*	*Virtual Room 2: Railway Transport* https://liedm.zoom.us/my/transbaltica005	*Virtual Room 3: Logistics and Transportation* https://liedm.zoom.us/my/transbaltica001
12:00 – 13:00	Lunch (ROOM: SRC 602)			
13:00 – 15:00	Vilnius City Tour: In-Person			

PARALLEL SESSIONS (15 September 2022, 14:00 – 16:30)

Room SRC 307: *In-Person* **Chairman: Paulius Skačkauskas** **Co-Chairman: Olegas Prentkovskis** https://liedm.zoom.us/my/transbaltica	*Virtual Room 1:* *Vehicle Engineering and Dynamics* **Chairman: Vidas Žuraulis** **Co-Chairman: Paulius Kojis** https://liedm.zoom.us/my/transbaltica001	*Virtual Room 2:* *Combustion in Engines, Energy, Emissions* **Chairman: Mykola Karpenko** **Co-Chairman: Algimantas Danilevičius** https://liedm.zoom.us/my/transbaltica002	*Virtual Room 3:* *Logistics and Transportation* **Chairwoman: Kristina Čižiūnienė** **Co-Chairwoman: Viktoriia Ivannikova** https://liedm.zoom.us/my/transbaltica003
Intelligent transportation systems applications: safety and transfer of big transport data *(Yasin Çelik, Metin Mutlu Aydın, Ioan Petri, Dimitris Potoglou)*	The use of simulation programs in the traffic accident analysis *(Ján Ondruš, Eduard Kolla, Ľudmila Macurová, Ján Podhorský)*	Comparative assessment of organic rankine cogeneration cycle efficiency with secondary heat sources from marine diesel *(Tomas Čepaitis, Sergejus Lebedevas)*	Analysis of international air hubs: a competitiveness review *(Aya Medany, Ilmars Blumbergs, Khaled Elsakty)*
Friction resitances in a prototype internal gear pump with sickle insert made of plastic *(Krzysztof Towarnicki, Michał Stosiak, Tadeusz Leśniewski, Adam Deptuła, Kamil Urbanowicz, Paweł Śliwiński)*	Finite element analysis of the tank semi-trailer's frame on road irregularities and liquid sloshing conditions *(Tomas Smolskas, Romualdas Juknelevičius)*	Improving the energy efficiency of a vehicle by implementing an integrated system for utilizing the thermal energy of the exhaust gases of an internal combustion engine *(Yurii Gutarevych, Jonas Matijošius, Dmitrij Trifonov, Oleksandr Syrota, Alfredas Rimkus, Yevhenii Shuba, Urtė Radvilaitė)*	Assessment of the link between the integration of technological development of a transport company and marketing in the supply chain *(Kristina Vaičiūtė, Ernestas Vaičius, Liudmila Burinskienė, Darius Bazaras)*
An engineering design of a frame of an electric bicycle *(Ján Dižo, Miroslav Blatnický, Denis Molnár)*	Assessment of hydrogen assisted degradation of stacker conveyor boom steel *(Olha Zvirko, Oleksandr Tsyrulnyk, Leonid Polishchuk)*	Artificial neural network model use for particulate matter evaluation from ships in Klaipeda port *(Paulius Rapalis, Giedrius Šilas)*	The role of East Asia in current issues focus on value chain management of logistics and transport market *(Veslav Kuranovic)*
Experimental approach to water hammer phenomenon *(Michał Stosiak, Kamil Urbanowicz, Krzysztof Towarnicki, Marijonas Bogdevičius, Mykola Karpenko)*	Determination of the value of the energy equivalent speed parameter according to the residual deformations of the finite element model *(Tomas Pasaulis, Robertas Pečeliūnas)*	A case study for the development of environmentally safe low-lead aviation gasoline in Ukraine *(Sergii Boichenko, Anna Yakovlieva, Iryna Shkilniuk, Natalia Gecejova, Olufemi Olaulava Babatunde, Ihor Kuberskyi)*	A study for identifying fake news in the information society: the case of the logistics sector *(Kristina Čižiūnienė, Artūras Petraška, Gabrielė Žemaitytė)*
Identification and classification of soft targets in railway infrastructure *(Simona Slivkova, Lenka Michalcova)*	Research of efficiency of anti-lock braking system during emergency cornering manoeuver *(Airidas Staputis, Vidas Žuraulis)*	Methodological aspects of numerical studies of ammonia use in diesel cycle *(Martynas Drazdauskas, Sergejus Lebedevas)*	Green logistics and marketing features: literature review *(Margarita Išoraitė)*
Methodology of the durability tests of semi-trailers on the MTS 320 road simulator *(Arkadiusz Czarnuch, Marek Stembalski, Tomasz Szydłowski, Damian Batory)*	Scenarios of accident events of electric vehicles *(Jozef Kubás, Michal Ballay, Katarína Zábovská)*	The comparison and potential of CO2 capture technologies implementation on the marine transport *(Audrius Malūkas, Sergejus Lebedevas)*	Innovations development in intermodal freight transport: Polish practitioners' viewpoint *(Ludmiła Filina-Dawidowicz, Tatjana Paulauskiene, Alla Selivanova, Daria Możdrzeń, Sara Stankiewicz)*
New design of axial piston pump with displaced swash plate axis of rotation for hydro-mechanical transmissions *(Paweł Załuski, Piotr Patrosz, Marcin Bąk)*	Prospects for the production of recycled hot mix asphalt with plastic fiber *(Volodymyr Ilchenko, Alla Kariuk, Roman Mishchenko, Anna Shevchenko)*	Study on correlation between particulate matter emissions and exhaust Smoke levels in CI engines *(Sai Manoj Rayapureddy, Jonas Matijošius)*	Mathematical model of airport aviation security *(Olena Sokolova, Kostiantyn Cherednichenko, Viktoriia Ivannikova)*
Engineer mobility support on the territory of the Czech Republic as one of the host nation support tasks *(Jindřich Dologa, Ota Rolenec, Natálie Hanáková)*	Possibilities of the using of drilling mud in road construction *(Oksana Demchenko, Volodymyr Shulhin, Volodymyr Ilchenko, Elena Uzhviieva)*	Methodology for calculating the load of petroleum products emissions on the soils of the roadside space created by the operation of highways *(Oksana Melnikova, Valentina Iurchenko, Mykola Mykhalevych)*	Formation of organizational principles of service of export cargo flows in transport units *(Gryshchuk Oleksandr, Petryk Anatoliy, Yaro-slav Yerko, Litus Tetiana)*
Identification of specific system parameter space in initial research stage *(Andrius Macutkevičius, Raimundas Junevičius)*	Streets and urban roads surface runoff problems: a case study in the Poltava city, Ukraine *(Iryna Tkachenko, Tetyana Lytvynenko, Lina Hasenko, Nataliia Sorochuk)*	Possibilities of legislative and economic support for electromobility in Slovakia *(Kristián Čulík, Karol Hrudkay, Vladimíra Štefancová)*	Study of technological literacy competencies of logistics specialists of a transport company *(Kristina Vaičiūtė, Irina Yatskiv (Jackiva))*
Energy consumption and travel time as important factors for deciding on the mode of transport - case study from Slovakia *(Juraj Grenčík, Dalibor Barta, Miloš Brezáni, Denis Molnar)*	Expert evidence in the analysis of the accident event – vehicle, motorcycle and pedestrian *(Ľudmila Macurová, Pavol Kohút, Gustáv Kasanický, Michal Ballay)*	Numerical analysis of combustion parameters of a spark ignition engine fuelled with CNG and variable valve timing *(Gediminas Mikalkėnas, Alfredas Rimkus, Saugirdas Pukalskas)*	Optimization of the special cargo delivery by UAV *(Anna Ayrapetyan, Viktoriia Ivannikova)*
Scavenging of a two-stroke engine *(Vytautas Rimša, Darius Rudinskas)*	Comparison of same aftermarket monotube shock absorbers manufactured by different brands *(Paulius Skačkauskas, Dominyka Norkūnaitė, Mykola Karpenko, Vilius Mejeras)*		Transport eurointegration of Ukraine (ways to revitalize Dnipro reservoirs) *(Grygoriy Shariy, Svitlana Nesterenko, Vira Shchepak, Evgeniya Ugnenko)*

PARALLEL SESSIONS (16 September 2022, 10:00 – 12:00)

Room SRC 307: In-Person Chairman: Paulius Skačkauskas Co-Chairman: Olegas Prentkovskis https://liedm.zoom.us/my/transbaltica	Virtual Room 1: Intelligent Vehicles and Infrastructure Aerospace Technologies Chairman: Viktor Skrickij Co-Chairman: Laurynas Šišovas https://liedm.zoom.us/my/transbaltica004	Virtual Room 2: Railway Transport Chairman: Gintautas Bureika Co-Chairman: Mykola Karpenko https://liedm.zoom.us/my/transbaltica005	Virtual Room 3: Logistics and Transportation Chairman: Vidas Žuraulis Co-Chairwoman: Viktoriia Ivannikova https://liedm.zoom.us/my/transbaltica001
A reliable low-cost interlocking system for regional railway lines (*Petr Šohajek, Martin Šustr, Pavla Šmídová, Radovan Soušek*)	Comprehensive vehicle safety diagnostics and management system (*Maksym Delembovskyi, Terenchuk Svitlana*)	Improving noise immunity of audio frequency track circuits using neural networks and data classification (*Inna Saiapina, Halyna Holub, Ivan Kulbovskyi*)	Identification of problem areas of traffic flow management and solutions in Vilnius (*Aldona Jarašūnienė, Gabrielė Žemaitytė*)
Numerical analysis of passenger car wheel suspension models in a vertical test of an axle (*Miroslav Blatnický, Ján Dižo, Denis Molnár*)	Validating adverse weather influence on LiDAR with an outdoor rain simulator (*Michał Brzozowski, Krzysztof Parczewski*)	Changes in the passenger sector in the Covid-19 era (*Agata Pomykala*)	Optimization of customs processes for improving cooperation between third-party logistics companies (*Ieva Meidutė-Kavaliauskienė, Renata Činčikaitė*)
Comparison of mathematical models of torque transmitted by multi-disc wet clutch with experimental (*Marcin Bąk, Piotr Patrosz, Paweł Śliwiński, Paweł Załuski, Mykola Karpenko*)	Conditions of effective application of energy-saving programs for the movement of heavy trucks on the highway (*Myroslav Oliskevych, Viktor Danchuk*)	Assessment of the on-board energy storage parameters of the locomotive for rail quarry transport (*Ievgen Riabov, Liliia Kondratieva, Liliia Overianova and Sergiy Goolak*)	Restriction of mobility due to follow-up measures caused by COVID-19 (*Vladimíra Štefancová, Kristián Čulík, Borna Abramović, Adriana Pálková*)
Investigation into the significance of railway traction rolling stock characteristics for serviceability using MCDM methods (*Laurynas Meilus, Lijana Maskeliūnaitė, Henrikas Sivilevičius*)	Crack open / close effect on impedance based system of structural health monitoring (*Pavithra Nagaraj, Vitalis Pavelko*)	Implementing intelligent monitoring of the technical condition of locomotive hydraulic transmissions (*Boris Bondar, Oleksandr Ockasov, Viačeslav Petrenko, Michail Martishevskij*)	Adapting private sector warehousing services to the needs of the Lithuanian armed forces (*Aidas Vasilis Vasiliauskas, Ieva Meidutė-Kavaliauskienė, Edgaras Čerškus*)
Methodological framework for assessing and strengthening the resistance of railway critical infrastructure elements (*David Rehak, Lucie Flynnova, Abdollah Malekjafarian*)	Influence of the ground effect on the precise landing of an unmanned aircraft (*Andrius Dubovas, Domantas Bručas*)	Revised estimation of public railway infrastructure line capacity: Lithuanian case (*Gintautas Bureika*)	The impact of third-party logistics intermediaries on supply chain responsiveness (*Aidas Vasilis Vasiliauskas, Olga Navickienė*)
Experimental study of flow rate in hydraulic satellite motor with the rotating case at a low constant rotational speed (*Pawel Sliwinski, Piotr Patrosz, Marcin Bak, Michal Stosiak, Kamil Urbanowicz, Šarūnas Šukevičius*)	Intelligent Management of Traffic Flows in Large Cities (*Bohdan Yeremenko, Roman Mazurenko, Oleksii Stetsyk and Anatolii Buhrov*)	Ukrainian high-speed normal gauge railway: factors of war and peace (*Viktor Myronenko, Valery Samsonkin, Oksana Yurchenko, Andrii Pozdniakov*)	Study of the dynamics of railway passenger traffic, identification of trends (*Renata Činčikaitė, Ieva Meidute-Kavaliauskiene*)
Environmental problems associated with vehicle braking and their solutions (*Oleksandr Kravchenko, Dalibor Barta, Juraj Gerlici, Kateryna Kravchenko, Iwona Rybicka, Andrej Zigo*)	Development of a technology for monitoring passenger traffic in the context of intelligent transport systems (*Mykyta Volodarets, Igor Gritsuk, Sergii Pronin, Alona Yurzhenko*)	Study on measurement repeatedness of vertical impacts on rail of loaded and empty wagons (*Gediminas Vaičiūnas, Stasys Steišūnas*)	Method and results of the most efficient means of transport selection for executing orders of the grain crops delivery (*Viktoriia Kotenko*)
Methodology of experimental research on efficiency of hydro-mechanical automatic gearbox (*Piotr Patrosz, Marcin Bąk, Paweł Załuski, Paweł Śliwiński, Mykola Karpenko*)	Improvement of methodology of calculation and assessment of transport and operational condition of airfield pavement (*Viktor Karpov, Oleksandr Stepanchuk, Oleksandr Dubyk, Oleksandr Rodchenko, Olegas Prentkovskis*)	Comparison of railway development in the countries of the world (*Gediminas Vaičiūnas*)	Influence of the bridge's status on the military mobility in the Slovak republic (*Ján Jančo, Jaroslav Kompan*)
Realtime measurements of the relation between the acting force, unsprung and sprung masses on a road simulator test stand for large-size vehicles (*Marek Stembalski, Arkadiusz Czarnuch, Tomasz Szydłowski, Damian Batory*)			An application of driver behavior questionnaire: case study of amman (*Khair Jadaan, Duha Alsarayreh, Qasem Alqasem, Zaid Alnusairat, Ala'a Atieh*)
The use of mineral powders of various nature to form the structure of asphalt concrete (*Kateryna Krayushkina, Oleksandra Akmaldinova, Kyrylo Fedorenko, Oleksandra Skrypchenko*)			Investigation of the possibilities of optimization of freight road traffic flows in the urban logistics system (*Nijolė Batarlienė, Šarūnas Šlajus*)