



ON- LINE CONFERENCE PROGRAMME

WEDNESDAY

October 21

10⁰⁰ - 10³⁰	OPENING CEREMONIES
10³⁰ - 10⁴⁵	IEEE POLSKA
10⁴⁵ - 12³⁰	SESSION 1 <i>Chairman: prof. Zbigniew Lozia, Prof. Jozef Gašparik</i>
10 ⁴⁵ - 11 ⁰⁰	Wojciech Wach Spatial impulse-momentum collision model in programs for simulation of vehicle accidents
11 ⁰⁰ - 11 ¹⁵	Naveen Shirur, Christian Birkner, Roman Henze, Thomas M. Deserno, Darshankumar Dudhat Effect of Airbag Deployment Phases on Tactile Occupant Detection Sensor
11 ¹⁵ - 11 ³⁰	Krzysztof Podkowski, Łukasz Okruch, Paweł Jasiński, Katarzyna Stańko-Pająk Strength numerical analyses of the construction of the PAWO autonomous high mobility platform
11 ³⁰ - 11 ⁴⁵	Roman Rak, Dagmar Kopencova Issues of Vehicle Digital Forensic
11 ⁴⁵ - 12 ⁰⁰	Sabri Alper Keskin, Erdem Acar, Mehmet Ali Güler, Murat Altın Crashworthiness Sensivity Analysis Of Axisymmetric Rectangular Crash Absorbers With Diaphragms
12 ⁰⁰ - 12 ¹⁵	Jozef Gašparik, Peter Blaho, Lumír Pečený, Causality of accidents at railway-crossings in Slovakia and its prevention
12 ¹⁵ - 12 ³⁰	Ondrej Stopka, Mária Stopková, Ján Ližbetin, Jakub Soviar, Jacek Caban Development Trends of Electric Vehicles in the Context of Road Passenger and Freight Transport
12³⁰ - 12⁴⁰	PRESENTATION ENVIBRA
12⁴⁰ - 14⁰⁰	BREAK
14⁰⁰ - 15⁴⁵	SESSION 2, <i>Chairman: prof. Andrzej Reński, prof. Marián Gogola</i>
14 ⁰⁰ - 14 ¹⁵	Marián Gogola, Ján Ondruš Road safety perspective of small children
14 ¹⁵ - 14 ³⁰	Zbigniew Lozia Can anything optimistic be found in the statistics of road accidents in Poland in 1975-2018?
14 ³⁰ - 14 ⁴⁵	Alica Kalašová, Kristián Čulík, Ambróz Hájnik Young Drivers and Their Risky Behaviour on the Roads
14 ⁴⁵ - 15 ⁰⁰	Branislav Šarkan, Juraj Hudec, Monika Kiktová The Analysis of the network of technical inspection stations for road vehicles and traffic accidents in Slovakia
15 ⁰⁰ - 15 ¹⁵	Jan Vrabel, Juraj Jagelčák, Jaroslav Čermák, Ján Ondruš Tracing of the dangerous goods and its tracking in the intermodal transport mode - the case study Tracing of the dangerous goods and its tracking in the intermodal transport mode - the case study
15 ¹⁵ - 15 ³⁰	Stanislav Kubařák, Marián Gogola The accident rate of cyclists in the Slovak republic in bike-sharing system
15 ³⁰ - 15 ⁴⁵	Mysłowski Jaromir Two-wheel revolution - active and passive safety of users
15⁴⁵ - 16¹⁰	BREAK
16¹⁰ - 18¹⁰	SHORT SESSION 3



- 1 SECTION (IEEE), Chairman: prof. Wojciech Wach, prof. Alica Kalašová**
- 16¹⁰ – 16²⁰ **Dalibor Barta, Tetiana Bazhynova, Oleksandr Kravchenko, Oleh Haievyi, Vladimir Pavelcik**
Neural Network Model Of Assessing The Technical Condition Of The Power Unit Of A Hybrid Vehicle
- 16²⁰ – 16³⁰ **Arkadiusz Małek, Andrzej Niewczas**
Selected maintenance aspects of traction batteries in electric vehicles
- 16³⁰ – 16⁴⁰ **Dariusz Tarnapowicz, Sergey German-Galkin**
Optimization of the electric car's drive system with PMSM
- 16⁴⁰ – 16⁵⁰ **Andrzej Bąkowski, Rafał Jurecki, Leszek Radziszewski, Paweł Świetlik**
Analysis of the relations between road vehicle traffic parameters and the number of road accidents in subsequent hours of the day - a case study
- 16⁵⁰ – 17⁰⁰ **Jacek Caban, Paweł Drożdziel, Monika Stoma, Agnieszka Dudziak, Jan Vrabel, Ondrej Stopka**
Road Traffic Safety in Poland, Slovakia and Czech Republic – statistic analysis
- 17⁰⁰ – 17¹⁰ **Michał Gruszczyński, Rafał Jurecki,**
Review of driving quality and vehicle safety indicators
- 17¹⁰ – 17²⁰ **Alica Kalašová, Ján Gaňa, Veronika Harantová, Kristián Čulík**
Restrictions Meaning in Road Transport
- 17²⁰ – 17³⁰ **Jaroslava Kubáňová, Šimon Senko, Alžbeta Bieliková, Adriana Ďuranová, Eva Faturíková**
Safe and secure truck parking places in EMEA region
- 17³⁰ – 17⁴⁰ **Radovan Slávik, Jozef Gnap**
Speed and Noise as a Problem of Safety in Residential Areas
- 17⁴⁰ – 17⁵⁰ **Peter Medvid', Stanislav Kubaľák, Šimon Senko, Bibiána Poliaková**
Improving Transport Services In Košice By Introducing Preferential Measures
- 17⁵⁰ – 18⁰⁰ **Krzysztof Parczewski, Henryk Wnęk**
An attempt to determine the value of forces acting on the wheel while overcoming road unevenness
- 18⁰⁰ – 18¹⁰ **Kristián Čulík, Ambróz Hájník, Veronika Harantová**
Improving the Mobility of People with Disabilities

2 SECTION, Chairman: prof. Rafał Jurecki, prof. Branislav Šarkan

- 16¹⁰ – 16²⁰ **Irina Makarova, Polina Buyvol, Gulnara Yakupova, Eduard Mukhametdinov, Anton Pashkevich**
Increasing The Transport System Safety By Creating A Comfortable Working Conditions For Truck Drivers
- 16²⁰ – 16³⁰ **Ján Ližbetin, Maria Stopkova**
A case study into safety compliance within the road freight transport sector with regards to securing cargo
- 16³⁰ – 16⁴⁰ **Joanna Rymarz, Anna Borucka, Andrzej Niewczas**
Ocena Wpływu Czynnków Operacyjnych I Technicznych Na Czas Przystoju Autobusów Komunikacji Miejskiej Na Podstawie Modelu Regresji Liniowej
- 16⁴⁰ – 16⁵⁰ **Monika Stoma, Jacek Caban, Agnieszka Dudziak, Andrzej Kuranc**
Chosen Aspects Of Road Traffic Safety Management System
- 16⁵⁰ – 17⁰⁰ **Izabela Krzysztofik, Zbigniew Koruba**
Dynamics And Control Of The Gyroscopic Head Used For Laser Illumination Of A Ground Target From The Quadcopter Deck
- 17⁰⁰ – 17¹⁰ **Piotr Woś, Ryszard Dindorf**
Bricklaying Robot Lifting And Levelling System
- 17¹⁰ – 17²⁰ **Andrzej Bąkowski, Leszek Radziszewski**
Descriptors Of The Urban Noise At Night
- 17²⁰ – 17³⁰ **Arkadiusz Małek, Rodolfo Taccani, Dariusz Kasperek, Jacek Hunicz**
Optimization Of Energy Management In A City Bus Powered By Hydrogen Fuel Cells
- 17³⁰ – 17⁴⁰ **Anna Matuszewska, Marlena Owczuk, Izabela Samson-Bręk**
Biorefinery Systems As A Key Element Of Sustainable Development - Part 2. Technology Readiness Level Of Existing Solutions And Their Impact On The Environment
- 17⁴⁰ – 17⁵⁰ **Piotr Łagowski**
Injection Parameters and Concentrations of the Exhaust Gas Harmful Components in Diesel Engine Powered by Plant-derived Fuels
- 17⁵⁰ – 18⁰⁰ **Dariusz Kurczyński**
Effect of RME biodiesel on the diesel engine consumption fuel and emission
- 18⁰⁰ – 18¹⁰ **Michał Warianek, Kazimierz Lejda**
Influence of the Fiat 0.9 TwinAir compressed natural gas engine on the environmental safety of its use

10⁰⁰ – 11⁴⁵ SESSION 4, Chairman: prof. Grzegorz Ślaski, Prof. Jozef Gašparík

- 10⁰⁰ – 10¹⁵** **Miloš Poliak, Jana Tomicová, Juraj Hammer, Pawel Drozdziel**
Free access to the road transport market as a condition for the sustainability of road transport functionality in the European Union
- 10¹⁵ – 10³⁰** **Adela Poliakova**
Allocation of financial sources for road transport incidents decreasing
- 10³⁰ – 10⁴⁵** **Józef Stokłosa, Artur Dmowski**
Exploitation efficiency of the car as a determinant for the commercial vehicle choice at long-term rental
- 10⁴⁵ – 11⁰⁰** **Wojciech Zakrzewicz, Ewa Sys, Adam Mrowicki, Krzysztof Siczek, Przemysław Kubiak**
Safety issues for electric and hybrid vehicles
- 11⁰⁰ – 11¹⁵** **Juraj Hammer, Milos Poliak, Marek Jaskiewicz, Zdenek Riha, Borna Abramovic**
Probability of secure return of semi-trailers to the domicile of the carrier, with regard to transport costs
- 11¹⁵ – 11³⁰** **Irina Makarova, Polina Buyvol, Gulnara Yakupova, Eduard Mukhametdinov, Anton Pashkevich**
Identification for Factors and Causes Affecting the Traffic Accident Severity
- 11³⁰ – 11⁴⁵** **Mária Bridžíková, Vladimír Konečný, Štefánia Semanová**
Assessing the Impact of Transport Service Quality on the Demand of Passengers for Bus Transport. Application of the Assessment Methodology in the Žilina Self-governing Region in the SR

11⁴⁵ – 12⁰⁰ PRESENTATION GLOBTRAK POLSKA**12⁰⁰ – 13³⁰ BREAK****13³⁰ – 14³⁰ SESSION 5, Chairman: prof. Zbigniew Lozia, prof. Marián Gogola**

- 13³⁰ – 13⁴⁵** **Ryszard Dindorf, Jakub Takosoglu, Piotr Woś**
Using of the brain activity of a disabled driver to exert a pneumatic actuator pressure on an secondary foot brake pedal during emergency braking
- 13⁴⁵ – 14⁰⁰** **Mateusz Brukalski, Krzysztof Rokick, Hubert Sar**
Application of CAN bus data in road tests of automobiles
- 14⁰⁰ – 14¹⁵** **Damian Frej, Emilia Szumska, Andrzej Zuska**
Analysis of the impact of a child seat mounting method on vertical vibrations affecting a child in a child seat
- 14¹⁵ – 14³⁰** **Grzegorz Ślaski, Zbyszko Klockiewicz, Krzysztof Dąbrowski**
Simulation investigation of individual bumps recognition possibilities for damping control and possible suspension performance improvements

14³⁰ – 14⁴⁰ PRESENTATION EC TEST SYSTEMS**14⁴⁰ – 15³⁰ BREAK****15³⁰ – 16⁵⁰ 6 SHORT SESSION****1 SECTION (IEEE), Chairman: prof. Marek Pawełczyk, prof. Branislav Šarkan**

- 15³⁰ – 15⁴⁰** **Rafał Jurecki, Tomasz L. Stańczyk, Marek J. Jaśkiewicz, Andrzej Zuska, Emilia Szumska, Paweł Grabski, Damian Frej, Piotr Lagowski**
Braking performance tests for different types of vehicles
- 15⁴⁰ – 15⁵⁰** **Damian Frej, Marek Jaśkiewicz, Dariusz Więckowski, Miloš Poliak**
Shoulder joint design of the anthropometric dummy used for crash tests
- 15⁵⁰ – 16⁰⁰** **Jana Tomicova, Miloš Poliak, Marek Jaśkiewicz, Anna Rudawska, Natalia Lakhmetkina**
Impact of neutralization of transport documents on the safety of the road carrier
- 16⁰⁰ – 16¹⁰** **Michał Kekez, Leszek Radziszewski, Andrzej Bąkowski, Dariusz Kurczyński**
Short-term imputation of missing sound level data using selected computational intelligence methods
- 16¹⁰ – 16²⁰** **Dariusz Kurczyński**
Impact of RME biodiesel on the concentration of particulates and nitrogen oxides in compression ignition engine exhaust fumes
- 16²⁰ – 16³⁰** **Piotr Łagowski**
Effect of the biofuel and injection timing on emission of Diesel engine DI
- 16³⁰ – 16⁴⁰** **Anna Matuszewska, Marlena Owczuk, Izabela Samson-Bręk**
Current trends of biofuels use in transport

2 SECTION, *Chairman: prof. Marek Jaśkiewicz, prof. Miloš Poliak*

- 15³⁰ – 15⁴⁰ **Hubert Sar, Mateusz Brukalski, Krzysztof Rokicki**
Simulation of curvilinear motion of automobile including two-degree-of-freedom flat model
- 1⁴⁰ – 15⁵⁰ **Hubert Sar, Mateusz Brukalski, Krzysztof Rokicki**
Research On Curvilinear Motion Of Automobile With The Application Of On-Board CAN Bus Data
- 15⁵⁰ – 16⁰⁰ **Pavol Kohút, Ľudmila Macurová, Miroslav Rédl, Michal Ballay**
Application of rectification method for processing of documentation from the place of road accident (3)
- 16⁰⁰ – 16¹⁰ **Jaromir Mysłowski**
Nowoczesne rozwiązania w bezpieczeństwie czynnym i biernym użytkowników jednośladów
- 16¹⁰ – 16²⁰ **Ryszard Dindorf, Jakub Takosoglu, Piotr Woś**
Study On A Brain-Controlled Pneumatic Actuator To Assist Emergency Braking Of A Vehicle
- 16²⁰ – 16³⁰ **Piotr Zdanowicz, Marek Guzek**
Diagnostic On-Vehicle Shock Absorber Testing
- 16³⁰ – 16⁴⁰ **Damian Frej, Andrzej Zuska, Emilia Szumska**
Laboratory tests of the control of the method of using child seats for the vibration comfort of the children transported in them
- 16⁴⁰ – 16⁵⁰ **Andrzej Bąkowski, Leszek Radziszewski**
Analysis Of Selected Parameters Of Traffic At The National Road During Several Years Of Operation, On A Section In The City

FRIDAY

OCTOBER 23

10⁰⁰ – 12⁴⁵ **SESSION 7, *Chairman: prof. Paweł Drożdziel, prof. Branislav Šarkan***

- 10⁰⁰ – 10¹⁵ **Mateusz Ziubiński, Leon Prochowski, Mirosław Gidlewski**
Wpływ składowej dynamicznej siły nacisku kół jezdnych na bilans energii podczas czołowo-bocznego zderzenia samochodów
- 10¹⁵ – 10³⁰ **Paweł Drożdziel, Rafał Wrona, Iwona Rybicka**
Errors In Controlling Cars Cause Tragic Accidents Involving Motorcyclists
- 10³⁰ – 10⁴⁵ **Rafał Jurecki, Tomasz Lech Stańczyk**
Analysis of how to drive under different road conditions
- 11⁰⁰ – 11¹⁵ **Jozef Paľo, Ondrej Stopka**
On-Site Traffic Management Evaluation And Proposals To Improve Safety Of Access To Workplaces
- 11¹⁵ – 11³⁰ **Piotr Fundowicz, Hubert Sar, Mateusz Brukalski**
Modelling of wheels' normal reaction forces of automobile in steady-state curvilinear motion
- 11³⁰ – 11⁴⁵ **Emilia Szumska**
Comparative Life Cycle Analysis Of Hybrid And Conventional Drive Vehicles In Various Driving Conditions
- 11⁴⁵ – 12⁰⁰ **Wojciech Zakrzewicz, Adam Mrowicki, Przemysław Kubiak**
Nonlinear method of precrash velocity determination for Mini car class-B-spline tensors products with probabilistic weights
- 12⁰⁰ – 12¹⁵ **Jacek Caban, Andrzej Kuranc, Branislav Šarkan, Agnieszka Dudziak, Monika Stoma**
Emission Of Selected Exhaust Gas Components And Fuel Consumption In Different Driving Cycles
- 12¹⁵ – 12³⁰ **Anna Matuszewska, Marlena Owczuk, Izabela Samson-Bręk**
Biorefinery Systems As A Key Element Of Sustainable Development - Part 1. Classification Of Systems And Their Importance In The Circular Economy

12³⁰ **CLOSING CEREMONIES**

COMMENTS

- PRESENTATIONS IN SESION 1, 2, 4, 5, 7 – PRESENTATION TIME - 10 MINUTES +5 MINUTES DISCUSSION, IN ACCORDANCE WITH THE DETAILED PROGRAM, PRESENTATION AT POWER POINT AND PDF FORMAT MUST BE SEND FOR ORGANIZERS BY CONFERENCE WEBSITE
- PRESENTATIONS IN SHORT SESION 3,6 – PRESENTATION TIME - 6 MINUTES +4 MINUTES DISCUSSION, IN ACCORDANCE WITH THE DETAILED PROGRAM, PRESENTATION AT POWER POINT AND PDF FORMAT MUST BE SEND FOR ORGANIZERS BY CONFERENCE WEBSITE
- ALL PAPERS INTENDED FOR PUBLICATION IN IEEE MUST BE PRESENTED IN ENGLISH

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