



UNIVERSITY OF NIŠ
Faculty of Mechanical Engineering

Department of Transport Engineering and Logistics

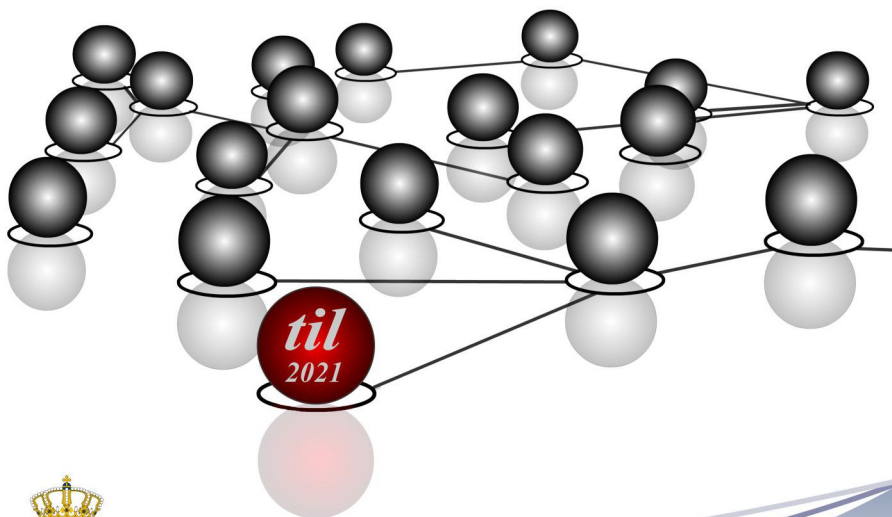
Niš, Serbia 3th December 2021

8th INTERNATIONAL CONFERENCE

TRANSPORT & LOGISTICS

warehousing
 GIS resource
 GPS goods
 project management
 GSM efficient
 AHP production
 method traffic
 supply order
 low system
 management
 reliability
 production
 traffic
 order
 system
 management
 reverse logistics
 design
 organization
 supply chain
 distribution
 lean
 research
 ergonomics and industrial design
 control
 VRP
 E-business
 operation
 information flow
 management
 traffic safety
 control
 VRP
 E-business
 operation
 research
 material handling
 transport machines
 management
 information flow
 material flow
 storage
 structural analysis
 production logistics
 control
 simulation
 cranes
 optimisation
 SCM
 machines
 transportation
 city logistics
 vehicle
 material handling
 transport machines
 management
 information flow
 vehicle routing
 inventory control
 availability
 functions
 production logistics
 control
 warehousing
 maintenance
 shipping
 mobile
 machines
 transportation
 city logistics
 vehicle

Conference Program



Under the auspices of
 Serbian Ministry of Education, Science and Technological Development

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Jelena Mihajlović, Faculty of Mechanical Engineering, University of Niš, SRB.

All authors will receive e-mails with links to join plenary session and other sessions (1, 2, 3)

10.00 - 12.00

CONFERENCE OPENING AND PLENARY SESSION

CONFERENCE OPENING

Prof. Dr. Goran Janevski, Faculty of Mechanical Engineering, University of Niš, Serbia, Dean of the Faculty

Assoc. Prof. Dr. Goran Petrović, Faculty of Mechanical Engineering, University of Niš, Serbia, Chairman of the Scientific Committee

PLENARY SESSION

Moderate: **Prof. Dr. Dragan Marinković**,
Assoc. Prof. Dr. Goran Petrović

DIGITAL TWINS OF RAILWAY JUNCTIONS BASED ON A SIMULATION MODEL, **Aleksandr Rakhmangulov**, **Pavel Mishkurov**, **Sergey Kornilov**, *Nosov Magnitogorsk, State Technical University, Mining Engineering and Transport Institute, Department of Logistics and Transportation Systems Management, Magnitogorsk, Russia*

PROBABILISTIC ANALYSIS OF INDUSTRIAL EQUIPMENT ACCIDENT REGISTERS THROUGH BAYES' RULE AND BAYESIAN NETWORKS, **Rosen Mitrev**, *Technical University of Sofia, Mechanical Engineering Faculty, Bulgaria*

DECISION-MAKING IN TRANSPORT AND LOGISTICS USING INTEGRATED MODELS, **Željko Stević**, *University of East Sarajevo, Faculty of Transport and Traffic Engineering, Doboj, Bosnia and Herzegovina*

12.30 - 14.30

**SESSION 1 - LOGISTICS SYSTEMS
OPERATION RESEARCH AND QUANTITATIVE LOGISTICS**

Moderate: **Asst. Prof. Dr. Predrag Milić**,
Asst. Prof. Dr. Danijel Marković

1.1. DYNAMIC ELECTRIC VEHICLE ROUTING PROBLEM, **Lazar Z. Velimirović**, *Mathematical Institute SANU, Belgrade, Serbia*, **Aleksandar Janjić**, *University of Niš, Faculty of Electronic Engineering, Nis, Serbia*, **Petar Vranić**, **Ivana Petkovski**, **Jelena D. Velimirović**, *Mathematical Institute SANU, Belgrade, Serbia*

1.2. STATISTICAL MODELING OF A RENT-A-BIKE IN GoNM SYSTEM, **Matej Babič**, *Faculty of information studies, Novo mesto, Slovenia*, **Dragan Marinković**, *Technical University Berlin, Institute of Mechanics, Berlin, Germany*

1.3. APPLICATION OF PCA-DEA MODEL FOR EVALUATING THE EFFICIENCY OF A TRANSPORT COMPANY, **Smiljka Miškić**, **Eldina Huskanović**, **Marko Vasiljević**, *University of East Sarajevo, Faculty of Transport and Traffic Engineering, Doboj, Bosnia and Herzegovina*

- 1.4. **REAL TIME SIMULATION OF CONVEYING SYSTEM: CASE STUDY**,
Saša Marković, Danijel Marković, Aleksandar Stanković, Predrag Milić, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 1.5. **SELECTION OF LASER CUTTING SYSTEMS USING MCDM METHODS**,
Miloš Madić, Miroslav Radovanović, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 1.6. **ADAPTIVE NEURO FUZZY ESTIMATION OF IMPORTANT FACTORS FOR E-COMMERCE PRODUCT SHIPMENT DELIVERY**,
Miloš Milovančević, *University of Niš, Faculty of Mechanical Engineering, Serbia*,
Dalibor Petković, *University of Niš, Pedagogical Faculty in Vranje, Vranje, Serbia*
- 1.7. **RE-SHORING IN THE SUPPLY CHAIN AS A RESPOND TO COVID-19**,
Aleksandra Andelković, Melisa Bejtović, *University of Niš, Faculty of Economics, Nis, Serbia*
- 1.8. **SOLVING THE UNRELATED PARALLEL MACHINE SCHEDULING PROBLEM WITH SETUP TIMES**, Aleksandar Stanković, Goran Petrović, Danijel Marković, Saša Marković, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 1.9. **MONTE CARLO METHOD BASED ON THE GAME “TOUR DU WINO” AND ITS APPLICATIONS**, Predrag Rajković, Ljiljana Radović, Milica Barać, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 1.10. **PRIORITIZING THE INTERNAL AND EXTERNAL FACTORS LEADING FIRMS TO GREEN LOGISTIC: A CASE STUDY FOR FOOD FIRMS**, Selçuk Korucuk, *Giresun University, Department of International Trade and Logistics, Turkey*, Ahmet Aytekin, *Artvin Çoruh University, Department of Business Administration, Turkey*, Basil Oluch Okoth, Çağlar Karamaşa, *Anadolu University, Department of Business Administration, Turkey*
- 1.11. **THE ROLE OF DIGITAL TECHNOLOGIES IN SUPPLY CHAIN MANAGEMENT IN THE COVID-19 CRISIS PERIOD**,
Adriana Jevtić, *University of Belgrade, Technical faculty in Bor, Bor, Serbia*, Goran Milovanović, *University of Niš, Faculty of Economics, Niš, Serbia*, Nevena Tomić, *University of Niš, Faculty of Technology, Leskovac, Serbia*

15.00 - 17.00

SESSION 2 - MATERIAL HANDLING EQUIPMENT CONSTRUCTIONS AND DESIGN ENGINEERING

Moderate: Asst. Prof. Dr. Vesna Jovanović,
Dr. Jovan Pavlović

- 2.1. **OPTIMIZATION OF SCISSOR MECHANISM LIFTING PLATFORM MEMBERS USING HHO METHOD**, Marko Todorović, Nebojša B. Zdravković, Mile Savković, Goran Marković, *University of Kragujevac, Faculty of Mechanical and Civil Engineering in Kraljevo, Kraljevo, Serbia*, Goran Pavlović, *University of Niš, Faculty of Electronic Engineering, Niš, Serbia*

- 2.2. SELECTION OF ZIPLINE BRAKING DEVICE**, **Tanasije Jojić, Jovan Vladić, Radomir Đokić, Atila Zelić**, *University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia*
- 2.3. ANALYSIS OF LOADING AXIAL BEARING OF SLEWING PLATFORM DRIVE MECHANISMS IN HYDRAULIC EXCAVATORS**, **Vesna Jovanović, Dragoslav Janošević, Jovan Pavlović, Nikola Petrović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 2.4. DETERMINATION OF SOLID PARTICLE VELOCITY IN A PNEUMATIC CONVEYING SYSTEM**, **Jasmina Bogdanović Jovanović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 2.5. EXPERIMENTAL ASSESSMENT OF THERMAL ENVIRONMENT IN MOBILE MACHINERY CAB**, **Dragan Ružić, Nenad Poznanović**, *University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia*
- 2.6. OPTIMIZATION OF A LOADER DRIVE MECHANISMS ON THE BASIS OF THE CYCLE TIME CRITERION**, **Jovan Pavlović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*, **Radomir Đokić**, *University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Serbia*, **Nikola Petrović, Nikola Despenić**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 2.7. SELECTION OF THE OPTIMAL TWO STAGE PLANETARY GEAR TRAIN FOR APPLICATION AT SLEWING PLATFORM DRIVE MECHANISM OF HYDRAULIC EXCAVATOR**, **Jelena Stefanović-Marinović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*, **Sanjin Troha**, *University of Rijeka, Faculty of Engineering, Rijeka, Croatia*, **Vesna Jovanović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*
- 2.8. THE TWO-ROLL RUBBER MILL FRAME DEVELOPMENT SUPPORTED BY THE MCDM METHODOLOGY**, **Dušan Ćirić, Jelena Mihajlović, Miroslav Mijajlović**, *University of Niš, Faculty of Mechanical Engineering, Nis, Serbia*

17.30 - 19.30**SESSION 3 - TRAFFIC AND TRANSPORT ENGINEERING**

Moderate: **Prof. Dr. Dušan Stamenković,**
Asst. Prof. Dr. Boban Nikolić

- 3.1. ANALYSIS OF OPERATING SPEED DEVIATIONS FROM LIMIT VALUES ON TWO-LANE ROADS**, **Ana Bonić, Mirnes Salkanović, Marko Subotić, Željko Stević**, *University of East Sarajevo, Faculty of Transport and Traffic Engineering, Dobož, Bosnia and Herzegovina*
- 3.2. TURBOPROP AND TURBOFAN ENGINES EFFECTIVENESS COMPARISON**, **Ljubiša Vasov, Branimir Stojiljković, Olja Ćokorilo**, *University of Belgrade, Faculty of Transport and Traffic Engineering, Belgrade, Serbia*, **Dušan Stamenković**, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*, **Đorđe Pantović**, *Ryanair Group, Lauda Europe Limited, Flight and Ground Operations*

- 3.3. ANY EVIDENCE OF SUSTAINABLE TRAVEL BEHAVIOR IN LIBYA? AN INVESTIGATION,** Hussain Nasr, *Central South University, School of Traffic and Transportation, China*, Ibrahim Badi, *The Libyan Academy-Misurata, Libya*
- 3.4. COMPUTATIONAL INTELLIGENCE AND MACHINE LEARNING IN TRAFFIC AND TRANSPORTATION,** Bratislav Lukić, *Ministry of Defense of the Republic of Serbia, Serbia*, Goran Petrović, Predrag Milić, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*, Dragan Marinković, *Institute of Mechanics, Berlin, Germany*, Žarko Čojbašić, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*
- 3.5. INTEGRATION OF UNMANNED AERIAL VEHICLES INTO URBAN TRANSPORT SYSTEMS,** Miloš Marina, Tanja Živojinović, Marijana Petrović, Petar Miroslavljević, *University of Belgrade, Faculty of Transport and Traffic Engineering, Belgrade, Serbia*
- 3.6. INTELLIGENT LED MATRIX LIGHTING SYSTEMS ON MODERN VEHICLES,** Andrija Veličković, *Gama Consulting Prokuplje, Serbia*, Miloš Milošević, Maša Milošević, Aleksandra Cvetković, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*
- 3.7. SYSTEMATIZATION OF ERGONOMIC AND INCLUSIVE PRINCIPLES FOR DESIGNING INTERIORS OF AUTONOMOUS VEHICLES,** Elena Angeleska, Sofija Sidorenko, Aleksandar Jankovic, Tashko Rizov, Aleksandra Aleksovska, Nikola Avramov, *University Ss. Cyril and Methodius in Skopje, Faculty of Mechanical Engineering – Skopje, North Macedonia*
- 3.8. THE APPLICATION OF CAMERAS ON THE HEAVY DUTY VEHICLES WITH AIM TO INCREASE THE DRIVER VISUAL FIELD,** Nadica Stojanović, Ivan Grujić, Jasna Glišović, *University of Kragujevac, Faculty of Engineering, Kragujevac, Serbia*, Bojana Bošković, *Academy of professional studies Šumadija, Department in Trstenik, Serbia*, Saša Vasiljević, *Academy of professional studies Šumadija, Department in Kragujevac, Serbia*
- 3.9. DESIGN AND DEVELOPMENT OF AUTOMOTIVE INTERIORS USING QFD METHODS,** David Marinkov, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*, Nikola Kostić, *Ph.D. Academy of Technical Educational Vocational Studies Niš, Serbia*, Vladislav Blagojević, Saša Randelović, *University of Niš, Faculty of Mechanical Engineering, Niš, Serbia*



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