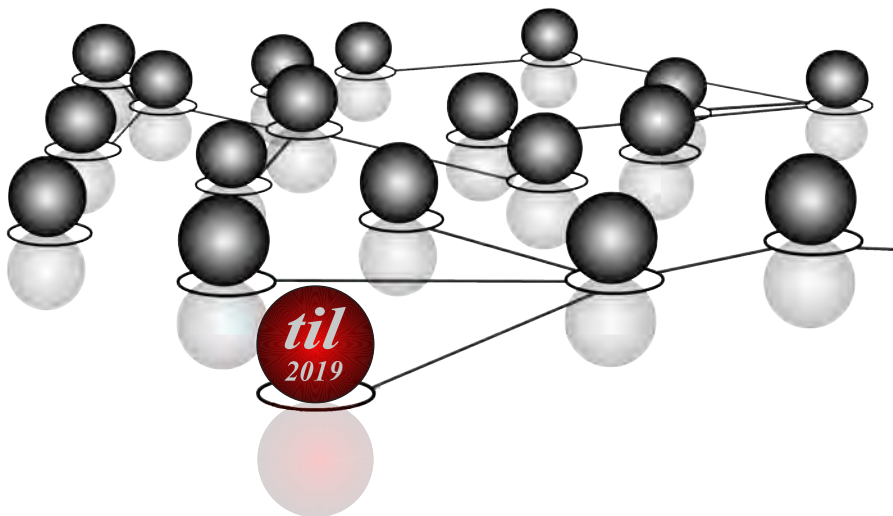


Niš, Serbia 6 December 2019

7th INTERNATIONAL CONFERENCE

TRANSPORT & LOGISTICS

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



SCIENTIFIC COMMITTEE

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Jovan Pavlović (conference technical secretary), Faculty of Mechanical Engineering, University of Niš, SRB,
Aleksandar Stanković, Faculty of Mechanical Engineering, University of Niš, SRB,
Jelena Mihajlović, Faculty of Mechanical Engineering, University of Niš, SRB.

09.00 - 10.00

REGISTRATION OF PARTICIPANTS

Lobby - VI floor

10.00 - 11.00

CONFERENCE OPENING AND PLENARY SESSION

Ceremonious Room - VI floor

CONFERENCE OPENING

Prof. Dr. Nenad T. Pavlović, 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: **Assoc. Prof. Dr. Marijana Petrović**, **Asst. Prof. Dr. Boban Nikolić**

CHALLENGES OF ASSISTIVE TECHNOLOGIES IMPLEMENTATION INTO INDUSTRY 4.0: A REVIEW, Marko Periša, Dragan Peraković, Petra Zorić, *Department of Information and Communication Traffic, Faculty of Transport and Traffic Sciences, University of Zagreb, Croatia*

ACTIVE STRUCTURES IN TRANSPORT – AN INTERACTIVE SIMULATION TOOL, Marinković Dragan, Manfred Zehn, *Department of Structural Analysis, Faculty of Mechanical Engineering and Transport Systems, TU Berlin, Germany*

11.00 - 11.30

COFFEE BREAK

Lobby - VI floor

11.30 - 13.30

SESSION 1 - SMART LOGISTICS SYSTEMS

Ceremonious Room - VI floor

Moderate: **Asst. Prof. Dr. Željko Stević**, **Assoc. Prof. Dr. Goran Petrović**

1.1. WEIGHTING THE KEY FEATURES AFFECTING SUPPLIER SELECTION USING MACHINE LEARNING TECHNIQUES, **Ahmad Abdulla**, *George Baryannis, School of Computing and Engineering, University of Huddersfield, United Kingdom*, **Ibrahim Badi**, *Faculty of Engineering, Misurata University, Libya*

1.2. AN INTEGRATED FUCOM – ROUGH SAW MODEL FOR SUSTAINABLE SUPPLIER EVALUATION, **Elmina Durmić**, *Faculty of Transport and Traffic Engineering Doboj, University of East Sarajevo, Bosnia and Herzegovina*, **Milovan Tomašević**, *Faculty of Information Studies in Novo Mesto, Slovenia*, **Marko Vasiljević**, **Željko Stević**, *Faculty of Transport and Traffic Engineering Doboj, University of East Sarajevo, Bosnia and Herzegovina*, **Prasenjit Chatterjee**, *Department of Mechanical Engineering, MCKV Institute of Engineering, India*

- 1.3. NORMALIZED WEIGHTED GEOMETRIC DOMBI BONFERONI MEAN OPERATOR WITH INTERVAL GREY NUMBERS APPLICATION IN MULTICRITERIA DECISION MAKING**, Dragan Pamučar, *Department of logistics, Military academy, University of Defence in Belgrade, Serbia.*
- 1.4. SUPPLIER SELECTION FOR DISTRIBUTION OF FINISHED PRODUCTS COMBINED FUCOM-MABAC MODEL**, Željko Stević, Branislavka Mičić, Dominik Lukić, *Faculty of Transport and Traffic Engineering Dobož, University of East Sarajevo, Bosnia and Herzegovina*, Milovan Tomašević, *Faculty of Information Studies in Novo Mesto, Slovenia*, Siniša Sremac, *Faculty of Technical Sciences, University of Novi Sad, Serbia.*
- 1.5. SMART, GREEN ASPECTS IN WAREHOUSES LOGISTICS**, Kristina Jakimovska, Anita Vasileva, Slave Jakimovski, *Faculty of Mechanical Engineering – Skopje, University “Ss. Cyril and Methodius”, North Macedonia.*
- 1.6. AN APPLICATION OF A GENETIC ALGORITHM FOR THE FLEXIBLE JOB-SHOP SCHEDULING PROBLEM**, Aleksandar Stanković, Goran Petrović, Žarko Čojbašić, Miloš Madić, Natalija Tomić, *Faculty of Mechanical Engineering, University of Niš, Serbia.*
- 1.7. THE LOCATION SELECTION PROCESS FOR BATTERY CHARGING STATIONS FOR TWO-WHEEL ELECTRIC VEHICLES REGARDING THE IMPORTANCE OF URBAN MOBILITY IN THE CITY OF NIŠ**, Jelena Mihajlović, Goran Petrović, Nikola Petrović, Predrag Milić, Dušan Ćirić, *Faculty of Mechanical Engineering, University of Niš, Serbia.*

11.30 - 13:30

SESSION 2 - INTELLIGENT AND INNOVATIVE MATERIAL HANDLING EQUIPMENT AND TRANSPORTATION SYSTEMS

Room 408 – IV floor

Moderate: Asst. Prof. Dr. Goran Marković, Asst. Prof. Dr. Predrag Milić

- 2.1. NON-INTEGRATED WORKING PLATFORMS USED IN CONJUNCTION WITH FORKLIFT TRUCKS – DILEMMAS, ANSWERS, AND BASIC GUIDANCE FOR DESIGN AND USE**, Atila Zelić, Rastislav Šostakov, Dragan Živanić, Nikola Ilanković, *Faculty of Technical Sciences, University of Novi Sad, Serbia.*
- 2.2. POSSIBILITIES OF MATERIAL FLOW PROPAGATION THROUGH CONVEYOR LOADING DEVICES**, Dragan Živanić, Nikola Ilanković, Atila Zelić, *Faculty of Technical Sciences, University of Novi Sad, Serbia.*
- 2.3. ZIPLINE COMPUTATIONAL MODEL FORMING AND IMPACT OF INFLUENTIAL SIZES**, Radomir Đokić, Jovan Vladić, Tanasije Jojić, *Department of Mechanization and Design Engineering, Faculty of Technical Sciences, University of Novi Sad, Serbia.*
- 2.4. A CONTRIBUTION TO THE SELECTION OF ADEQUATE MCDM TECHNIQUE STATISTICAL COMPARISON OF THE SELECTION RESULTS OF MATERIAL HANDLING EQUIPMENT**, Goran Marković, Milomir Gašić, Mile Savković, Nebojša Zdravković, Bratislav Sredojević, *Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac, Serbia*, Marko Popović, *Faculty of Technical Sciences Čačak, University of Kragujevac, Serbia.*

- 2.5. DEVELOPMENT AND DESIGN OF THE SPECIAL VEHICLE FOR THE TRANSPORTATION OF HEAVY WEIGHT CONSTRUCTION MACHINES,** Mile Savković, Goran Marković, Nebojša Zdravković, Boris Milovanović, Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac, Goran Pavlović, R&D Center Alfatec Ltd, Serbia, Milomir Gašić, Bratislav Sredojević, Faculty of Mechanical and Civil Engineering in Kraljevo, University of Kragujevac, Serbia.
- 2.6. TRANSPORT COMFORT DATA CLUSTERING,** Željko Jovanović, Department of Computer Engineering, Faculty of Technical Sciences Čačak, University of Kragujevac, Serbia, Dragan Janković, Department of Computer Science, Faculty of Electronic Engineering, University of Niš, Serbia.
- 2.7. SOME MODERN TRENDS OF AUTONOMOUS VEHICLES,** Suzana Jovanović, Ministry of defense Republic of Serbia, Miloš Milošević, Faculty of Mechanical Engineering, University of Niš, Serbia.

14.00 - 16.00

CONFERENCE LUNCH

Restaurant Etno kuća Biser – teniski tereni
(Jadranska bb, Niš)

16.30 - 18.30

SESSION 3 - TRAFFIC ENGINEERING, URBAN MOBILITY AND CITY LOGISTICS

Ceremonious Room - VI floor

Moderate: Asst. Prof. Dr. Nikola Petrović, Asst. Prof. Dr. Danijel Marković

- 3.1. TQM TOOLS IN SUPPORT TO URBAN MOBILITY SHIFT: EXPLORING POSSIBILITIES TO TRANSFER EU PRACTICE IN SERBIA,** Marijana Petrović, Nataša Vidović, Faculty of Transport and Traffic Engineering, University of Belgrade, Serbia.
- 3.2. NEW CONCEPT OF TRAIN AND RAILWAY INFRASTRUCTURE MAINTENANCE,** Dušan Stamenković, Milan, Banić, Aleksandar Miltenović, Miloš Simonović, Faculty of Mechanical Engineering, University of Niš, Serbia.
- 3.3. THE INFLUENCE OF MIRRORS POSITION ON THE DRIVER VISUAL FIELD,** Nadica Stojanović, Ivan Grujić, Faculty of Engineering, University of Kragujevac, Serbia, Jovan Dorić, Faculty of technical sciences, University of Novi Sad, Serbia, Saša Vasiljević, High Technical School of Professional Studies, Kragujevac, Serbia, Bojana Bošković, College of Technical and Mechanical Engineering Trstenik, Serbia.
- 3.4. TURBOFAN ENGINE SHOP VISIT MANAGEMENT,** Branimir Stojiljković, Ljubiša Vasov, Olja Čokorilo, Department of Air Transport and Traffic Division of Aircraft, Faculty of Transport and Traffic Engineering, University of Belgrade, Serbia.

- 3.5. HUMAN ENVIRONMENT, ENVIRONMENTAL AWARENESS AND URBAN MOBILITY THROUGH THE LENSES OF PUERTO RICO AND THE BAHAMAS**, Magdalena Krstanovski, *Construction Management and Renewable Energy Department, Everglades University, Sarasota, FL, U.S.A.*, Ana M. Lazarevska, *University "Ss. Cyril and Methodius", North Macedonia*, Daniela Mladenovska, *University Mother Teresa, Skopje, North Macedonia*.
- 3.6. RETHINKING URBAN MOBILITY IN DEVELOPING COUNTRIES**, Beti Angelevska, Vaska Atanasova, *Department for transport and traffic, Faculty of Technical Sciences, Bitola, North Macedonia*.
- 3.7. ASSISTIVE TECHNOLOGIES AND URBAN MOBILITY PROBLEMS OF DISABLED PEOPLE IN NIS**, Đorđe Milanović, Saša Milanović, Vladislav Blagojević, Danijel Marković, *Faculty of Mechanical Engineering, University of Niš*,

16.30 - 18.30

SESSION 4 - CONSTRUCTIONS AND DESIGN ENGINEERING*Room 408 – IV floor*Moderate: **Prof. Dr. Dragan Marinković**, **Asst. Prof. Dr. Vesna Jovanović**

- 4.1. INFLUENCE OF CAR DOOR CAVITY DESIGN ON INGRESS/EGRESS ERGONOMICS**, Elena Angelevska, Antonio Cvetkovski, Mila Dimchova, Nenad Simonovski, Darko Treziovski, Sofija Sidorenko, *Faculty of Mechanical Engineering, "Ss Cyril and Methodius", University in Skopje, North Macedonia*.
- 4.2. ANALYSIS OF LOADING TOOTH MANIPULATOR FOR BREAKING OF CRAWLER TRACTOR**, Vesna Jovanović, Dragoslav Janošević, Predrag Milić, Jovan Pavlović, *Faculty of Mechanical Engineering, University of Niš, Serbia*.
- 4.3. MODEL OF THE ELECTRO-PNEUMATIC FESTO MOTION TERMINAL**, Vladislav Blagojević, Saša Milanović, *Faculty of Mechanical Engineering, University of Niš, Serbia*.
- 4.4. IDENTIFYING RELEVANT INDICATORS FOR COST-EFFECTIVE MAINTENANCE IN COAL-FIRED THERMAL POWER PLANTS**, Daniela Mladenovska, *Technical Faculty, University Mother Teresa, Skopje, North Macedonia*, Ana M. Lazarevska, *Faculty of Mechanical Engineering, "Ss Cyril and Methodius", University in Skopje, North Macedonia*.
- 4.5. MULTI-CRITERIA OPTIMAL SYNTHESIS OF THE LOADER MANIPULATOR DRIVE MECHANISMS USING THE GENETIC ALGORITHM**, Jovan Pavlović, Dragoslav Janošević, Vesna Jovanović, Nikola Petrović, *Department for Material Handling Systems and Logistics, Faculty of Mechanical Engineering, University of Niš*.
- 4.6. STRUCTURE AND IMPORTANT PARAMETERS CHOICE OF THE TWO-SPEED TWO-CARRIER PLANETARY GEAR TRAINS**, Jelena Stefanović-Marinović, *Faculty of Mechanical Engineering, University of Niš, Serbia*, Sanjin Troha, *Faculty of Engineering, University of Rijeka, Croatia*, Miloš Milovančević, *Faculty of Mechanical Engineering, University of Niš, Serbia*, Željko Vrcan, *Faculty of Engineering, University of Rijeka, Croatia*.

4.7. ANGULAR POSITION MEASUREMENT USING AN ADAPTIVE ABSOLUTE ENCODER, Goran Miljković, Dragan Denić, Milan Simić, Aleksandar Jocić, Faculty of Electronic Engineering, University of Niš, Serbia.

4.8. LEAVING THE LINE PATH, Predrag Rajković, Ljiljana Radović, Department for Mathematics, Faculty of Mechanical Engineering, University of Niš, Serbia.

18.30

CONFERENCE CLOSING
Ceremonious Room - VI floor

The conference is supported by:





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