



**International Congress
Motor Vehicles & Motors 2018
Kragujevac, Serbia
October 4th - 5th, 2018**



INTRODUCTORY LECTURES

MVM2018-IL1	Dušan Gruden	WILL ELECTRIC MOTOR SUBSTITUTE INTERNAL COMBUSTION ENGINE?
MVM2018-IL2	Ralph Pütz	ELECTRIC BUS VERSUS BUS WITH COMBUSTION ENGINE - AN ECOLOGICAL-ECONOMIC APPROACH
MVM2018-IL3	Miroљub Adžić	FUEL CELLS AND ELECTRIC VEHICLES
MVM2018-IL4	Josip Vlahović	TURBULENT DEVELOPMENT OF BODY CONCEPTS, MATERIALS AND JOINING PROCESSES IN THE LAST TWO DECADES
MVM2018-IL5	Dobrivoje Ninković	CURRENT STATE AND DEVELOPMENT TRENDS IN THE FIELD OF LARGE DIESEL AND GAS ENGINES
MVM2018-IL6	Patrizio Nuccio	DEVELOPMENT THROUGH SIMULATION OF A TURBOCHARGED 2-STROKE G.D.I. ENGINE FOCUSED ON A RANGE-EXTENDER APPLICATION
MVM2018-IL7	Giovanni Belingardi Pier Giuseppe Anselma Miroslav Demic	OPTIMIZATION-BASED CONTROLLERS FOR HYBRID ELECTRIC VEHICLES
MVM2018-IL8	Dušan Teodorović	TRANSPORTATION SCIENCE: CHALLENGES AND FUTURE RESEARCH

SECTION A

Power Train Technology

MVM2018_001	Sunny Narayan Ivan Grujic Nadica Stojanovic Vipul Gupta	ANALYSIS OF PRESSURE PLATE OF AN AUTOMOTIVE CLUTCH ASSEMBLY
MVM2018_004	Sreten Perić Bogdan Nedić Mile Stojilković Radovan Radovanović	EXPERIMENTAL RESEARCH OF THE BIODEGRADABLE UNIVERSAL TRACTOR OIL BASED ON THE VEGETABLE OILS
MVM2018_005	Slobodan Mišanović Dragan Taranović Jovanka Lukić Radivoje Pešić Jasna Glišović	THE IMPACT OF THE SYSTEM FOR HEATING AND AIR-CONDITIONING ON THE ENERGY EFFICIENCY OF THE ELECTRIC DRIVE BUS (E-BUS)

MVM2018_011	Mikhail G. Shatrov Leonid N. Golubkov Andrey U. Dunin Pavel V. Dushkin Andrey L. Yakovenko	ANALYSIS OF REALIZATION OF STEPPED FUEL INJECTION WITHOUT CHANGING DESIGN OF COMMON RAIL INJECTOR
MVM2018_012	Mikhail G. Shatrov Vladimir V. Sinyavski Ivan G. Shishlov Andrey Y. Dunin Andrey V. Vakulenko	EXPERIENCE OF DIESEL ENGINES CONVERSION FOR OPERATION ON NATURAL GAS OBTAINED IN MADI
MVM2018_014	Hristo Stanchev Krasimir Markov	INVESTIGATION OF DIESEL ENGINE OPERATED WITH DIESEL FUEL-BUTANOL BLENDS AND CETANE IMPROVER
MVM2018_016	Igor V. Alekseev Mikhail G. Shatrov Andrey L. Yakovenko	METHOD AND SOME RESULTS OF INVESTIGATION OF STRUCTURE-BORNE NOISE OF DIESEL ENGINE AT ACCELERATION MODE
MVM2018_017	Branimir Milosavljević Radivoje Pešić Žarko Đorđević Nikola Kostić Jelena Erić Obućina Saša Babić	STATISTICAL ANALYSIS OF INFLUENTIAL PARAMETERS ON THE PROBABILITY THAT CARS MEET THE CO EMISSION TEST
MVM2018_023	Almir Blažević Dževad Bibić Ivan Filipović	INFLUENCE OF DETERMINING THE PERIOD OF IGNITION DELAY ON THE HEAT RELEASE CHARACTERISTIC OF DIESEL ENGINES FUELLED WITH DIESEL AND BIODIESEL
MVM2018_029	Ivan Blagojević Saša Mitić	HYDROGEN AS A VEHICLE FUEL
MVM2018_044	Ivana Terzić Vanja Šušteršič Aleksandar Nešović Mladen Josijević	POSSIBILITIES FOR THE USE OF BIOFUELS IN EUROPE AND IN SERBIA
MVM2018_062	Ivan Grujić Jovan Dorić Nadica Stojanović Aleksandar Davinić Radivoje Pešić Sunny Narayan	NUMERICAL MODELING OF IC ENGINE COMBUSTION PROCESS
MVM2018_063	Nenad Raspopović Jovan Dorić Ivan Grujić Nebojša Nikolić	ANALYSIS OF HYBRID TURBOCHARGER IN MOTOR VEHICLE IC ENGINE
MVM2018_064	Saša Milojević Radivoje Pešić Aleksandar Davinić Dragan Taranović Snežana Petković Emil Hnatko Radmilo Stefanović Stevan Veinović	INFLUENCE OF VARIABLE COMPRESSION RATIO ON EMISSION AND VIBE FUNCTION PARAMETERS OF EXPERIMENTAL ENGINE
MVM2018_065	Radivoje Pešić Saša Milojević Dragan Taranović Milan Stanojević	EXPERIENCES RELATED TO THE INSPECTION OF MOTOR VEHICLES RUNNING ON NATURAL GAS IN THE REPUBLIC OF SERBIA

SECTION B

Vehicle Design and Manufacturing

MVM2018_002	Isak Karabegović Ermin Husak	THE ROLE OF INDUSTRIAL AND SERVICE ROBOTS IN FOURTH INDUSTRIAL REVOLUTION WITH FOCUS ON CHINA
MVM2018_010	Nenad Kostić Nenad Petrović Vesna Marjanović Nenad Marjanović	AUTOMATED SELECTION OF ANALYTICALLY CALCULATED GEARBOX CONCEPTS ACCORDING TO DIMENSIONAL CRITERIA
MVM2018_027	Saša Mitić Ivan Blagojević	END-OF-LIFE VEHICLE DISPOSAL AND IT'S INFLUENCE TO THE ENVIRONMENT
MVM2018_031	Dimitrios V. Koulocheris Clio G. Vossou	ALTERNATIVE DESIGN FOR A SEMI – TRAILER TANK VEHICLE
MVM2018_033	Ralph Pütz Matthias Kampfl Thomas Hechfellner	EXPLOITATION OF THE GOLF BALL EFFECT FOR FURTHER AERODYNAMIC OPTIMISATION OF RACE CARS
MVM2018_034	Nadica Stojanovic Jasna Glisovic Ivan Grujic Sunny Narayan Sasa Vasiljevic Bojana Boskovic	EXPERIMENTAL AND NUMERICAL MODAL ANALYSIS OF BRAKE SQUEAL NOISE
MVM2018_036	Sandra Veličković Blaža Stojanović Lozica Ivanović Slavica Miladinović Saša Milojević	APPLICATION OF NANOCOMPOSITES IN THE AUTOMOTIVE INDUSTRY
MVM2018_040	Aleksandar Poznić Boris Stojić	SECONDARY CONTRIBUTION TO THE ANALYSIS OF MAGNETORHEOLOGICAL BRAKE
MVM2018_045	Sonja Kostić Zorica Đorđević Milosav Đorđević	THE INFLUENCE OF THE INTERNAL RADIAL CLEARANCE ON THE LOAD DISTRIBUTION ON THE ROLLER BODY OF A SINGLE RADIAL BALL BEARING
MVM2018_046	Aleksandar Radaković Dragan Milosavljević Gordana Bogdanović Dragan Čukanović Petar Knežević	ELASTIC WAVES PROPAGATION IN COMPOSITE LAMINATES USED IN THE AUTOMOTIVE INDUSTRY
MVM2018_047	Dragan Čukanović Aleksandar Radaković Gordana Bogdanović	THERMAL ANALYSIS OF FUNCTIONALLY GRADED MATERIAL AS THE SPECIFIC CLASS OF ADVANCED COMPOSITES USED IN AUTOMOTIVE INDUSTRY
MVM2018_056	Dragan Ružić	AN ANALYTICAL MODEL OF AIR-CONDITIONED MOTOR VEHICLE CABIN
MVM2018_059	Boris Stojić Dragan Ružić Zoran Ivanović Evgenije Adžić Nikola Ilanković	LIGHT HYBRID-ELECTRIC VEHICLE AS EDUCATIONAL AND RESEARCH PLATFORM

MVM2018_066	Saša Milojević Dragan Džunić Dragana Taranović Radivoje Pešić Slobodan Mitrović	EXPERIMENTAL DETERMINATION OF TRIBOLOGICAL CHARACTERISTICS OF COMPOSITE MATERIALS IN USE FOR PARTS IN ALUMINUM AIR COMPRESSOR (PISTON AND CYLINDER)
MVM2018_067	Rodoljub Vujanac Nenad Miloradovic Milan Djordjevic	DESIGN OF FORKLIFT SPEED LIMIT CONTROL SYSTEM FOR WAREHOUSES

SECTION C

Vehicle Dynamics and Intelligent Control Systems

MVM2018_037	Lazar Stojnić Aleksandar Grkić Slavko Muždeka	DEVELOPMENT AND ANALYSIS OF A 4X4 TRUCK MULTIBODY SIMULATION MODEL
MVM2018_042	Boris Stojić Aleksandar Poznić Nebojša Nikolić	EXAMINATION OF SENSITIVITY OF TRACTOR TIRE FILTERING BEHAVIOR TO CONTACT LENGTH CHANGE
MVM2018_051	Nina Živanović Gordana Bogdanović	OSCILLATIONS OF LIGHT WHEELED VEHICLE UNDER THE INFLUENCE OF INTEGRATED WEAPON'S RECOIL FORCE
MVM2018_052	Satoru Furugori Takeo Kato Yoshiyuki Matsuoka	AUTOMOTIVE SAFETY CONTROL SYSTEM BASED ON TIMEAXIS DESIGN

SECTION D

Driver/Vehicle Interface, Information and Assistance Systems

MVM2018_003	Valentina Golubović- Bugarski Snežana Petković Željko Đurić Goran Jotić	VIBRATION COMFORT OF THE VEHICLE EXPRESSED BY SEAT EFFECTIVE AMPLITUDE TRANSMISSIBILITY
MVM2018_015	Janez Kopač Franci Pušavec	TOUCHSCREEN CAR DASHBOARDS AS SERIOUS DANGER FOR CAUSING TRAFFIC ACCIDENTS
MVM2018_019	Saša Babić Jovanka Lukić Nikola Kostić Žarko Đorđević Jelena Obućina-Erić Branimir Milosavljević	NOISE EMISSION WITH ASPECT OF VEHICLES FLEET STRUCTURE – THE CASE OF SERBIA
MVM2018_021	Jelena Trifunović Aleksandar Manojlović Snežana Kaplanović Nebojša Bojović	METHODOLOGY FOR DETERMINING THE AMOUNT OF ECOLOGICAL FEE FOR THE USE OF PASSENGER CARS

MVM2018_035	Tijana Ivanišević Dragan Taranović Radivoje Pešić Sreten Simović Vedran Vukšić	ROLE OF VEHICLES ON ALTERNATIVE PROPULSION SYSTEMS IN LOGISTICS AND TRANSPORT
MVM2018_053	Slavica Mačužić Jovanka Lukić	APPLICATION OF DIGITAL HUMAN MODEL IN ORDER TO DETERMINE THE HUMAN BODY DISCOMFORT
MVM2018_057	Slavica Mačužić Igor Saveljić	THREE DIMENSIONAL ANALYSES OF SEAT BELT AND DRIVER IN CASE OF SUDDEN BRAKING

SECTION E

Road Traffic Safety

MVM2018_006	Slobodan Mišanović Predrag Živanović Dušan Savković Pavle Krstić Slobodan Ivanov Slobodan Stević	TWO-YEAR SUCCESSFUL EXPLOITATION OF THE ELECTRIC BUSES IN BELGRADE
MVM2018_007	Milja Simeunović Zoran Papić Milan Simeunović Pavle Pitka	THE ROLE OF APPLYING ELECTRIC VEHICLES IN SUSTAINABLE URBAN MOBILITY
MVM2018_008	Goran Štetin Zoran Papić Nenad Saulić Andrijana Jović	ANALYSIS OF VEHICLE CRASH DEFORMATIONS USING FE MODELS
MVM2018_013	Vase Jordanoska Igor Gjurkov Darko Danev	COMPARATIVE ANALYSIS OF CAR FOLLOWING MODELS BASED ON DRIVING STRATEGIES USING SIMULATION APPROACH
MVM2018_020	Jelena Eric Obucina Nikola Kostic Zarko Djordjevic Sasa Babic Branimir Milosavljevic	SAFETY ASPECTS OF THE HYDRAULIC SERVO STEERING GEAR IN THE VEHICLE SYSTEM
MVM2018_025	Saša Vasiljević Nadica Stojanović Ivan Grujić Bojana Bošković Milan Mladenović	MEASUREMENT OF VEHICLE BRAKE COEFFICIENT AS VEHICLE MAINTENANCE PARAMETER ON TECHNICAL INSPECTION LINES
MVM2018_026	Bojana Bošković Milan Mladenović Saša Vasiljević Marina Teofilović Nadica Stojanović Ivan Grujić	PERSONS WITH DISABILITIES AS PARTICIPANTS IN THE TRAFFIC
MVM2018_032	Clio G. Vossou Dimitrios V. Koulocheris	A COMPUTATIONAL MODEL FOR THE RECONSTRUCTION OF VEHICLE COLLISIONS
MVM2018_039	Žarko Đorđević Nikola Kostić Jelena Erić Obućina Branimir Milosavljević Saša Babić	CONTRIBUTION TO THE RESEARCH OF PARAMETERS, EFFECTS AND METHODS OF ECO DRIVING MEASUREMENTS

MVM2018_041	Goran Pejić Marko Bunjevac Matija Pečet Zoran Lulić	IMPACT OF INTRODUCTION OF LOW EMISSION ZONES IN THE CITY OF ZAGREB
MVM2018_058	Kjosevski Stevan Kochov Atanas Kostikj Aleksandar	AN INDICATORS BASED APPROACH TOWARDS DECISION MAKING AND POLICY MAKING REGARDING INTRODUCING ELECTRIC VEHICLES
MVM2018_061	Aleksandar Jovanović Katarina Kukić	INTEGRATED CONTROL OF DIVERGING DIAMOND INTERCHANGE AND RAMP METERING: FUZZY LOGIC APPROACH