

International Congress Motor Vehicles & Motors 2010

# LIST OF ACCEPTED PAPERS

## **INTRODUCTORY LECTURES**

MVM2010-IL1	Giovanni Berlingardi Alessandro Scattina	SOME RECENT RESULTS OF THE POLITECNICO DI TORINO RESEARCH IN THE FIELD OF VEHICLE PASSIVE SAFETY
MVM2010-IL2	Maria Pia Cavatorta	ERGONOMICS ASSESSMENTS AND IMPROVEMENTS IN AUTOMOTIVE MANUFACTURING
MVM2010-IL3	Dušan Gruden	ON FUTURE OF POWER PLANT FOR MOTOR VEHICLES
MVM2010-IL4	Patrizio Nuccio	VARIABLE VALVE ACTUATION SYSTEMS AS A MEANS FOR IMPROVING RECIPROCATING I.C. ENGINE EFFICIENCY WITHOUT PENALIZING PERFORMANCE
MVM2010-IL5	Konstantinos N. Spentzas	VEHICLES AND CLIMATE CHANGE: PERSPECTIVES AND ROAD MAP FOR AN EFFECTIVE POLICY

### **SECTION A**

Power Train Technology

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MVM2010-003	Dejanu Marcel Popa Dinel Dascălu Traian, Tabacu Ion	THE DESIGN AND CONSTRUCT OF AN EXPLOSION BOMB DESIGNED FOR IGNITING FUEL WITH A LASER BEAM
MVM2010-004	Blaž Vajda Zoran Žunić Breda Kegl	MESH TYPE ANALYSIS FOR SIMULATING CAVITATION PHENOMENA IN INJECTION NOZZLE: THEORETICAL AND NUMERICAL ANALYSIS
MVM2010-008	Perić Sreten Vuruna Mladen Nedić Bogdan	MONITORING OIL FOR LUBRICATION OF TRIBOMECHANICAL ENGINE ASSEMBLIES
MVM2010-010	Krzysztof Sliwinski	COMBUSTION PROCESS IN SPARK IGNITION ENGINE FED WITH OXYGEN ENRICHED AIR-FUEL MIXTURE
MVM2010-016	Pikula Boran Filipović Ivan Bibić Dževad	DEVELOPMENT OF ALGORITHM FOR REDUCTION OF FUEL CONSUMPTION AT LIGHT DUTY MOTOR VEHICLES
MVM2010-019	Ireneusz Hetmanczyk Wacław Hepner Andrzej Bieniek	GENERATOR GAS – BOTH THE OLDEST AND THE NEWEST ENGINE FUEL
MVM2010-020	Ireneusz Hetmanczyk Wacław Hepner Andrzej Bieniek	REGULATION AND CONTROL OF THE HYDROGEN- SUPPLIED FUEL ENGINE

MVM2010-021	Damian Borecki Bieniek Andrzej Mamala Jarosław Graba Mariusz Lechowicz Andrzej	CYLINDER PRESSURE BASED CONTROL OF DIESEL INJECTION
MVM2010-022	Zoran Marjanović Radomir Brzaković Zorica Pantelić- Milinković	BIOGAS, LNG, METHANOL AND ETHANOL AS THE VEHICLE FUELS
MVM2010-024	Dževad Bibić Ivan Filipović Almir Blažević	CONTRIBUTION IN DEFINING PARAMETERS OF THE EQUIVALENT SYSTEM OF TORSIONAL VIBRATIONS WITH THE SIGNIFICANT INTERNAL DAMPING ELEMENTS
MVM2010-028	Tokar Adriana Negoitescu Arina Mihon Liviu	BIODIESEL USED FOR A CLEAN ENVIRONMENT PROMOTION
MVM2010-029	Sebastian Brol Jarosław Mamala Jerzy Jantos	THE ESTIMATION OF THE ENGINE POWER DURING ROAD TEST
MVM2010-031	Ivan Filipović Aleksandar Milašinović	THE PARAMETER DETERMINATION OF THE CRANKSHAFT DYNAMICAL MODEL
MVM2010-033	Aleksandar Djurić Snezana Jovanović	VEHICLE TRANSMISSION EXAMINATION WITH USE VIBRATION ANALYSIS
MVM2010-035	Vanja Šušteršič Dušan Gordić Milan Despotović	INCREASE OF THE ENERGY EFFICIENCY OF PASSENGER CARS USING DIFFERENT TYPES OF TRANSMISSIONS
MVM2010-036	Jerzy Dutczak	PRELIMINARY INVESTIGATIONS OF CHEMICAL COMPOSITION OF HELICOPTER TURBINE ENGINE EXHAUST GASES
MVM2010-039	Saša Milojević Radivoje Pešić Zoran Vujović Nenad Ilić Ivana Milojević	CNG BUSES FOR CLEAN AND ECONOMICAL CITY TRANSPORT
MVM2010-040	Radinko Gligorijević Jeremija Jevtić Djuro Borak	REDUCTION OF DIESEL EXHAUST EMISSIONS BY BLENDS OF MINERAL DIESEL – BIODESEL FUELS
MVM2010-050	Velimir Petrović Branka Grozdanić Djuro Borak	VEHICLE IN-USE EMISSIONS TESTING AND PORTABLE EMISSIONS MEASUREMENT SYSTEMS (PEMS)
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MVM2010-058	Aleksandar Poznić Ferenc Časnji	ONE CONTRIBUTION TO SYNCHROMESH TYPE GEARBOX AUTOMATION
MVM2010-061	Radivoje Pešić Aleksandar Davinić Snežana Petković Dragan Taranović Danijela Miloradović	VOLUMETRIC EFFICIENCY - PROBLEMS IN EXPERIMENTAL DETERMINATION
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	Milan Despotović Saša Babić	COW MANURE IN THE REPUBLIC OF SERBIA AS A ROAD TRANSPORT FUEL
MVM2010-068	Dragan Taranovic Radivoje Pešic Aleksandar Davinic Andrija Savcic Snezana Petkovic Pero Dugic Omer Kovac Miroslav Pecanac	CENTRAL COMMUNICATION UNIT FOR VEHICLES WITH DIESEL ENGINE
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#### SECTION B Vehicle Design and Manufacturing

(AIR/FUEL) DROPLET OF CUMMINS SPRAY

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MVM2010-041	Zorica Djordjević Vera Nikolic- Stanojević Mirko Blagojević	APPLICATION OF HYBRID ALUMINIUM/COMPOSITE MATERIALS FOR MANUFACTURE OF TRANSMISSION SHAFTS
MVM2010-049	Novak Vukčević Slavko Muždeka	THE STUDY OF MOTOR VEHICLES SUITABILITY FOR MOUNTING COMBAT SYSTEMS
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MVM2010-054	Božidar V. Krstic Vojislav Krstic	THE INFLUENCE OF THE HYDRODINAMIC, CINEMATIC AND GEOMETRIC PARAMETERS ON THE CHARACTERISTICS AT THE HYDRODYNAMIC CLUTH FOR MOTOR VEHICLES
MVM2010-063	Branislav Aleksandrovic Marko Djapan Aleksandra Jankovic	EXPERIMENTAL RESEARCH OF DYNAMIC STRESSES OF MOTORCYCLE'S FRAME
MVM2010-064	Milan Blagojević Miroslav Živković	ALGORITHM FOR 3D SURFACE RECONSTRUCTION BASED ON POINT CLOUD GENERATED BY OPTICAL MEASURING TECHNIQUES

#### **SECTION C**

# Vehicle Dynamics and Intelligent Control Systems

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MVM2010-034	Aleksandar Nikolić Aleksandar Đurić	QUALITY AND EFFICIENCY IMPROVEMENT OF MEASUREMENT VEHICLE'S DYNAMIC

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MVM2010-062	Lilo Kunchev Nikolay Pavlov	COMPARATIVE ANALYSIS ON MATHEMATICAL MODELS DESCRIBING VIBRATIONS OF AUTOMOTIVE INDEPENDENT SUSPENSIONS
MVM2010-070	Jasna Glišovic Danijela Miloradovic	ELIMINATING BRAKE NOISE PROBLEM

## **SECTION D**

# Driver/Vehicle Interface, Information and Assistance Systems

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MVM2010-032	Snezana Jovanovic Aleksandar Djuric	THE EXPOSURE OF CREW TO VIBRATION IN OFF ROAD VEHICLE
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MVM2010-044	Saša Jovanović Milan Milovanović Predrag Milenković Milan Matijević	METHODOLGY OF DRIVER SIMULATION DESIGN ON DYNAMICAL ENGINE TEST BENCH
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MVM2010-030	Jarosław Mamala Sebastian Brol Jacek Korniak	DIAGNOSTICS OF THE TRANSMISSION UNIT IN A PASSENGER CAR
MVM2010-048	S. Popović N. Miljić M. Cvetić M. Tomić D. Nauparac	HYDRAULIC HYBRID TECHNOLOGY REVIEW – PERSPECTIVES AND BENEFITS IN URBAN TRAFFIC
MVM2010-055	Vojislav Krstic Božidar Krstic	ANALYSIS OF THE RELIABILITY OF THE MOTOR VEHICLE BRAKES BANDS AND OF THE OPTIMAL STRATEGY FOR PREVENTIVE MAINTENANCE
MVM2010-067	Radivoje Pešić Emil Hnatko Kazimierz Golec Dragan Đokić Stevan Veinović	TRANSPORT ECOLOGY AND ANTHROPOGENIC GLOBAL WARMING