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Gherghina George	ROMÂNIA	Tabacu Ion	ROMÂNIA
Iorga Daniel	ROMÂNIA	Tabacu Ștefan	ROMÂNIA
Ivan Florian	ROMÂNIA	Tarniță Daniela	ROMÂNIA
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Mamut Eden	ROMÂNIA		

Science and Management of Automobile and Tractors, SMAT 2008

University of Craiova - Faculty of Mechanics

23rd-25th October 2008

CONGRESS PROGRAM

23rd October

Aula Buia - Faculty of Agriculture

8.30 - 10.30 Guests receiving and registration of participants

10,30 -13,30

Opening of congress,

- Welcome message from University
- Welcome message from SIAR
- Welcome Message of FISITA
- Message from Ministry of Transports
- Message From County Authorities
- Message from Ford Romania Company,
- Message from Renault Technologies Roumanie
- Message From ACAROM
- Message from Romanian Academy
- Message from Mechanical Faculty

Technical break

Scientific Works in plenum from

- FISITA
- RTR
- AVL
- PSA

University's house

13,30-15,00

Lunch

15,00-17,00

Scientific works on sections - University's house

17,00-17,20

Coffee break

17.20-19,45

Scientific works on sections - University's house

20.30

Cocktail

24th OCTOBER

Faculty of Mechanics

8,30-9,00	Coffee break
9,00-10,30	Scientific works
10,30-13,30	- Technical demonstrations - Presentations from automotives companies - Curricula seminar - SIAR - Meeting

University's house

13,30-15,00	Lunch
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Faculty of Mechanics

15,30-17,30	Scientific works on sections
17,30-17,45	Coffee break
18,00	Entertainment program - Craiova's anniversary Open air spectacles
20.30	Dinner

25th October

Faculty of Mechanics

8,30 - 9,15	Coffee break
9,15 - 10,30	Travel to Drobeta Turnu Severin
11,00 -16,00	Danube cruise (from Dr. Tr. Severin to Orsova)
16,00-17,45	Return to Craiova
18,00	Congress closure

Congress Programme 23rd of October

Thursday, October 23, 2008

Room MIHAI EMINESCU

15⁰⁰-16⁰⁰

Chairmen:

Tabacu Ion
Manea Laurentiu

- 1 V03 **THE POWER WEIGHT OF THE VIBRATION MODES OF AUTOMOBILES WITH RANDOM EXCITATION BY BEARING RACE**
BÂLDEA Monica, PANDREA Marina, PANDREA Nicolae
- 2 V05 **ASSESSMENT OF VEHICLE MOBILITY USING NRMM**
CIOBOTARU Ticusor, VINTURIS Valentin, GRIGORE Lucian
- 3 V06 **METHOD FOR MEASURING TIRE DEFLECTION**
CIOBOTARU Ticusor, VINTURIS Valentin, IONASCU Valentin
- 4 V07 **STUDY OF INSTRUMENTATION SETTLING TIME**
CLINCIU Mihai, CAMPIAN Vasile, TANE Nicolae, THIERHEIMER Diana C., THIERHEIMER Walter W.
- 5 V08 **SOME CONSIDERATION ABOUT THE OPTIMISATION OF STEERING MECHANISM WITH SUSPENSION**
CLINCIU Mihai, CAMPIAN Vasile, TANE Nicolae, THIERHEIMER Walter W., THIERHEIMER Diana C.
- 6 V09 **STUDY ON THE LIFETIME OF METALIC HELICAL SPRINGS USED FOR THE SUSPENSIONS OF ROAD AND RAILWAY VEHICLES**
COPACI Ion, TANASOIU Aurelia
- 7 V10 **CAD-PLM INTEGRATION USING THE WEBDAV PROTOCOL**
COVACIU Dinu, PREDA Ion, CAMPIAN Vasile, CAMPIAN Ovidiu-Vasile
- 8 V13 **THE INFLUENCE OF THE PC DATA ACQUISITION SYSTEMS ON THE SIGNAL ANALIZED**
COJOCARU Vasile Valerian, CAMPIAN Vasile, TANE Nicolae, THIERHEIMER Walter W., THIERHEIMER, Diana C.

16⁰⁰-17⁰⁰

Chairmen:

Chiru Anghel
Pandrea Nicolae

- 1 V29 **THE ANALYTICAL METHOD FOR THE DETERMINATION OF THE MECHANICAL ENERGY OF THE AUTOMOBILE VIBRATIONS WITH RANDOM EXCITATION BY BEARING RACE ON THE PATTERN WITH ONE DEGREE OF FREEDOM**
PANDREA Marina, BÂLDEA Monica
- 2 V30 **THE MODAL POWER ASPECTS OF THE VIBRATIONS OF THE AUTOMOBILES WITH HARMONIC EXCITATIONS BY BEARING RACE**
PANDREA Nicolae, PANDREA Marina, BÂLDEA Monica

- 3 V17 **SOME DYNAMIC ASPECTS OF NEMO, TRIO AND MIXTRA – THREE PROTHOTYPES
CREATED BY AUTOMOTIVE SPECIALISTS OF OVIDIUS UNIVERSITY OF CONSTANTA**
MANEA Adriana-Teodora, MANEA Laurentiu –Claudiu, BOBESCU Gheorghe,
TOGĂNEL George, TRUȘCĂ Daniel
- 4 V18 **ROAD DYNAMIC EXPERIMENTAL RESULTS OF MIXTRA'S COMPLEX EQUIPMENT**
MANEA Laurentiu –Claudiu, PRICOP Mihail, MANEA Adriana-Teodora, RADU
Gheorghe Alexandru, DIMA Dragos
- 5 V19 **SOME DESIGN ASPECTS OF MIXTRA – NAVAL AND ROAD COMPLEX SYSTEM**
MANEA Laurentiu –Claudiu, PRICOP Mihail, MANEA Adriana-Teodora
- 6 T03 **CONTRIBUTION TO THE STUDY OF THE INFLUENCE OF CONSTRUCTIVE AND
OPERATIONAL PARAMETERS OF THE WORK TRACTOR TYRE WHEELS UPON THE
DISTRIBUTION AND MAGNITUDE OF THE SOIL STRESS**
POPESCU Simion, DINU Liviu Laurențiu, CANDEA Ion
- 7 V22 **STUDY CONCERNING FRACTIONAL FRONT AXLE KINEMATICS WITH TRANSVERSE FOUR
NON-EQUAL RODS MECHANISM UTILISED FOR AUTOMOBILES WITH 3D MODELLING**
MATEESCU Viorel, GEORGESCU Liviu, TICA Mihai
- 8 V23 **CONSIDERATIONS ON DESIGNING MECHANICAL GEARBOXES FOR ALL TERRAIN
AUTOMOBILES**
MATEESCU Viorel, GEORGESCU Liviu, MICU Dan Alexandru

17²⁰-18²⁰

Chairmen:

**Minu Mitrea
Popescu Simion**

- 1 V01 **A STUDY ON THE DYNAMICS OF AN OVERSIZE AND OVERWEIGHT VEHICLE
COMBINATION**
ANGHELACHE Gabriel, MOISESCU Raluca, ARON Florian
- 2 V11 **INFLUENCE OF INTERNAL TIRE PRESSURE ON THE RADIUS OF TURN AT FRONT DRIVE
AXLE MOTOR CARS**
DĂSCĂLESCU Dan S.C., DROSESCU Radu, SACHELARIE Adrian, MĂNUCĂ Radu,
SAVISCHI Mihai
- 3 V24 **THE DYNAMIC BEHAVIOR OF ROAD VEHICLE**
MIHON Liviu, OSTOIA Daniel
- 4 V33 **THE OPTIMIZATION OF THE MAINTENANCE ACTIVITY FOR THE
DIRECTIONAL CONTROL SYSTEM OF THE MOTOR VEHICLE BASED ON
THE RELIABILITY INDICATORS**
SOTOC Horia Marcel, CAMPAN Ovidiu-Vasile
- 5 V34 **THE INFLUENCE OF THE PRODUCTION AND EXPLOITATION FACTORS UPON THE
RELIABILITY OF THE MOTOR VEHICLES' DIRECTIONAL CONTROL SYSTEM**
SOTOC Horia Marcel, CAMPAN Ovidiu-Vasile
- 6 V35 **THE INFLUENCE OF THE VEHICLE'S TYPE AND OF THE EXPLOITING CONDITIONS UPON
THE RELIABILITY OF THE STEERING GEAR**
SOTOC Horia Marcel, CAMPAN Ovidiu-Vasile
- 7 V37 **COUPLED MULTIBODY – FINITE ELEMENT MODEL FOR THE STUDY OF AN OFF ROAD
VEHICLE FRAME**
TABACU Stefan, PANDREA Nicolae, STĂNESCU Nicolae-Doru, TABACU Ion
- 8 V38 **DIMENSIONING OF THE HYDROSTATIC TRANSMISSION WITH PRIMARY ADJUSTMENT
FOR A ROAD VEHICLE**
TARULESCU Stelian, BENCHE Victor, TARULESCU Radu
- 9 V44 **RESEARCHES CONCERNING THE ELECTRIC PROPULSION SYSTEM OF A VEHICLE WITH
INDEPENDENT TRACTION WHEELS**
DANCIU Grigore, MATEESCU Viorel, COVRIG Mircea, GHEORGHE Stefan

1820-1945

Chairmen:

Campian Ovidiu

Preda Ion

- 1 V45 **GENERAL ALGORITHM FOR DETERMINATION OF THE EFFORTS OF THE CRANK- SLIDER MECHANISM WITH CLEARANCE INSIDE THE CRANKPIN BEARING**
GRIGORE Jan-Cristian, PANDREA Nicolae
- 2 V46 **THE CALCULATION OF THE COMFORT INDICES, PMV AND PPD, DEPENDING ON THE DIFFERENT PARAMETERS**
IVANESCU Mariana, TABACU Stefan, TABACU Ion, VIERU Ionel
- 3 V47 **SOME ASPECTS CONCERNING TESTING AND ASSESSING OF THE AUTOMOBILE PLATFORMS FOR FURTHER DEVELOPMENT OF THE LAROM WEAPON SYSTEM**
MITREA Minu, MARINESCU Marin, GROSU Dănuț
- 4 V49 **RESEARCH REGARDING VEHICLES BRAKING AND THE INFLUENCE ON ACTIVE SAFETY**
BELES Horia, NAGY Tiberiu, PREDA Ion
- 5 M25 **ABOUT OF THE INFLUENCE OF THE PRODUCTION STOCKS' SIZE ON THE AUTOMOTIVE MANUFACTURING PROCESSES QUALITY**
Minu MITREA
- 6 V51 **ANALYSIS OF DESIGN AND RUNNING FACTORS ON THE HYDRAULIC ENERGY RECOVERY SYSTEM FROM VEHICLE SHOCK ABSORBERS**
ABĂITĂNCEI Horia, RADU Gheorghe Alexandru, DĂNILĂ Comănică Bogdan, RADU Tudor Sebastian
- 7 V52 **THE ACTUAL STATE OF DEVELOPMENT OF THE ECOVITA PROTOTYPE VEHICLE**
CLENCI Adrian, BIZIIAC Adrian, PODEVIN Pierre, DESCOMBES Georges, NICULESCU Rodica
- 8 V53 **RESEARCH REGARDING THE DEVELOPMENT OF A PLUG-IN HYBRID ELECTRIC VEHICLE E- 4WD TYPE**
MARINESCU Danut Gabriel, TABACU Ion, SERBAN Florin
- 9 V54 **MATHEMATICAL AND THEORETICAL SIMULATION OF THE STABILITY WHILE CLIMBING AN INCLINE**
SUSTER BADARAU Helene, DRAGHICI Dumitru
- 10 V20 **ASPECTS CONCERNING DYNAMIC TESTING OF THE VEHICLES IN ORDER TO DETERMINE THEIR STABILITY LIMITS**
MACARIE Tiberiu, IONIȚĂ Silviu, BĂDĂRĂU-SUSTER Helene

Room NICOLAE IORGA

15⁰⁰-16⁰⁰

Chairmen:

Nicolae Filip
Bocii Sevastian Liviu

- 1 R01 **EFFICIENT GPS MEASURING METHODS FOR LAND COMMUNICATION ROUTES**
Nicolae Băbucă, Mihnea Marin
- 2 R02 **THE INFLUENCE OF THE DIESEL URBAN TRANSPORTATION VEHICLES OVER THE CHEMICAL AND NOISE POLLUTION**
Corneliu COFARU, Daniela FLOREA, Stelian TARULESCU
- 3 R03 **URBAN AREAS CHEMICAL POLLUTION IN FUNCTION OF THE TRAFFIC FLOW SIZE AND COMPOSITION**
Corneliu COFARU, Daniela FLOREA, Stelian TARULESCU, Radu TARULESCU
- 4 R04 **USING GPS DEVICES FOR COLLECTING TRAFFIC DATA**
Dinu COVACIU, Daniela FLOREA, Ion PREDA, Janos TIMAR
- 5 R05 **ANALYSIS OF RUNNING CONDITIONS OF A HYDRAULIC HYBRID VEHICLE IN URBAN TRAFFIC CONDITIONS**
Comănică Bogdan DĂNILĂ, Gheorghe Alexandru RADU, Horia ABĂITĂNCEI, Tutor Sebastian RADU
- 6 R06 **EQUIPMENT DESIGN FOR CONTINUOUS ROAD TRAFFIC COUNT**
Nicolae FILIP, Florin SUCIU
- 7 R07 **RESEARCH REGARDING THE VEHICLES IDENTIFICATION**
Nicolae FILIP
- 8 R08 **PIRACY IN TRANSPORTATION**
Ioan Halaciuga, Sorin Igret

16⁰⁰-17⁰⁰

Chairmen:

Cofaru Corneliu
Boroii Alexandru

- 1 R09 **THE COUNTERACTING OF THE TERRORIST ACTIONS IN THE FIELD OF TRANSPORTATION**
Ioan Halaciuga, Sorin Igret
- 2 R10 **ASPECTS CONCERNING THE WAY ROUNDABOUTS IMPROVE INTERSECTION SAFETY**
Ariadna ILIUȚ, Janos TIMAR, Corneliu COFARU
- 3 R11 **ANALYSIS REGARDING THE PEDESTRIAN CONFLICT WITHIN ROUNDABOUTS**
Ariadna ILIUȚ, Janos TIMAR, Corneliu COFARU
- 4 R12 **EMISSION'S CONTROL FOR VEHICLES**
Doina MIHON, Liviu MIHON
- 5 R13 **THE TIRES' PRINTS ON THE ROAD THAT MAY BE PROOFS DURING THE INVESTIGATION AND RECONSTRUCTION OF CAR ACCIDENTS**
Alexandru PETRESCU, Marius TOMA, Stefan VOLOACA
- 6 R14 **THE EXAMINATION OF VEHICLE INVOLVED IN TRAFFIC ACCIDENTS THE EFFECT OF THE ACCIDENT ON THE VEHICLE INTERIOR**

Alexandru PETRESCU, Marius TOMA, Stefan VOLOACA

- 7 R15 **VEHICLE DYNAMIC BEHAVIOUR ANALYSIS BASED ON GPS DATA**
Ion PREDA, Dinu COVACIU, Gheorghe CIOLAN, Dragoş-Sorin DIMA
- 8 R16 **THE INFLUENCE OF THE PUBLIC ILLUMINATION ON THE ROAD EVENTS**
Diana C. THIERHEIMER, Tiberiu NAGY, Nicolae TANE, Walter W. THIERHEIMER

17²⁰-18²⁰

Chairmen:

**Florea Daniela
Tabacu Stefan**

- 1 R17 **MICROSCOPIC SIMULATION USING SIMTRAFFIC SOFTWARE**
Janos TIMAR, Corneliu COFARU, Daniela FLOREA, Stelian ȚĂRULESCU, Dinu COVACIU
- 2 R18 **STUDY REGARDING THE ROAD TRAFFIC NOISE COMBINED WITH OTHER DISTURBING SOURCES**
Janos TIMAR, Ariadna ILIUȚ, Corneliu COFARU, Daniela FLOREA, Călin ROȘCA
- 3 R19 **URBAN TRAFFIC DATA ACQUISITION USING THE GPS**
Janos TIMAR, ARIADNA ILIUȚ, Corneliu COFARU, Daniela FLOREA, Sânziana TIMOFTI
- 4 R20 **INFLUENCE OF THE HUMAN ELEMENT OF THE INTERACTION BETWEEN USER AND THE ROAD**
Iuliana LASCU, Daniel-Dragos TRUSCA
- 5 R21 **OVERVIEW OF VEHICLE TO PEDESTRIAN COLLISIONS IN LINEAR SETTLEMENTS AND THEIR CAUSES**
Iuliana LASCU, George-Radu TOGANEL
- 6 R22 **FAILURE TIME DISTRIBUTION ANALYZE OF THE BRAKING PADS IN ORDER TO OPTIMIZE THE PLANNED MAINTENANCE**
Alexandru BOROIU, Viorel NICOLAE, Gheorghe STAN
- 7 R23 **RESEARCH CONCERNING EXPERIMENTAL DETERMINATION OF THE MAIN PASSENGER FLOWS WITHIN THE METROPOLITAN AREA OF PITESTI CITY IN ORDER TO VALIDATE THE OPPORTUNITY OF INTRODUCING A NEW PUBLIC TRANSPORT SYSTEM ON INDIVIDUAL LANE (WHEEL TRAMWAY)**
Rodica NICULESCU, Florian IVAN, Viorel NICOLAE, Catalin ZAHARIA
- 8 R24 **RESEARCH CONCERNING DETERMINATION OF COMMERCIAL SPEED IN ORDER TO VALIDATE THE OPPORTUNITY TO INTRODUCE A NEW PUBLIC TRANSPORT SYSTEM ON INDIVIDUAL LANE (WHEEL TRAMWAY) WITHIN THE METROPOLITAN AREA OF PITESTI CITY**
Florian IVAN, Rodica NICULESCU, Viorel NICOLAE, Catalin ZAHARIA

18²⁰-19⁴⁵

Chairmen:

**Negrea Dan
Copaci Ion**

- 1 R25 **EXPERIMENTAL RESULTS OF THE IMPACT BETWEEN A FALSE-HEAD AND THE INSTRUMENT PANEL**
Sorin ILIE, Ștefan TABACU
- 2 R27 **RUTIERR TRANSPORTS, THEIR SUSTAINABLE DEVELOPMENT AND ENVIRONMENT**
V.D. Negrea, D.A. Negrea, Ileana Negrea, I.L. Rafan, Venetia Sandu
- 3 V14 **AUTOMOTIVE DEPORTANTE WING WITH COANDĂ EFFECT**
HUMINIC Angel, HUMINIC Gabriela
- 4 V15 **GETTING A MATHEMATICAL MODEL OF THE VEHICLE'S DYNAMICS USING REGRESSIONS**

- ILIE Constantin-Ovidiu, MARINESCU Marin, OLOERIU Florin
- 5 V21 **COMMUNICATION ANTENNAE FOR AUTOMOTIVES**
ENACHE Valeriu
- 6 V25 **SINGLE-TRACK VEHICLES - A DYNAMIC APPROACH**
OLOERIU Florin, MARINESCU Marin
- 7 V27 **CONSIDERATIONS CONCERNING THE CALCULUS OF SUSPENSION INFERIOR'S ARM
USING FINITE ELEMENT METHOD (FEM)**
NEACSU Catalin-Adrian, VIERU Ionel, PETRACHE Gheorghe, NICULESCU Adrian-Ioan
- 8 V36 **HYDROPLANING PHENOMENON'S EQUATIONS AT WHEEL TYRES HAVING THE ROLLER
TRACK FROM CONTINUOUS LONGITUDINAL TAPES**
STAN Marinică, HARA Vasile, POPA Dinel
- 9 V39 **ON THE RESISTANCE OF METALIC HELICAL SPRINGS THAT EQUIP ROAD AND RAILWAY
VEHICLES**
TANASOIU Aurelia, COPACI Ion

Room HILARY CLINTON

15⁰⁰-16⁰⁰

Chairmen:

**Burnete Nicolae
Iorga daniel**

- 1 E01 **EQUILIBRIUM RELATIONS LIQUID-VAPOURS FOR THE LIQUEFIED PETROLEUM GAS**
Mihai NAGI, Dan ALEXANDRU, Arina NEGOITESCU
- 2 E02 **ENERGETICALLY OPTIMIZATION OF INTERNAL COMBUSTION ENGINE RADIATOR USING THE ELECTRO-HYDRODYNAMIC ANALOGY**
Victor BENCHE, Gabriela HUMINIC, Angel HUMINIC
- 3 E03 **THE INFLUENCE OF BIODIESEL FUELS ON DIESEL ENGINE**
Bogdan Cornel BENEĂ
- 4 E04 **BIODIESEL PRODUCTION FROM SUNFLOWER**
Bogdan Cornel BENEĂ
- 5 E05 **BIOFUELS MARKET SWOT ANALYSE**
Nicolae BURNETE, Florin MARIAȘIU, Bogdan VARGA
- 6 E06 **FUNCTIONING CONDITIONS OF THE INTERNAL COMBUSTION ENGINES USING SPECIFIC FUELS MIXED WITH ALCOHOL**
Nicolae BURNETE, Alexandru NAGHIU, Bogdan VARGA, Florin MARIAȘIU, Cristian COLDEA, Emilian BORZA, Doru BALDEAN, Adrian COSTEA
- 7 E07 **LPG FUELING FOR A SMALL CARBURRETOR ENGINE**
Liviu Georgescu
- 8 E08 **ÎNCERCĂRI DE REZISTENȚĂ ÎN FUNCȚIONARE A ARBORELUI CU CAME TUBULAR**
Sorin Igreș, Gheorghe Aurel Gherman, Ioan Hălăciugă

16⁰⁰-17⁰⁰

Chairmen:

**Nagi Mihai
Clenci Adrian**

- 1 E09 **EXPERIMENTAL RESULTS CONCERNING POLLUTION DECREASING FOR A HIGH POWER DIRECT INJECTION DIESEL ENGINE**
Daniel IORGA, Ion Vrabie, Werner HINKEL, Liviu MIHON, Adrian IRIMESCU
- 2 E10 **USING BIO-FUELS INTO COMMON TRUCKS CI ENGINES**
Nicolae ISPAS, Mihai DOGARIU, Mircea NĂSTĂSOIU, Vladimir MĂRDĂRESCU
- 3 E11 **THE MATHEMATICAL SIMULATE AT TRANSIENT STATE OF DIESEL ENGINE FUNCTION**
Neculai Iurea, Alexandru Dragalina, Ionel Apostol

- 4 E12 **THE INFLUENCE OF ETHANOL-GASOLINE BLENDS ON SPARK IGNITION ENGINE OPERATION, PERFORMANCE AND EMISSION CHARACTERISTICS**
Daniel MINIȘAN , Veneția SANDU
- 5 E13 **EXPERIMENTAL RESEARCHES REGARDING THE DIRECT INJECTION IN HYDROGEN FUELED S.I. ENGINE**
Niculae NEGURESCU, Constantin PANA, Marcel Ginu POPA, Alexandru CERNAT, Dorin SOARE
- 6 E14 **STEADY-STATE ANALYSIS OF THE DISPLACEMENTS, STRESSES AND STRAINS FIELDS FOR AN INTERNAL COMBUSTION ENGINE USING THE FINITE ELEMENT METHOD**
Claudiu OBOGEANU, Marian POPESCU, Gheorghe POPA, Florentin POPESCU
- 7 E15 **THE LPG USE IN DIESEL ENGINE**
Constantin PANA, Niculae NEGURESCU, Marcel Ginu POPA, Alexandru CERNAT, Dorin SOARE, Petre DESPA, Florin BUJGOI
- 8 E16 **THE ANALYSE OF THE COMMAND SYSTEM FOR ADAPTIVE ADMISSION IN INSERTION PROCESS OF FUNCTIONING AT HEAT ENGINES**
Marinică STAN, Dinel POPA

17²⁰-18²⁰

Chairmen:

**Ivan Florin
Pana Constantin**

- 1 E17 **ATTENDING ENGINE BY COMPUTER IN ORDER TO REDUCE POLLUTANT EMISSIONS**
Marius STOICAN, Marin BICĂ, Corina Dana CERNĂIANU
- 2 E18 **CALIBRATION OF PARAMETERS OF ECM FOR EMISSION REDUCTION FOR AN OTTO ENGINE**
Marius STOICAN, Marin BICĂ, Corina Dana CERNĂIANU
- 3 E19 **REFRACTORINESS OF ALLOYS FROM THE POLYNAR SYSTEM Al-Cu-Mg-Si-Mn-Ti etc., USED ON PISTON CASTING FOR HEAT ENGINES**
Adriana TOKAR , Victor BUJOR , Ion SPOREA
- 4 E20 **EXHAUST EMISSIONS OF DIFFERENT BLENDS OF BIODIESEL AND PETRODIESEL IN A MONOCYLINDRICAL DIESEL ENGINE**
Tutunea DRAGOS, Bica MARIN
- 5 E21 **ANALYSIS OF NOISE LEVEL INTO A MONOCYLINDRICAL DIESEL ENGINE WHEN IS FUELED WITH DIFFERENT BLENDS OF BIODIESEL AND PETRODIESEL**
Tutunea DRAGOS, Bica MARIN
- 6 E22 **ANALYZE OF THE SPECIFIC VIBRATION MODES FOR A CAMSHAFT**
Ionel VIERU, Gheorghe STAN, Viorel NICOLAE, Alexandru BOROIU, Sebastian PARLAC
- 7 E23 **MECATRONICS SYSTEM FOR THE EVALUATION OF ENERGETICAL PARAMETERS OF INTERNAL COMBUSTION ENGINE**
Dumitru Ilie, Rosca Adrian, Cataneanu Mihnea, Popa Gheorghe, Dumitrache Ionut

18²⁰-19⁴⁵

Chairmen:

**Cristea Dumitru
Negurescu Nicolae**

- 1 E24 **VVA FOR A SPARK IGNITION ENGINE**

- Marcel LUPASCU, Constantin GRIGORESCU, Dumitru CRISTEA, Florin SERBAN,
Vasile DUMITRESCU
- 2 E25 **CONSIDERATIONS REGARDING VVA REQUIREMENTS**
- 3 E26 **EXPERIMENTAL STAND FOR THE STUDY OF HYBRID AND ELECTRIC VEHICLES WITH
HYBRID ENERGY SOURCE**
- 4 E27 **ESTIMATION BY CALCULATION OF MECHANICAL POWER LOSSES ON
AUTOMOTIVE TURBOCHARGERS**
- 5 M07 **THE EFFECT OF THE SEPARATION ZONE ON THE PERFORMANCE OF A
COMPRESSED AIR DRYER**
- NAGI MIHAI, ILIES PAUL, SUCILA MARIUS, ENEA MIRCEA
- 6 M08 **STUDY ON VEGETAL OILS CHARACTERISTICS**
- Mihai NAGI, Ciprian CAIA, Calin MOLDOVEANU
- 7 M09 **STUDIES ON HEAT EXCHANGES WITH FIELD TUBES**
- Nagi Mihai, Motăntău Sârbu Dan, Stanciu Tiberiu
- 8 M10 **BIO-FUELS REPLACING CLASSIC FUEL**
- Oana-Victoria OTAT, Alexandru-Mihai DIMA, Gabriel-Catalin Marinescu

Room ALEXANDRU PIRU

15⁰⁰-16⁰⁰

Chairmen:

Nicolae Viorel
Craciunoiu Nicolae

- 1 M01 **SPECTRAL DECOMPOSITION OF THE ELASTICITY MATRIX OF NITINOL**
Dumitru BOLCU, Daniela TARNITA, Marius STANESCU
- 2 M02 **IMPLEMENTING A COMPONENT FROM A NEW SUPPLIER**
Marian BRABETE
- 3 M03 **MODIFIED SELF-CONSISTED SCHEME TO PREDICT THE THERMAL CONDUCTIVITY OF NANOFLUIDS**
Kliment Hadjov
- 4 M04 **INFLUENCE OF THE PARTICLE SIZE DISTRIBUTION ON THE THERMAL CONDUCTIVITY OF NANOFLUIDS**
Kliment Hadjov, Dimitar Dontchev
- 6 M05 **EFFECTIVE THERMAL CONDUCTIVITY OF NANOSUSPENSIONS WITH ANISOTROPIC INCLUSIONS**
Kliment Hadjov, Mihnea Marin
- 7 M06 **ADVANCED MACHINING TECHNOLOGIES FOR AUTOMOTIVE COMPLEX COMPONENT PARTS WITH COMPLEX WALLS**
Tiberiu MALCIU, Madalina CALBUREANU, Raluca MALCIU
- 8 M11 **NEW TECHNOLOGY FOR COMPOSITES BASED ON TUNGSTEN POWDER OBTAINING**
Cristina Ileana PASCU , Alexandru STANIMIR
- 9 M12 **INFLUENCES OF WEAR OF PCBN INSERTS, DEPTH OF CUT, FEED RATE AND CUTTING SPEED ON SURFACE ROUGHNESS IN FINISH TURNING OF HARDENED 205 CR115 STEEL**
Alexandru STANIMIR, Ileana Cristina PASCU

16⁰⁰-17⁰⁰

Chairmen:

Dumitru Constantin
Kliment Hadjov

- 1 M13 **NITINOL: PROPERTIES AND APPLICATIONS**
Daniela TARNITA, Dan TARNITA, Nicu BIZDOACA, Cosmin BERCEANU

- 2 M14 **PLASTIC DEFORMATION OF MATERIAL IN THE AREA CUTTING PROCESSING THROUGH VIBROSPLINTERING**
Bebe TICA, Stefanita CIUNEL
- 3 M15 **CONSIDERATIONS ON CONTACT SPLINTER-TOOLS TO PROCESSING THROUGH ULTRASONIC VIBROSPLINTERING**
Bebe TICA, Stefanita CIUNEL, Ovidiu Vasile CAMPIAN
- 4 M19 **STUDIES AND RESEARCH REGARDING THE ROUGHNESS OF THE SURFACES GOT BY TURNING THE ALLOYED STEEL**
MARIUS ZAMFIRACHE
- 5 M20 **RESEARCH REGARDING THE ROUGHNESS OF THE SURFACES TITANIUM ALLOYS (TIAL6V4) TURNING**
MARIUS ZAMFIRACHE
- 6 M21 **CONSIDERATIONS ON THE COMBUSTIBILITY OF THE COMPOSITES BY RESINE - UNWONERE TEXTILE FIBRES**
Gelica STĂNESCU, Monica MATEESCU, Adrian BERCEANU, Anca MOGOȘANU, Mario TROTEA
- 7 M23 **INFLUENCES OF WEAR OF PCBN INSERTS, DEPTH OF CUT, FEED RATE AND CUTTING SPEED ON CUTTING FORCES IN FINISH TURNING OF HARDENED 205 CR115 STEEL**
Alexandru STANIMIR, Gabriel BENGA

17²⁰-18²⁰

Chairmen:

Tarnita Daniela
Marin Mihnea

- 1 M26 **RESEARCHES CONCERNING THE DEVELOPMENT OF A LUBRICANT FOR THE SURFACES MADE IN CONTACT AT GREAT SPEED**
VĂDUVOIU GH., TĂRĂȚĂ DANIELA
- 2 M27 **THE ESTIMATION OF THE RESIDUAL STRESS LEVEL FROM THE WELDED COMPONENTS**
VĂDUVOIU GH., TĂRĂȚĂ DANIELA
- 3 M28 **CONSIDERATIONS LOOKING THE CALCULUS OF MULTILAYER COMPOSITE FRAMES TO THERMAL SOLICITATIONS**
Gabriela Monica PANĂ
- 4 M31 **TEHNICI DE GRAFICA MODERNA FOLOSITE IN PROTOTIPAREA VIRTUALA**
George GHERGHINA, Dragos POPA, Mihaela BOGDAN, Cristian GLUGA
- 5 M32 **OPTIMIZATION BY LINEAR PROGRAMMING OF CERTAIN FLEXIBLE SPINAL COLUMNS UTILIZED TO POLY-ARTICULATED ROBOTS**
Violeta Cristina DUMITRU, Sorin DUMITRU
- 6 M33 **STANDPOINTS REGARDING DESIGN OF PRODUCTS USED IN THE AUTO INDUSTRY**
Constantin DUMITRU, Violeta Cristina DUMITRU
- 7 M34 **THE ENHANCEMENT OF HEAT TRANSFER PROPERTIES OF RUBBER COMPOUNDS BY THE REINFORCEMENT WITH CARBON NANOTUBES**
Eden MAMUT, Camelia BROATAN
- 8 M35 **THE DEVELOPMENT OF A NEW CLASS OF FUELS WITH COLLOIDAL DISPERSION OF SOLID FUEL NANOPARTICLES**
Eden MAMUT, Luigi ALLOCCA

18²⁰-19⁴⁵

Chairmen:

Gavrila Marin
Mateescu Viorel

- 1 M36 **THE CALCULUS OF DEFORMATION COEFFICIENTS FOR THE SOIL UNDER MACHINE MASSIVE FOUNDATIONS**
Ivona Georgescu
- 2 M37 **EFFECT OF STIFFNESS UNCERTAINTIES ON THE AEROELASTIC STRUCTURES**
Stefan C. Castravete and Raouf A. Ibrahim
- 3 M38 **MATHEMATICA – PACKAGES FOR PLANAR KINEMATIC CHAINS**
Nicolae Craciunoiu, Nicolae Dumitru, Dan B. Marghitu, Filip G. Ciolacu
- 4 M39 **TENTACULAR ROBOT WITH APLICATIONS IN THE AUTOMOTIVE INDUSTRY**
Sorin DUMITRU, Cristian COPILUSI, Violeta DUMITRU
- 5 M40 **A TRAINING SUITE FOR IMAGE OVERLAY AND OTHER NEEDLE INSERTION TECHNIQUES**
Gregory S. Fischer, Iulian Iordachita, Paweena U-Thainual, John A. Carrino, and Gabor Fichtinger
- 6 M41 **STEADY-HAND MANIPULATOR FOR RETINAL SURGERY**
Iulian Iordachita, Ankur Kapoor, Ben Mitchell, Peter Kazanzides, Gregory Hager, James Handa, and Russell Taylor

Congress Programme 24rd of October

Room CCA

09⁰⁰-10³⁰

Chairmen:

Bagnaru Dan
Ilincioiu Dan

- 1 V02 **APPROXIMATE METHOD IN ORDER TO DETERMINE THE DISPLACEMENT FIELDS FOR THE KINEMATIC ELEMENTS STANDING IN VIBRATION**
BĂGNARU Dan Gh., STĂNESCU M. Marius, BOLCU Dumitru, CUȚĂ P.
- 2 V04 **EXPERIMENTAL RESEARCH ABOUT DYNAMICS BEHAVIOUR OF LANDING GEAR**
BOGDAN Mihaela, POPA Dragoș GHERGHINA George SIMNICEANU Loreta
- 3 V12 **MEASUREMENT OF FORCES INSIDE THE CONTACT SPOT OF THE TRUCK TYRE WITH THE ROAD WITH THE HELP OF THE SOLID FORCE TRANSDUCER**
DRAGOMIR C., ANGHELACHE G.C., LAZANU F., ZUS R.
- 4 V16 ***ANALYTICAL RESEARCH OF MECHANICAL STRESSES IN A TRUCK STRENGTH STRUCTURE***
ILINCIOIU Dan, IANASI Catalina, ANGHEL Claudiu
- 5 V26 **CONSIDERATION ON THE DISTRIBUTION OF THE VERTICAL FORCES AT THE MOTOR VEHICLE'S IN CIRCULAR MOTION**
OTAT Victor, BOLCU Dumitru, STANESCU M. Marius, DUMITRU Ilie, NEAGOE Dumitru
- 6 V28 **LED TECHNOLOGY IN the AUTOMOTIVE INDUSTRY**
OȚĂT Oana-Victoria, DIMA Alexandru-Mihai, MARINESCU Gabriel-Catalin
- 7 V31 **POSSIBILITY OF TECHNICAL SYSTEMS SELF DIAGNOSIS**
POPESCU Florentin, CAMPAN Vasile, TANE Nicolae, THIERHEIMER Walter W., THIERHEIMER Diana C.
- 8 V32 **STUDY ABOUT AUTOMOTIVE ROLLOVER DYNAMICS**
POPESCU Florentin, CAMPAN Vasile, OȚĂT V., THIERHEIMER Walter W., THIERHEIMER Diana C.
- 9 V40 **COMPARATION BETWEEN TWO MATHEMATICAL MODEL FOR VEHICLE STABILITY STUDY TAKEN AND WITHOUT TAKEN IN CONSIDERATION THE DRIVE ACTION**
OȚĂT Victor, SIMNICEANU Loreta, NEAGOE D-tru, BOGDAN Mihaela, DINCĂ Liviu
- 10 V41 **THE VALIDATION BY EXPERIMENTAL TEST OF MODEL ANALYSIS STABILITY WITH CONSIDERING THE DRIVE ACTION**
NEAGOE D-tru, SIMNICEANU Loreta, OȚĂT Victor, BOGDAN Mihaela, TROTEA Mario

Room NEW AMPHITHEATRE

09⁰⁰-10³⁰

Chairmen:

Otat Victor

Neagoe Dumitru

- 1 V42 **MODELS FOR CAR STABILITY ANALYZES WITH AND WITHOUT TAKING INTO CONSIDERATION THE DRIVERS ACTION**
SIMNICEANU Loreta, OȚĂȚ Victor, NEAGOE D-tru, BOGDAN Mihaela, TROTEA M.
- 2 V43 **MEASUREMENT THE TORQUE DEVELOPED BY MOTIVE WHEEL OF THE MOTOR VEHICLES**
NEAGOE Dumitru, SIMNICEANU Loreta, CĂMPIAN Ovidiu, BOLCU Dumitru, STĂNESCU Gelica
- 3 V48 ***DEVELOPMENT OF INFORMATION SYSTEMS FOR AUTO DRIVERS***
PANĂ Gabriela Monica, MARCU Carmen
- 4 V50 **ABOUT THE SYNTHESIS AND STABILITY OF THE SPATIAL KINEMATIC CHAINS WITH LINEAR-ELASTIC ELEMENTS**
VINTILA Daniela-Doina
- 5 V55 **STUDIUL COMPARATIV AL DIFERITELOR SOLUȚII CONSTRUCTIVE DE AUTOSPECIALE DESTINAT OPERAȚIUNILOR DE DESZĂPEZIRE A CĂILOR DE RULARE DE PE AEROPORTURILE DIN ROMÂNIA**
DRAGOMIR Costin, HASNAS Șerban, ATHANASIU Dan
- 6 V56 **QUALITY'S ASSURANCE, COMPULSORY CONDITION FOR MOTOR VEHICLES MAINTENANCE PROCESSES OPTIMIZATION**
CIUPANCAN Dan, NEGRUS Eugen
- 7 V57 **COMPARATIVE PRACTICAL STUDY BETWEEN STATISTICAL METHOD AND WEIBUL MATHEMATICAL MODEL**
CIUPANCAN Dan, NEGRUS Eugen
- 8 V58 **EXPERIMENTAL STAND FOR TRYING AND TESTING THE COMPONENTS OF MOTOR-VEHICLES BRAKE SYSTEM**
DUMITRU Constantin, DUMITRU Violeta Cristina
- 9 V59 **THE RESPONSE OF A RANDOM EXCITATION NON-LINEAR SQUEEZE FILM OSCILLATOR -**
STAN Petre
- 10 V60 **ANALYSIS OF SINGLE-DEGREE OF FREEDOM NON-LINEAR STRUCTURE UNDER GAUSSIAN WHITE NOISE GROUND EXCITATION**
STAN Petre
- 12 V61 **VELOCITY FIELD FOR EPICYCLIC GEAR TRAINS**
BUCULEI Mihaela, CRACIUNOIU Nicolae, DUMITRU Nicolae, MARGHITU Dan B.

Room CCA

15³⁰-17³⁰

Chairmen:

Badescu Mircea
Alexandru Tudor

- 1 T01 **INVESTIGATIONS CONCERNING THE POSSIBILITY OF CONVERTING THE DISPLACEMENT VELOCITY INTO AN ELECTRIC PARAMETER IN ORDER TO AUTOMATIZE THE WORKING PROCESS FOR AGRICULTURAL SPRINKLING MACHINERY**
GLODEANU Mihnea, ALEXANDRU Tudor, POPESCU Simion, BORUZ Sorin
- 2 T02 **CONSIDERATION REGARDING THE COMPORMENT TO ENDURANCE OF A TRACTION BAR OF A 200 HP TRACTOR, IN CASE OF THE HYDROPULS ACCELERATED TESTING**
VLADUT V., MATAACHE M., GANGA M., MIHAI M.
- 3 T04 **THE GEOMETRICAL PARAMETERS DETERMINATION OF THE LAMELAR MOULDBOARDS USED AT THE MODERN PLOUGHES**
BUNGESCU Sorin – Tiberiu, BIRIŞ Sorin – Ştefan, VLĂDUŢ Valentin, PILOCA Lorin, IMBREA Florin
- 4 T05 **NO-TILL RESEARCH RESULTS IN SOUTH-WEST ROMANIA**
BADESCU Mircea, DOBRE Marian, MECA Adrian
- 5 T06 **INVESTIGATIONS MADE FOR ESTABLISHING LONGITUDINAL MODULUS OF ELASTICITY IN THE CASE OF POTATO CREEPING STALK**
BADESCU Mircea, PETRESCU Stelian
- 6 T07 **THE INFLUENCE OF THE DEFORMATION OF THE TYRES AND OF THE RACE WAY ON THE TRANSVERSAL STABILITY OF THE WORKING MACHINE-TRACTOR SYSTEM**
BORUZ Sorin, BĂDESCU Mircea, GLODEANU Mihnea, STAN Constantin
- 7 T08 **EXPERIMENTAL RESEARCHES ON WORK QUALITY INDEX OF PEANUTS MECHANICAL HARVESTING**
ALEXANDRU Tudor, GLODEANU Mihnea, COLA Mugurel
- 8 T09 **CHECKING ON STAND THE SPECIFIC FEATURE OF A ELECTONIC AUTOMATIC ADJUSTING SYSTEM IN ORDER TO AUTOMATIZE THE WORKING PROCESS FOR AGRICULTURAL SPRINKLING MACHINES**
GLODEANU Mihnea, ALEXANDRU Tudor
- 9 T10 **THE FINIT ELEMENT METHOD USED FOR THE STRESS STATE DETERMINATION AT THE SPRAYERS' NOZLESS**
BUNGESCU Sorin – Tiberiu, BIRIŞ Sorin – Ştefan, VLĂDUŢ Valentin, PILOCA Lorin, IMBREA Florin
- 10 T11 **THE MEASURE EQUIPMENT OF THE RESISTANCE FORCES TO THE TRACTION OF THE CARRIED AGRICULTURE MACHINE ON TRACTOR REAR MOUNTED THREE POINT LINKAGE BY THE 3RD AND THE 4TH CATEGORY**
CONSTANTINESCU Augustin, POPESCU Simion
- 11 T12 **RESEARCH ON AGRICULTURAL TRACTORS PARAMETERS INFLUENCE ON SOIL COPMACTION**
Saracin Ion, PANDIA Olimpia, MARIN Gheorghe

Room New Amphitheatre

15³⁰-17³⁰

Chairmen:

Cataneanu Adina
Rosca Adrian

- 1 R26 **THE APPLICATION OF SYSTEM'S IDENTIFICATION TYPE METHOD IN DESIGNING, REALIZATION AND VALIDATION OF MATHEMATICAL MODELS FOR TRAFFIC SEQUENCES OPTIMIZATION**
Theodor George OPRICA, Traian POPESCU, Nastase SUTRU, Constantin STAN, Ilie DUMITRU
- 2 M16 **RESEARCHES REGARDING METHODS OF APPLYING THERMOCHEMICAL TREATMENTS TO IRON-MADE SINTERED PARTS RONDE TYPE**
Traian POPESCU, Ilie DUMITRU, Victor OȚĂȚ, Gheorghe POPA
- 3 M17 **EFFECTS OF QUENCING AND ANNEALING TREATMENTS ON THE MECHANICAL PROPERTIES OF SINTERED STEELS**
Traian POPESCU, , Victor OȚĂȚ, Cezar Alin UNGUREANU, Mihnea CĂȚĂNEANU,
- 4 M18 **STUDY OF SINTERED STEELS OBTAINED AFTER QUENCING AND ANNEALING TREATMENTS**
Traian POPESCU, Mariana NICULESCU, Carmen MARCU
- 5 M22 **TECHNOLOGY AND MODULATED EQUIPMENT FOR OBTAINING COMPOSITES MATERIAL POLYESTER – TEXTILE FIBRE**
Gelica STĂNESCU, Dumitru NEAGOE, Monica MATEESCU, Anca MOGOȘANU
- 6 M29 **ERROR ON THE GEOMETRICAL SHAPE OF TEETH PROFILE**
Alina DUTA, Ludmila SASS
- 7 M30 **EXPERIMENTAL STUDY OF A FULL CORRECTION OF SNAILS WITH MORE BEGINNINGS - THE CONVENTIONAL GADGET**
Nour. I. CRISAN, Dumitru NEAGOE, Gelica STĂNESCU, Adrian BERCEANU
- 8 M42 **CAD-FEA DEVELOPMENT BASED ON ARX LIBRARY**
Adrian ROȘCA, Ilie DUMITRU
- 9 M43 **ABOUT THE DETERMINATION OF SOME CHARACTERISTIC PROPRIETIES OF VISCOELASTIC MATERIALS USING THE DYNAMIC IDENTIFICATION METHODS**
Dan Gheorghe BAGNARU, Adina CATANEANU, Mihnea CATANEANU
- 10 M44 **THE MODELLING OF VIBRATIONS FOR LINEAR-ELASTIC BARS USING THE FINITE ELEMENT METHOD**
Adina CATANEANU, Dan Gheorghe BAGNARU, Mihnea CATANEANU

Congress Programme 25rd of October

Faculty of Mechanics

8,30-9,15	coffee break
9,15-10,30	Travel to Drobeta- Turnu Severin - Orsova
11,00-16,00	Danube Cruise
16,00-17,45	Travel to Craiova
18,00-	Close of Conference