







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Plenary session – Invited speakers

| THURSDAY, May 16                            |   | Blue           | Blue hall – Central building                                  |  |
|---|---|----------------|---|--|
| Honoris Causa Ceremony – Prof. I            |   | y – Prof. Erns | Ernst Von Lavante   |  |
| 1 <b>0</b> <sup>00</sup> – 11 <sup>30</sup> | NUMERICAL METHODS APPLIE<br>FLOW METERING | D TO FLUID     | Prof. Ernst Von Lavante<br>University Duisburg-Essen, Germany |  |

| THURSDAY, May 16                    |  |   |  |  |  |
|-------------------------------------|--|---|--|--|--|
|                                     | Blue hall – Central building   |   |  |  |  |
|                                     | Invited Speakers   |   |  |  |  |
| 1200- 1220                          | OPEN CEREMONY  |   |  |  |  |
| 12 <sup>20</sup> – 12 <sup>40</sup> | MESSSAGE FROM FORD COMPANY, ROMANIA                                      | Jan GIJSEN,<br>President, FORD Romania                            |  |  |  |
| 12 <sup>40</sup> -13 <sup>00</sup>  | SC POPECI UTILAJ GREU SA, STRATEGIC<br>PARTNER FOR UNIVERSITY OF CRAIOVA | Ing. Constantin POPECI, Director General SC POPECI UTILAJ GREU SA |  |  |  |
| 13 <sup>00</sup> – 13 <sup>20</sup> | FUTURE R&D ON MECHANICAL SYSTEMS FOR<br>SUSTAINABLE ENERGY               | Prof. Ion VIŞA<br>Transilvania University Brasov,<br>Romania      |  |  |  |
| 13 <sup>20</sup> – 13 <sup>40</sup> | PROGRESSES IN POWDER METALURGY AT FACULTY OF MECHANICS                   | Prof. Mihail MANGRA,<br>University of Craiova                     |  |  |  |
| 13 <sup>40</sup> - 14 <sup>00</sup> | TOTAL INTEGRATED ENGINEERING SYSTEMS SOLUTIONS                           | Ing. Constantin CIOLOFAN<br>Director General<br>INAS SA           |  |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Modeling and Simulation in Mechanical Engineering

| THURSDAY, May 16, 16 <sup>00</sup> – 17 <sup>45</sup> University's House – EMINESCU Salon  Chair: Professor, Ernst Von Lavante, Duisburg-Essen, Germany Co-chair: Professor, Daniela Tarnita University of Craiova Secretary: Assistant Copilusi Cristian, University of Craiova |  |  |
|--|--|--|
|  |  |  |
| 16 <sup>15</sup> – 16 <sup>30</sup>  | KINEMATIC AND CONSTRUCTIVE MODELING OF SOME<br>MONO-CONTOUR PARALLEL MECHANISMS                  | TEMPEA Iosif,<br>BRĂNICĂ (MILOSTEANU)<br>Diana-Nicoleta,<br>LIVADARIU Adriana-Madalina |
| 16 <sup>30</sup> – 16 <sup>45</sup>  | A COMPARISON BETWEEN THE KINEMATICS OF THE HUMAN<br>UPPER LIMB AND AN ARTIFICIAL HAND-ARM SYSTEM | BERCEANU Cosmin,<br>TARNIŢĂ Daniela  |
| 16 <sup>45</sup> – 17 <sup>00</sup>  | VIRTUAL SIMULATION OF THE HEALTHY AND OSTEOARTHRITIC KNEE JOINT MODELS                           | CATANA Marius,<br>TARNITA Daniela  |
| 17 <sup>00</sup> – 17 <sup>15</sup>  | ELASTODYNAMIC ANALYSIS OF A BEAM PUMPING UNIT<br>MECHANISM                                       | DUMITRU Nicolae,<br>CRACIUNOIU Nicolae,<br>MALCIU Raluca,<br>PLOSCARU Nicolae          |
| 17 <sup>15</sup> – 17 <sup>30</sup>  | CONSIDERATIONS REGARDING THE PRIME INTEGRALS OF<br>THE SOLID-RIGID WITH FIXED POINT MOVEMENT     | BOLCU Dumitru,<br>STĂNESCU Marius Marinel,<br>MIRIŢOIU Cosmin Mihai                    |
| 17 <sup>30</sup> – 17 <sup>45</sup>  | HUMAN GAIT PHASES STUDY AND THEIR INFLUENCE ON A<br>LOW-COST EXOSKELETON DESIGN                  | COPILUSI Cristian,<br>CECCARELLI Marco,<br>CARBONE Giuseppe                            |







#### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Modeling and Simulation in Mechanical Engineering

THURSDAY, May 16, 1815-1930

University's House - EMINESCU Salon

Chair: Professor Tempea losif, Politechnica University Bucharest

Co-chair: Professor Bolcu Dumitru, University of Craiova Secretary: Assistant Copilusi Cristian, University of Craiova

| 18 <sup>15</sup> – 18 <sup>30</sup> | KINEMATICS SIMULATION OF A MECHANISM FOR HUMAN LEG<br>MOTION ASSISTANCE        | GEONEA Ionut,<br>CECCARELLI,Marco<br>DUMITRU Nicolae<br>COPILUȘI Cristian                     |
|-------------------------------------|--|---|
| 18 <sup>30</sup> – 18 <sup>45</sup> | THREE NEW DESIGNS OF TIBIA NAILS WHICH ELIMINATE ORTHOPEDIC SCREWS             | POPA Dragos-Laurentiu,<br>BUCIU Gabriel,<br>GRECU Dan,<br>GHERGHINA George,<br>TUTUNEA Dragos |
| 18 <sup>45</sup> – 19 <sup>00</sup> | ON BERWALD LINEAR CONNECTIONS ON AFFINE BUNDLES                                | POPESCU Marcela,<br>POPESCU Paul  |
| 19 <sup>00</sup> – 19 <sup>15</sup> | DESIGN AND FINITE ELEMENT ANALYSIS OF CONNECTING ROD USING SOLIDWORKS SOFTWARE | TUTUNEA Dragos,<br>BICA Marin,<br>DIMA Alexandru  |
| 19 <sup>15</sup> – 19 <sup>30</sup> | THERMAL ANALYSIS OF THE ENGINE PISTON MADE OF ALUMINUM ALLOYS                  | TUTUNEA Dragos,<br>GHERGHINA George,<br>POPA Dragos Laurentiu                                 |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Modeling and Simulation in Mechanical Engineering

| FRIDAY, May 17, 2013 10 <sup>00</sup> – 11 <sup>30</sup> University's House – EMINESCU Salon |   |   |  |  |
|--|---|---|--|--|
| Chair:<br>Co-chair:<br>Secretary:  | Assoc. Professor, Adrian Sorin Rosca University of Craiova<br>Assoc. Professor, Mihai Talu, University of Craiova<br>Assistant Ionut Geonea University of Craiova |   |  |  |
| 10 <sup>00</sup> – 10 <sup>15</sup>  | THE INFLUENCE OF THE MATERIAL ON THE FATIGUE STRENGTH FOR THE PRIMARY SHAFT OF A GEARBOX WITH THREE AXLES   | CONSTANTINESCU Augustin,<br>NEAGOE Dumitru,<br>SIMNICEANU Loreta,<br>TROTEA Mario |  |  |
| 10 <sup>15</sup> – 10 <sup>30</sup>  | THE COMPARATIVE STUDY BETWEEN THE COMPUTATIONAL SIMULATION USING THE FINITE DIFFERENCES METHODS AND THOSE USING THE INTEGRAL TRANSFORMS                           | CATANEANU Adina,<br>BAGNARU Dan,<br>CATANEANU Mihnea                              |  |  |
| 10 <sup>30</sup> – 10 <sup>45</sup>  | APPLICATIONS OF INTEGRAL TRANSFORMS IN THE COMPUTATIONAL ANALYSIS OF THE MECHANICAL SYSTEMS VIBRATIONS  | CATANEANU Adina,<br>CATANEANU Mihnea,<br>BAGNARU Dan                              |  |  |
| 1045-1100  | INFLUENCE OF IMAGE PROCESSING ON THE MEASUREMENT OF THE HUMAN RETINAL MICROVASCULAR FRACTAL DIMENSION   | ŢĂLU Ştefan,<br>ŢĂLU Mihai  |  |  |
| 1100-1115  | MATLAB DYNAMICS OF A FREE LINK WITH ELASTIC IMPACT  | RAGAN Joseph,<br>MARGHITU Dan   |  |  |
| 1115_ 1130   | 3-DOF FORCE SENSING MICRO-FORCEPS FOR<br>VITREORETINAL SURGERY  | GONENC Berk,<br>IORDACHITA Iulian   |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Modeling and Simulation in Mechanical Engineering

| FRIDAY, May 17, 2013 12 <sup>00</sup> – 13 <sup>30</sup> University's House – EMINESCU Salor  |  |  |  |
|---|--|--|--|
| Chair: Assoc. Professor Craciunoiu Nicolae, University of Craiova Co-chair: Professor Dumitru Nicolae, University of Craiova Secretary: Assistant Ionut Geonea, University of Craiova |  |  |  |
| 1 <b>2</b> <sup>00</sup> – 12 <sup>15</sup>   | EXPERIMENTAL INVESTIGATION OF THE 3D SURFACE ROUGHNESS OF UNWORN HYDROGEL CONTACT LENSES | ŢĂLU Mihai<br>ŢĂLU Ştefan  |  |
| 12 <sup>15</sup> – 12 <sup>30</sup>   | VIBRATION ANALYSIS BY COMPUTATIONAL METHODS FOR THE LINEAR-ELASTIC KINEMATIC ELEMENTS    | ROMANESCU Alina,<br>VINTILA Daniela,<br>GRIGORIE Laura,<br>IONESCU Adriana,<br>NEGRU Mihai |  |
| 12 <sup>30</sup> 12 <sup>45</sup>   | MODELING AND EXPERIMENTAL RESULTS ON THE PALETTE SUBASSEMBLY                             | CRACIUNOIU Nicolae,<br>DUMITRU Nicolae,<br>SEMENESCU Daniel,<br>MANEA, I.                  |  |
| 12 <sup>45</sup> - 13 <sup>00</sup>   | ADVANCED FLEXIBILITY INSIDE AUTODESK INVENTOR  | ROŞCA Adrian Sorin   |  |
| 13 <sup>00</sup> – 13 <sup>15</sup>   | CALCULUS OF THE MECHANICAL STRENGTH OF THICK WALL PIPES TO HYDRAULIC HAMMER              | RADULESCU Mircea,<br>ROSCA Valcu,<br>MIRITOIU Cosmin                                       |  |
| 13 <sup>15</sup> – 13 <sup>30</sup>   | CALCULUS OF PULSATIONS IN HYDROSTATIC MACHINES   | RADULESCU Mircea,<br>STEFANESCU Cosmin   |  |







ANTONESCU Păun

### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Applied Mechanics and Mechatronic Systems

| THURSDAY   | , May 16, 16 <sup>00</sup> – 17 <sup>45</sup><br><i>Universi</i> t                                       | y's House ROMANESCU Salon   |
|--|--|---|
| Chair: Professor Ocnarescu Constantin, Politehnica University Bucharest Co-chair: Professor Daniela Vintila, University of Craiova Secretary: Assistant Andrei Nanu, University of Craiova |  |   |
| 16 <sup>00</sup> – 16 <sup>15</sup>  | ON THE IDENTIFICATION OF NONLINEAR BOUNDARY CONDITIONS BY USING THE CONCEPT OF THE INTERFERENCE DISTANCE | BRIŞAN Cornel,<br>TEODORESCU Petre,<br>DUMITRIU Dan,<br>MOŞNEGUŢU Valerica  |
| 16 <sup>15</sup> – 16 <sup>30</sup>  | ON THE SOMMERFELD EFFECT WITH APPLICATION TO MECHANICS   | MUNTEANU Ligia,<br>SIRETEANU Tudor,<br>BRISAN Cornel,<br>CHIROIU Veturia    |
| 16 <sup>30</sup> – 16 <sup>45</sup>  | ON THE SQUEAKY KNEE  | MOŞNEGUŢU Valerica,<br>DONESCU Ştefania,<br>IOAN Rodica,<br>CHIROIU Veturia |
| 16 <sup>45</sup> – 17 <sup>00</sup>  | KINEMATIC ANALYSIS OF A PARALLEL MANIPULATOR   | OCNĂRESCU Constantin,<br>SIMIONESCU Ion,<br>UNGUREANU Liviu                 |
| 17 <sup>00</sup> – 17 <sup>15</sup>  | COMPLEX BRAKING MECHANISMS OF THE 2-AXLE BOGIE FROM PASSENGER WAGONS                                     | ANTONESCU Păun,<br>SÎRBULESCU Mihai,<br>ANTONESCU Ovidiu                    |
| 17 <sup>15</sup> – 17 <sup>30</sup>  | STRUCTURE, GEOMETRY AND STATICS OF A COACH UNFOLDING MECHANISM   | ANTONESCU Ovidiu,<br>STRIMBEANU Margareta                                   |
| 17 <sup>30</sup> – 17 <sup>45</sup>  | STRUCTURE OF THE MECHANISMS USED AS HANDBRAKE TO WAGONS AND LOCOMOTIV                                    | BARBU Ion,<br>GEONEA Ionut,<br>ANTONESCU Păun                               |







#### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Applied Mechanics and Mechatronic Systems

THURSDAY, May 16, 1815- 1930

University's House - ROMANESCU Salon

Chair: Professor Paun Antonescu, Politehnica University Bucharest

Co-chair: *Professor*, Nanu Gheorghe, University of Craiova Secretary: *Assistant* Geonea Ionut, University of Craiova

| 18 <sup>15</sup> – 18 <sup>30</sup> | DUAL ADJUSTMENT VARIABLE VALVE LIFT MECHANISM   | MIHALCEA Stelian,<br>PANDREA Nicolae |
|-------------------------------------|---|--------------------------------------|
| 18 <sup>30</sup> – 18 <sup>45</sup> | MATHEMATICAL MODEL FOR STUDYING THE EFFORTS IN MECHANISMS WITH CARDAN JOINT WITH TECHNICAL DEVIATIONS   | BULAC Ion,<br>PANDREA Nicolae        |
| 18 <sup>45</sup> — 19 <sup>00</sup> | CALCULATION ALGORITHM OF EFFORTS FOR THE MECHANISM WITH CARDAN JOINT WITH TECHNICAL DEVIATIONS  | BULAC Ion                            |
| 19 <sup>00</sup> – 19 <sup>15</sup> | THE POWER SPECTRAL DENSITY OF RESPONSE FOR N RANDOM EXCITATIONS OF A NON-LINEAR OSCILLATOR WITH NON-LINEAR DAMPING CHARACTERISTIC IN THE FLUID MEDIUM | STAN Petre,<br>STAN Marinică         |
| 19 <sup>15</sup> – 19 <sup>30</sup> | THE POWER SPECTRAL DENSITY OF THE RESPONSE<br>FOR DUFFING OSCILLATOR WITH NON-LINEAR ELASTIC<br>CHARACTERISTIC  | STAN Marinică,<br>STAN Petre         |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

# Scientific papers schedule Section: Applied Mechanics and Mechatronic Systems

| FRIDAY, May 17, 2013 10 <sup>00</sup> – 11 <sup>30</sup> <i>University's House – ROMANESCU Salon</i> |   |   |  |  |
|--|---|---|--|--|
| Chair: Professor Rosca Valcu Co-chair: Professor Ilincioiu Dan Secretary: Assistant Romanescu Alina  |   |   |  |  |
| 10 <sup>00</sup> - 10 <sup>15</sup>  | EXTENTION OF THE TRIBOMODEL CONCEPT IN STUDY OF THE LOW CYCLE FATIGUE PROCESS   | MĂCUŢĂ Silviu   |  |  |
| 10 <sup>15</sup> – 10 <sup>30</sup>  | STUDY UPON THE DURABILITY OF STEEL R520 UPON THE TEMPERATURE TO AN ECCENTRIC AXIAL SOLICITATION WITH ASYMMETRY COEFFICIENT R0.5 | ROŞCA Vâlcu,<br>GEONEA Ionuţ,<br>ROMANESCU Alina,<br>MIRIŢOIU Cosmin                            |  |  |
| 10 <sup>30</sup> – 10 <sup>45</sup>  | EMPIRIC MODELS FOR STUDY THE CRACK INCREASE SPEED IN STEEL R520   | ROŞCA Vâlcu,<br>MIRIŢOIU Cosmin,<br>GEONEA Ionuţ,<br>ROMANESCU Alina                            |  |  |
| 10 <sup>45</sup> – 11 <sup>00</sup>  | THE RESULTS CHECKING OF A DEVICE USED TO BEND MECHANICAL ELEMENTS. PART I: A FINITE ELEMENT APPROACH                            | ROŞU Cătălin,<br>MIRIŢOIU Cosmin<br>STANIMIR Alexandru,<br>VÎLCU Roşca,<br>ILINCIOIU Dan        |  |  |
| 11 <sup>00</sup> – 11 <sup>15</sup>  | THE RESULTS CHECKING OF A DEVICE USED TO BEND MECHANICAL ELEMENTS. PART II: AN ANALYTICAL APPROACH                              | ROŞU Cătălin,<br>MIRIŢOIU Cosmin Mihai,<br>ILINCIOIU Dan,<br>ROŞCA Vîlcu,<br>STANIMIR Alexandru |  |  |
| 11 <sup>15</sup> – 11 <sup>30</sup>  | SECTION GEOMETRY OF STRENGTH PARTS  | MARIN Mihai,<br>MIRIŢOIU Cosmin,<br>ILINCIOIU Dan   |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Applied Mechanics and Mechatronic Systems

| FRIDAY, May 17, 2013 12 <sup>00</sup> – 13 <sup>30</sup> University's House – ROMANESCU Salon       |   |  |
|---|---|--|
| Chair: Professor Ilincioiu Dan Co-chair: Professor Rosca Valcu Secretary: Assistant Romanescu Alina |   |  |
| 12 <sup>00</sup> - 12 <sup>15</sup>   | OPERATING ENVIRONMENT FOR A POLY-ARTICULATE ROBOTIC ARM   | DUMITRU Violeta Cristina   |
| 12 <sup>15</sup> - 12 <sup>30</sup>   | CONSIDERATIONS ON THE DYNAMICS OF THE<br>MATERIAL POINT ON A LINEAR ELASTIC PLANE PLATE<br>UNDERGOING PLANE MOTION  | NANU Gheorghe,<br>NANU Andrei Gheorghe   |
| 12 <sup>30</sup> - 12 <sup>45</sup>   | CONSIDERATIONS ON SOLVING the MATHEMATICAL MODELS OF LONGITUDINAL AND TRANSVERSE VIBRATIONS OF A KINEMATIC ELEMENT OF LINEAR ELASTIC STRAIGHT BEAM TYPE UNDERGOING PLANE MOTION | NANU Gheorghe,<br>NANU Andrei Gheorghe   |
| 12 <sup>45</sup> - 13 <sup>00</sup>   | THE DETERMINATION OF THE MATHEMATICAL MODEL FOR THE COLLISION OF A RIGID BODY   | BOGDAN Mihaela-Liana,<br>POPA Dragos Laurentiu   |
| 13 <sup>00</sup> – 13 <sup>15</sup>   | ELEMENTS OF DYNAMIC ANALYSIS FOR RECTILINIAR SHAFTS   | VINTILĂ Daniela,<br>GRIGORIE Laura,<br>ROMANESCU Alina,<br>IONESCU Adriana,<br>NEGRU Mihai |
| 13 <sup>15</sup> – 13 <sup>30</sup>   | CONSIDERATIONS ABOUT THE INFLUENCE OF THE SHOCKS On THE KINETO-STATICS OF THE SHAPING   | BOGDAN Mihaela-Liana,<br>SIMNICEANU Loreta   |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

### Scientific papers schedule Section: Automotives and tractors

| THURSDAY, May 16, 16 <sup>00</sup> – 17 <sup>45</sup> |   |  |  |  |  |
|---|---|--|--|--|--|
| Co-chair: Pro   | Chair: Professor Bica Marin Co-chair: Professor Gherghina George Secretary: Assistant Trotea Mario    |  |  |  |  |
| 16 <sup>00</sup> – 16 <sup>15</sup>                   | CONSIDERATIONS ON EXPERIMENTAL MEASUREMENTS FOR A RACK AND PINION STEERING SYSTEM                     | MARINESCU Gabriel Cătălin,<br>DUMITRU Nicolae,<br>DUMITRACHE Silviu Ionuţ,<br>OŢĂT Oana Victoria |  |  |  |
| 16 <sup>15</sup> – 16 <sup>30</sup>                   | STEERING AND FRONT SUSPENSION DYNAMIC SIMULATION USING THE ADAMS/CAR SOFTWARE.                        | MARINESCU Gabriel Cătălin,<br>DUMITRU Nicolae,<br>OŢĂT Oana Victoria,<br>OŢĂT Victor             |  |  |  |
| 16 <sup>30</sup> – 16 <sup>45</sup>                   | RESEARCHES ON THE POSSIBILITY TO REDUCE THE AIR POLLUTION THROUGH THE EMISSION REGULATORY INSTRUMENTS | BICA Marin,<br>STOICAN Marius,<br>TUTUNEA Dragos,<br>DIMA Alexandru,<br>SOFRONIE Sorin           |  |  |  |
| 16 <sup>45</sup> – 17 <sup>00</sup>                   | A REVIEW OF CATALYTIC CONVERTERS USED IN AUTOMOTIVE INDUSTRY  | BICA Marin,<br>STOICAN Marius,<br>TUTUNEA Dragos,<br>DIMA Alexandru,<br>SOFRONIE Sorin           |  |  |  |
| 17 <sup>00</sup> – 17 <sup>15</sup>                   | MECHATRONICS ELEMENTS USED FOR LPG MOTOR VEHICLES   | GHERGHINA George,<br>TUTUNEA Dragos,<br>LAMBRACHE Nicolas  |  |  |  |
| 17 <sup>15</sup> – 17 <sup>30</sup>                   | METHODS OF EVALUATION OF NO <sub>X</sub> EMISSIONS AT THERMAL POWER PLANTS                            | BICĂ Marin,<br>TUDOR Viorel,<br>CERNĂIANU Corina,<br>POPA Alina                                  |  |  |  |
| 17 <sup>30</sup> – 17 <sup>45</sup>                   | TECHNICAL SOLUTIONS FOR THE MODERNIZATION OF THE BOILERS OF 510 T/H OF CTE                            | BICĂ Marin,<br>TUDOR Viorel,<br>CERNĂIANU Corina,<br>POPA Alina                                  |  |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Automotives and tractors

THURSDAY, May 16, 1815- 1930

University's House - PLOPSOR Salon

Chair: Professor Preda Ion

Co-chair: Professor Ciolan Gheorghe Secretary: Assistant Trotea Mario

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|-------------------------------------|--|--|--|
| 18 <sup>15</sup> – 18 <sup>30</sup> | STABILITY ANALYSIS OF A CAR MOVING WITH A SIMPLIFIED MODEL   | SIMNICEANU Loreta,<br>NEAGOE Dumitru,<br>BOGDAN Mihaela,<br>TROTEA Mario |  |
| 18 <sup>30</sup> – 18 <sup>45</sup> | STARTING PERFORMANCES CALCULATIONS PARTICULARITIES OF CVT-EQUIPPED VEHICLES  | PREDA Ion,<br>CIOLAN Gheorghe  |  |
| 18 <sup>45</sup> – 19 <sup>00</sup> | A STUDY ABOUT THE INFLUENCE OF THE COMBUSTION CHAMBER ARCHITECTURE ON THE ENGINE PERFORMANCES USING A VIRTUAL DESIGN PROGRAM | DIMA Alexandru   |  |
| 19 <sup>00</sup> – 19 <sup>15</sup> | THE INFLUENCE OF LIGNITE QUALITY OF ROVINARI BASIN TO THE FORMATION OF POLLUANTS   | FOANENE Adriana,<br>IANCU Constantin,<br>SOFRONIE Sorin                  |  |
| 19 <sup>15</sup> – 19 <sup>30</sup> | THE INFLUENCE OF GRINDING FINESSE OF COAL ON THE COMBUSTION PROCESS  | FOANENE Adriana,<br>IANCU Constantin,<br>SOFRONIE Sorin                  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Automotives and tractors

| FRIDAY, May 17, 2013 1000- 1130 |
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University's House – PLOPSOR Salon

Chair: Professor Otat Victor

Co-chair: *Professor* Neagoe Dumitru Secretary: *Assistant* Buculei Mihaela

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|---|---|---|
| 10 <sup>00</sup> – 10 <sup>15</sup>         | THE DIFFERENCE OF TEMPERATURE CALCULATE FOR A HEAT EXCENGER   | STĂNCUŢ Eugenia Adriana,<br>CERNĂIANU Corina  |
| 10 <sup>15</sup> — 10 <sup>30</sup>         | MEASURING THE TORQUE AND ROTATIONAL SPEED OF<br>DRIVE SHAFTS FOR FRONT AND REAR AXLES OF A 4X4<br>TRACTOR | CONSTANTINESCU Augustin,<br>TROTEA Mario,<br>DUMITRU Ilie,<br>POPA Gheorghe                 |
| 10 <sup>30</sup> – 10 <sup>45</sup>         | ELECTROMECHANICAL SYSTEM FOR QUALITY<br>ASSESMENT OF SPUR GEAR  | MARGINE Alexandru,<br>DUMITRU Nicolae,<br>GEONEA Ionut<br>DRAGUT Emil                       |
| 1045- 1100                                  | STUDIES ON MULTIPLE NOZZLE INJECTORS IN BIODIESEL INJECTION.  | PICIOREA George Daniel,<br>BUCULEI Mihaela,<br>NAGI Mihai ,<br>IORGA Dănilă,<br>OȚĂT Victor |
| 11 <sup>00</sup> -11 <sup>15</sup>          | AUTOMOBILE RECYCLING - INTEGRATED LIABILITY OF THE MANUFACTURER COMPANIES                                 | PANĂ Gabriela Monica,<br>MARCU Carmen   |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Transportation and Traffic

| THURSDAY, May 16, 16 <sup>00</sup> – 17 <sup>45</sup> University's House IORGA Salon                   |  |  |  |  |
|--|--|--|--|--|
| Chair: Professor Ispas Nicolae Co-chair: Professor Nastasoiu Mircea Secretary: Assistant Popa Gheorghe |  |  |  |  |
| 16 <sup>00</sup> – 16 <sup>15</sup>  | STUDIES CONCERNING THE PRELIMINARY DESIGN OF A CONTEXTUAL CAR-DRIVER INTERFACE         | ISPAS Nicolae,<br>COFARU Corneliu, NĂSTĂSOIU<br>Mircea,<br>PREDA Ana-Maria           |  |  |
| 16 <sup>15</sup> – 16 <sup>30</sup>  | STUDIES REGARDING DISTRIBUTED ARCHITECTURES FOR ROAD TRAFFIC MANAGEMENT AT LOCAL LEVEL | OPRICA Theodor,<br>VÎNĂTORU Matei,<br>DUMITRU Ilie                                   |  |  |
| 16 <sup>30</sup> – 16 <sup>45</sup>  | CONSIDERATIONS ON MODELING AND SIMULATION IN VEHICLES COLLISION                        | OŢĂT Oana Victoria, DUMITRU<br>Nicolae,<br>OŢĂT Victor,<br>MARINESCU Gabriel Cătălin |  |  |
| 16 <sup>45</sup> – 17 <sup>00</sup>  | COMPARATIVE ANALYSIS FOR TWO TYPES OF FRAMES USED FOR IMPACT TESTING DEVICE            | CIUNEL Stefanita,<br>DUMITRU Nicolae,<br>POPA Dragos-Laurentiu                       |  |  |
| 17 <sup>00</sup> – 17 <sup>15</sup>  | ON PUBLIC TRANSPORTATION CYCLES' DETERMINATION AND OPTIMIZATION IN CRAIOVA             | DUMITRU, Ilie,<br>OTAT Oana,<br>OPRICA Theodor.,<br>OTAT Victor                      |  |  |
| 17 <sup>15</sup> – 17 <sup>30</sup>  | MOBILITY CREDIT PLATFORM FOR IMPROVING TRANSPORT EFFICIENCY IN CRAIOVA                 | MATEI Lucian,<br>DUMITRU Ilie,<br>VINATORU Matei,<br>OPRICA Theodor                  |  |  |
| 17 <sup>30</sup> – 17 <sup>45</sup>  | ANALYSIS ON TESTING DISMANTLED AND UNDISMANTLED VEHICLE ENGINES                        | DUMITRU Ilie ,<br>OTAT Victor,<br>OTAT Oana,<br>POPA Gheorghe                        |  |  |
| THURSDAY, May 16, 18 <sup>15</sup> – 19 <sup>30</sup> University's House – IORGA Salon                 |  |  |  |  |
| Chair: Professor Otat Victor Co-chair: Professor Dumitru Ilie Secretary: Assistant Popa Gheorghe       |  |  |  |  |
| <b>18</b> <sup>15</sup> – <b>18</b> <sup>30</sup>  | STUDIES REGARDING FREIGHT DISTRIBUTION IN CRAIOVA<br>HISTORIC CENTER                   | OPRICA Theodor,<br>DUMITRU Ilie,<br>MATEI Lucian<br>PLESEA Laurentiu                 |  |  |
| 18 <sup>30</sup> – 18 <sup>45</sup>  | CONSIDERATION ABOUT THE EVOLUTION OF TRAFFIC MANAGEMENT SYSTEMS                        | PLESEA Laurentiu,<br>DUMITRU Ilie <sup>,</sup><br>OPRICA Theodor                     |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

## Scientific papers schedule Section: Materials and Fabrication Systems

| THURSDAY, May 16, 16 <sup>00</sup> – 17 <sup>45</sup> University's House HILLARY Salon                           |  |  |  |
|--|--|--|--|
| Chair: Professor Gheorghe Stefan Co-chair: Assoc. Professor Teisanu Cristina Secretary: Assistant Tutunea Dragos |  |  |  |
| 16 <sup>00</sup> – 16 <sup>15</sup>  | RESEARCH ON SURFACE ROUGHNESS IN GRINDING THE CYLINDER LINERS IN AUTOMOTIVE CONSTRUCTION   | ZAMFIRACHE Marius  |  |
| 16 <sup>15</sup> – 16 <sup>30</sup>  | STUDIES CONCERNING THE TOOL WEAR OF THE SURFACES IN THE CASE OF ALLOYS STEEL TURNING   | ZAMFIRACHE Marius  |  |
| 16 <sup>30</sup> – 16 <sup>45</sup>  | OPTIMIZATION METHOD FOR THE DEVELOPING OF<br>COPPER- BASED SINTERED ALLOYS USING FINITE<br>ELEMENT METHOD AND MATHEMATICAL<br>ALGORITHMS | GHEORGHE Stefan,<br>TEISANU Cristina.                                  |  |
| 16 <sup>45</sup> – 17 <sup>00</sup>  | RESEARCH ABOUT THE QUALITY OF BIOCOMPOSITES BASED ON HYDROXYAPATITE NANOPOWDERS OBTAINED BY TWO STEPS SINTERING (TSS) TECHNOLOGY         | PASCU Cristina Ileana,<br>GINGU Oana,<br>ROTARU Petre                  |  |
| 17 <sup>00</sup> – 17 <sup>15</sup>  | RESEARCH TO IDENTIFY DEPENDENCY RELATIONS BETWEEN CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES OF ALUMINIUM ALLOY TYPE ALCU4MG1        | GRIGORIE Laura,<br>ROMANESCU Alina,<br>VINTILĂ Daniela                 |  |
| 17 <sup>15</sup> – 17 <sup>30</sup>  | CONSIDERATION ABOUT INFLUENCE OF SINTERING PARAMETERS ON THE IRON BASED ANTIFRICTION ALLOYS MICROSTRUCTURE                               | TEISANU Cristina,<br>MANGRA Mihail,<br>GHEORGHE Stefan,<br>CIUPITU Ion |  |
| 17 <sup>30</sup> – 17 <sup>45</sup>  | MP BICOMPONENT GUIDANCE BUSHING FOR MACHINE RETAINING DEVICES  | DIDU Marin,<br>DIDU Anca,<br>RADU Stefan                               |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

# Scientific papers schedule Section: Management and Production Systems

| THURSDAY, May 16, 18 <sup>00</sup> – 19 <sup>30</sup> University's House HILARY Salon                      |  |  |  |  |
|--|--|--|--|--|
| Chair: Professor Dumitru Constantin Co-chair: Professor Tarata Daniela Secretary: Assistant Tutunea Dragos |  |  |  |  |
| 18 <sup>00</sup> – 18 <sup>15</sup>  | ASPECTS OF THE QUALITY CONTROL PROCESS IN PIRELLI COMPANY  | CHERCIU Mirela,<br>BUZATU Dumitru Stefan |  |  |
| 18 <sup>15</sup> -18 <sup>30</sup>   | THEORETICAL AND EXPERIMENTAL RESEARCH ON DRYING CEREAL SEEDS AND PLANTS IN TECHNICAL FLUIDISED-BED   | CERNĂIANU Corina,<br>STĂNCUŢ Eugenia     |  |  |
| 18 <sup>30</sup> – 18 <sup>40</sup>  | STUDIES UPON AUTOMATED MANUFACTURING OF<br>TUBES WITH THICK SUPERALUMINA CERAMICWALLS<br>DESTINED FOR ELECTRONICS AND<br>ELECTROTECHNIQUE INDUSTRIES | DUMITRU Constantin                       |  |  |
| 18 <sup>40</sup> – 18 <sup>55</sup>  | NUMERICAL SIMULATION OF POWDER COMPACTING PROCESSES THROUGH HYDROSTATICS EXTRUSION   | DUMITRU Constantin                       |  |  |
| 18 <sup>55</sup> – 19 <sup>05</sup>  | AUTOMATISATION OF ADVANCE LONGITUDINALLY AND VERTICALLY TO A DEVICE FOR MICRO-FINISHING  | CERNĂIANU Adrian                         |  |  |
| 1 <b>9</b> <sup>05</sup> – 1 <b>9</b> <sup>20</sup>  | ANALYSIS OF PROCESS PARAMETERS ON PROCESSING ON A DEVICE FOR MICRO-FINISHING   | CERNĂIANU Adrian,<br>DIMA Alexandru      |  |  |
| 19 <sup>20</sup> – 19 <sup>35</sup>  | REGARDING THE ANALYSIS OF TENSION AND DEFORMATION STATE IN CASE OF PRODUCTS MANUFACTURED FROM RECOVERED SILICONE RUBBER                              | POPESCU Daniel,<br>POPESCU R.C           |  |  |







### **UNIVERSITY OF CRAIOVA - FACULTY OF MECHANICS**

### Scientific papers schedule Section: Civil Engineering

| THURSDAY, May 16, 16 <sup>00</sup> – 17 <sup>45</sup> University's House PIRU Salon                        |  |   |  |  |
|--|--|---|--|--|
| Chair: Professor Bratu Polidor Co-chair: Assoc. Professor Negru Mihai Secretary: Assistant Ionescu Adriana |  |   |  |  |
| 16 <sup>00</sup> – 16 <sup>15</sup>  | A COMPARISON OF THE RESULTS OBTAINED IN DAISYLAB AND LABVIEW USING THE BASIC RECORDS COMBINATION METHOD FOR A CIRCULAR SYMMETRIC STRUCTURE | MURZEA Patricia,<br>TRUŢĂ Alexandru   |  |  |
| 16 <sup>15</sup> – 16 <sup>30</sup>  | SEISMIC ASSESSMENT OF REINFORCED CONCRETE FRAMES WITH MASONRY INFILLED PANELS  | SAMOILĂ Diana   |  |  |
| 16 <sup>30</sup> – 16 <sup>45</sup>  | ANALYSIS OF THE DYNAMIC RESPONSE AT SEISMICSHOCKS OF THE SILICONIC OIL DISSIPATIVE DEVICES, FUNCTION OF THEIR RHEOLOGICAL BEHAVIOR         | BRATU Polidor   |  |  |
| 16 <sup>45</sup> – 17 <sup>00</sup>  | PARAMETRIC BEHAVIOR OF THE ANTIVIBRATION ELASTOMERIC ISOLATORS, AT STAND TESTING, DEPENDING ON THE DYNAMIC INERTIAL EXCITATION             | ALEXANDRU Carmen  |  |  |
| 17 <sup>00</sup> – 17 <sup>15</sup>  | PRIMARY ENERGY CONTENT EMBEDED IN CONFINED MASONRY   | CODIŢĂ Alina  |  |  |
| 17 <sup>15</sup> – 17 <sup>30</sup>  | COMPARATIVE STUDY ON THE ERGONOMICS OF REINFORCED MASONRY  | CODIŢĂ Alina  |  |  |
| 17 <sup>30</sup> – 17 <sup>45</sup>  | COMPARISON OF ANSYS AND ETABS RESULTS IN SEISMIC SIMULATION OF A BUILDING STRUCTURE  | NEGRU Mihai,<br>IONESCU Adriana,<br>CALBUREANU Madalina,<br>VINTILA Daniela |  |  |
| 17 <sup>45</sup> - 18 <sup>00</sup>  | WINKLER METHOD IN ANALYSIS OF A BUILDING STRUCTURE IN ANSYS PROGRAM  | IONESCU Adriana,<br>NEGRU Mihai,<br>VINTILA Daniela,<br>CALBUREANU Madalina |  |  |