

PROGRAM OF ICNcT 2014

Thursday, 23th October

Time	Activities
8.30 – 9.30	<i>Registration of the participants</i>
9.30 – 11.00	<p>Opening ceremony of TCM 60 and united conferences ICNcT, ICAMaT, POLCOM and ROBOTICS (AN 010) Welcome speeches of participants from all conferences and TCM' 60 event:</p> <ul style="list-style-type: none"> • Mihnea COSTOIU, Minister Delegate for Higher Education, Scientific Research and Technological Development • Prof. PhD Eng. Ecaterina ANDRONESCU, President of the Senate within POLITEHNICA University of Bucharest • Prof. PhD Eng. George DARIE, Rector of POLITEHNICA University of Bucharest • Prof. PhD Eng. Ec. Cristian DOICIN, Dean of the Faculty of Engineering and Management of Technological Systems • Prof. PhD Eng. Richard HERMAN, President of Romanian Association for Nonconventional Technologies • Prof. PhD Eng. DHC, Aurel NANU, Honorary President of Romanian Association for Nonconventional Technologies (video message) • Prof. PhD Eng. Dorel BANABIC, corresponding member of Romanian Academy, President of European Scientific Association for Material Forming • PhD Eng. Constantin STROE - ACAROM • Eng. Marcel DIACONU - ASPAPLAST • Assoc. Prof. PhD Eng. Nicolae IONESCU, Head of Manufacturing Engineering Department • Prof. PhD Eng. Pavel Topală, State University „Alec Russo” from Bălți, Republic of Moldova • Prof. PhD Eng. Mircea IVANESCU, President of Robotics Society of Romania • Prof. PhD Eng. Voicu TACHE, Former Rector of POLITEHNICA University of Bucharest • Prof. PhD Eng. Aurel STURZU, POLITEHNICA University of Bucharest • Prof. PhD Eng. Florian DRAGANESCU, POLITEHNICA University of Bucharest
11.00 – 11.30	Coffee break
11.30 – 13.30	<p>Plenary session (AN 010) – Chairman, Prof. PhD Eng. Ec. Cristian DOICIN</p> <p>11.30 – 11.55 - <i>Green Management of spare Parts for an Integrated Optimal Maintenance and Production Policy</i>, Sofiene DELLAGI, Université de Lorraine, Laboratoire de Génie Industriel, de Production et Maintenance – Metz.</p> <p>11.55 – 12.20 - <i>Advanced Integrated System of Innovative Gear Pumps For Polymeric Products Engineering</i>, Constantin Gheorghe Opran, University POLITEHNICA of Bucharest, Romania, Mircea Pricop, SC HESPER SA Bucharest, Romania, Constantin Teodoru, SC HESPER SA Bucharest, Romania, Maria Dinu, SC HESPER SA Bucharest, Romania.</p> <p>12.20 – 12.45 - <i>Do we need Product Lifecycle Management?</i>, Alin Popescu, Cenit Romania</p> <p>12.45 – 13.10 - <i>Points of View Concerning the Concept of Non-Conventional Technologies and their Current Development</i>, Laurențiu Slătineanu, Margareta Coteață, Oana Dodun.</p> <p>13.10 – 13.35 - <i>Perspectives In Optoelectronics. Present And Future in INOE</i>, Roxana Savastru, Gabriela Pavelescu, Roxana Radvan.</p>
13.35 – 15.00	Lunch - New Library, 2 nd floor
15.00 – 18.45	Papers presentation assigned to ICNcT sections
19.00 – 24.00	Celebration Dinner (POTCOAVA restaurant)

Friday, 24th October

Time	Activities
8.30 – 11.00	<p>Plenary session (A2.1 – New Library) – Chairman, Prof. PhD Eng. Tom SAVU</p> <p>8.30 – 8.55 - <i>The Textile And Leather Industry – Promoter For Smart Products And Cultural Traditions</i>, Carmen Ghițuleasa</p> <p>8.55 – 9.20 - <i>Benefits of the additive manufacturing in robotics</i>, PhD Vaclav Krys, Czech Republic</p> <p>9.20 – 9.45 - <i>Project Management and Lean Engineering</i>, Toufik Boudouh, Maître de Conférences - Laboratoire IRTES-M3M - Département IMSI, Université de Technologie de Belfort-Montbéliard</p> <p>9.45 – 10.10 - <i>Trends And Technological Innovations In Surgical Robotics</i>, Prof. PhD Eng. Doina Pisla, Tehnical University of Cluj-Napoca, President of Technical Commission for Kinematics Calculation from International Federation for Science Promotion of Mechanisms and Machines (IFTOMM)</p> <p>10.10 – 10.35 - <i>Advances in manufacturing</i>, Dorel BANABIC, Technical University of Cluj-Napoca.</p> <p>10.35 – 11.00 – <i>Hyper-Redundant Robotic Systems</i>, Prof. PhD Eng. Mircea Ivanescu, President of Romanian Society of Robotics, Member of Romanian Technical Sciences Academy</p>
11.00 – 11.30	Coffee break
11.30 – 13.35	<p>Plenary session (A2.1 – New Library) – Chairman, Prof. PhD Eng. Daniel GHICULESCU</p> <p>11.30 – 11.55 - <i>Grasp and Grippings Systems-State of Art</i>, Prof. PhD Eng. Ionel Staretu, President of Brasov Branch of Romanian Society of Robotics</p> <p>11.55 – 12.20 - <i>Innovative Solutions For Performances Increase At Micro-Electrical Discharge Machining Aided By Ultrasonics</i>, Prof. PhD Eng. Daniel Ghiculescu, Prof. PhD Eng. Niculae Ion Marinescu, PhD Sergiu Nanu, “Politehnica” University of Bucharest</p> <p>12.20 – 12.45 - <i>Obtaining Surfaces with Taylor Cone Shaped Asperities Of Micro- and Nano-Scale Dimensions Using the Edi Method</i>, Pavel Topală, State University „Alec Russo” from Bălți, Republic of Moldova, Dumitru Nedelcu, Universitatea Tehnică Gheorghe Asachi, Iași</p> <p>12.45 – 13.30 – <i>Training Stands For Energy Efficient Drives And Systems</i>, Dipl. eng. Krasimir Krastev, Head of Engineering department at AMK, Ltd, Gabrovo, Dr. eng. Borislav Stoyanov, project leader in Engineering department at AMK Ltd, Gabrovo, Bulgaria</p>
13.35 – 15.00	Lunch - New Library, 2 nd floor
15.00 – 17.00	Meeting of Romanian Association for Nonconventional Technologies
19.00 – 20.00	Dinner (POTCOAVA restaurant)

ICNcT Sections, Thursday, 23th October, 15 – 18.45

S1. Physical phenomena and processes specific to nonconventional technologies – Room CF 015	S2. Technological systems for nonconventional technologies – Room CE 104 - 105	S3. Modelling, experimental research and nonconventional machining – Room CE 111	S4. Nonconventional technologies management and other nonconventional processes – Room CB203	S5. Environmental friendly technologies and environmental impact reduction - Room CB112
<p>Moderators: Prof. Gh. Obaciu, Prof. L. Slătineanu Assoc. Prof. D. Nițoi</p>	<p>Moderators: Prof. N.I. Marinescu Prof. Carmen Simion Assoc. Prof. Liliana Popa</p>	<p>Moderators: Prof. D. Ghiculescu Assoc. Prof. C. Pisarciuc PhD Dan Savastru</p>	<p>Moderators: Prof. R. Herman, Prof. A. Vișan, Prof. A.M. Țițu</p>	<p>Moderators: Prof. Alexandra Banu, Prof. M. Radovanović, Assoc. Prof. T. Buidos</p>
<p>1. SHARPENED PEAKS BEHAVIOR IN ELECTROCHEMICAL MACHINING PROCESS Geo Caracaș, Laurențiu Slătineanu, António Gonçalves-Coelho, Margareta Coteață, Irina Beșliu</p>	<p>1. PERFORMANCE OF REQUIRED OPERATION OF ELECTRIC POWER SYSTEMS Ștefan Butucea, Gheorghe Obaciu</p>	<p>1. FEM STUDY OF THERMAL FRONT DYNAMICS AT MICRO-ELECTRICAL DISCHARGE MACHINING AIDED AND NOT AIDED BY ULTRASONICS Daniel Ghiculescu, Nicolae Marinescu, Gyula Varga, and Sergiu Nanu</p>	<p>1. ASPECTS REGARDING THE PRODUCTION PROCESSES OPTIMIZATION IN EROSION PROCESSING Richard Herman, Mihaiela Herman</p>	<p>1. THE ELECTROCHEMICAL CHARACTERIZATION OF SAME MARTENSITIC STAINLESS STEELS IN NATURAL AND SYNTHETIC WATERS Alexandra Banu, Alexandru Paraschiv, Cristina Juganaru</p>
<p>2. MACHINING DEPTH AND ENERGY CONSUMPTION AT ELECTRICAL DISCHARGE MACHINING OF POLYCRYSTALLINE DIAMOND Cristian Pisarciuc</p>	<p>2. CONTRIBUTIONS TO THE DESIGN OF AN AUXILIARY EQUIPMENT FOR PROCESSING SMALL HOLES THROUGH ELECTRICAL EROSION WITH FORM COPYING Vasile Făgărășan, Carmen Purcar and Aurel Mihail Țițu</p>	<p>2. FEM OF AN IMPLANT BEHAVIOR IN THE SITUATION OF A HIGHER TRABECULAR BONE VOLUME Dan Nițoi, Gheorghe Amza, Stefan Milicescu, Zoia Apostolescu, Andrei Dimitrescu</p>	<p>2. APPLICATION OF EXHAUSTIVE ITERATIVE SEARCH ALGORITHM FOR SOLVING MACHINING OPTIMIZATION PROBLEMS Miloš Madić, Marko Kovačević and Miroslav Radovanović</p>	<p>2. THE ENVIRONMENTAL IMPACT PRELIMINARY STUDY OF MANUFACTURING MACHINING BY APPLYING CO₂PE METHODOLOGY Alexandra Banu, Daniel Ghiculescu, Cristina Juganaru, Mihai Trifanescu</p>

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3. NONCONVENTIONAL APPROACHES IN II-IV-V ₂ BULK AND THIN FILM GROWTH Madalin Ion Rusu, Catalin Nicolae Zoita, Adrian Kiss	3. THEORETICAL AND METHODOLOGICAL COMPUTATIONAL ISSUES ON A HYDROSTATIC EQUIPMENT TO REPLICATE ELECTRO DISCHARGE MACHINING FEED MOTION Niculae Ion MARINESCU, Alexandru Sergiu NANU, Daniel GHICULESCU	3. CRATER SIZE PREDICTION IN ELECTRICAL DISCHARGE GRINDING (EDG) OF POLYCRYSTALLINE DIAMOND (PCD) M. Zulafif Rahim, Songlin Ding, Bo Hu and John Mo	3. UNCONVENTIONAL DISTANCE DETERMINATION THROUGH ABS PULSE EXTRACTION SYSTEM Valeriu Savu, Madalin Ion Rusu, Daniel Tenciu and Laurentiu Baschir	3. UNCONVENTIONAL WATER MONITORING AND EARLY WARNING SYSTEM Luminita Ghervase, Simona Dontu
4. CONTRIBUTIONS REGARDING TECHNOLOGICAL METAL DEPOSITION IMPROVING USING THE ULTRASONIC WAVES Gheorghe Amza, Valentin Petrescu, Dan Florin Nitoi, Zoia Apostolescu, Marius Cornel Teodorescu, Adrian Ioan Dragomir-Groza	4. ELECTRICAL EFFICIENCY OF EDM POWER SUPPLY Emanoil Toma and Carmen Simion	4. DIMENSIONAL ANALYSIS OF A 40KHZ HIGH POWER ULTRASONIC TRANSDUCER USED IN AIDED EDM Cristian Rugina, Veturia Chiroiu and Mihaela-Alexandra Popescu	4. ASPECTS REGARDING THE USE OF NEURAL NETWORKS IN THE ORGANIZATIONAL MANAGEMENT OF RESEARCH AND DEVELOPMENT OPERATORS IN THE NONCONVENTIONAL TECHNOLOGIES FIELD Simona-Ioana Marinescu	4. COMPARATIVE EXPERIMENTAL RESEARCHES ON THE PROCESSING OF CAR PARTS MADE BY SINTERING OF AN AUSTENITIC STAINLESS STEEL - ALUMINA POWDER MIXTURE Toderita Nemes, Marius Bibu, Cristian Deac, and Alina Gligor
5. THEORETICAL AND EXPERIMENTAL PIECES PLATING ULTRASONIC FIELD Gheorghe Amza, Valentin Petrescu, Zoia Apostolescu, Marius Cornel Teodorescu, Adrian Ioan Dragomir-Groza	5. RESEARCH ABOUT THE OPTIMIZATION OF A MICROWAVE EXPERIMENTAL DEVICE, BY MEANS OF AN ELECTRONIC INVERTER Mircea-Petru Ursu, Traian Buidos	5. SIMULATION OF A FBG TORQUE SENSOR Dan Savastru, Sorin Miclos and Ion Lancranjan	5. SHAPE MEMORY POLYMERS-(SMPs) NANOSTRIP MULTILAYERS APPLIED ON THE NEW BEARING GENERATION FOR HARD WEARING IN TURBOCHARGES Paul Olaru, Ian Hutchings, Nicole Dorr	5. THE MONITORING OF BUILDINGS DEFORMATIONS IN FLOODING AREAS WITH LANDSLIDE RISK M. N. Tautan, S. Miclos, D. Savastru and A. Stoica
6. SOME ASPECTS OF PRELIMINARY DESIGN OF EDM MACHINE Ştefan Butucea, Gheorghe Obaciu	6. COMPUTER AIDED MACHINING OF AN ACOUSTIC HORN FOR ULTRASONICALLY AIDED EDM Ovidiu-Dorin Alupei-Cojocariu, Daniel Ghiculescu	6. CONSIDERATIONS ABOUT ELECTRODEPOSITION OF TITANIUM IN A NICKEL MATRIX Mihaela Botis, Dinu Gubencu	6. UNCONVENTIONAL TECHNOLOGIES – THE PARADIGM OF THE FUTURE OR THE FUTURE OF PARADIGM Liliana Popa	6. STUDY CONCERNING THE EFFECTS OF PLASMA NITRIDING ON THE CHARACTERISTICS OF STRUCTURAL ALLOY STEELS Cristian Deac, Marius Bibu, Valentin Petrescu, Toderita Nemes, Alina Gligor
7. A SYSTEMIC MODEL FOR COMPLEX, ELECTRICAL AND ELECTROCHEMICAL EROSION PROCESSING Mihaela Herman, Richard Herman, Ioan Groza	7. CONSTRUCTIVE SOLUTIONS FOR HYDROSTATIC EQUIPMENT USED AS FEED MOTION REPLICATE AT ELECTRICAL DISCHARGE MACHINING Alexandru Sergiu Nanu, Niculae Ion Marinescu, Daniel Ghiculescu	7. DETERMINATION BY FEM OF ULTRASONIC HORN PROFILE FOR VIBRATING THE WORKPIECE AT EDM ASSISTED BY ULTRASONICS Daniel Ghiculescu, Niculae Marinescu, Gyula Varga, Sergiu Nanu	7. TRANSVERSAL LASER ROAD PROFILER M. N. Tautan, S. Miclos, D. Savastru, A. Stoica	7. THE INFLUENCE OF LUBRICANT SYSTEM IN DEEP DRAWING WALLS THICKNESS Alin Pop, Ioan Mihailă, Ioan Radu
8. MATERIAL REMOVAL RATE AT ELECTRICAL DISCHARGE MACHINING OF SMALL DIAMETER EXTERNAL CYLINDRICAL SURFACES Ştefan Stoica, Laurenţiu Slătineanu, Margareta Coteaţă, Oana Dodun, Miroslav Radovanovic	8. COLD PLASTIC DEFORMATION IN ELECTROMAGNETIC FIELD Gheorghe Sindilă, Rodica Rohan	8. EVALUATION OF NONCONVENTIONAL MACHINING PROCESSES CONSIDERING MATERIAL APPLICATION BY USING ADDITIVE RATIO ASSESSMENT METHOD Miloš Madić, Dušan Petković, Miroslav RADOVANOVIĆ	8. INTEGRATED METHOD FOR EVALUATION OF INTANGIBLE ASSETS APPLIED TO RESEARCH SMES FROM NONCONVENTIONAL FIELD Viorel Vulturescu, Daniel Ghiculescu, Niculae Marinescu, Marius Mitroi	8. NONCONVENTIONAL TECHNOLOGIES APPLIED IN THE ELECTRONIC COMPONENTS MANUFACTURING Dumitru Mnerie
		9. APPLICATIONS OF THE FACTORIAL EXPERIMENT METHOD ON CUTTING TECHNOLOGY BY ELECTRICAL EROSION WITH WIRE ELECTRODE Dumitru Mnerie, Remus Boboescu, Alin Vasile Mnerie		