

**“HENRI COANDA”
AIR FORCE ACADEMY**

AFASES 2009

**THE INTERNATIONAL SESSION OF XI-th
SCIENTIFIC PAPERS**

**"SCIENTIFIC RESEARCH AND EDUCATION
IN THE AIR FORCE"**



**20 – 22 MAY
BRASOV, ROMANIA**

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SCHEDULED ACTIVITIES
THE INTERNATIONAL SESSION OF
XIth SCIENTIFIC PAPERS
„SCIENTIFIC RESEARCH AND EDUCATION
IN THE AIR FORCE”

20 May 2009

10⁰⁰ - 18³⁰ Arrival of participants. Accommodation
19⁰⁰ Cocktail

21 May 2009

08⁰⁰ - 08⁴⁵ Welcoming and registration
09⁰⁰ - 09³⁰ Opening of the session
- Opening speeches
- Organizational specifications
09³⁰ - 11⁰⁰ Plenary session
11⁰⁰ - 11³⁰ Break
11³⁰ - 14⁰⁰ Paper presentation on sections (1)
14¹⁵ - 15¹⁵ Break
15³⁰ - 17⁰⁰ Paper presentation on sections (2)
17⁰⁰ - 17³⁰ Break
17³⁰ - 19⁰⁰ Paper presentation on sections (3)
19³⁰ Official dinner

22 May 2009

09⁰⁰ - 14⁰⁰ Sightseeing activities
15³⁰ - 23⁰⁰ Departure of participants

PLENARY SESSIONS

ACADEMY AULA

AIR FORCE

Speaker: Ion Aurel STANCIU, Chief of Romanian Air Force, Romania

1. *„AIR FORCE ROLE, PLACE AND CONTRIBUTION AS SECURITY PROVIDER IN NATO AND EU”*

AIR FORCE

Speaker: Milan SOPÓCI, Armed Forces Academy of gen. M. R. Štefánika, Liptovský Mikuláš, Slovakia

2. *„NEW METHODS IN EDUCATION OF AIR DEFENCE STUDENTS“*

SOCIO-HUMANITIES

Speaker: Diana ILIȘOI, „Henri Coanda” Air Force Academy, Brasov, Romania

3. *„THE PROFESSIONAL OPTION BETWEEN VOCATION AND SOCIAL DEMANDS”*

THE SESSIONS SECTIONS

1	<i>AIR FORCE</i>	11
2	<i>MANAGEMENT</i>	15
3	<i>SOCIO-HUMANITIES</i>	21
4	<i>ELECTRICAL AND ELECTRONICAL ENGINEERING</i>	27
5	<i>MECANICAL ENGINEERING</i>	31
6	<i>MATHEMATICS, COMPUTER SCIENCES AND INFORMATION TECHNOLOGY</i>	37

1. AIR FORCE

Room E 5

Co-Chairs

- **Prof Eng Mircea BOSCOIANU, PhD**
- **Lt Col Eng Petru SCURTU**
- **Capt Cdr Marian BOBE**

1. „CONSIDERATIONS UPON THE CAVITATION PHENOMENON OCCURRING AT THE NAVY PROPELLERS AND HYDROFOILS”, **Beazit ALI , Adriana SPORIȘ, Handeris ALI**, “Mircea cel Bătrân” Naval Academy , Constanta, Romania
2. „OBTAINING THE CHARACTERISTICS OF SMALL AND VERY SMALL SPAN WINGS”, **Beazit ALI , Adriana SPORIȘ, Handeris ALI** , “Mircea cel Bătrân” Naval Academy , Constanta, Romania
3. „THE ADAPTIVE CONTROL. THE SIMULATION OF THE ADAPTIVE SYSTEMS”, **Corneliu AXENTE, Silviu BALUȚĂ**, Military Equipment and Technologies Research Agency, Bucharest, Romania, **Mircea BOȘCOIANU**, Military Technical Academy, Bucharest, Romania
4. „THE COMMAND AND CONTROL STRUCTURE OF THE MOBILE SHORT RANGE AIR DEFENCE SYSTEMS”, **Silviu BĂLUȚĂ**, Military Equipment and Technologies Research Agency, Bucharest, Romania, **Marian PEARSICA**, „Henri Coanda” Air Force Academy, Brasov, Romania, **Corneliu AXENTE**, Military Equipment and Technologies Research Agency, Bucharest, Romania,
5. „ROMANIA - THE SECURITY PROVIDER IN THE WIDER BLACK SEA REGION”, **Catalin CIOACA**, ”Henri Coanda” Air Force Academy, Brasov, Romania
6. „HELICOPTER ANTITORQUE SYSTEM USING CIRCULATION CONTROL”, **Ionică CÎRCIU**, „Henri Coanda” Air force Academy, Brasov, Romania
7. „MODERNIZATION OF THE AUDIO-VIDEO RECORDING AND DEBRIEFING SYSTEM FOR THE IAR 99 SOIM AIRCRAFT”, **Eugen DUMITRU**, Research and Flight Test Center, Craiova, Romania

8. „HIGH ACCURACY DETERMINATION OF FLIGHT PERFORMANCES OF AIRCRAFT”, **Marin FIRANESCU, Gheorghe MUNTEANU**, Research and Flight Test Center, 1, GL. Stefan Ispas street, Craiova , ROMANIA
9. „INTEGRATION OF EMOTIONAL INTELLIGENCE IMPLICATIONS FOR MILITARY LEADERSHIP”, **Lavinia GAVRILĂ**, ” Henri Coanda” Air Force Academy, Brasov, Romania , **Ionel ONICIUC – CORDUBAN**, Centrul Zonal de Selecție și Orientare Câmpulung Moldovenesc, Romania
10. „EVOLUTIONS AND TENDENCIES, IN THE COMMON EUROPEAN SECURITY STRATEGY IN THE CONTEXT OF GLOBALIZATION”, **Ovidiu MOȘOIU, Marian, OANA**, “Henri Coanda” Air Force Academy, Brasov, Romania
11. „CRISIS MANAGEMENT - CIVIL AND MILITARY WAYS OF ACTION” , **Marian OANA, Ovidiu MOȘOIU**, ”Henri Coanda” Air Force Academy, Brasov, Romania
12. „THE FUNCTION BEHAVIOR AT STATOR’S AND ROTOR’S TURBINE BLADES”, **Sorin PAVEL**, Application School for Aerial Forces, Buzau, Boboc
13. „CORROSION DAMAGE OF ENTRANCE BUCKET”, **Sorin PAVEL**, Application School for Aerial Forces, Buzau, Boboc
14. „THE IMPLICATIONS ISSUE OF THE INTEGRATION IN NATINEADS ON THE NATIONAL AIR DEFENCE SYSTEM”, **Marcel PREDA, Eugen BOAMBĂ**, Military Technical Academy, Bucharest, Romania
15. „TRANING IN CINCU RANGE ONLY BY SIMULATION?”, **Horia POPESCU**, Domain and Infrastructures Agency Bucharest, Romania, **Adrian ALEXEI**, Agency from Research and Military Tehnologies Bucharest, Romania
16. „AERO DYNAMICAL STUDY ON RELIEVING ROPE CONSIDERATIONS REGARDING THE FLYING CONDUCT OF THE CLOSE OBSERVATION SYSTEM”, **Georgică SLĂMNOIU, Gabriel VLADU, Adrian CIUCULIN, George SURDU, Viorel UDRESCU, Simona CIUREA, Camelia PASCU**, Research Center for Navy, Constanta, Romania
17. „SUPERVISOR COMBAT COMPONENT”, **Georgică SLĂMNOIU, Gabriel VLADU, Adrian CIUCULIN, George SURDU, Viorel UDRESCU, Simona CIUREA, Camelia PASCU**, Research Center for Navy, Constanta, Romania

18. „INFORMATION ON GASEOUS DETONATIONS”, **Costin-Sebastian ZAGONEANU, Cristian ULEANU, Octavian ORBAN**, Military Technical Academy, Bucharest, Romania
19. „COMPLEX ASPECTS OF DETONATIONS”, **Costin-Sebastian ZAGONEANU, Cristian ULEANU, Octavian ORBAN**, Military Technical Academy, Bucharest, Romania

2. MANAGEMENT

Room E 45

Co-Chairs

- **Prof Eng Stelian PANZARU, PhD**
- **Assoc Prof Daniela BELU, PhD**
- **Maj Eng Virgil LUCANU, PhD**

1. „EFFICIENCY OF MANAGEMENT IN MILITARY ORGANISATION”, **Claudio Edmon APOSTOL, Simona Florentina CREANGĂ**, Protection and Guard Service, Romania
2. „COMPARATIVE ASPECTS CONCERNING GERMANY AND JAPAN’ LOGISTICS” , **Dorel BADEA, Daniela COSMA**, “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania
3. „QUANTITATIVE ANALYSIS OF RISK-APPLIED IN THE MILITARY STRATEGY”, **Liviu-Stelian BEGU**, Academy of Economic Studies, Bucharest, Romania, **Lidia MÂNDRU**, ”George Barițiu” University, Braşov, Romania
4. „THE FOUNDATION OF PERFORMANCE ASSESMENT – A WAY TO BRING SUCCES IN PRIVATE LIFE AND IN ORGANISATION DEVELOPMENT”, **Daniela BELU**, ” Henri Coanda” Air Force Academy, Brasov, Romania
5. „THE FOUNDATION OF PERFORMANCE ASSESMENT – I. FEELING GOOD WITH YOUR SELF – A PROBLEM OF SPEAKING AND THINKING ACCORDING TO YOUR DEEDS”, **Daniela BELU**, ” Henri Coanda” Air Force Academy, Brasov, Romania
6. „VOLUNTEERISM INVOLVEMENT OF CIVILIANS IN EMERGENCY SITUATIONS”, **Ana-Maria CAZAN, Ramona HENTER, Ecaterina UNIANU**, Transilvania University, Brasov, Romania
7. „THE EFFICIENCY OF MANAGERIAL COMMUNICATION IN ROMANIAN CREDIT INSTITUTIONS”, **Liliana Aurora CONSTANTINESCU**, “Dimitrie Cantemir” Christian University, Brasov, Romania, **Camelia STEFANESCU**, ”Spiru Haret” University, Brasov, Romania

8. „POINTS OF VIEWS CONCERNING THE BUILDING OF THEORETICAL FOUNDATION FOR A MILITARY LEARNING-ORIENTED KNOWLEDGE MANAGEMENT SYSTEM’, **Daniela COSMA, Dorel BADEA**, “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania
9. „GUIDELINES FOR MANAGEMENT OF QUALITY IN THE EUROPEAN HIGHER EDUCATION”, **Roxana ENACHE**, “Petroleum-Gas”, University, Ploiesti, Romania
10. “ANALIIICALS ELEMENTS OF CUSTOMER SATISFACTION MANAGEMENT”, **Titus - Mircea FAUR**, Seal Maker Romania
11. „GEOPOLITICS - BETWEEN BLACK AND WHITE”, **Florin Eduard GROSARU**, Regional Department for Defense Resources Management Studies, Braşov, Romania
12. „SOME ASPECTS OF THE DEVELOPMENT OF ENTREPRENEURSHIP CONCEPT”, **Ionica HOLBAN (ONCIOIU)**, ”Alexandru Ioan Cuza University”, Iasi and “Academy of Economies Studies”, Bucharest, Romania, **Florin Razvan ONCIOIU**, ”University of Agronomic Sciences and Veterinary Medicine”, Bucharest, Romania
13. „MOTIVATION AND REACTION TIME IN THE DECISIONAL PROCESS. INTELLECTUAL TRAINING – INCREASING THE EFFICIENCY AND EFFECTIVENESS OF DECISIONS”, **Elena-Simona INDREICA, Camelia TRUȚA**, „Transilvania” University, Braşov, România
14. „THE CHALLENGES OF THE COMMON TRANSPORT POLICY IN EUROPE”, **Romeo IONESCU**, Dunarea de Jos University, Galatz, Romania
15. „THE EUROPEAN ENVIRONMENT POLICY’S IMPACT ON ROMANIA”, **Romeo IONESCU**, Dunarea de Jos University, Galatz, Romania
16. „SAGGING AND INDUCED STRESS OF THE LIGHT-GAUGE SHEET SUBMITTED TO THE EXPANSION PROCESS”, **Laurentiu JITARU, Gabriela CRISTESCU**, “Aurel Vlaicu” University, Arad, Faculty of Engineering, Arad, Romania
17. „A FLEXIBLE TOOL MANAGEMENT STRATEGY FOR THE ADAPTIVE TOOL DEMAND RATE SIMULATION ANALYSIS”, **Camelia LIXANDRU, Traian GRĂMESCU**, Technical University “Gh. Asachi”, Iasi, Romania

18. „THE KONDRATIEFF WAVES AND THE ECONOMIC CYCLE”, **Ioana LOGOJAN**, Academy of Economic Study, Bucharest, Romania
19. „MATERIALS MANAGEMENT UTILIZING AUTOMATHICAL IDENTIFICATION TECHNOLOGIES”, **Virgil LUCANU, Tudor RISTOIU, Sorin LAZĂR**, Military Equipment and Technologies Research Agency Bucharst, Romania
20. „SOME ASPECTS ABOUT THE TOTAL QUALITY MANAGEMENT CONCEPT”, **Ioan MILOȘAN**, Transilvania University of Brasov, Romania
21. „MANAGER AND THE BURNOUT SYNDROME”, **Jaroslav NEKORANEC, Ivan VLČEK**, Department of Management, Armed Forces Academy of general M. R. Štefánik in Liptovský Mikuláš, Slovakia
22. „MANAGING STRATEGIC RISK”, **Noris NICA** , „Victor Bănciulescu” 90th Airlift Base, Otopeni, Romania
23. „OPINIONS AND GROUNDS REGARDING THE ROLE OF COMUNITY POLICE IN DETERRING TERRORIST ACTIONS FROM PRECURSORY STAGE AND DURING TIMES OF SOCIAL CRISIS”, **Ene NICOLAE**, Police Community, Brasov, Romania
24. „ASPECTS REGARDING ACTIONS OF THE OMUNITY POLICE IN CRISIS SITUATIONS. METHODS, TECHNIQUES AND MEANS OF ACTION”, **Ene NICOLAE**, Police Community, Brasov, Romania
25. “THE NECESSITY OF CHANGES IN THE STRUCTURE OF FIRM CAPITALIZATION TO OVERCOME THE FINANCIAL CRISIS”, **Daniela OBREJA** , ” Henri Coandă” Air Force Academy, Brasov, Romania
26. „CONSIDERATIONS FOR ENERGY MANAGEMENT IN FUTURE”, **Stelian PÂNZARU**, “Spiru Haret” University, Brasov, Romania
27. „NATO - CRISIS MANAGEMENT”, **Ilie PĂUN, Dorin TOHĂNEAN**, Ministry of National Defence, Romania
28. “AN EXAMPLE OF EXPERT SYSTEM USED IN ECONOMICAL FIELD”, **Elia PETRE, Florentina CHIRCU**, “Petroleum – Gas” University, Ploiesti, Romania

29. „MANAGEMENT CONFLICTS WITHIN THE INSTITUTIONS OF PUBLIC ADMINISTRATION”, **Ion PETRESCU, Stelian PÂNZARU**, “Spiru Haret” University, Brasov, Romania
30. „ESSENTIAL ISSUES IN APPLYING AUDIT STRATEGY”, **Ana PISLEAG**, “Spiru Haret” University, Brasov, Romania
31. „THE IMPACT OF THE CURRENT GLOBAL FINANCIAL CRISIS ON THE FINANCIAL SYSTEM”, **Laura POPA, Camelia STEFANESCU**, “Spiru Haret” University, Brasov, Romania
32. „THE NECESSITY OF THE FORESIGHT ACTIVITY IN THE TROPICAL CONTEXT”, **Simona POPA, Mihaela CIOPI OPREA**, ”Petroleum Gas” University, Ploiesti, Romania
33. „ENERGETICS STRATEGY OF ROMANIA IN THE FOLLOWING DECADE”, **Simona POPA, Mihaela CIOPI OPREA**, ”Petroleum Gas” University, Ploiesti, Romania
34. „LEAN, A MANAGEMENT TOOL, USED FOR HAVE AN COMPETITIVE PRODUCTION SYSTEM”, **Mariana C. RĂȘINĂ**, „Transilvania” University, Brașov, România
35. „MANAGEMENT AND COMPETITIVENESS OF PRODUCTION SYSTEMS, WITH THE PARTICULARITY OF PRODUCING MOLDS”, **Mariana C. RĂȘINĂ**, „Transilvania” University, Brașov, România
36. „INFORMATION MANAGEMENT AND CRITICAL INFRASTRUCTURES PROTECTION”, **Marian RIZEA**, “Vest University”, Timisoara, Romania, **Daniela ENACHESCU**, “Petroleum - Gas” University, Ploiesti, Romania
37. „FINANCIAL CRISIS, MORAL CRISIS OR SYSTEM CRISIS? IT IS POSSIBLE A CRISIS MANAGEMENT?”, **Marian RIZEA**, “Vest University”, Timisoara, Romania, **Cristiana NEAMTU-RIZEA**, SNGN Romgaz S.A. Mediaș, Ploiesti, Romania
38. „POSSIBILITIES FOR GROWTH OF THE ROMANIAN FIRMS COMPETITIVENESS BY BENCHMARKING METHODOLOGIES APPLICATION”, **Violeta SIMA, Ileana Georgiana GHEORGHE**, “Petroleum-Gas”, University, Ploiesti, Romania

39. „IMPLICATIONS OF THE SUSTAINABLE DEVELOPMENT FOR CONSUMERS BEHAVIOUR”, **Violeta SIMA**, “Petroleum-Gas”, University, Ploiesti, Romania
40. “INCREASING THE PRODUCTION QUALITY AS A RESULT OF CONSTRAINTS IMPOSED TO THE SUPPLIERS”, **Sorin-Dumitru SÎRBU**, Armaments Department, București, România
41. „APPLICATION NEW TRENDS OF MANAGEMENT DEVELOPMENT TO MILITARY EDUCATION”, **Milan SOPÓCI, Pavel NEČAS**, Department of Management, Armed Forces Academy of general M. R. Štefánik in Liptovský Mikuláš, Slovakia
42. „ETHICAL DIMENSIONS ON HACKING ISSUES”, **Alexandru STEFAN**, Bloomfield College, NJ, USA
43. „LOGISTIC MANAGEMENT OF NATO RESPONSE FORCE OPERATION”, **Dorin TOHĂNEAN, Ilie PĂUN**, Ministry of National Defence, Romania
44. „REPRESENTATIONS ON THE MILITARY ENVIRONMENT”, **Camelia TRUȚA, Simona INDREICA, Ana-Maria CAZAN**, “Transilvania” University, Brasov, Romania

3. SOCIO-HUMANITIES

Room E 73

Co-Chairs

- **Assoc Prof Diana ILISOI, PhD**
- **Asst Prof Maria PASCA, PhD**
- **AT Daniela NAGY**
- **Cdr Dumitru TOADER**

1. „LEGAL ASPECTS ON MARITIME SECURITY”, **Oana ADĂSCALIȚEI**, “Mircea cel Bătrân“ Naval Academy, Constanta, Romania
2. „WRECK REMOVAL-LEGAL PROVISIONS”, **Oana ADĂSCALIȚEI**, “Mircea cel Bătrân“ Naval Academy, Constanta, Romania
3. „ACTION RESEARCH: A BRIEF HISTORY”, **Razvan-Lucian ANDRONIC**, “Spiru Haret” University, Faculty of Psychology and Educational Sciences, Braşov, Romania
4. „MARITIME ENGLISH LEARNING/TEACHING MATERIALS”, **Carmen ASTRATINEI, Camelia ALIBEC** “Mircea cel Bătrân“ Naval Academy, Constanta, Romania
5. „AD TERROR AS A MEANS OF EVOKING NEGATIVE EMOTIONS”, **Aurelian BĂDULESCU**, “National Defence University Carol I”, **Cristian DELCEA**, Institute For Studies And Research On Terrorism
6. „KEY ISSUES AND PRESENT REFLECTIONS REGARDING THE NEW INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN EDUCATION AND TRENING”, **Gabriel Cristian BĂJENARU, Ana MUNTEANU**, “Spiru Haret” University, Brasov, Romania
7. „ROMANIAN ORTHODOX CHURCH FACTOR IN CHANGING LOCAL COMMUNITIES’ ATTITUDE TOWARDS DOMESTIC VIOLENCE”, **Iolanda BELDIANU, Daniela PORUMBU, Daniela NECSOI**, Transilvania University, Brasov, Romania

8. „THE IMPORTANCE OF PUBLIC RELATIONS IN”, **Mariana BORCOMAN**, Transilvania University, Brasov, Romania
COMMUNICATION
9. „COMMUNICATION BARRIERS”, **Mariana BORCOMAN**,
Transilvania University, Brasov, Romania
10. „THE WATER TRADE IN THE CAPITAL IN THE 19TH
CENTURY”, **Iulia Cristina BULACU**, University of Bucharest,
Faculty of History, Romania
11. “PERSONALITY CORRELATES PROMOTED BY
MILITARY SERVICE AND CAREER”, **Aurel Ion CLINCIU**,
Transilvania University, Brasov, Romania
12. „RECIDIVIST’S CORELLATES OF PERSONALITY”, **Aurel
Ion CLINCIU**, Transilvania University, Brasov, Romania
13. „RECOGNITION OF AUTHORITY AND SOCIAL ORDER
CONSTATATIV STUDY, ON AN HIGH-SCHOOL AND
UNIVERSITY LEVEL” , **Cornelia COCAN, Daniela POPA**
Transilvania University, Brasov, Romania
14. „LAS MENINAS - A POSTMODERN SYMBOL?”, **Laura
CIZER**, “Mircea cel Batran” Naval Academy, Constanta,
Romania
15. „ECONOMIC ASPECTS OF LEARNING FOREIGN
LANGUAGES”, **Sorinel COSMA**, “Ovidius” University,
Constanta, Romania, **Simona-Cătălina COSMA**, “Mircea cel
Batran” Naval Academy, Constanta, Romania
16. „FEMINIST ECONOMICS”, **Sorinel COSMA**, “Ovidius”
University, Constanta, Romania, **Simona-Cătălina COSMA**,
“Mircea cel Batran” Naval Academy, Constanta, Romania
17. „EFFECTS OF TRAINING IN MENTAL ROTATION
TASKS”, **Laura Teodora DAVID, Aurel Ion CLINCIU,**
Laura Elena NĂSTASĂ, “Transilvania” University, Brasov,
Romania
18. „A FEW CONSIDERATIONS ON POLITICAL
CORRECTNESS”, **Antoaneta DEMERGEAN**, Military
Technical Academy, Bucharest, Romania
19. „MEANS OF ENCODING FUTURITY IN ENGLISH AND
ROMANIAN. A TEMPORAL-ASPECTUAL-MODAL
PERSPECTIVE”, **Viorela -Valentina DIMA**, Academy of
Economic Studies, Bucharest ,Romania

20. „THE ARMY’S PRESENCE FOR HOLIDAYS AND FESTIVITIES IN CONSTANTA, STARTING WITH THE REINTEGRATION AND UP TO THE INTEGRATION WAR(1878 – 1916)”, **Paul DOMINTE**, University of Bucharest, Faculty of History, Romania
21. „THE HUMAN MOTIVATION: THEORIES AND THEIR APPLICATIONS AT THE LEVEL OF THE HUMAN RESOURCES WITHIN THE TEACHING SYSTEM”, **Paul DOMINTE**, University of Bucharest, the Faculty of History, Romania
22. „EUROPEAN DIMENSION IN EDUCATION”, **Roxana ENACHE**, “Petroleum-Gas”, University, Ploiesti, Romania
23. „CULTURE SHOCK AND ECONOMIC DOWNTURNS”, **Georgeta GHIGA**, Bucharest Academy of Economic Studies
24. „INTERCULTURAL COMPETENCE – AN ASPECT OF PROFESSIONAL COMMUNICATION”, **Georgeta GHIGA**, Bucharest Academy of Economic Studies
25. „THE BRITISH MONARCHY IN THE 21ST CENTURY”, **Raluca-Georgiana IRIMIA**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
26. „BREATHING... MASS MEDIA”, **Edith KAITER**, ”Mircea cel Bătrân” Naval Academy, Constanța, Romania
27. „POSTMODERNIST TRENDS AND ORIENTALISM”, **Edith KAITER**, ”Mircea cel Bătrân” Naval Academy, Constanța, Romania
28. „BLOGGING FOR ESP”, **Delia LUNGU, Mariana BOERU, Gabriela FTIMESCU**, “Mircea cel Bătrân” Naval Academy, Constanța, Romania
29. „WHY INTERCOMPREHENSION? AN OVERVIEW OF CURRENT RESEARCH ON THE TOPIC AND ARGUMENTS IN FAVOR OF CONSIDERING IT WHEN TEACHING AND LEARNING LANGUAGES”, **Delia LUNGU, Mariana BOERU, Gabriela FTIMESCU**, “Mircea cel Bătrân” Naval Academy, Constanța, Romania
30. „PECULIARITIES OF ESP”, **Magdalena MIHAILESCU**, Military Technical Academy, Bucharest, Romania
31. “FROM CORRUPTION TO KLEPTOCRACY”, **Vasile NAZARE**, “Mircea cel Bătrân” Naval Academy, Constanța, Romania

32. „INTERNATIONAL RELATIONS PARADOXES”, **Vasile NAZARE**, Mircea cel Bătrân Naval Academy, Constanța, Romania, **Vasile-Eugen NAZARE**, “Sigismund Toduță” High School of Music, Cluj Napoca
33. „STRESS AND LOCUS OF CONTROL IN THE ACADEMIC CONTEXT”, **Daniela NECȘOI, Daniela PORUMBU, Iolanda BELDIANU**, “Transilvania” University, Brasov, Romania
34. „THE INTEGRATION OF THE ROMA IN A MODERN, DEMOCRATIC SOCIETY”, **Elena NEDELUCU**, “Nicolae Titulescu” University of Bucarest, Romania
35. “THE ROLE OF INTERPERSONAL COMMUNICATION IN CAREER COUNSELING FOR STUDENTS” , **Maria Dorina PASCA**, University Of Medicine And Pharmacy Targu Mures, Romania
36. “WHAT IS WRITING?”, **Marioara PATEȘAN**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
37. „ELEMENTS OF CULTURE. AN INTERCULTURAL APPROACH”, **Oana-Andreea PÎRNUȚĂ**, Transilvania University of Brasov, **Ioana Mihaela DINESCU**, Bucegi Mountain Training Base of Predeal, Romania
38. „NATIONAL SPECIFICITIES AND INTERCULTURAL COMMUNICATION IN THE UNITED STATES OF AMERICA AND FRANCE”, **Oana-Andreea PÎRNUȚĂ**, Transilvania University of Brasov, **Ioana Mihaela DINESCU**, Bucegi Mountain Training Base of Predeal, Romania
39. „ABSURD SUFFERING FROM EXISTENTIALISM TO POSTMODERNISM”, **Oana POPESCU**, “Alexandru Ioan Cuza” Police Academy, Bucharest, Romania
40. „RELIGION – AXIS OF COMMUNICATION IN THE EUROPEAN SPACE”, **Călin SINESCU, Liliana TROFIN**, „Dimitrie Cantemir” University, Bucharest Romania
41. „POWER OF THE WORD IN PSYCHOANALYSIS”, **Daniela SOREA** “Transilvania” University, Brasov, Romania
42. „SYMBOLIZATION, SYMBOL AND PSYCHIC ENERGY AT S. FREUD AND C. G. JUNG”, **Daniela SOREA**, “Transilvania” University, Brasov, Romania

43. „CLASSROOM MANAGEMENT – COMPETITION IN THE CLASSROOM”, **Marica TARĂU, Aurica NEACȘU, Elena IORDACHE**, Grup Școlar de Meserii și Servicii, Buzău, România
44. „THE RIGHT TO BE INFORMED – THE RIGHT OF PERSONALITY”, **Dumitru TOADER**, „Henri Coanda” Air Force Academy, Brasov, Romania
45. „PERMENENT EDUCATION THROUGH THE MILITARY ACADEMIC ENVIRONMENT”, **Ecaterina UNIANU, Ramona HENTER**, Faculty of Psychology and Educational Sciences Teacher Training Department, “Transilvania” University of Brasov, Romania
46. „NARROWING THE GAP BETWEEN THEORY AND PRACTICE OF TRANSLATION”, **Dana ZECHIA**, “Mircea cel Batran” Naval Academy, Constanta, Romania
47. „A GLIMPSE INTO THE PROCESS OF WRITING”, **Dana ZECHIA**, “Mircea cel Batran” Naval Academy, Constanta, Romania

4. ELECTRICAL AND ELECTRONICAL ENGINEERING

Room E 32

Co-Chairs

- **Assoc Prof Eng Gheorghe PANĂ, PhD**
- **Asst Prof Eng Constantin STRIMBU, PhD**
- **Asst Prof Eng Mihai MIRON, PhD**

1. „THE MANAGEMENT OF POSITIONING SYSTEMS POWER SUPPLIES USING PROGRAMMABLE LOGICAL CONTROLLERS”, **Cornel Ovidiu BADEA, Aurelian CRĂCIUNESCU, Valentin NĂVRĂPESCU**, University Polytechnic of Bucharest, Romania
2. „THE PERFORMANCES OF THE SYNCHRONOUS MOTOR WITH PERMANENT MAGNETS USING IN TROLLEY-BUS TRACTION”, **Ioan BELE, Liviu-Sevastian BOCÎL, Valentin MULLER, Mihaela POPA**, “Aurel Vlaicu” University, Arad, Romania
3. „EXPERIMENTAL RESEARCH ON THE MEASURING METHODS OF METALLIC SURFACES”, **Marius BENTA, Alexandra MARMANDIU, Cătălin MIHAI**, “Transilvania” University, Brasov, Romania
4. „ELECTRO ANALYTICAL MEASUREMENT METHODS USING VIRTUAL INSTRUMENTATION ASSISTED BY LABVIEW PROGRAMMES”, **Marius BENTA, Laura RAB, Alexandra MARMANDIU**, “Transilvania” University, Brasov, Romania
5. „MULTILAYER COMPOSITE FOR ELECTRICAL INSULATION”, **Florin BUȘE, Emil Dumitru POPESCU**, Technical Military Academy, Bucharest Romania, **Traian ZAHARESCU**, INCIE ICPE CA, Bucharest, Romania
6. „THE REGULATION OF THE POWER FOR THE MODERNIZED ELECTRICAL RAILWAY-ENGINE BO-BO OF 3400KW”, **Gabriela CRISTESCU, Laurentiu JITARU**, “Aurel Vlaicu” University, Faculty of Engineering, Arad, Romania

7. „STRUCTURAL-KINEMATICAL RELIABILITY ASPECTS OF EXTERNAL MEMORY WITH RIGID MAGNETIC DISKS”, **Petre-Daniel DINESCU**, Agency for Informatic Services and Systems, Bucharest , **Dinu COMĂNESCU**, Politehnica of Bucharest, Faculty of Mechanical Engineering, Bucharest **Adriana COMĂNESCU**, University Politehnica of Bucharest, Dept. of Mechanisms and Robots Theory, Bucharest, Romania
8. „CONSIDERATIONS ABOUT THE ELECTRICAL ENGINE VIBRODIAGNOSIS”, **Melania FILIP**, **Elena HELEREA**, **Ioan Călin ROȘCA**, “Transilvania” University, Brasov, Romania, **Doru LUCULESCU**, “Henri Coanda” Air Force Academy, Brasov, Romania
9. „THOMSON JUMPING RING SIMULATION”, **Laurian GHERMAN**, “Henri Coanda” Air Force Academy, Brasov, Romania,
10. „HIGH PRECISION LI BATTERY MONITOR”, **Dan LOZNEANU**, Cross Vertical, Utilities & Industry Delivery, SIEMENS PSE SRL, Brasov, Romania, **Gheorghe PANĂ**, **Ioan-Răzvan LOZNEANU**, “Transilvania” University, Brasov, Romania
11. „STUDY ON THE COMPOSITION AND PROPERTIES OF FLY ASH THERMAL FROM STEAM POWER PLANT”, **Alexandra MARMANDIU**, **Rodica POPESCU**, **Marius BENTA**, “Transilvania” University, Brasov, Romania
12. „FLY ASH CAPTURING AND ENVIRONMENTAL ISSUES”, **Alexandra MARMANDIU**, **Rodica POPESCU**, **Marius BENTA**, “Transilvania” University, Brasov, Romania
13. „OPTICAL CHANNELS IMPLEMENTATION BE MEASUREMMENT AND CONTROL SYSTEMS”, **Mihai MIRON**, “Transilvania” University, Brasov, Romania , **Ecaterina Liliana MIRON**, “Henri Coanda” Air Force Academy, Brasov, Romania
14. „CONSIDERATIONS ABOUT MODELLING OF THE AC CIRCUIT WITH SCR”, **Ecaterina Liliana MIRON**, “Henri Coanda” Air Force Academy, Brasov, Romania, **Mihai MIRON**, “Transilvania” University, Brasov, Romania

15. „POLYETHYLENE ELECTRICAL INSULATION MATERIALS UNDER ACCELERATED DEGRADATION”, **Emil Dumitru POPESCU**, Technical Military Academy , Bucharest, **Traian ZAHARESCU**, INCDIE ICPE CA, Bucharest, **Gheorghe SAMOILESCU**, Naval Academy “Mircea cel Batran”, Constanta, Romania
16. „GENERALIZED GRAPHIC REPRESENTATION OF NOISE MARGINS FOR TTL INTEGRATED CIRCUITS”, **Mircea Iulian PORTEANU**, University of Oradea, Oradea, Romania
17. „ENERGETICAL MONITORING OF THE STORAGE DEVICES BY USING SENSORS NETWORK PLACED INSIDE THE MOBILE SYSTEMS”, **Ana Maria PUȘCAȘ**, **Radu MUȘAT**, **Marius CARP**, **Paul BORZA**, **Elena HELEREA**, “Transilvania” University, Brasov, Romania
18. „NEW SOLUTIONS FOR THE MAGNETIC PROTECTION OF SHIPS”, **Gheorghe SAMOILESCU**, **Mircea CONSTANTINESCU**, **Alina BARBU**, **Adelina SAMOILESCU**, Naval Academy “Mircea cel Batran”, Constanta, Romania
19. „SYNTHESIS OF THE MAGNETIC COMPENSATION WRAP AROUND FOR A SHIP UNDER CONSTRUCTION”, **Gheorghe SAMOILESCU**, **Mircea CONSTANTINESCU**, **Alina BARBU**, **Adelina SAMOILESCU**, Naval Academy “Mircea cel Batran”, Constanta, Romania
20. „THE MECHANISM OF RADIATION DEGRADATION OF SPACE SOLAR CELLS”, **Sergiu SHISHIYANU**, **Teodor SHISHIYANU**, Technical University of Moldova, **Ioan CALINIUC**, Institute of Applied Physics Academy of Sciences of Republic of Moldova
21. „CONSIDERATIONS ABOUT OF THE RC LOADED, SINGLE PHASED TRANSFORMER IN PERIODICAL A.C. SWITCHING MODE”, **Constantin STRIMBU**, “Henri Coanda” Air Force Academy, Brasov, Romania
22. „EVALUATION OF THE SHIELDING EFFECTIVENESS OF A MULTIMODE METALLIC CAVITY”, **Andrei SZILAGYI**, **Daniela CAZANARU**, **Adina BOTEANU**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania

23. “BROADBAND MICROWAVE ANTENNAS”, **Andrei SZILAGYI, Daniela CAZANARU, Adina BOTEANU**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
24. „DESIGN AND IMPLEMENT OF DIGITAL ASYNCHRONOUS SYSTEMS USING VERILOG HDL”, **Mihai TIMIS, Alexandu VALACHI**, Automatic Control and Computer Science Faculty, Computer Science Department, Technical University „Gh.Asachi” Iasi, Romania
25. ” SYNTHESIS OF THE ASYNCHRONOUS DIGITAL SYSTEMS USING RECONFIGURABLE DEVICES”, **Mihai TIMIS, Alexandu VALACHI**, Automatic Control and Computer Science Faculty, Computer Science Department, Technical University „Gh.Asachi” Iasi, Romania
26. „THE MATHEMATICAL MODELING OF THE ELECTROMAGNETIC GROUP - WIND TURBINE AND ASYNCHRONOUS GENERATOR”, **Daniel TOADER, Valentin MÜLLER**, “Aurel Vlaicu” University, Arad, Romania
27. „ELECTROMAGNETIC SYSTEM WITH TWO ASYNCHRONOUS GENERATORS”, **Daniel TOADER, Valentin MÜLLER** “Aurel Vlaicu” University, Arad, Romania
28. „IMPROVING QUALITY PERFORMANCE OF CURRENTS”, **Dan George TONȚ, Gabriela TONȚ**, University of Oradea, Oradea, Romania
29. „AN APPROACH TO IMPROVED QUALITY OF CURRENT”, **Dan George TONȚ, Gabriela TONȚ**, University of Oradea, Oradea, Romania

5. MECANICAL ENGINEERING

Room E 431

Co-Chairs

- **Prof Eng Ionel STARETU, PhD**
- **Assoc Prof Eng Petrica VIZUREANU**
- **Assoc Prof Eng Lavinia GAVRILA**

1. „ANALYZE OF WELDING PROCESS ON THE HIGH ELASTICITY STEEL PLATES”, **Remus BOBOESCU**, Politehnica University Timișoara , Romania ,**Valentin GLOD**, Military School “Eremia Grigorescu”, Sibiu , Romania
2. „CONSIDERATIONS REGARDING MATHEMATICAL MODELING OF THE CEREAL DRYING PROCESS”, **Laurențiu CĂLIN, Ioana IONEL, Mihai JĂDĂNEANȚ**, Politehnica University of Timișoara, Romania, **Nicolae BRIA**, “Gheorghe Ionescu-Șisesti” Academy of Agricultural and Forestry Sciences, Romania
3. „OPTIMISATION OF THE DRYING TECHNOLOGICAL SYSTEMS AND THE ADHERENCE TO THE EUROPEAN REGULATIONS REGARDING POLLUTANT EMISSIONS”, **Laurențiu CĂLIN, Francisc POPESCU, Adrian CIOABLA**, Politehnica University of Timișoara, Romania, **Nicolae BRIA**, “Gheorghe Ionescu-Șisesti” Academy of Agricultural and Forestry Sciences, Romania
4. „STUDIES REGARDING THE CAUSES OF AVERAGES PRODUCED AT COMPONENT PARTS OF ROLLING MATERIALS”, **Mihaita CAZACU, Emil ZAMFIR, Adriana ZARA**, “Transilvania” University of Brasov, Romania
5. „VALUE ANALYSIS AND REDESIGN OF EQUIPMENTS” Parth I, **Florin CHICHERNEA, Alexandru CHICHERNEA**, “Transilvania” University of Brasov, Romania
6. „VALUE ANALYSIS AND REDESIGN OF EQUIPMENTS” Parth II, **Florin CHICHERNEA, Alexandru CHICHERNEA**, “Transilvania” University of Brasov, Romania

7. „DATA BASES DEDICATED TO COMPUTERIZATION OF FOUNDRIES ACTIVITIES”, **Ion CHIRA**, Departament of Cast Metals, Politehnica University of Bucharest, Romania, **Ruxandra IONICĂ**, The Special Telecommunications Service, Bucharest, Romania, **Ruxandra BECA (NEMEȘ)**, General Inspectorate of Gendarmerie Bucharest, Romania, **Bogdan Constantin TEODORESCU**, ING Wholesale Banking Bucharest Romania
8. “PRELIMINARIES CONCERNING OMPUTERIZATION OF STOCKS MANAGEMENT IN FUNDRIES”, **Ion CHIRA**, Departament of Cast Metals, POLITEHNICA University of Bucharest, Romania, **Ruxandra BECA (NEMEȘ)**, General Inspectorate of Gendarmerie Bucharest, Romania, **Ruxandra IONICĂ**, The Special Telecommunications Service, Bucharest, Romania, **Bogdan Constantin TEODORESCU**, ING Wholesale Banking Bucharest Romania
9. “SOLVING THE FUNDAMENTAL PROBLEM OF THE INTERIOR BALLISTICS USING THE REAL BURNING LAW OF THE PROPELLANT”, **Lucian CIOBANU**, **Florin SUCIU**, **Titică VASILE**, Military Technical Academy, Bucharest, Romania
10. “ADVANCED COMPOSITE MATERIALS FOR NOTAR HELICOPTER FUSELAGE”, **Ionică CÎRCIU**, „Henri Coanda” Air force Academy, Brasov, Romania
11. „ON THE LIFETIME OF RAILWAY VEHICLE SUBSYSTEMS THAT HAVE A BEARING CAPACITY QUALITY”, **Ion COPACI**, **Bogdan TĂNĂSOIU**, ”Aurel Vlaicu” University, Arad, Romania
12. „POWDER PROPERTIES RESULTED FROM THE BEARINGS PROCESSING”, **Ion DINESCU**, „Henri Coanda” Air Force Academy, Brasov, Romania
13. „A FEW CONSIDERATIONS REGARDING THE GEOTHERMAL HEAT PUMPS”, **Alexandru DRAGALINA**, **Traian FLOREA**, **Anastase PRUIU**, **Adrian POPA**, **Marian RISTEA**, “Mircea cel Bătrân” Naval Academy, Constanta, Romania, **Traian-Vasile FLOREA**, S.C. „DELATREID”, Constanta, Romania

14. „SOME ASPECTS REGARDING THE WATER BASED TECHNOLOGIES USED ON DIESEL ENGINES FOR THE REDUCTION OF NO_x EMISSIONS”, **Alexandru DRAGALINA, Anastase PRUIU, Traian FLOREA, Adrian POPA, Marian RISTEA**, “Mircea cel Bătrân” Naval Academy, Constanta, Romania, **Traian-Vasile FLOREA, S.C.**
„DELATREID”, Constanta, Romania
15. „STATE OF THE PRESENT RESEARCH OF THE METALLIC GLASSES AND THEIR PROPERTIES”, **Emilian ENE, Adriana ZARA, Bogdan NOVAC, Ioan GIACOMELLI**, “Transilvania” University of Brasov, Romania
16. „MATHEMATICAL MODEL OF A HYDRAULIC MODEL “WITH APPLICATIONS IN THE VIBRATIONS OF THE MECHANICAL MACHINES”, **Olivia FLOREA**, “Transilvania” University of Brasov, Romania
17. „APPLICATION OF COMPLEMENTARY ENERGY METHOD TO DEFLECTION PROBLEMS”, **Lavinia GAVRILĂ**, „Henri Coanda” Air Force Academy, Brasov, Romania
18. „ALUMINUM POWDERS USED IN AUTOMOTIVE APPLICATIONS FOR OBTAINING PARTS WITH HIGH TECHNOLOGICAL PERFORMANCES”, **Horia Ovidiu GEAMĂN, Virgil GEAMĂN, Maria STOICĂNESCU**, “Transilvania” University Of Brasov, Romania
19. „HOT ISOSTATIC PROCESSING APPLIED TO CEMENTED CARBIDES AND CERAMICS”, **Virgil GEAMĂN, Gheorghe BEJINARU-MIHOC, Horia Ovidiu GEAMĂN**, “Transilvania” University Of Brasov, Romania
20. „THE INFLUENCE OF CHEMICAL COMPONENTS AND THERMIC TREATMENT ON ALUMINIUM ALLOYS CASTED IN PISTONS FOR THERMIC ENGINES”, **Richard HERMAN, Ioan SPOREA, Mihaiela HERMAN**, „Politehnica” University, Timișoara, Romania
21. „OPTIMIZED THE GRASPING MECHANISM, SPECIFICALLY TO THE INSPECTION ROBOTS IN HAZARDOUS ENVIROMENTS”, **Catalin Eugen IONESCU**, Ministry of Administration and of Interior, Bucharest, Romania

22. „PIERCING INCENDIARY BULLETS’ IMPACT PHENOMENON. EXPERIMENTAL RESULTS AND NUMERICAL DATES”, **Catalin Eugen IONESCU**, Ministry of Administration and of Interior, Bucharest, Romania
23. “THE METALS DEFORMING THROUGH THE PLASTICITY CRITERIA”, **Gabriela IVAN**, “Transilvania” University of Brasov, Romania
24. “THE TRACTOR’S CAB STRUCTURE, BEHAVIOR IN ELASTICO- PLASTIC FIELD”, **Gabriela IVAN**, “Transilvania” University of Brasov, Romania
25. “ESTABLISHING RELIABILITY OF ANGULAR COUPLINGS USED TO ENABLE TRANSMISSION TO THE ANTITORQUE ROTOR FOR IAR 316B HELICOPTERS”, **Doru LUCULESCU**, **Bogdan Gheorghe MUNTEANU**, “Henri Coandă” Air Force Academy, Brasov, Romania
26. “OPTIMIZATION OF SOME HYDRO-AERODYNAMIC PROFILES FOR OBTAINING LIFT OR MAXIMAL PROPULSION”, **Mircea LUPU**, **Ernest SHEIBER** , “Transilvania” University of Brasov, Romania, **Stefan NEDELICU**, “Henri Coanda” Air Force Academy, Brasov, Romania
27. “MULTILAYERED STRUCTURES ZIRCONIA BASE IN AEROSPATIAL FIELD”, **V. MANOLIU**, **N. MARIN**, **A. STEFAN**, **Gh. IONESCU**, **S. GAMAN**, National Institute for Aerospace Research "Elie Carafoli", Bucharest, Romania
28. „APPLICATIONS OF SHAPE MEMORY MATERIALS”, **Dan MÂNDRU**, **Ion LUNGU**, **Simona NOVEANU**, **Olimpiu TĂȚAR** Technical University of Cluj-Napoca, Romania
29. „SOME ASPECTS REGARDING THE SELF GENERATED TORQUE WITHIN THE 4WD DRIVETRAIN”, **Marin MARINESCU**, **Florin OLOERIU**, **Marian TRUȚĂ**, Military Technical Academy, Bucharest, Romania
30. „SIMPLIFIED MECHANISM FOR NO_x FORMATION” **Daniela-Elena MITU**, **Liviu STAN**, **Nicolae BUZBUCHI**, Constanta Maritime University, Constanta, Romania
31. “RELIABILITY OF TECHNICAL SYSTEMS-CONCEPT, CLASSIFICATION AND QUANTIFICATION”, **Nicolae MORO**, “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania

32. „THE QUALITY CHARACTERISTICS AND QUALITY OF PRODUCTS INTENDED FOR MILITARY”, **Nicolae MORO**, “Nicolae Balcescu” Land Forces Academy, Sibiu, Romania
33. “THE MECHANISM OF MODIFYING CAST IRON BY MIXING LIQUID STATE OF TWO CAST IRON TO A DIFFERENT DEGREE OF SATURATION IN CARBON”, **Bogdan NOVAC, Adriana ZARA, Emilian ENE, Gheorghe NOVAC**, “Transilvania” University of Brasov, Romania
34. “DEVELOPMENT OF MINIATURIZED SYSTEMS BASED ON COMPLIANT MECHANISMS”, **Simona NOVEANU, Dan MÂNDRU, Ion LUNGU, Olimpiu TĂTAR**, Technical University of Cluj-Napoca, Romania
35. „MODERN INSTRUMENTS FOR MEASURING AND VERIFICATION OF SURFACES MADE BY MECHANIC PROCESS”, **Rita Vasilica OPRISAN (STOICA)**, “Transilvania” University, Braşov, Romania
36. “SOLUTIONS OF INCREASING THE PRODUCTIVITY IN MODULAR FIXTURE DESIGN USING AUTODESK INVENTOR”, **Rodica PĂUNESCU**, “Transilvania” University, Braşov, Romania
37. „THE INFLUENCE OF CHEMICAL COMPOSITION, STRUCTURE AND THERMAL TREATMENT ON THE CASTING REFRACTORY ALUMINUM ALLOYS”, **Ion SPOREA, Remus BOBOESCU, Alin Vasile BĂEŢAN, Mircea OLARIU, Ion CÂRPEAN**, Politehnica University Timișoara, Romania
38. “ANTHROPOMORPHIC GRIPPERS FOR ROBOTS - CURRENT STAGE AND PERSPECTIVES”, **Ionel STARETU**, “Transylvania” University of Brasov, Romania
39. „THE INFLUENCE OF CONDITIONS OF THE HEAT TREATMENT OF ALUMINUM ALLOYS”, **Maria STOICANESCU**, “Transilvania” University, Braşov, Romania, **Mihaela SMEADA**, „Henri Coanda” Air Force Academy, **Ioan GIACOMELLI**, “Transilvania” University, Braşov, Romania
40. „A NEW MATHEMATICAL MODEL OF BALLISTIC CYCLE FOR ARTILLERY SYSTEM”, **Florin SUCIU, Lucian CIOBANU, Titiță VASILE**, Military Technical Academy, Bucharest, Romania

41. „On the travel safety of railway vehicles used for freight transport”, **Aurelia TĂNĂSOIU, Bogdan TĂNĂSOIU**, ”Aurel Vlaicu” University, Arad, Romania
42. „STUDY ON THE ENERGETIC CHARACTERISTICS OF THE SHOCK INSULATORS OF RAILWAY VEHICLES” , **Aurelia TĂNĂSOIU, Ion COPACI**, ”Aurel Vlaicu” University, Arad, Romania
43. “BLAST WAVE SCALING LAWS (Hopkinson-Cranz Scaling Method)”, **Cristian ULEANU, Costin ZAGONEANU, Octavian ORBAN**, Military Technical Academy, Bucharest, Romania
44. „SIMPLIFIED CALCULATION METHOD FOR EXPLOSIVE SAFETY QUANTITY DISTANCE (QD)”, **Cristian ULEANU, Costin ZAGONEANU, Octavian ORBAN**, Military Technical Academy, Bucharest, Romania
45. „EXPERIMENTAL PROGRAMMING IN MATERIALS SCIENCE”, **Petrica VIZUREANU**, “Gheorghe Asachi” Technical University Iasi, Romania
46. „STUDIES REGARDING OF SUPERFICIAL HEAT TREATMENTS EFFECTUATED WITH MODERN TECHNOLOGIES”, **Adriana ZARA, Emilian ENE, Bogdan NOVAC, Ioan GIACOMELLI**, ”Transilvania” University, Braşov, Romania

6. MATHEMATICS, COMPUTER SCIENCES AND INFORMATION TECHNOLOGY

Room E 10

Co-Chairs

- **Prof Mircea LUPU, PhD**
- **Prof Ștefan NEDELCU, PhD**
- **Constantin GROZEA**

1. „SPARSE PIXELS VECTORIZATION (SPV) ALGORITHM”, **Adrian ALEXEI**, Military Equipment and Technologies Research Agency, Bucharest, Romania, **Raoul DRAGOMIR**, SC Geo Arc SRL, Bucharest, Romania
2. „VECTORIZATION ALGORITHMS THROUGH 8 PROXIMITIES”, **Adrian ALEXEI**, Military Equipment and Technologies Research Agency, Bucharest, Romania, **Tiberius TOMOIAGĂ**, Military Equipment and Technologies Research Agency, Bucharest, Romania, **Claudiu DASCĂLU**, SC Geo Arc SRL, Bucharest, Romania
3. „ASYMPTOTIC STABILITY OF A HIGHER ORDER DIFFERENCE EQUATION”, **Gheorghe ANTON**, Trades and Services High School, Buzău, **Gheorghe RADU**, “Henri Coanda” Air Force Academy, Brașov, Romania
4. „THE IMPLEMENTATION OF AN AIR POLLUTION WARNING SYSTEM USING ELEMENTS OF FUZZY LOGIC”, **Mădălina CĂRBUREANU**, “Petroleum-Gas”, University, Ploiesti, Romania
5. „A PROBABILISTIC PROOF OF AN ASYMPTOTIC FORMULA FOR EXPONENTIAL OPERATORS”, **Cristina Sanda CISMAȘIU**, „Transilvania” University, Brasov, Romania
6. „TRAINING PROCESS – AIM: AUTOMATIZATION” **Iuliana DOBRE**, Oil-Gas University of Ploiești, Romania
7. „THE RAMSEY ALGORITHM”, **Gabriela – Simona DUMITRESCU**, Traian High School Constanta, Romania

8. „DECISION – TREE SEARCH METHODS”, **Gabriela – Simona DUMITRESCU**, Traian High School, Constanta, Romania
9. „THE ANALYSE OF A SYSTEM OBJECT”, **Vasile DUMITRU**, “Spiru Haret” University, Brasov, Romania
10. „EDUCATION IN INFORMATION ERA”, **Vasile DUMITRU, Constantin POSEA**, “Spiru Haret” University, Brasov, Romania
11. „BROWNIAN MOVEMENT USED IN DEMOGRAPHY”, **Cornelia GABER, Maria STOICA**, “Petroleum-Gas”, University, Ploiesti, Romania, **Maria STOICA**, “Nichita Stanescu” High School, Ploiesti, Romania
12. „COMPLEX TELETRAFFIC ANALYSIS AND OPTIMIZATION SYSTEM FOR COMMUNICATION NETWORKS BASED ON TECHNOLOGICAL DIVERSITY AND SERVICE CONVERGENCE”, **Constantin GROZEA**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
13. „ON INDUCED COMPLEX VECTOR PSEUDO-FIELDS ON AFFINE FIBERED MANIFOLDS”, **CRISTIAN IDA**, „Transilvania” University, Brasov, Romania
14. „IMPLEMENTING SIMULATED ANNEALING ON GPU FOR IMAGE PROCESSING TASKS”, **István LŐRENTZ, Alexandru SUCIU**, “Transilvania” University, Brasov, Romania
15. „THE STUDY OF SOME TRACKING, INTERCEPTING OR GUIDED PULLING PROBLEMS WITH APPLICATIONS IN BALLISTICS OR TRAFFIC”, **Mircea LUPU, Ernest SHEIBER**, „Transilvania” University, Brasov, Romania
16. „STATISTICAL TESTING OF RANDOM NUMBER GENERATORS”, **Mihai MARIN, Florin RĂSTOCEANU, Roxana DRAGOMIR**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
17. „ANALYTICAL MODEL OF A QUANTIFYING AND ASSESSING THE COUNTRY RISK “, **Constantin POSEA**, “Spiru Haret” University, Brasov, Romania
18. „EVALUATING THE PERFORMANCE OF PARALLEL SYSTEMS”, **Carmen PUGHINEANU**, ”Petru Rareș” National College, Piatra Neamț, **Gheorghe RADU**, “Henri Coandă” Air Force Academy, Brașov, Romania

19. „GLOBAL ATTRACTIVITY IN A HIGHER ORDER NONLINEAR DIFFERENCE EQUATION“, **Gheorghe RADU**, “Henri Coanda” Air Force Academy, Braşov, **Gheorghe ANTON**, Trades and Services High School, Buzău, Romania
20. „ABOUT SURFACE MODELING USING FRACTALS”, **Adrian-Gelu RADU**, “Trades and Services” High School, Buzau, Romania, **Marcel SULTĂNESCU**, Department of Science Education, DPIP Buzau, University Bucureşti, Romania
21. „ABOUT SIMULATION WITH FRACTAL INTERPOLATION USING LAGRANGIAN TRACKING OF PARTICLES”, **Adrian-Gelu RADU**, “Trades and Services” High School, Buzau, Romania, **Marcel SULTĂNESCU**, Department of Science Education, DPIP Buzau, University Bucureşti, Romania
22. „CRYPTOGRAPHIC MODULES TESTING AGAINST FIPS 140-2”, **Gabriela RĂŞCHITOR**, **Marilena LAZĂR**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
23. „APPROVED SECURITY FUNCTIONS FOR FIPS PUB 140-2”, **Gabriela RĂŞCHITOR**, **Gheorghe STEFAN**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
24. „AUTOMATIC SPEAKER RECOGNITION ARCHITECTURES”, **Florin RĂSTOCEANU**, **Marilena LAZĂR**, METRA - Military Equipment and Technologies Research Agency, Bucharest, Romania
25. „EUROPEAN OPTIONS EVALUATION THROUGH CRANK-NICOLSON METHOD”, **Ioan-Gheorghe RATIU**, “George Baritiu” University, Brasov, Romania
26. „CRYPTOGRAPHIC ALGORITHMS AND SERVICES IN THE LOCAL AREA NETWORK”, **Petru SCURTU**, “Henri Coanda” Air Force Academy, Brasov, Romania
27. „BHP UNIVERSALITY HYPOTHESIS VERIFICATION FOR BET-FI INDEX FROM BVB”, **Tiberiu SOCACIU**, “Stefan cel Mare” University, Suceava, Romania, **Mirela DANUBIANU**, “Vasile Goldis” West University, Arad, Romania
28. „PP PLOT AND QQ PLOT TOOL FOR BHP UNIVERSAL DISTRIBUTION”, **Tiberiu SOCACIU**, “Stefan cel Mare” University, Suceava, Romania, **Ioan MAXIM**, “Vasile Goldis” West University, Arad, Romania

29. „AN ANALYSIS OF A H.264MVC REFERENCE ENCODER FOR USING MULTI CORE PROCESSORS”, **Alexandru SUCIU**, **István LŐRENTZ**, “Transilvania” University, Brasov, Romania
30. „PILOT-IN-THE-LOOP PROBLEM AND ITS SOLUTION”, **Róbert SZABOLCSI**, “Miklós Zrínyi” National Defense University Bolyai János Military Technical Faculty, Institute of Automation and Robotics, Hungary
31. „STOCHASTIC NOISES AFFECTING DYNAMIC PERFORMANCES OF THE AUTOMATIC FLIGHT CONTROL SYSTEMS”, **Róbert SZABOLCSI**, “Miklós Zrínyi” National Defense University Bolyai János Military Technical Faculty, Institute of Automation and Robotics, Hungary