

# "SCIENTIFIC RESERCH AND EDUCATION IN THE AIR FORCE"

# **AFASES 2011**

THE 13-th INTERNATIONAL CONFERENCE

Publishing House of "Henri Coanda" Air Force Academy Brasov, Romania 26 – 28 May, 2011 Brasov-ROMANIA

It is our great pleasure to welcome you to the **13-th** International Conference **"SCIENTIFIC RESEARCH AND EDUCATION IN THE AIR FORCE"** 

This event is organized by "Henri Caonda" Air Force Academy in collaboration with "General M.R. Stefanik" Armed Forces Academy and "AIRTEC" Germany.

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## Conference Agenda

#### Thursday 26 May 2011

$16^{00}$ - $18^{30}$	Arrival of participants
	Check-in
	Time at your disposal / Socializing opportunities
$18^{30} - 21^{00}$	Ice Breaker Evening (Canteen)

#### Friday 27 May 2011

$07^{00} - 07^{45}$	Brea	Breakfast (Canteen – paid meal)							
$08^{00} - 09^{00}$	Con	Conference Registration (antechamber of Academy							
	Aud	itorium	ı)						
$09^{00} - 10^{30}$	Plen	ary Se	ssion (Ac	cademy .	Auditori	um)			
$10^{30} - 10^{45}$	Offi	cial Ph	oto Sessi	ion					
$11^{00} - 14^{30}$		1	2		3	4		5	6
	Sections	E78	E31, E3		245, 244	E10 E13	·	<i>E5</i>	E5
$14^{30} - 15^{30}$	Lun	ch Brea	ak <i>(Cant</i>	een – pa	id meal	)			
$15^{30} - 19^{00}$	IS	1	2	3	4	5	6	UA	4V
	Sections	E78	E31, E3	E45, E44	E10, E13	<i>E5</i>	<i>E5</i>	Static& Flight demonstration	
$20^{00}$	Fest	ive din	ner	•	•	•	•	•	

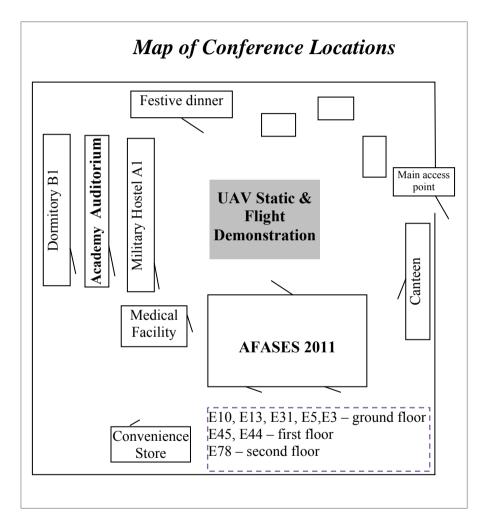
#### Saturday 28 May 2011

$09^{00} - 09^{45}$	Breakfast (Canteen – paid meal)
$10^{00}$ - $14^{00}$	Sightseeing of Brasov City
	Time at your disposal
$14^{00} - 14^{45}$	Lunch (Canteen – paid meal)
$14^{45}$	Check-out
	Departure of participants

- 1.Management, Marketing, Finance E78
- 4. Engineering Sciences E10, E13

- 2.Socio and Humanities - E31,E3

- 5. Air Force E5
  6. Developments in the field of UAS E5
- 3.Mathematics, Computer Sciences, IT&C- E45,E44
  - 5



### **PLENARY SESSION** ACADEMY AUDITORIUM

#### **Gabriel - Florin MOISESCU**

Rector of "Henri Coanda" Air Force Academy, Brasov, Romania

#### **CÂRNU Fanică**

Chief of Romanian Air Force

#### **Pavel BUCKA**

Vice-rector for Education, "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic "Unmanned Aerial Systems Used in the Armies of Developed Countries"

#### James KEAGLE

Director of the Transforming National Security seminar series, Center for Technology and National Security Policy, National Defense University, USA

#### María JOSÉ MÉNDEZ DE VALDIVIA

The Embassy of Spain in Romania and Moldova Republic

#### Sebastian KAWCZYNSKI

CEO at Plagiat.pl, Poland

#### Florin PĂUN

Deputy Director Industrial Innovation, Onera - The French Aerospace Lab, France

"From Managing Asymmetries Towards a Systemic Approach in Technology Transfer: A Critique Based on the Sme Strategy at Onera – The French Aerospace Lab<sup>TM</sup>"

## THE CONFERENCE' SECTIONS

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## **1.** *MANAGEMENT, MARKETING, FINANCE* Conference Room E78

#### **MODERATORS:**

- ≻ Stelian STANCU
- > Mihai ROMAN
- ➢ Viera FRIANOVA
- > Stanislav MORONG

	GLOBALIZATION. SECURITY CRISES
1.	Iustin ACHIRECESEI, Vasile NODIŞ
	"Lucian Blaga" University, Sibiu Romania
	ADVANTAGES OF THE NEW ROMANIAN ECONOMIC SPACE.
	DEVELOPMENTS OF THE ROMANIAN ECONOMIC DIMENSION ON
2.	NATIONAL SECURITY
	Sorin BOUARU
	"Carol I" National Defense University Bucharest, Romania
	A QUANTITATIVE STOCHASTIC MODEL FOR AVIATION SECURITY
2	Catalin CIOACA*, Marian OANA*, Florin Catalin OLTEANU**
3.	*"Henri Coanda" Air Force Academy, Brasov, Romania,
	** Transilvania University of Brasov, Romania
	A GAME THEORY MODEL OF STOCK EXCHANGE MARKET
4	MANIPULATION
4.	Diana DEZSI
	Academy of Economic Studies, Bucharest, Romania
	INSURANCE MARKET EVOLUTION IN ROMANIA IN TERMS OF
	GLOBAL ECONOMIC CRISIS
5.	Gherasim Solovestru DOMIDE*, Gabriel Arthur ZELINSCHI**,
З.	Alexandru DOMIDE*, Gheorghe Mircea HORGOS*
	*North University of Baia Mare, Romania,
	**Academy of Economic Studies, Bucharest, Romania
	MONTHLY SEASONALITY IN THE BUCHAREST STOCK EXCHANGE
6.	Ramona DUMITRIU, Razvan STEFANESCU, Costel NISTOR
	Danubius University of Galați, Romania
	COMMUNICATION STRATEGY OF THE MINISTRY OF DEFENCE
	OF THE SLOVAK REPUBLIC
7.	Viera FRIANOVA
	Department of Management, "Gen. M. R. Stefanik" Armed Forces
	Academy, Liptovsky Mikulas, Slovak Republic

	IMPLEMENTATION OF AN ECONOMIC-MATHEMATICAL MODEL
	IN ORDER TO DETERMINE THE EFFECTIVENESS OF
8.	INVESTMENTS IN THE CHANGES FROM THE DEFENSE INDUSTRY
	Dan HAGEANU
	"Alma Mater" University, Sibiu, Romania
	IMPACT OF GLOBALIZATION ON AIRPORT INDUSTRY
9.	Dan – Cristian ION
	"Politehnica" University of Bucharest, Romania
	PERCEPTIONS OF THE CURRENT ECONOMIC CRISIS
10	DIMENSIONS IN A RURAL COMMUNITY
10.	Daniela Rodica IOV
	Petroleum-Gas University of Ploiesti, Romania
	EVOLUTION OF CURRENT INCOME AND CONSUMPTION OF
11	POPULATION IN A RURAL COMMUNITY
11.	Daniela Rodica IOV
	Petroleum-Gas University of Ploiesti, Romania
	COMBAT CAPABILITY OF MODERN SUPERSONIC AIRCRAFT FOR
10	CZECH AIR FORCE
12.	Miroslav JANOŠEK
	University of Defense, Air Force Department, Brno, Czech Republic
	THE INTERNATIONALIZATION AND GLOBALIZATION OF
	BUSINESS MECHANISMS AND MOTIVATIONS
13.	Gabriela MIRONOV-DURET, Aida Mariana CIMPEANU,
	Adriana MARGARIT, Sergiu Ionel PIRJU
	"Danubius" University, Galați, Romania
	CURRENT ISSUES IN SELECTED ECONOMIC CRISIS
	MANAGEMENT TOOLS
14.	Stanislav MORONG
1.11	"Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš,
	Slovak Republic
	THEORETICAL CONSIDERATIONS ON THE CALCULATION OF
. –	TURNOVER OF BREAK-EVEN IN INSURANCE COMPANIES
15.	Florin Catalin OLTEANU, Gavrila CALEFARIU*
	Transilvania University of Brasov, Romania
	MANAGERIAL COMPONENTS IN IMPROVING THE EFFICIENCY
	OF THE MANAGEMENT OF ROMANIA'S STATE BORDER
16.	SECURING
10.	Stelian PANZARU, Camelia-Cristina STEFANESCU
	Management Faculty, "Spiru Haret" University, Brasov, Romania
	Wanagement Pacuty, Spiru Haret Oniversity, Diasov, Romania

17.	TRANSFERRING NEW DYNAMIC CAPABILITIES TO SMES: THE ROLE OF ONERA – THE FRENCH AEROSPACE LAB IN PROMOTING ASYMMETRIES MANAGEMENT Florin PAUN <sup>*</sup> , Nick VON TUNZELMANN <sup>**</sup> , Philippe RICHARD <sup>***</sup> *Deputy Director Industrial Innovation, ONERA-The French Aerospace Lab ** Emeritus Professor, SPRU, University of Sussex ***President, Ventures Strategy Consulting
18.	INFORMATION RESOURCES MANAGEMENT IN NATO Ilie PAUN The Regional Department of Defense Resources Management Studies, Brasov, Romania
19.	INFORMATION RESOURCES MANAGEMENT IN ROMANIAN ARMY Ilie PAUN The Regional Department of Defense Resources Management Studies, Brasov, Romania
20.	THE CULTURAL EFFORT OF INFORMATION SHARING IN THE KNOWLEDGE-BASED SOCIETY Oana-Andreea PIRNUTA*, Mircea BOSCOIANU** *Transilvania University of Brasov, Romania ** "Henri Coanda" Air Force Academy, Brasov, Romania
21.	THE GREAT DEPRESSION AND THE CONTEMPORARY GLOBAL ECONOMIC CRISIS. A COMPARATIVE APPROACH Oana-Andreea PIRNUTA*, Ioana Anca GRIGORESCU*, Mircea BOSCOIANU** *Transilvania University of Brasov, Romania ** "Henri Coanda" Air Force Academy, Brasov, Romania
22.	CORRELATION AND EVOLUTION OF ROMANIAN TOURISM Raluca PODASCA Petroleum-Gas University of Ploiesti, Romania
23.	SWOT ANALYSIS OF A RETAIL COMPANY Raluca PODASCA Petroleum-Gas University of Ploiesti, Romania
24.	MODELS OF FOREIGN DIRECT INVESTMENTS. STUDY CASE ON ROMANIA Mihai ROMAN Academy of Economic Studies, Bucharest, Romania
25.	PROACTIVE MANAGEMENT AND INTERNAL AUDIT PROCEDURES IN AIRPORTS USING BI SOLUTIONS Elena Monica SABAU, Andreea Ileana ZAMFIR Academy of Economic Studies, Bucharest, Romania

26.	AN ECONOMETRIC APPROACH OF ACTUAL FINANCIAL CRISIS Stelian STANCU, Oana Madalina PREDESCU, George Viorel VOINESCU, Anca Domnica LUPU Academy of Economic Studies, Bucharest, Romania
27.	RISK AND UNCERTAINTY IN THE CHOICE OF AN OPTIMAL PORTFOLIO ON THE ROMANIAN CAPITAL MARKET Stelian STANCU, Oana Madalina PREDESCU, Nora CHIRITA, George Viorel VOINESCU, Anca Domnica LUPU Academy of Economic Studies, Bucharest, Romania
28.	MONETARY POLICY AND INFLATION CONTROL Alina STOICA, Sorina STOIAN Transilvania University of Brasov, Romania
29.	DIRECT INFLATION TARGETING IN ROMANIA Magdalena Lucica TALVAN (MIHAI), Mihai Daniel ROMAN Academy of Economic Studies Bucharest Romania

## 2. SOCIO AND HUMANITIES Conference Room E31

## Panel 1. The psychology of defense, public order and national security

#### **MODERATORS:**

#### ≻Mihail ANTON

#### Florentina PESCARU

#### > Milan SOPOCI

NANOPSYCHOLOGY IN THE EXTREME FUTURE

1.	Mariana CALUSCHI
	"Petre Andrei" University, Iași, Romania
	CULTURAL AND GENDER TOLERANCE PRINCIPLES IN SOCIAL
	SCIENCES AFFECTING THE SECURITY ENVIRONMENT
2.	Mária MARTINSKÁ, Eva ZÁVODNÁ
	"Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš,
	Slovak Republic
	TRENDS OF ACTION OF THE PRIVATE / CORPORATE TYPE OF
3.	SECURITY EXPERTISE IN ROMANIA
	Carmen POSTELNICU
	"Mihai Viteazul" National Intelligence Academy, Bucharest, Romania

4.	WOMEN'S CONDITION IN MILITARY INSTITUTIONS
	Cristina RADOI
	National School of Political Studies and Public Administration,
	Bucharest, Romania
	SECURITY RESEARCH AND NEW REQUIREMENTS ON EDUCATION
	AND TRAINING
5.	Milan SOPÓCI
	"Gen. M. R. Stefanik" Armed Forces Academy, Liptovsky Mikulas,
	Slovak Republic
	APPLYING THE HUMANITARIAN INTERNATIONAL LAW IN
6.	DESTRUCTURED INTERNAL CONFLICTS
0.	Dumitru TOADER
	"Henri Coandă" Air Force Academy, Brasov, Romania
	EVOLUTION OF PATHOLOGICAL COMMUNICATION'S MILITARY
7.	DOMAINS, FROM PROPAGANDA TO INFORMATION OPERATIONS
7.	Alfred VASILESCU
	Operational Command Center, General Staff, Bucharest, Romania
	INTEGRATIVE CONTEMPORARY THEORIES ABOUT
	UNCONVENTIONAL AGGRESSIONS OF INFORMATIONAL TYPE,
8.	BASED ON PATHOLOGICAL COMMUNICATION
	Alfred VASILESCU
	Operational Command Center, General Staff, Bucharest, Romania
9.	Mihaela Alina STATE
10.	Adina Daniela VOINEA
11.	Cristina GOMBOS
12.	Nicoleta COMANICI
13.	Anca Carmen OPRIS

#### Panel 2. Educational psychology, counseling and vocational school

#### **MODERATORS:**

Maria Dorina PASCA > Aurel Ion CLINCIU > Mihaela GURANDA

#### ANXIETY ASPECTS IN PUPILS' BEHAVIOR

#### Ana-Maria ALEXANDRU\*, Maria-Letitia ROMAN\*\*

1. \*"Danubiana" Technical High School, Roman, Romania \*\* Psihotera SRL, Brasov, Romania

	PARALLEL VOICES IN TWO AMERICAN NOVELS
2.	Ana-Maria ALEXANDRU
	"Danubiana" Technical High School, Roman, Romania
	PARTNERSHIP AND PROJECTS AS EDUCATIONAL INTEGRATED
3.	ACTION
••	Aida Cristina FRANGULEA PASTOR
	University of Bucharest, Romania
	SELF – DISCLOSURE AND PARENTS – CHILDREN RELATIONSHIPS DEPENDING ON PARENTAL STYLES
4.	Iulia Mihaela MIHAI
	"Petre Andrei" University, Iasi, Romania DEVELOPMENT OF EMOTIONAL INTELLIGENCE
	– AN EXPERIENTIALIST APPROACH
5.	– AN EAFENIALIST AFFROACH Laura Elena NASTASA, Laura Teodora DAVID
	Transilvania University of Brasov, Romania
	STRESS AND JOB SATISFACTION AMONG UNIVERSITY TEACHERS
6.	Daniela Veronica NECSOI
0.	Transilvania University of Brasov, Romania
	OCCUPATIONAL STRESS IN UNIVERSITY: PERCEIVED CAUSES
_	AND COPING STRATEGIES
7.	Daniela Veronica NECSOI, Daniela PORUMBU
	Transilvania University of Brasov, Romania
	VIOLATING WORK AND INTERPERSONAL RELATIONSHIPS IN
	ORGANIZATIONS AS A CURRENT PROBLEM OF PERSONAL
8.	MANAGEMENT
0.	Jaroslav NEKORANEC, Eva ZÁVODNÁ
	"Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš,
	Slovak Republic
	THE IDENTIFICATION OF THE COMPONENTS OF SCHOOL
9.	INADAPTABILITY
	Maria Dorina PASCA
	University of Medicine and Pharmacy, Targu Mures, Romania
	DETERMINATION VERSUS SELF-DETERMINATION IN THE
10.	STRUCTURE AND DYNAMICS OF SELF
	Daniela PORUMBU, Daniela Veronica NECSOI
	Transilvania University of Brasov, Romania THE PARADIGM OF EGO – THE FUNDAMENTAL PARADIGM OF
	THE PARADIGM OF EGO – THE FUNDAMENTAL PARADIGM OF EFFICIENCY
11.	Daniela PORUMBU
	Transilvania University of Brasov, Romania

12.	THE RELATION BETWEEN SOCIAL COMPARISON AND COACHES' ORIENTATION TOWARDS COMPETITIVE SITUATION
	Diana SIMION (DUMITRIU)
	National School of Political Studies and Public Administration,
	Bucharest, Romania
	PERCEPTIONS ABOUT THE MASS MEDIA AMONG THE STUDENTS
13.	FROM REPUBLIC OF MOLDOVA
15.	Razvan STEFANESCU, Ramona DUMITRIU, Costel NISTOR
	"Dunarea de Jos" University, Galati, Romania
	RESIDENTS' PERCEPTION OF VIOLENCE ACTS - A LOCAL
	RESEARCH
14.	Ecaterina Maria UNIANU,
	Aida Cristina FRANGULEA-PASTOR
	University of Bucharest, Romania
	PARTNERSHIP AND PROJECTS AS EDUCATIONAL INTEGRATED
15.	ACTION
10.	Aida Cristina FRANGULEA-PASTOR
	University of Bucharest, Romania
	STUDENT MOTIVATION AND SELF – REGULATED LEARNING – A
16.	THEORETICAL REVIEW
10.	Ana – Maria CAZAN
	University of Bucharest, Romania
	ORGANIZATIONAL MANAGEMENT OF EMOTIONS AT WORK:
17.	MOTIVES AND FORMS
17.	Camelia TRUTA
	University of Bucharest, Romania

### Panel 3. Work psychology, transport and services

#### **MODERATORS:**

## Marcela Rodica LUCA Catalin Marius GHERASIM

HUMAN FACTORS IN AVIATION: CREW MANAGEMENT	
1. Dan – Cristian ION	
"Politehnica" University of Bucharest, Romania	
SMOMELP STUDENTS MOTIVATION REGARDING MANAGERIAL	
ENTRY LEVEL POSITION	
2. Mihaela OANCEA, Daniela BELU, Catalin CIOACA,	
Dorin DUICULETE	
"Henri Coandă" Air Force Academy, Brasov, Romania	

		A FEW METHODS TO TEST THE SPECIFIC LEVEL OF THE
		PHYSICAL TRAINING OF THE NAVAL STUDENTS ACCORDING TO
3.	3.	THE PROFESSIONAL REQUESTS ABOARD SHIPS
		Naie Gilles OPRISAN
		"Mircea Cel Bătrân" Naval Academy, Constanta, Romania,
		THE PSYCHOLOGICAL PROFILE OF THE HIGH – PERFORMANCE
		MILITARY PILOT
2	4.	Florentina PESCARU, Valentin HALMAGIU
		University of Bucharest, Romania
		TERROR MANAGEMENT. TOWARDS MECCA AND A PEACE
	-	MESSAGE
	5.	Nicolae RADU
		Ministry of Administration and Interior, Romania
		THE TERROR PSYCHOPATHOLOGY
(	6.	Nicolae RADU
		Ministry of Administration and Interior, Romania
	7.	ENTREPRENEURSHIP COMPETENCES ACQUIRED DURING
-		PRACTICAL PLACEMENT. QUALITATIVE ISSUES
		Marcela Rodica LUCA
		Transilvania University of Brasov, Romania
8	8.	Minerva Nicoleta GHINDEA
9	).	Cristina Elena PANTAZIU
1	10.	Alexandra Georgiana NECULAI

## Panel 4. Communication, education, history, languages, political science

#### **MODERATORS:**

# Lavinia STAN Asher SHAFRIR Liviu PLUGARU

A SHORT HISTORY OF LAW ENFORCEMENT IN ENGLISH WORDS: FROM POSSE COMITATUS TO FLYING SQUAD

 FROM POSSE COMITATOS TO FEITING SQCAD Ileana CHERSAN "Al. I. Cuza" Police Academy, Bucharest, Romania HOW TO AVOID GENDER DIFFERENCES IN BUSINESS ENGLISH CORRESPONDENCE Maria ENACHE Academy Studies Deckerst, Demonia

Academy of Economic Studies, Bucharest, Romania

	TEACHING NEGOTIATION SKILLS
3.	Maria ENACHE
	Academy of Economic Studies, Bucharest, Romania
	EDUCATIONAL MANAGEMENT – ART OR SCIENCE?
4.	Mihaela GURANDA*, Daniela NAGY**
	*University of Bucharest, Romania
	**"Henri Coanda" Air Force Academy, Brasov, Romania
	GEORGE THE THIRD, SELIM THE THIRD AND ENGLISH
	ORIENTAL POLICY AFTER THE ESTABLISHMENT OF ROMANIAN
5.	CONSULATE (1803)
	Nilgün İSMAIL
	Academy of Economic Studies, Bucharest, Romania
	NEW DOCUMENTS REGARDING THE SPREAD OUT OF THE
	ENGLISH TRADE INTO THE OTTOMAN DOMAINS: THE
6.	MEMORANDUM OF THE BOARD OF TRADE, LONDON, 1828
	Nilgün İSMAIL
	Academy of Economic Studies, Bucharest, Romania
	EUROPEAN AND NATIONAL BORDERS: TRANSFER OR
	PENETRATION OF VALUES
7.	Dragos Lucian IVAN
	National School of Political and Administrative Studies, Bucharest,
	Romania
	MILTON'S SATAN: HERO OR ANTI-HERO?
8.	Edith KAITER, Corina SANDIUC
	"Mircea cel Bătrân" Naval Academy, Constanta, Romania
	LIMITATIONS TO LAUNCHING DEVELOPMENT PROJECTS OF
•	INTERCULTURAL COMMUNICATION COMPETENCE IN THE
9.	MILITARY ENVIRONMENT
	Adrian LESENCIUC, Cosmina DRAGHICI
	"Henri Coandă" Air Force Academy, Brasov, Romania
10	BODY PARTS IN IDIOMS
10.	Edith KAITER, Raluca MATES
	"Mircea cel Bătrân" Naval Academy, Constanta, Romania
	WOMEN' S STATUS IN A FREE WORLD: A MODERN PERSPECTIVE
11.	Oana-Andreea PIRNUTA*, Ioana-Anca GRIGORESCU** *Transilvania University of Brasov, Romania
•	** ICLS Co., Craiova, Romania
	ON UTOPIA – BETWEEN PHILOSOPHY AND COMMUNISM
	Oana-Andreea PIRNUTA*, Ioana-Anca GRIGORESCU**
12.	*Transilvania University of Brasov, Romania
	** ICLS Co., Craiova, Romania

TO BE OR NOT TO BE ... TRANSLATED CULTURAL TRANSLATION AND IDENTITY ISSUES IN MONICA ALI'S BRICK LANE

13. Iulia RASCANU Department of Germanic Languages, Academy of Economic Studies, Bucharest, Romania MULTI / INTER-CULTURALISM AND GROUP ACTIVITY IN MONICA ALI'S BRICK LANE 14. **Iulia RASCANU** Academy of Economic Studies, Bucharest, Romania ETHNIC MINORITY LANGUAGES IN ISRAEL 15. Asher SHAFRIR Tel Aviv University, Israel HEBREW LANGUAGE STATUS AND CORPUS PLANNING 16. Asher SHAFRIR Tel Aviv University, Israel EDUCATION AND DEMOCRACY THE DEVELOPMENT OF SOCIAL SCIENCES AFTER 1989. THE CASE OF THE UNIVERSITY OF 17. **BUCHAREST Claudia Maria UDRESCU** University of Bucharest, Romania COMMUNICATION SKILLS IN THE CLASSROOM Monica Mirela UNGUREANU 18. "Mircea Santimbreanu" No 139 School, Bucharest, Romania

## **3.** *MATHEMATICS, COMPUTER SCIENCE, IT&C 3.1 APPLIED MATHEMATICS*

#### **Conference Room E45**

#### **MODERATORS:**

➢ Constantin GHITA

> Mircea LUPU

#### **INVITED PAPER: Eugen PALTANEA**, "Recent Advances in

Stochastic Comparison of Order Statistics", Transilvania University of Brasov, Romania

	A SPLITTING ALGORITHM FOR VARIATIONAL INEQUALITIES
1.	Corina L. CHIRIAC
	Bioterra University, Bucharest, Romania
	A VERSION OF ROBBINS-MONROE ALGORITHM
2.	Neculai CRISMARU
	Transilvania University of Brasov, Romania
	BEST PATTERN OF MULTIPLE LINEAR REGRESSION
3.	Cornelia GABER
	Petroleum-Gas University of Ploiesti, Romania
	VALUES AND PROPER VECTORS USED IN ECONOMIC-STATISTICS
4	ANALYSIS
4.	Cornelia GABER
	Petroleum-Gas University of Ploiesti, Romania
	SOME MODELS ON PHASE TRANSFORMATIONS ON A WIDE
	RANGE OF TEMPERATURE CHARACTERIZING DISSIPATIVE
5.	PROCESSES
	Constantin GHITA
	"Valahia" University, Targoviste, Romania
	CRITERIA AND APPLICATIONS REGARDING THE ABSOLUTE
6.	STABILITY FOR THE SHIPS AUTOPILOT ROUTE ADJUSTMENT
0.	Mircea LUPU, Olivia FLOREA
	Transilvania University of Brasov, Romania
	INTEGRATING QUANTUM TECHNIQUES INTO SECURE SOCKET
7.	LAYER PROTOCOL
7.	Gabriela MOGOS
	University of Oradea, Romania

8.	NUMERICAL APPROXIMATION OF DIRICHLET PROBLEM IN
	BOUNDED DOMAINS AND APPLICATIONS
	Oana RACHIERU, Alina STOICA
	Transilvania University of Brasov, Romania
	ANALYSIS OF MONTE CARLO SIMULATIONS BASED ON
	DIFFERENT DISCRETIZATION SCHEMAS OF CONTINUOUS
9.	STOCHASTIC MODELS FROM FINANCE
	Tiberiu SOCACIU, Ioan MAXIM
	"Stefan cel Mare" University, Suceava, Romania
	PARALLELIZING BLACK-SCHOLES PDE SOLVING ON AN OPEN
10.	DOMAIN WITH SCHUR DECOMPOSITION METHOD
10.	Tiberiu SOCACIU, Ioan MAXIM
11.	"Stefan cel Mare" University, Suceava, Romania
	MATHEMATICAL ESTIMATION IN FINANCIAL ECONOMICS
	Sorina STOIAN, Oana RACHIERU
	Transilvania University of Brasov, Romania

# **3.2 COMPUTER SCIENCE, INFORMATION TECHNOLOGY and COMMUNICATIONS**

### **Conference Room E44**

#### **MODERATORS:**

- > Adrian ALEXEI
- Julius BARÁTH
- ➢ Gheorghe RADU

## **INVITED PAPER: Dorin BOCU**, "Interface Oriented Software Systems Modelling", Transilvania University of Brasov, Romania

 THE CONTOUR TREE - A POWERFUL CONCEPTUAL STRUCTURE FOR REPRESENTING THE RELATIONSHIPS AMONG CONTOUR LINES ON A TOPOGRAPHIC MAP Adrian ALEXEI, Mariana BARBARESSO Military Equipment and Technologies Research Agency, Bucharest, Romania
 TEST BED FOR CYBER-ATTACKS MITIGATION Július BARÁTH, Marcel HARAKAĽ "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic

	GIS FOR POLLUTION MANAGEMENT
3.	Mariana BARBARESSO
	Military Equipment and Technologies Research Agency, Bucharest,
	Romania
	ALGORITHMS FOR MAP GENERALIZATION WITH ARCGIS
4.	SOFTWARE
7.	Florin Virgil DULGHERU
	GEOINT Center, Military Technical Academy, Bucharest, Romania
	SELF-SYNCHRONIZATION TECHNIQUES USED TO ENCRYPT DATA
	STRINGS OF TELEPHONE AND DATA SUBSCRIBERS SYSTEMS
5.	Constantin GROZEA, Ionut-Gabriel TARSA
	Military Equipment and Technologies Research Agency, Bucharest,
	Romania
	A PLATFORM MODULE AND A METHOD OF TRAFFIC ANALYSIS
-	IN IP COMMUNICATION NETWORKS
6.	Constantin GROZEA, Gigi-Daniel BUDARIU
	Military Equipment and Technologies Research Agency, Bucharest,
	Romania
	DATA ERASURE ON MAGNETIC STORAGE
7.	Mihaita IVASCU
	Military Equipment and Technologies Research Agency, Bucharest,
	Romania DESIGN OPTIMIZATION OF INDUSTRIAL WIRELESS NETWORK
	USING GENETIC ALGORITHMS
8.	Ramona–Georgiana OROS, Vlad JINGA, Cornel SAMOILA,
0.	Doru URSUTIU
	Transilvania University of Brasov, Romania
	THE APPRAISAL OF OIL PRODUCTION USING THE METHOD OF
	REGRESSION
9.	Loredana-Maria PAUNESCU
	Petroleum and Gas University of Ploiesti, Romania
	THE SECURITY CONTROL OF THE INFORMATIONAL SYSTEMS
10.	Loredana-Maria PAUNESCU
	Petroleum and Gas University of Ploiesti, Romania
	THE PROTOCOL MODEL FOR THE CONGESTION CONTROL
11.	Ioan POPOVICIU
	"Mircea cel Bãtrân"Naval Academy, Constanta, Romania
	DESIGNING A DATA WAREHOUSE. CASE STUDY: SC "AMBIENT"
	SA
12.	Carmen RADUT, Mihaela ALBICI, Delia TESELIOS,
	Anca VALCU
	"Constantin Brancoveanu" University, Ramnicu Valcea, Romania

IMPACT OF CLOUD COMPUTING SOLUTIONS TO NETWORK ENABLED CAPABILITIES

**13.** Michal TURČANÍK, Marcel HARAKAĽ, Miloš OČKAJ "Gen. M.R. Stefanik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic

DECISION SUPPORT WITH KNOWLEDGE DATABASE IN ASYMMETRIC OPERATION AREA

14. Miroslav ŽÁK, Pavel BUČKA "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic

## 4. ENGINEERING SCIENCES

## 4.1 ELECTRICAL AND ELECTRONICAL ENGINEERING

**Conference Room 13** 

#### **MODERATORS:**

- Elena HELEREA
- ➢ Gheorghe SAMOILESCU
- Ecaterina Liliana MIRON

USE OF PRESELECTED MESSAGES IN AIR-GROUND RADIO COMMUNICATIONS

1.	Constantin BUJOR
	"Politehnica" University of Bucharest, Romania
n	DIAGNOSIS OF FAULTS IN INDUCTION MACHINE
	MANUFACTURING
2.	Anca Ciobanu, Elena HELEREA
	Transilvania University of Brasov, Romania
3.	CONSIDERATIONS REGARDING MODAL TESTING OF ELECTRIC
	MOTORS PARTS
	Melania FILIP*, Ioan Călin ROSCA**, Elena HELERA**
	*"Mircea Cristea" Technical College, Brasov, Romania
	**Transilvania University of Brasov, Romania
4.	RESEARCHES AND EXPERIMENTS ON TELECOMMUNICATIONS
	OPTICAL FIBER WELDING
	Sebastian GANSCA, Valentin Gaftoneanu, Robert ROSCA,
	Camelia RADU (Hanea), Iacob-Nicolae TRIF
	Transilvania University of Brasov, Romania

5.	THE CONCEPTION OF A COMPUTER FOR HEIGHT COMPUTATION ON TELECOMMUNICATION ANTENNAS Sebastian GANSCA*, Robert ROSCA*, Tudor TRIF**, Maria HERESCU (ROSCA)*, Iacob-Nicolae TRIF* *Transilvania University of Brasov, Romania **Ericsson Romania, Bucharest, Romania
6.	MONITORING THE UNBALANCE IN POWER MICRO-GRIDS Ionel LEPADAT*, Catalin MIHAI**, Elena HELEREA*, Sorin ABAGIU*** * Transilvania University of Brasov, Romania ** Transilvania SUD Electrica Distribution Networks SA, Brasov, Romani ***Transilvania Sud - Electrica Serv SA, Brasov, Romania
7.	EMBEDDED SYSTEM FOR MONITORING THE TEMPERATURE INSIDE A VEHICLE Radu MUSAT, Ana-Maria PUSCAS, Elena HELEREA Faculty of Electrical Engineering and Computer Science, Transilvania University of Brasov, Romania
8.	ASPECTS ON THE FUNCTIONAL OPTIMIZATION OF THE TRR – TYPE INDUSTRIAL ROBOT Silviu – Mihai PETRISOR, Ghita BARSAN, Dorel BADEA "Nicolae Bălcescu" Land Force Academy, Sibiu, Romania
9.	DETECTION OF ERRONEOUS OPERATION IN TTL INTEGRATED CIRCUITS USING MODULUS FUNCTIONS OF NOISE MARGINS Mircea Iulian PORTEANU University of Oradea, Romania
10.	ON INTEGRATING AUTONOMOUS MOBILE ROBOTS IN AN INTELLIGENT ENVIRONMENT Ioan SUSNEA, Grigore VASILIU "Dunarea de Jos" University, Galati, Romania
11.	A FRAMEWORK FOR CREATING MIXED ROBOT FORMATIONS WITH PHYSICAL AND VIRTUAL AGENTS Ioan SUSNEA, Grigore VASILIU "Dunarea de Jos" University, Galati, Romania
12.	<i>NEW DESIGN METHOD FOR ASYNCHRONOUS DIGITAL SYSTEMS</i> <b>Mihai TIMIS, Alexandru VALACHI</b> "Gh.Asachi" Technical University, Iasi, Romania

## 4.2 MECHANICAL ENGINEERING Conference Room E10

#### **MODERATORS:**

- Vasile NASTASESCU
- Lavinia GAVRILA
- ≻ Adriana FOTA

THE MATHEMATICAL MODELLING OF CHANNEL TEMPERATURE MEASUREMENT OF AIRCRAFT ENGINE EXHAUST GASES

- 1. František ADAMČÍK, Jan LABUN, Peter KRAJŇÁK Department of Avionics, Faculty of Aeronautics of Technical University of Košice, Slovak Republic STRESS ANALYSIS WITH FINITE ELEMENT METHOD OF LARGE BEARINGS HOLLOW ROLLERS USED IN WIND TURBINE SYSTEM
- Sorin-Adrian BARABAŞ, Adriana FOTA, Cornel SERBAN, Nadia STOIAN
  - Transilvania University of Brasov, Romania

PROCESSING AND EVALUATION OF MEASUREMENT RESULTS A CAMBER GEARS USING KIMOS

- 3. Gianina TIMOFTE CHIRUGU, Marius CHIRUGU "Gheorghe Asachi" Technical University, Iasi, Romania IMPROVING WORKPLACE ORGANIZATION USING
- 4. 5S METHOD Gianina TIMOFTE CHIRUGU, Marius CHIRUGU "Gheorghe Asachi" Technical University, Iasi, Romania THE PARAMETRIC CORRELATION OF THE WOOD CABLE
  - MOLDING AT THE KINEMATICS PROCESS WITH CONSTANT PITCH
  - 5. *PITCH* Ivan CISMARU, Adriana FOTIN Transilvania University of Brasov, Romania

CALCULUL TRANSPORTOARELOR PNEUMATICE

- 6. Gabriela Simona DUMITRESCU "Mihai Eminescu" National College High School, Constanta, Romania THE OPTIMIZATION OF ADVANCED PRODUCT SYSTEMS USED THE FUZZY ALGORITHM
- 7. Adriana FOTA, Sorin BARABAS, Nadia STOIAN, Magdalena BARBU Transilvania University of Brasov, Romania

8.	EXPERIMENTAL RESEARCH CONCERNING THE POWER CONSUMPTION DURING THE SANDING PROCESS OF BIRCH WOOD Adriana FOTIN, Ivan CISMARU, Mátyás MARTHY, Luminita BRENCI, Camelia COSEREANU Transilvania University of Brasov, Romania
9.	STUDY CONCERNING THE INFLUENCE OF MILLING PARAMETERS UPON THE SURFACE QUALITY OF THE BIRCH AND PEAR WOOD Adriana FOTIN, Matyas MARTHY, Ivan CISMARU Transilvania University of Brasov, Romania
10.	CONCERNS REGARDING THE STUDY OF IMPACT BETWEEN AN AIRCRAFT AERODYNAMICAL SURFACE AND A FOREIGN OBJECT Mihai IVANICA Military Technical Academy,Bucharest, Romania
11.	GLOBAL FLOW RATE MODELLING WITH LOCAL HEATING TRANSITORY REGIME Vlad JINGA, Ramona Georgiana OROS, Cornel SAMOILA, Doru URSUTIU Faculty of Material Science and Engineering, Transilvania University of Brasov, Romania
12.	ABOUT SMOOTHING FUNCTIONS USED IN SPH METHOD Vasile NASTASESCU*, Lavinia GAVRILA** *Military Technical Academy-Bucharest, Romania **"Henri Coanda" Air Force Academy, Brasov, Romania
13.	APPROACHES CONCERNING THE OPTIMIZING OF SUPPORTING STEEL FRAME OF A WHEEL LOADER ENGINE BONNET Ionut SERBAN*, Gheorghe BOBESCU*, Cornel ARAMA** *Transilvania University of Brasov, Romania **"Henri Coandă" Air Force Academy, Brasov, Romania
14.	DESIGN APPROACHES OF A BIOMASS HOT AIR UNIT OPERATING A SMALL AUTOMOTIVE MOBILE MAINTENANCE FACILITY Ionut SERBAN*, Gheorghe BOBESCU*, Cornel ARAMA** *Transilvania University of Brasov, Romania **"Henri Coandă" Air Force Academy, Brasov, Romania
15.	INTEGRATION OF NONDESTRUCTIVE TESTING IN AIRCRAFTS MAINTENANCE Constantin STANCU, Emil GRIGORE, Dorin STOIAN, Alina DUMITRU Research & Flight Test Center, Craiova, Romania

AIMING PROCESS ALGORITHMS AND ALGORITHMS DETERMINING THE SECOND INITIAL MOMENT OF BOMB DROPPING ERROR

- 16. Ognyan STOYKOV, Milen ATANASOV Faculty of Aviation "Vassil Levski" National Military University Dolna Mitropolia, Bulgaria
  THEORETICAL AND EXPERIMENTAL STUDY OF THE UNSTEADY
- HEAT TRANSFER IN THE BARREL WALL OF THE ARMAMENT
  17. SYSTEM
  Titica VASILE, Cristian BARBU, Florin-Radu SUCIU
  Military Technical Academy, Bucharest, Romania

## 4.3 MATERIALS AND TECHNOLOGY Conference Room E10

#### **MODERATORS:**

- ➢ Ion DINESCU
- > Mihaela SMEADA
- > Adela Eliza DUMITRASCU

STUDY ON THE INFLUENCE OF MECHANICAL VIBRATIONS ALLOYS PROPERTIES

1. Alexandru Stefan BANEA, Ionut Bogdan ROMAN, Adrian GALEA, Mircea Horia TIEREAN

Transilvania University of Brasov, Romania DEGRADATION OF MECHANICAL PROPERTIES OF ARMORED STEELS AFTER ITS WELDING

2. Igor BARÉNYI, Ondrej HÍREŠ, Peter LIPTÁK Faculty of Special Technology, Alexander Dubcek University of Trencin, Slovak Republic

METHODS OF INVESTIGATING AT A NANO-LEVEL THE SURFACES OF METALLIC MATERIALS IN LIQUID ENVIRONMENTS

3. Marius Dan BENTA, Camelia GHIOCEL, Lizica MODEL \*Transilvania University of Brasov \*\* Transport Technical College, Brasov, Romania THE DESCRIPTION OF METALLIC LAYERS THROUGH SENSOR – SURFACE INTERACTION

Marius Dan BENTA\*, Constantin STRIMBU\*\*,

4. Stefan NEDELCU\*\*, Violeta VASILACHE\* \*Transilvania University of Brasov, Romania \*\*"Henri Coanda" Air Force Academy, Brasov, Romania \*\*\*"Stefan cel Mare" University, Suceava, Romania

	SOME ASPECTS REGARDING IMPACT ABSORBERS APPLIED ON
5	AIRCRAFT LANDING GEARS
5.	Daniel BOSNICEANU
	Military Technical Academy, Bucharest, Romania
	ELASTIC FOUNDATION MODEL OF ROLLING CONTACT WITH
	FRICTION BY FINITE ELEMENT
6.	Ioan ENESCU, Badea LEPADATESCU,
	Adela –Eliza DUMITRASCU
	Transilvania University of Brasov, Romania
	RESEARCH ON RECONDITIONING WELDING ROTOR COAL
	PULVERIZING MV
7.	Adrian GALEA, Alexandru Livius VAS, Ionut ROMAN,
	Alexandru BANEA ,TRIF Iacob-Nicolae
	Transilvania University of Brasov, Romania
	EXPLOSIVE WELDING OF COPPER TO STEEL
8.	Victor GHIZDAVU
	Military Technical Academy, Bucharest, Romania
	WEAR FACTORS ACTING ON AVIATION TURBO ENGINES
	Gheorghe IONESCU*, Sorin DIMITRIU**, Victor MANOLIU*,
	Sorina ILINA*, Constantin VILCU***
9.	*National Institute for Aerospace Research, Bucharest, Romania
	** "Politehnica" University of Bucharest, Romania
	***Romanian Research & Development Institute for Gas Turbines,
	Bucharest, Romania
	ANTIFRICTION MATERIALS TECHNOLOGIES TO ACHIEVE BY
10.	ELECTROMAGNETIC SUBMITTING
10.	Elena IRIMIE
	Military Technical Academy, Bucharest, Romania
	ANALYSIS OF SPECIFIC AREAS ON LASER WELDS CROSS-
11.	SECTION
	Ramona LASLAU, Remus BOBOESCU
	Mechanical Faculty, Politehnica University, Timisoara, Romania
	LASER BEAM DEFOCUSING EFFECTS ON LASER WELDS
12.	SURFACES
	Ramona LASLAU, Remus BOBOESCU
	Mechanical Faculty, Politehnica University, Timisoara, Romania
	ADVANCED MATERIALS FOR AEROSPACE, COMPOSITE WITH
13.	FINE STRUCTURE
101	MARGINEAN I., FLOREA B
	"Politehnica" University of Bucharest, Romania VIBRATING METAL MELTS SOLUTION COMPACTION WALL
14.	CASTINGS
	I. MARGINEAN, B. FLOREA, B.AI. VERDES
	"Politehnica" University of Bucharest Romania

VIBRATING THE COOLING MELTS METAL FINISHING SOLUTION STRUCTURES

15	SINCCICILLS
15.	I. MARGINEAN, B. Florea, I. V. ANTON
	"Politehnica" University of Bucharest, Romania
16.	SPECIAL MULTY-LAYER MATERIALS OBTAINING USING
	NONCONVENTIONAL METHODS
	Stefan Mircea MUSTATA, Mihai MIHAILA-ANDRES,
	Ciprian – Marius LARCO
	Military Technical Academy, Bucharest, Romania
	THE INFLUENCE OF REINFORCED FIBERS ON
17.	CHARACTERISTICS COMPOSITE STRUCTURES
1/.	Stefan - Mircea MUSTATA
	Military Technical Academy, Bucharest, Romania
	CONSIDERATIONS ON CORROSION AND CORROSION
	PROTECTION OF SURFACES WORKING UNDER HIGH
18.	TEMPERATURE CONDITIONS
	Sorin PAVEL
	General Staff, Bucharest, Romania
19.	NANOMANUFACTURING AND THE INDUSTRIAL APPLICATION OF
	NANOTECHNOLOGIES
17.	Vasile N. POPA
	Transilvania University of Brasov, Romania
	THE APPLICATION OF CRYOGENIC TREATMENT ON COLD
•	PLASTIC DEFORMATION STEELS
20.	Paul POPA, Ioan GIACOMELLI, Maria STOICANESCU,
	Maria DRAGOMIR – GROZA
	Transilvania University of Brasov, Romania
	POKA YOKE – A TOOL FOR COMPETITIVENESS IN DIE
21.	PRODUCTION SYSTEMS Mariana C. RASINA
	Transilvania University of Brasov, Romania IMPLEMENTED TPM TO INCREASE THE COMPETITIVENESS DIE
	PRODUCTION SYSTEMS
22.	Mariana C. RASINA, Vladimir M. KLEIN
-	Transilvania University of Brasov, Romania
	SPECIALIZED DEVICES FOR POSITIONING AND FIXING, THE
	MECHANIZATION OF WELDING OPERATION
23.	Florin SAPARIUC, Adrian DRAGAN, Ionut UNCU,
23.	Alin PARPALEA, Iacob-Nicolae TRIF
	Transilvania University of Brasov, Romania
	Transity and Chity Of Diabov, Romania

MECHANIZATION AND CONTROL OF THE WELDING FOR AUTO SEATS STRUCTURE

24. Florin SAPARIUC, Ionut UNCU, Maria HERESCU (ROSCA), Camelia RADU (HANEA), TRIF Iacob-Nicolae Transilvania University of Brasov, Romania

## 4.4 RENEWABLE ENERGY AND ENVIRONMENT, FOOD PRODUCTION Conference Room E13

#### MODERATORS: ≻ Ion SOBOR ≻ Laurian GHERMAN

	IMPACT OF LOW-E GLASS AND INSULATING SPACERS ON CONDENSATION
1.	Beatrice-Cristina ANTON (PACEA), Serban BOBANCU
	Transilvania University of Brasov, Romania
	INFLUENCE OF MICROCLIMATE ON WINDOWS AND DOORS
2.	Beatrice-Cristina ANTON (PACEA)
	Transilvania University of Brasov, Romania
	APPLICATION OF METEOINFORMATICS FOR THE ANALYSIS OF
2	WEATHER FORECAST DATA
3.	Mirela COMAN, Gilbert TARO, Cioruța BOGDAN
	North University of Baia Mare, Romania
	RESEARCHES ON ENVIRONMENT MANAGEMENT – PRINCIPLE OF
	SUSTAINABLE DEVELOPMENT
4.	Adela – Eliza DUMITRASCU, Badea LEPADATESCU, Ioan
	ENESCU
	Transilvania University of Brasov, Brasov, Romania
	RESEARCH ON THE FLY ASH CHARACTERISTICS FROM THERMAL
_	POWER STATIONS
5.	Alexandra MARMANDIU, Teodor MACHEDON PISU
	Transilvania University of Brasov, Romania
	TECHNICAL ASPECTS OF CAPTURE INSTALLATION OF FLY ASH
6.	FROM THERMAL POWER STATIONS
0.	Alexandra MARMANDIU, Teodor MACHEDON PISU
	Transilvania University of Brasov, Romania

7.	THE ROLE OF PLM IN ECOLOGIC DESIGN OF ELECTRONIC
	DEVICES
	Luminita POPA
	Transilvania University of Brasov Romania
8.	THE ROLE OF VIRTUAL COLLABORATIVE ENGINEERING IN
	PRODUCT DEVELOPMENT
	Luminita POPA
	Transilvania University of Brasov Romania
9.	STUDY OF PROPELLANT PRESERVATION USING A RE-LIQUEFIER
	SYSTEM
	Viorel POPA*, Marius CUZIC**, Nicusor VATACHI*
	* "Dunărea de Jos" University, Galati, Romania
	** CRIOMEC S.A., Galati, Romania
	CHARACTERISTICS CALCULATION OF THE WIND ELECTRIC
10	WATER PUMPING SYSTEM
10.	Ion SOBOR, Vasile RACHIER
	Technical University of Moldova, Chisinau, Moldova
	MODIFIED CLAUS PROCESS APPLIED TO NATURAL GAS FOR
11	SULFUR RECOVERY
11.	Nicusor VATACHI, Viorel POPA
	"Dunărea de Jos" University, Galati, Romania
10	THE THERMAL MANAGEMENT OF BUILDING SECTOR ENERGY
	SAVINGS USING ELECTRICAL DEVICES FOR HEAT TRANSFER
12.	Vasile N.POPA
	Transilvania University of Brasov, Romania
	ELECTROPHYSICAL TREATMENT OF THE SECONDARY MILK
	PRODUCTS
13.	Mircea BOLOGA, Elvira SPRINCEAN (VRABIE),
	Alexandru BOLOGA, Tatiana STEPURINA, Albert POLIKARPOV
	Institute of Applied Physics, Academy of Sciences of Moldova
	INTEGRATED SYSTEM FOR AIR TRANSPORT OF DANGEROUS
14.	GOODS
14.	Eugene BUSA
	FPC IFPTR Arad, Romania
	PHYSICAL PARAMETERS INFLUENCE IN FRIED POTATOES
15.	PROCESSING
15.	Mihaela MATEI, Carol CSATLOS
	Transilvania University of Brasov, Romania
16.	POTATOES CRISPS QUALITY FROM FIELD TO FINISHED
	PRODUCT
	Mihaela MATEI, Carol CSATLOS
	Transilvania University of Brasov Romania

## **5.** *AIR FORCE* Conference Room E5

#### **MODERATORS:**

- Pavel BUCKA
- > Oana Andreea PIRNUTA
- > Petr CECH

#### AERONAUTICAL ACTIVITY UNDER THE CONDITIONS OF THE FLEXIBLE USE OF AIRSPACE

Traian ANASTASIEI\*, Oana-Andreea PIRNUTA\*\*, Gabriela Prelipceanu\*\*\*\*, Mircea BOSCOIANU\*\*\*, Anca SUMANARU\*\*

 I'renpecand ', Mireca Bosconaroo ', Anca Somaria \*"Carol I" National Defense University, Bucharest, Romania \*\* Transilvania University of Brasov, Romania,\*\*\*"Henri Coanda" Air Force Academy, Brasov,\*\*\*\* "Ştefan Cel Mare" University, Suceava, Romania

SOME ASPECTS REGARDING THE ARCHITECTURE AND BASIC REQUESTS FOR AN AIR DEFENCE BATTALION COMMAND POST

- 2. Silviu BALUTA\*, Marian PEARSICA\*\* \* The Military Equipment and Technology Research Agency, Bucharest, Romania,\*\* "Henri Coandă" Air Force Academy, Brasov, Romania
  - THE CONCEPT OF FLEXIBLE USE OF AIRSPACE

#### **3.** Constantin BUJOR

"Politehnica" University of Bucharest, Romania KAIZEN - NEW INSTRUMENT FOR PROCESSES OF MAINTENANCE

#### 4. IN AIR FORCE

#### Michal CEHLÁR, Katarína TEPLICKÁ, Stanislav SZABO Technical University of Košice, Slovak Republic

EVALUATION METHODS FOR AERIAL TARGET-TYPE SELF-CONFIGURATION SYSTEMS DESIGNATED FOR TRAINING FIRING WITH SELF-DIRECTED AIR-TO-AIR AND GROUND-TO-AIR

5. OPERATIONAL MISSILES Dumitru DRAGOMIR, Constantin NUTA, Matei POPA, Marin FIRANESCU, Dragos SANDU Research & Flight Test Center - Craiova

THE EU AND THE EUROPEAN DEFENSE MARKET

 6. Cristian ENE, Marian OANA "Henri Coanda"Air Force Academy, Brasov, Romania
 *CAPABILITIES AND RISKS IN THE MEDIUM AND LONG TERM PLANNING IN THE AIR FORCE - METRICS AND METHODS*

#### Ionel HORNEA

CONCERNS OVER FLIGHT PARAMETERS INTERPRETATION IN ORDER TO IDENTIFY THE CAUSE – EFFECT CONNECTION IN

8.	FLIGHT OCCURRENCES
	Mihai IVANICA
	Military Technical Academy, Bucharest, Romania
9.	COMPARATIVE EVALUATION OF RADICAL AND "DESTRUCTIVE"
	ORGANIZATIONS
	Batyr KHALMURADOV, Pavel NEČAS
	* National Aviation University, Kiev, Ukraine
	** "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš,
	Slovak Republic
10.	COMMUNICATION AND INFORMATION SYSTEMS WITHIN THE
	CRISIS MANAGEMENT
	Marcel LINEK
	"Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš,
	Slovak Republic
	IAR-99 GROUND VIBRATION TESTS AND DYNAMICS FINITE
	ELEMENT MODEL
11.	Dorin LOZICI-BRINZEI, Simion TATARU, Radu BISCA
	* National Institute for Aerospace Research, Bucharest, Romania
	**Aerospace Consulting, Bucharest, Romania
	REAL-TIME AERIAL VIDEO TRANSMISSION FROM A UAV
12.	PLATFORM TO A GROUND STATION
12.	Andrei MACARESCU
	"Aurel Vlaicu" Air Force Training School, Boboc, Romania
13.	TYPOLOGY AND PHYSIOGNOMY OF FUTURE CONFLICTS
15.	Basil MAIER
	THE FIRE FLY ("LICURICIUL") – A VERSATILE TARGET FOR
	ANTI-AIRCRAFT DEFENCE
14.	Niculae MARIN*, Elena MARIN**
	*Aerospace Consulting, Bucharest, Romania
	** Arcad & Research, Bucharest, Romania
	MUTATIONS AND LINES OF EVOLUTION OF MILITARY SYSTEM IN
15.	THE CONTEXT OF GLOBALIZATION
	Ovidiu MOSOIU*, Ion BALACEANU**, Danut BALOS*
	*,,Henri Coandă",Air Force Academy Brasov, Romania
16.	MILITARY TRANSFORMATION IN THE CONTEXT OF
	GLOBALIZATION
	Oana-Andreea PIRNUTA*, Mircea BOSCOIANU**, Gabriela
	Prelipceanu****, Anca SUMANARU*, Traian ANASTASIEI***
	*Transilvania University of Brasov, Romania, **"Henri Coanda" Air
	Force Academy, Brasov, Romania*** "CAROL I" National Defence
	University, Bucharest, Romania, ****"Ştefan Cel Mare" University,
	Suceava, Romania

17.	V-22 OSPREY: WAGING ITS OWN WAR <b>Tomáš SCHÓBER*, Matúš GREGA*, Pavel NEČAS**</b> *Central ground-controlled interception, Operation Centre Zvolen, Slovak Republic ** "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic
18.	PERFORMING PHYSICAL EDUCATION IN THE ARMY Madalin SLANICEANU "Henri Coandă"Air Force Academy, Brasov, Romania
19.	AIRLINES PRIVATIZATION ASPECTS Luboš SOCHA*, Pavol KAVKA*, Pavel NEČAS** *Technical university of Košice, Slovak Republic ** "Gen. M.R. Štefánik" Armed Forces Academy, Liptovský Mikuláš, Slovak Republic
20.	THE DEVELOPING MILITARY ROBOTICS Róbert SZABOLCSI "Zrínyi Miklós" National Defense University, Budpest, Hungary
21.	HACCP - NEW TREND OF RISK MANAGEMENT IN AIR FORCE Katarína TEPLICKÁ, Michal CEHLÁR, Stanislav SZABO Technical University of Košice, Slovak Republic

## 6. DEVELOPMENTS IN THE FIELD OF UAS's Conference Room E5

**MODERATORS:** 

- Emil ORZEA
- James KEAGLE
- Robert SZABOLCSI
- Florin NEDELCUT

**INVITED PAPER: Mircea LUPU,** "Advanced Mathematical Methods for Dynamic Stability Study of Small UAV's", Corresponding member of the Academy of Romanian Scientists, Romania

THE COANDĂ VTOL-UAV AEROMECHANICAL ASPECTS
 George BALAN \*, Sorin-Gabriel CONSTANTINESCU \*, Bogdan
 CIOBANU \*\*

 \*"Dunărea de Jos" University, Galati, Romania
 \*"Gheorghe Asachi" Technical University, Iasi, Romania

2.	UAV SYSTEMS IN SUPPORT OF LAW ENFORCEMENT FORCES Sorin-Gabriel CONSTANTINESCU, Florin NEDELCUT "Dunărea de Jos" University, Galati, Romania
3.	ATTACK OF THE DRONES: UNMANNED AERIAL VEHICLES AS AN INSTRUMENT OF WAR James M. KEAGLE, Bailey Ann CAHALL Center for Technology and National Security Policy, National Defense
	University, USA
4.	AN OVERVIEW ON THE CONCEPT OF UAV SURVIVABILITY
	Adrian MURARU "Ştefan Cel Mare" University, Suceava, Romania
5.	LUAV'S ARE THE RIGHT APPROACH FOR SURVEILLANCE CIVIL
	MISSIONS
5.	Florin NEDELCUT, Sorin-Gabriel CONSTANTINESCU
	"Dunărea de Jos" University, Galati,Romania
	INTRODUCTION MORPHING TECHNOLOGY IN UNMANNED
6.	AIRCRAFT VEHICLES (UAV)
	Vasile PRISACARIU, Vasile SANDRU, Ionica CIRCIU "Henri Coandă" Air Force Academy, Brasov, Romania
	ASPECTS REGARDING THE CONCEPT, DEVELOPMENT AND USE
-	OF MODERN UAVS
7.	Vasile PRISACARIU, Vasile ŞANDRU, Cristea-Gabriel RAU
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	UAV CONTROLLER SYNTHESIS USING LQ-BASED DESIGN
8.	METHODS
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