

***“VASIL LEVSKI” NATIONAL MILITARY UNIVERSITY
ARTILLERY, AIR DEFENSE AND CIS FACULTY - SHUMEN, BULGARIA
MILITARY TECHNICAL ACADEMY - BUCHAREST, ROMANIA
AIR FORCE ACADEMY, BRASOV, ROMANIA
MILITARY STUDIES FACULTY, WAR STUDIES UNIVERSITY OF WARSAW, POLAND
MILITARY UNIVERSITY OF TECHNOLOGY, WARSAW, POLAND***



***INTERNATIONAL
SCIENTIFIC
CONFERENCE
2017***

***EXHIBITION
OF PRODUCTS FOR
SECURITY AND DEFENSE***



A G E N D A

***October 3-4, 2017
Shumen, Bulgaria***

ORGANIZING COMMITTEE

GENERAL CO-CHAIRS

- *Brig. Gen. Plamen BOGDANOV, Rector and Commandant of “Vasil Levski” National Military University, Bulgaria*
- *Brig. Gen. Prof. Vasile BUCINSCHI, PhD. “Henry Coanda” Air Force Academy, Romania*
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- *Colonel Assoc. Prof. Krzysztof KRAKOWSKI, Dean of Military Studies Faculty, War studies University, Warsaw, Poland*

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- *Col. Prof. Szymon MITKOW, PhD, Dean of Logistics Faculty, Military University of Technology, Poland*
- *Col. Prof. Eng. Martin MACKO, PhD, Dean of Faculty Military Technology Faculty, Defense University, Czech Republic*

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- *Assoc. Prof. Constantin STRIMBU, Head of Air Defense Department, “Henry Coanda” Air Force Academy, Romania*

SECRETARY'S OFFICE

- *Prof. PhD. Zhaneta Tasheva, Artillery, Air Defense and CIS Faculty, “Vasil Levski” National Military University, Bulgaria*

3 October 2017

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| 1. Registration | 09.00 – 10.45 |
| 2. Opening ceremony | 11.00 - 11.30 |
| 3. Plenary session | 11.30 – 13.30 |
| 4. Lunch break | 13.30 - 14.30 |
| 5. Plenary session and Presentations
of products for security and defense | 14.30 – 18.00 |
| 6. Dinner | 19.00 |

4 October 2017

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| 1. Workgroup sessions | 09.00 - 17.30 |
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5 October 2017

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| 1. Transportation to the firing field | 08.30 - 11.00 |
| 2. Field Artillery Shooting Show | 11.00 - 14.00 |
| 3. Departure of Participants | 14.30 |

3 October 2017

I panel

Location: Conference Hall of Youth Center - Shumen

PLENARY SESSION

✓ Latest weapon technology - development and advancement	11.30-12.00	- Prof. DrSc Andon Lazarov – BFU, Burgas, Bulgaria
▪ Questions and discussion	12.00-12.30	
✓ Researches concerning the un-guided rocket effectiveness	12.30-13.00	- Col. Prof. Eng. Pamfil Şomoiaş - Military Technical Academy, Bucharest, Romania
▪ Questions and discussion	13.00-13.30	
Lunch break	13.30-14.30	

II panel

***Location: Briefing Hall 7201, Foreign Language Department
(Block 26), 2nd floor***

✓ Researches concerning the bullet impact and ricochet	14.30-15.00	- Lt. cdor. Assoc. Prof. PhD Cristian-Emil Moldoveanu - Military Technical Academy, Bucharest, Romania
✓ Preliminary numerical estimation of selected terminal ballistic effects produced by explosion of mortar projectile	15.00-15.30	- MSc. Eng. Bartosz FIKUS - Faculty of Mechatronics and Aerospace, Military University of Technology; Warsaw, Poland
✓ Measurement and monitoring of patriotism, tolerance, leadership and other personal qualities	15.30-16.00	- Prof. Anatoliy Maslak – KubSU, Slavyansk-on-Kuban, Russian Federation
Coffee break	16.00-16.30	
➤ Exhibition of products for security and defense	16.30-18.00	
Dinner	19.00	

Workgroup session
SECTION
DEFENSE AND SECURITY

Chairman: Col. Assoc. Prof. PhD Atanas Lenkov Atanasov
Location: Room 08410, Block 8, IV floor

4 October 2017

- 09.00-09.30 ***Prof. PhD. Veliko P. Petrov – “Artillery, Air Defense and CIS” Faculty***
1. INCREASE AND DEVELOPMENT OF THE TRANSBOUNDARY ORGANIZED CRIME IN THE WORLD
2. POLICY CYCLE OF THE EUROPEAN UNION TO COMBAT WITH THE ORGANIZED AND SERIOUS INTERNATIONAL CRIME
- 09.30-09.45 ***Assoc. Prof. PhD Konstantin K. Kazakov – University of Library Studies and Information Technology, Sofia, Bulgaria***
PRINCIPLES OF INTELLIGENCE ANALYSIS AND SYNTHESIS
- 09.45-10.00 ***Cap. III r. Zhivko St. Yordanov – Military unit 32300, Varna, Bulgaria***
EXAMINATION APPROACH OF INTERACTION BETWEEN THE ARMED FORCES AND INSTITUTIONS INVOLVED INTO THE COUNTRY'S INTERNAL SECURITY SYSTEM
- 10.00-10.15 ***Col. Assoc. Prof. PhD Atanas L. Atanasov - “Artillery, Air Defense and CIS”***
ANALYSIS OF THE CONCEPT “HIGH-PRECISION WEAPONS”
- 10.15-10.30 ***LtC. Stoyan N. Chaney – PhD student, “Artillery, Air Defense and CIS” Faculty***
SHORT-RANGE TACTICAL SURFACE-TO-AIR MISSILE SYSTEM AS A MASS SERVICE SYSTEM
- 10.30-10.45 ***Maj. PhD Eng. Kaloyan A. Iliev - “Artillery, Air Defense and CIS” Faculty***
Capt. Eng. Radoslav B. Chalakov – Military academy “Georgi S. Rakovski”, Sofia, Bulgaria
"JOINT SUPPORT MAINTENANCE" - A FACTOR IN CONTEMPORARY OPERATIONS
- 10.45-11.00 ▪ Questions and discussion
- 11.00-11.30 Coffee break

11.30-11.45 **Assoc. Prof. PhD Hristo A. Desev - “Artillery, Air Defense and CIS” Faculty**

APPROACHES TO ENHANCE EFFICIENCY IN THE FIGHT AGAINST THE USE OF MONEY, ACQUIRED FROM CRIMINAL ACTIVITY

11.45-12.00 **Capt. Eng. Krasimir Slavyanov - “Artillery, Air Defense and CIS” Faculty**

CONTEMPORARY SYNTHETIC APERTURE RADAR SYSTEMS.
MARKET SITUATION

12.00-12.45 **LtC. PhD Dilyan K. Markov - Artillery, Air Defense and CIS Faculty**

1. THE ATTACK OF TARGETS FROM ARTILLERY FORMATIONS, ARMED WITH 122 MM SELF-PROPELLED HOWITZER 2C-1 ”GVOZDIKA” IN THE PROXIMITY TO THE ZONE OF THE AIRSPACE COORDINATION AREA

2. THE ATTACK OF TARGETS FROM JOINT FIRE SUPPORT IN THE AIRSPACE COORDINATION AREA

3. TRANSFORMATION OF POINT COORDINATES BETWEEN CK-42 AND WGS-84 COORDINATE SYSTEMS FOR ARTILLERY UNITS

12.45-13.30 ■ Questions and discussion

13.30-14.30 Lunch break

14.30-17.30 ■ Questions and discussion

Workgroup session
SECTION
ARMS, TECHNOLOGIES, LOGISTICS

Chairman: LtC Assoc. Prof. PhD Tsonyu Grigorov Tsonev
Location: Room 08102, Block 8, Ground floor

4 October 2017

- 09.00-09.15 ***Col. Assoc. Prof. Ph.D. Eng. Tudor-Viorel Tiganescu, Ovidiu G. Iorga, Marcel Sonu, Ana M. Harbu - Military Technical Academy, Bucharest, Romania***
RESEARCH AND DEVELOPMENT OF A MULTI-PURPOSE LATENT FINGERPRINT RECOVERY CABINET
- 09.15-09.30 ***Col. Assoc. Prof. Ph.D. Tudor V. Tiganescu, Ovidiu G. Iorga, Voicu E. Andreea, Ana M. Florea - Military Technical Academy, Bucharest, Romania***
RESEARCH, DESIGN, DEVELOPMENT AND BENCH TESTING OF A HYBRID REACTIVE PROPULSION SYSTEM FOR SPACE LAUNCHER APPLICATIONS
- 09.30-09.45 ***Assistant Prof. Andreea Voicu, Gabriela Toader, Octavian Orban, Viorel Tiganescu, Assoc. Prof. PhD Eng Traian Rotariu - Military Technical Academy, Bucharest, RO; Mircea Teodorescu - Politehnica University, Bucharest, RO***
ECO-FRIENDLY POLYMERIC BINDERS FOR ENERGETIC FORMULATIONS
- 09.45-10.00 ***DSc. Eng. Marek Gąsiorowski, MSc. Eng. Bartosz Fikus, DSc. - Military University of Technology; Warsaw, Poland***
ESTIMATION OF MORTAR SHELL TRAJECTORY USING THEORETICAL MODEL
- 10.00-10.15 ***Col. phd. Vasile Şandru - Air Force Academy Henri Coandă, Braşov, Romania***
COMPARATIVE ANALYSIS OF SURFACE BASED AIR DEFENSE SYSTEMS' FIRE CONTROL UNIT
- 10.15-10.45 ***Prof. PhD Lyubomir Lazov, D.h.c; Prof. Dr.sc.ing. Edmunds Teirumnieks, Mg. Chem. Ērika Teirumnieka, Hristina Deneva - Rezekne Academy of Technologies, Rezekne, Latvia***
1. DANGERS OF IRRADIATION OF MILITARY STAFF WITH LASER LIGHT
2. INFRARED LASERS IN THE MILITARY ACTION

- 10.45-11.00 ***Col. Prof. Ph.D. Eng. Sasho S. Evlogiev, Leut. Eng. Ivelin G. Katsev - Artillery, Air Defense and CIS Faculty***
OVERVIEW OF MODERN OPTICAL DEVICES FOR RECOGNITION USED BY ARTILLERY FORWARD OBSERVERS
- 11.00-11.30 Coffee break
- 11.30-11.45 ***Assoc. Prof. PhD Eng. Krasimir S. Davidov - University of Shumen “Bishop Konstantin Preslavsky”***
LtC. Assoc. Prof. PhD Eng. Tsonyu G. Tsonev - Artillery, Air Defense and CIS Faculty
A METHOD FOR SOLVING THE TASK FOR MODERNIZATION OR PURCHASING OF LIGHTLY ARMORED COMBAT VEHICLES
- 11.45-12.00 ***Assoc. Prof. PhD Andrey I. Bogdanov - University of Shumen “Bishop Konstantin Preslavsky”***
USE OF HEURISTIC ALGORITHMS IN LOGISTICS
- 12.00-12.15 ***Leut. Eng. Yana D. Dimitrova, LtC. Assoc. Prof. PhD Eng. Tsonyu G. Tsonev - Artillery, Air Defense and CIS Faculty***
EXPERIMENTAL INVESTIGATION ON THE DEVIATION OF THE MIDPOINT OF THE HITS OF THE SHOTS AND THE GROUPING AT SHOOTING WITH SMALL ARMS WITH FITTED SILENCER
- 12.15-12.30 ***Maj. Eng. Stamen I. Antonov – Artillery, Air Defense and CIS Faculty***
Col. Prof. Ph.D. Ivan S. Hristozov - Defense Advanced Research Institute
MODELS OF THE EXISTING SYSTEM FOR MAINTENANCE AND REPAIR OF THE ARRANGEMENT
- 12.30-13.30 ▪ Questions and discussion
- 13.30-14.30 Lunch break
- 14.30-17.30 ▪ Questions and discussion

Workgroup session

SECTION

COMMUNICATION AND COMPUTING TECHNOLOGIES

Chairman: Assoc. Prof. PhD Margarita Vladimirova Vasileva

Location: Room 25201, Block 25, second floor

4 October 2017

- 09.00-09.30 ***PhD. Georgi L. Dimitrov – Nikola Vaptzarov Naval Academy***
1. RAPID DEPLOYABLE POST-DISASTER COMMUNICATION SOLUTIONS
 2. RAPID DEPLOYABLE ROBOTIC COMMUNICATION NETWORKS FOR CRITICAL SITUATIONS
- 09.30-10.15 ***LtC. PhD. Milena H. Lambeva - Artillery, Air Defense and CIS Faculty***
1. SOFTWARE-DEFINED MULTICHANNEL RADIO ACCESS POINT
 2. INFORMATION SYSTEMS COMPATIBILITY MODEL
 3. FUZZY MODEL OF INFORMATION SYSTEMS INTEROPERABILITY ASSESSMENT
- 10.15-10.30 ***Col. Assoc. Prof. PhD. Dilyan I. Dimitrov, Second Leut. Deyan At. Atanasov - Artillery, Air Defense and CIS Faculty***
- IMPLEMENTATION OF THE HOUGH TRANSFORM IN DETECTION OF TARGET TRAJECTORY
- 10.30-10.45 ***Maj. PhD. Matey K. Kirov, LtC. PhD. Ivan A. Iliev - Artillery, Air Defense and CIS Faculty***
- CORRELATION-PULSE METHOD FOR INCREASING THE SENSITIVITY OF THE PROXIMITY RADAR RECEIVER
- 10.45-11.00 ***PhD Veselka T. Stoyanova, PhD Nikolai Kulev - Artillery, Air Defense and CIS Faculty***
- ANALYSIS OF QUALITY INDICATORS FOR STEGANOGRAPHY IMAGE
- 11.00-11.30 Coffee break
- 11.30-11.45 ***LtC. PhD Dimitar T. Doychinov - Artillery, Air Defense and CIS Faculty***
- MEASURES FOR PROTECTION OF WEB APPLICATIONS
- 11.45-12.00 ***Kap. eng. Dyanko K. Hubenov - Artillery, Air Defense and CIS Faculty***
- MANAGEMENT TECHNIQUES OF AVAILABLE RADIO FREQUENCY SPECTRUM INFORMATION IN 802.22 COGNITIVE RADIO NETWORKS

12.00-12.15 ***Leut. Eng. Ivelin G. Katsev - PhD student, Artillery, Air Defense and CIS Faculty***

ANALYSIS OF THE ADVANTAGES AND DISADVANTAGES OF USING MOBILE GPS RECEIVERS FOR MILITARY PURPOSES

12.15-13.30 ■ Questions and discussion

13.30-14.30 Lunch break

14.30-17.30 ■ Questions and discussion

Workgroup session
SECTION
SOCIAL SCIENCE

Chairman: Assoc. Prof. PhD Hristo Atanasov Desev
Location: Room 25106, Block 25, Ground Floor

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09.00-09.15 ***Prof. DrSc Goshko K. Petkov, Assoc. Prof. DrSc Mayyana Mitevska-Encheva - University of Library Studies and Information Technology, Sofia, Bulgaria***

1. CHOOSING A CAREER AS A FUNCTION OF THE PERSONALITY
2. PERSONAL PROJECTIONS ON LIFE SATISFACTION

09.15-09.30 ***Capt. Eng. Radoslav B. Chalakov - Military academy "Georgi Rakovski"***
Maj. PhD Eng. Kaloyan A. Iliev - Artillery, Air Defense and CIS Faculty
APPROACHES FOR THE TRAINING OF FUTURE OFFICERS IN ANY OF THE LEADING
NATO ARMY

09.45-11.00 ▪ Questions and discussion

11.00-11.30 Coffee break

11.30-13.30 ▪ Questions and discussion

WORKGROUP SESSION

STUDENTS' SECTION

Chairman: Maj. PhD Yosif Venelinov Yosifov
Location: Room 25109, Block 25, Ground Floor

4 октомври 2017

09.00-09.15 ***Nikolay M. Petrov - PhD student, "Vasil Levski" National Military University***

STUDYING THE LEVEL OF SATISFACTION OF THE COMMANDERS OF ENTITIES FOR COMMUNICATION AND INFORMATION MAINTENANCE WITH REFERENCE TO THE LEVEL OF PROFESSIONAL COMPETENCES DEVELOPED IN THE OFFICERS WHO HAVE COMPLETED THE SPECIALIZATION "MILITARY COMMUNICATION AND INFORMATION SYSTEMS"

09.15-09.30 ***Valya M. Simeonova - PhD student, University of Library Studies and Information Technology, Sofia, Bulgaria***

THE IMAGE AND COMMUNICATIONS AS A LEADING FACTORS IN THE DEVELOPMENT OF THE MILITARY ORGANIZATION

09.30-09.45 ***Neli G. Borisova - University of Shumen "Bishop Konstantin Preslavsky"***

PRESERVATION OF THE PUBLIC ORDER MAIN ACTIVITY OF THE BODIES OF THE MIA

09.45-10.15 ***Meral. M. Galib, Hristina I. Koseva - University of Shumen "Bishop Konstantin Preslavsky"***

1. IMPLEMENTATION OF CRYPTOCURRENCY BITCOIN IN THE INFORMATION SECURITY SYSTEMS
2. UNAUTHORIZED ACQUISITION OF CONFIDENTIAL INFORMATION THROUGH THE CYBER-ATTACK PHISHING

10.15-10.30 ***Genoveva R. Parashkevanova, Vasil P. Vasilev, Viktor V. Lilov – students, University of Shumen "Bishop Konstantin Preslavsky"***

A NEW GENERATION VIDEO SURVEILLANCE WITH INTELLIGENT VIDEO MANAGEMENT SYSTEM

10.30-10.45 ***Daniel R. Denev, Tarkan S. Ismail, Toncho N. Tonchev - – students, University of Shumen "Bishop Konstantin Preslavsky"***

DIGITAL AUDIO WORKSTATION FL STUDIO FOR AUDIO PROCESSING

10.45-11.00 ***Toncho N. Tonchev, Albena B. Aleksandrova - students, University of Shumen "Bishop Konstantin Preslavsky"***

DISTRIBUTING ELECTRONIC BOOKS

11.00-11.30 Coffee break

11.30-11.45 ***Ivel I. Keshishev – cadet, “Artillery, Air Defense and CIS” Faculty***

INDEPENDENCE STRUGGLE OF TUAREG IN AZAWAD REGION

11.45-12.15 ***Vidyo D. Delev – cadet, “Artillery, Air Defense and CIS” Faculty***

1. ENERGY SECURITY AS A PART OF THE NATIONAL SECURITY
2. METHODS OF PREVENTION OF THE TERRORISM IN OUR DAYS

12.15-12.45 ***Kaloyan M. Zhelev – cadet, “Artillery, Air Defense and CIS” Faculty***

1. HUMAN TRAFFICKING
2. WATER SOURCES AS A SOURCE OF THREAT TO ENVIRONMENTAL SECURITY

12.45-13.30 ▪ Questions and discussion

13.30-14.30 Lunch break

14.30-15.00 ***Tihomir T. Zhelyazkov – cadet, “Artillery, Air Defense and CIS” Faculty***

1. CYBERTERRORISM
2. METHODS OF OVERCOMING THE PUBLIC-POLITICAL CRISIS

15.00-15.15 ***Stilian A. Slavchev – cadet, “Artillery, Air Defense and CIS” Faculty***

ORGANIZED CRIME IN THE COUNTRY AND OUTSIDE IT

15.15-16.00 ▪ Questions and discussion

16.00-16.30 Coffee break

16.30-17.30 ▪ Questions and discussion