



„CAROL I” NATIONAL DEFENSE UNIVERSITY  
COMMAND AND STAFF COLLEGE

# Program

THE 15<sup>TH</sup> INTERNATIONAL SCIENTIFIC CONFERENCE  
“STRATEGIES XXI”

*TECHNOLOGIES – MILITARY APPLICATIONS,  
SIMULATION AND RESOURCES*

**Scientific Editors:**

Brigadier General Professor Gheorghe CALOPĂREANU, PhD

Colonel Professor Iulian MARTIN, PhD

Colonel Professor Ioana ENACHE, PhD

Colonel Professor Constantin POPESCU, PhD

Colonel Professor Daniel GHIBA, PhD

Lieutenant Colonel Associate Professor Tudorel LEHACI, PhD

April 11-12, 2019  
Bucharest, Romania

## INTERNATIONAL SCIENTIFIC COMMITTEE

Brigadier General Professor Gheorghe CALOPĂREANU, PhD (National Defense University "Carol I", Bucharest, Romania)  
Colonel Professor Iulian MARTIN, PhD (NDU)  
Colonel Professor Valentin DRAGOMIRESCU, PhD (NDU)  
Colonel Professor Constantin POPESCU, PhD (NDU)  
Colonel Professor Ioana ENACHE, PhD (NDU)  
Colonel Professor Daniel GHIBA, PhD (NDU)  
Colonel Associate Professor Marius SERBESZKI, PhD (NDU)  
Colonel Professor Lucian POPESCU, PhD  
Colonel Associate Professor Marius Victor ROȘCA, PhD  
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Lieutenant Colonel Associate Professor Andrzej SOBON, PhD (War Studies University, Poland)  
Magistrate Lieutenant General Professor Erich CSITKOVITS, PhD (National Defense Academy, Austria)  
Major-General Grudi Ivanov ANGELOV, (National Defense College "G. S. RAKOVSKI", Sofia, Bulgaria)  
Brigadier General Professor Eng. Bohuslav PŘIKRYL, PhD (University of Defense, Czech Republic)  
Brigadier General (ret.) Professor Eng. Rudolf URBAN, PhD (University of Defense, Czech Republic)  
Professor Zdenek ZEMANEK, CSc, PhD (Czech Republic)  
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Navy Captain (ret.) Associate Professor Piotr GAWLICZEK, PhD (National Defense University, Poland)  
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Major General Professor Vuruna MLADEN, PhD (Military Academy, Serbia)  
Brigadier General Professor Slaven ZDILAR, PhD ("Petar Zrinski" Defense Academy, Croatia)  
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Professor Adrian-Liviu IVAN, PhD (National Intelligence Academy, "Mihai Viteazul", Bucharest, Romania)  
General (ret.) Professor Teodor FRUNZETI, PhD (Titu Maiorescu University, Bucharest, Romania)  
Lecturer Codrin-Dumitru MUNTEANU, PhD, (NDU)  
Colonel Sergiu PLOP (Military Academy of Armed Forces "Alexandru cel Bun", Chișinău, Moldova)  
Brigadier General Professor Eng. Ghiță BÂRSAN, PhD (Land Forces Academy "Nicolae Bălcescu", Sibiu, Romania)

Colonel Professor Gheorghe MINCULETE, PhD (NDU)  
Lieutenant-colonel Associate Professor Nicolai-Tudorel LEHACI, PhD (NDU)

## ORGANIZING COMMITTEE

### Chairmen

Brigadier General Professor Gheorghe CALOPĂREANU, PhD  
Colonel Professor Iulian MARTIN, PhD  
Colonel Professor Ioana ENACHE, PhD  
Colonel Professor Constantin POPESCU, PhD  
Colonel (AF) Associate Professor Marius ȘERBESZKI, PhD  
Colonel Professor Daniel GHIBA, PhD  
Lieutenant-colonel Associate Professor, Nicolai-Tudorel LEHACI, PhD

### Members

Colonel Professor Daniel DUMITRU, PhD  
Colonel Professor Valentin DRAGOMIRESCU, PhD  
Colonel Professor Laurențiu GRIGORE, PHD  
Colonel Professor Ion PURICEL, PhD  
Colonel Professor Marilena-Miorica MOROȘAN, PhD  
Captain (Navy) Professor Florin NISTOR, PhD  
Colonel Associate Professor Cristian-Octavian STANCIU, PhD  
Colonel (AF) Associate Professor Eng. Laurențiu-Răducu POPESCU, PhD  
Colonel Associate Professor Octavian MIREA, PhD  
Colonel Professor Ion ANDREI, PhD  
Colonel Lecturer Gheorghe LUCA, PhD  
Lieutenant-colonel Associate Professor Alexandru HERCIU, PhD  
Lieutenant-colonel Associate Professor Daniel ROMAN, PhD  
Capitan-commander (Navy) Associate Professor Eng. Lucian SCIPANOV, PhD  
Colonel Advanced Instructor Ștefan-Antonio DAN-ȘUTEU, PhD  
Colonel Advanced Instructor Pătru PÎRJOL, PhD  
Colonel Advanced Instructor Alin-Dumitru PELMUȘ, PhD Candidate  
Lieutenant-colonel Advanced Instructor Cătălin CHIRIAC, PhD Candidate  
Capitan-commander (Navy) Advanced Instructor Eng. Ionuț CIORANU, PhD Candidate  
Lieutenant-colonel Superior Instructor Marius ISTRATE, PhD Candidate  
Lieutenant-colonel Advanced Instructor Cristian STANCU, PhD Candidate  
Lieutenant-colonel Advanced Instructor Petrișor PĂTRAȘCU, PhD Candidate  
Lieutenant-colonel Superior Instructor Gelu ȚANU, PhD Candidate  
Major Superior Instructor Răzvan ENACHE, PhD Candidate  
Associate Professor Diana-Elena ȚUȚUIANU, PhD  
Associate Professor Andra-Sybil ȘTEFAN, PhD  
Associate Professor Ana-Maria CHISEGA-NEGRILĂ, PhD  
Associate Professor Luiza-Anca KRAFT, PhD  
Associate Professor Dănuța-Mădălina SCIPANOV, PhD  
Lecturer Alin PETRACHE, PhD

## ADMINISTRATIVE COMMITTEE

Florina GRUIA

**PROGRAM**  
**THE 15<sup>TH</sup> INTERNATIONAL SCIENTIFIC CONFERENCE**  
**STRATEGIES XXI**  
***“TECHNOLOGIES – MILITARY APPLICATIONS,***  
***SIMULATION AND RESOURCES”***

**Day 1 – April 11, 2019**

- 08.00 - 08.50 – Registration of participants – Building “D”, Ground Floor, Mid Entrance; Visiting of the Conference’s Exhibition, Building “C”;
- 09.00 - 09.40 – Opening Ceremony – National Defense University „Carol I” Auditorium, Building “C”, Ground Floor;
- 09.40 - 09.50 – Photo Session – National Defense University „Carol I” – Building “C”, Main Entrance;
- 09.50 - 10.30 – Visiting of the Conference’s Exhibition, Building “C”;
- 10.30 - 12.00 – Working Panels - National Defense University „Carol I” Auditorium, Building “C”, Ground Floor;
- 12.00 - 13.00 – Coffee Break – Building “C”, Ground Floor, in front of the National Defense University „Carol I” Auditorium;
- 13.00 - 14.30 – Working Panels - National Defense University „Carol I” Auditorium, Building “C”, Ground Floor;
- 14.30 - 15.30 – Visiting of the Conference’s Exhibition, Building “C”;
- 15.30 - 17.30 – Cocktail – Mess Hall, Building “A”, Ground Floor.

**Day 2 – April 12, 2019**

- 09.00 - 10.00 – Working Panels\*;
- 10.00 - 10.30 – Break, Building “C”;
- 10.30 - 12.00 – Working Panels, Conclusions and Closing Ceremony (on Panels).

*\* Working Panels Locations:*

- *Panel I - The evolutionary trends of the Air Force’s and Navy’s military operational art; – ”General Paul Teodorescu” Auditorium, Building C, 2<sup>nd</sup> floor;*
- *Panel II – Leadership, education and training in the military – ”Marshall Alexandru Averescu” Auditorium, Building C, 1<sup>st</sup> floor;*
- *Panel III - The evolutionary trends of the Land Forces military operational art; – ”General Paul Teodorescu” Auditorium, Building C, 2<sup>nd</sup> floor;*
- *Panel IV Technologies – military applications, simulation and modelling – ”Marshall Alexandru Averescu” Auditorium, Building C, 1<sup>st</sup> floor;*
- *Panel V - Logistics, financial-accounting management and defence resources management in the context of the international security – ”Marshall Alexandru Averescu” Auditorium, Building C, 1<sup>st</sup> floor;*

**Day 1 – April 11, 2019**  
**National Defense University „Carol I” Auditorium,**  
**Building “C”, Ground Floor**

**MODERATORS**

Colonel Professor Ioana ENACHE, PhD  
 Colonel Associate Professor Marius Victor ROȘCA, PhD  
 Lieutenant-colonel Associate Professor, Nicolai-Tudorel LEHACI, PhD  
 Colonel Associate Professor Cristian-Octavian STANCIU, PhD  
 Colonel (AF) Associate Professor Marius ȘERBESZKI, PhD  
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 Colonel Professor Marilena-Miorica MOROȘAN, PhD

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 Colonel Professor Ion ANDREI, PhD  
 Lieutenant-colonel Associate Professor Alexandru HERCIU, PhD  
 Lieutenant-colonel Associate Professor Daniel ROMAN, PhD  
 Capitan-commander (Navy) Associate Professor Eng. Lucian SCIPANOV, PhD  
 Associate Professor Diana-Elena ȚUȚUIANU, PhD

NAME	TITLE
Cosmin BUȚĂ Marius BUTILĂ	Mission command and detailed command – the leader’s role
Silviu CONSTANTINIANU Alexandru CUCINSCHI	Critical thinking in the military decision - making process
Petar MARINOV Valentina GEORGIEVA	Hybrid approaches to teaching counter-terrorism and radicalization at Rakovski National Defence College
Petar MARINOV Stoyko STOYKOV Rumen MARINOV	A comprehensive approach to education and management in the system of security
Diana VICOL	Financing romanian education. A current debate
Alexandru HERCIU Lucian BOIURU	Peculiarities of CBRN defence assets’ employment in mountainous and afforested operational environment
Todor DIMITROV	Navy capabilities for protection of ports and coastal units from terrorism and diversion
Marius ȘUCIU Mihai DĂIESCU	Myers briggs type indicator (MBTI) and military leaders
Slavov Vladislav SLAVOV	Current aspects of the participation of the military police service of the Ministry of Defense of the Republic of Bulgaria in peace support operation
Gelu ȚANU	Modern solutions to consolidate the national air defense. MEADS surface-to-air missile system – from project to operational reality
Marius BUTILĂ Cosmin BUȚĂ	Toxic leadership – effects on organizations
Gheorghe-Alexandru GABROVEANU – GHINEA Corina Georgiana STAN	Integrating software solutions for countering disinformation
Petre PAVLOV Radu-Mihai LIȚĂ	Black Sea fleet participation in the Syrian war
Florin ȘUHAN	Study on self-financing potential in the national defense institution
Mihai DĂIESCU Marius ȘUCIU	Reproductive leadership - the difference between „straight ahead” and „fast forward”
Daniel ROMAN Emanuel-Ștefan DALBAN	Theoretical considerations regarding the application of the modeling and simulation systems in the field of critical infrastructure protection
Petre-Răzvan ENACHE	Civil-military cooperation and civil affairs in counterinsurgency operations
Nicolai-Tudorel LEHACI	Challenges regarding tactical operations planning in a multinational environment

## Day 2 – April 12, 2019

### - PANEL I -

*The evolutionary trends of the Air Force's and Navy's military operational art*

### - PANEL III –

*The evolutionary trends of the Land Forces military operational art*

**”General Paul Teodorescu” Auditorium, Building C, 2<sup>nd</sup> floor;**

NAME	TITLE
Daniel ROMAN Georgiana - Cătălina CHIȚAC	Current approaches to the contemporary security environment
Cristian STANCIU	Mobility in intermediate operations
Cristian STANCIU	Mobility in stability operations
Mihai-Cristian STANCU	Peculiarities of warfighting functions during the offensive operation for the liberation of Mosul (17 October 2016 – 9 July 2017)
Mihai-Cristian STANCU	The typology of modern conflicts
Gelu ȚANU Florian RĂPAN	Emerging threats for the air defense systems – unmanned air vehicles
Ion MITULEȚU	Resilience in land forces operations
Ion MITULEȚU Doru-Mădălin AGACHE	Particularities of planning process and initial training for CBRN consequence management in NATO
Florin NISTOR Ionuț Laurențiu DATCU	The importance of using TOPFAS application packages in the operation planning process
Florin NISTOR Crina Anamaria DATCU	The importance of wargames in the great battles of modern history
Lucian Valeriu SCIPANOV Antoanel Marian VĂTĂMANU	The analysis of Russian, Ukrainian and Romanian maritime power from the fluvial power component
Lucian Valeriu SCIPANOV	Legislative framework on national programs for the territorial defence preparation
Gheorghe LUCA Adrian MIREA	Artillery support in urban operations- lessons learned from Chechnya
Emil OANCEA Costel MIRCEA	The interests of the Danube in Romania and its neighbors; risks and vulnerabilities of this area
Mihail Lucian MANGIUREA Cristian Titus GHEORGHIU	Black Sea security - NATO perspective
Cosmin IVAN Claudiu Doru BĂLĂCEANU	The latest naval missiles and missile platforms in NATO and EU
Cosmin IVAN Claudiu Doru BĂLĂCEANU	International maritime disputes
Silviu CONSTANTINIANU Alexandru CUCINSCHI	Supported and supporting commander
Petre PAVLOV Radu-Mihai LIȚĂ	Considerations regarding the use of PUMA naval helicopter in search and rescue operations at sea and in riverine areas
Sebastian Gabriel POPESCU	Artificial intelligence in naval operations
Silviu CERNAT Victor DIMA	Hybrid warfare – a challenge to NATO and Romania`s security
Silviu CERNAT Victor DIMA	Naval forces participation in peace support operations
Emil OANCEA Costel MIRCEA	The international rivers and the specifics of the navigation of military ships on international rivers

Georgică GRIGORE Stelică MOCANU	Modern strategy of great powers - based on A2AD military concept - to impose worldwide
Sebastian Gabriel POPESCU Vasile SĂVULESCU	Modernization of the Romanian Naval Forces in context of the Black Sea regional security
Florin BĂDICĂ Lucian NEACSU	Risk management - optimisation instrument in the decision-making process of planning a maritime operation
Florin BĂDICĂ Lucian NEACSU	Passive defensive mine countermeasures - an intrinsic component of mine action to minimize risks in military actions
Lucian DUMITRACHE Valentin GAVRILĂ	METOC information relevance for naval operation
Cornel TĂNĂSESCU	The importance of the unmanned underwater vehicles in network centric warfare
George-Victor DUREA Alexandru-Adrian GOBILĂ	Targeting in the maritime domain – challenges and solutions
George-Victor DUREA Alexandru-Adrian GOBILĂ	Naval modernization programs in the Black Sea
Stelică MOCANU Georgică GRIGORE	Participation of the Romanian Naval Forces in promoting confidence and stability in the Black Sea area
Gheorghe BUJOR Sorin GRECU	The recognized marine environmental picture as a force multiplier for maritime operations
Gheorghe BUJOR Sorin GRECU	Marine research in the exclusive economic zone of Romania - legal aspects and trends
George CHIRICĂ	Some considerations concerning the endowment of the Romanian Naval Forces
Gabriel RUSU Ion TATARICI	Anti-piracy strategies in the context of maritime security
Gabriel RUSU Ion TATARICI	Building the credit holders' budgets in the National Ministry of Defense, in compliance with the planning, programming, budgeting and evaluation system
Marius PETROV Eduard Augustin GHEMENT	Security issues in the Black Sea
Constantin-Marian BÎRSAN Ion BĂLĂCEANU	Russian Special Forces: evolution, task organization and training
Constantin-Marian BÎRSAN Ion BĂLĂCEANU	The employment of Russian Special Operations Forces in Ukraine
Lucian ISPAS Alin Ionuț CÎRDEI	Conventional features of hybrid warfare
Gheorghe LUCA Sorina POTCOVARU	Risk identification in the context of change
Julian MARTIN Ștefan-Antonio DAN-ȘUTEU Giuseppe VELLA	Strategy, foresight and the military instrument of power
Marian NICULAE	Battlefield identification friend or FOE systems
Eugen POPESCU	Thoughts concerning civil-military cooperation and development trends in today's security environment
Eugen POPESCU	Highlights upon civil-military cooperation evolution in multinational operations

- PANEL II -  
*Leadership, education and training in the military*  
 -PANEL IV -  
*Technologies – military applications, simulation and modelling*  
 - PANEL V -  
*Logistics, financial-accounting management and defence resources management  
 in the context of the international security*

**”Marshall Alexandru Averescu” Auditorium, Building C, 1<sup>st</sup> floor;**

NAME	TITLE
Alexandru HERCIU	The key role of core values in building team spirit in the military
Niculai-Tudorel LEHACI	The leader – a factor of augmentative potential in the performance of military organization
Ion ANDREI Elvira Gabriela ANDREI	Water and physical effort
Ion ANDREI Elvira Gabriela ANDREI	Age and physical effort – modification of biomechanic factors of the organism
Ionuț CIORANU	Military leadership in the present security context
Marius-Constantin ISTRATE Alin PELMUȘ	Aspects regarding history of ski and the military help to his development
Mădălina SCIPANOV	Public debt of Romania - level and evolutions
Alin PELMUȘ Marius-Constantin ISTRATE	The influence of psychophysical training on factors (functions) which multiply/diminish the combat power
Diana-Elena ȚUȚUIANU	Learning from the others: building a team of teams
Diana-Elena ȚUȚUIANU	Teamwork in the military
Ștefan-Antonio DAN-ȘUTEU	Operational requirements for cyber security training platforms in simulated didactic environments
Ana-Maria GRECU	The design of C4ISR architecture in the current geopolitical and geostrategic context
Laurențiu GRIGORE Florina-Dorina GRUIA	Risk identification in critical infrastructure
Petrișor PĂTRAȘCU	NATO’s current approaches to Cyber Defence
Marius PETROV Eduard Augustin GHEMENT	OPSEC – a basic component in the protection of critical information
Ilie ANGIU	Considerations on the logistic system of the Romanian Air Force
Ilie ANGIU	The role and place of the logistics structures in the military units dislocation process
Ioan-Daniel DRĂGĂNESCU	Approaches to conceptual delimitations, characteristics and types of audits performed in the public and private domains
Ana-Maria GRECU	The perspectives of some logistical domains in C4ISR architecture
Gheorghe MINCULETE Sorin MINCULETE	Approaches of project management in digital marketing
Romulus MUNTEANU Alina NEGOESCU	The maintenance of mechanised infantry brigade military equipments within joint operations
Nicolae NICOARĂ Gabriela-Florina NICOARĂ	The internal facts which have a major influence on tactical logistic structures
Petrică ZAHARIA	Development and use plans barracks - requires in management programs and projects in infrastructure