

**ROMANIA**  
**MINISTRY OF NATIONAL DEFENCE**



**“NICOLAE BĂLCESCU”**  
**LAND FORCES ACADEMY IN SIBIU**



**ACADEMY OF ROMANIAN SCIENTISTS**  
**MILITARY SECTION**

**INTERNATIONAL SCIENTIFIC CONFERENCE**

**EMERGING AND DISRUPTIVE TECHNOLOGIES’**  
**IMPACT ON GLOBAL SECURITY**



**PROGRAMME**

**November 18, 2021**  
**SIBIU**

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## EDT 2021 Programme

Thursday, November 18	
10:00-10:15	<b>Opening Remarks/Auditorium</b> <b>General (ret.) Prof. Teodor FRUNZETI, PhD</b> <b>BG Prof.Eng. Ghiță BÂRSAN, PhD</b>
10:15-10:45	<b>Plenary Presentations/Auditorium</b> <b>General (ret.) Ion OPRÎȘOR, Presidential Adviser, Head of the Department of National Security</b> <i>- The Impact of Emerging and Disruptive Technologies on Security</i> <b>Prof.Eng. Alexandru-Adrian BADEA, PhD, AOSR President</b> <i>- Online Message on Behalf of AOSR</i>
10:45-11:00	<b>Demonstrative Presentation of Some Applications Based on Augmented Reality (AR) and Virtual Reality (VR) /Auditorium</b>
11:30-14:00	<b>Presentations on Sections/Designated Laboratories*</b>

\* Presentations on Sections will be delivered on Moodle Platform.

## PANEL 1: EMERGING AND DISRUPTIVE TECHNOLOGIES WITH MILITARY IMPACT

**Chairpersons:** Major General (ret.), Professor **Gheorghe CALOPĂREANU**, PhD  
Colonel Associate Professor Engineer **Ioan VIRCA**, PhD

**Place:** Applied Informatics I. Databases Lab  
Room: 46; Building: D; 2nd Floor

1. *Artificial Intelligence as a Decision-Making Tool for Military Leaders*, **Alexandru BABOȘ**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
2. *Reflections on the Role of Higher Education Institutions in Introducing Emerging Technologies into the Educational Process in the Face of the Pandemic Challenge COVID-19*, **George BUCĂȚA**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
3. *Considerations on Countering the Actions Aimed at Banning Access and Restricting Freedom of Action (A2AD)*, **Ionuț Alin CÎRDEI**, **Laviniu BOJOR**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
4. *The Influence of Disruptive Technologies in the Field of Defense*, **Ileana METEA**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
5. *Quantum Internet and Security of Military Communications*, **Florin POPESCU\***, **George BUCĂȚA\*\***, **Sorin PISTOL\*\*\***, \* “Carol I” National Defense University, Bucharest, Romania, \*\* “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania, \*\*\* “European Commission” European Asylum Support Office, Brussels, Belgium
6. *The Potential Impact of the 4<sup>th</sup> Industrial Revolution Technologies on Revolutionizing the NATO Land Forces*, **Paul TUDORACHE**, **Aurelian RAȚIU**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
7. *The Challenges of Simulation Training of the Troops in the Context of the Emerging Technologies*, **Cristian ȚECU\***, **Sorin PÎNZARIU\*\***, \*Joint National Training Center, Cincu, Romania, \*\* “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
8. *Applications of Augmented Technologies in the Educational Military Field*, **Ioan VIRCA**, **Ghiță BÂRSAN**, **Romana OANCEA**, **Claudiu VESA**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania

## PANEL 2: EMERGING AND DISRUPTIVE TECHNOLOGIES IMPACT ON POLITICS AND SOCIETY

**Chairpersons:** Brigadier General (ret.), Professor **Viorel BUȚA**, PhD  
Associate Professor **Anca DINICU**, PhD

**Place:** Applied Informatics IV. Cyber Security Lab  
Room: 47; Building: D; 2nd Floor

1. *Strategies and Policies for New Technologies: the United Nations, the United States and the European Union*, **Alina ALEXANDRU**, “Carol I” National Defence University, Bucharest, Romania
2. *An EDTs Perspective on the Social Security in Academia*, **Mădălina-Ioana BĂDILĂ\***, **Lucian-Ionel CIOCA\***, **Ioan VIRCA\*\***, \**“Lucian Blaga”* University, Sibiu, Romania, \*\**“Nicolae Bălcescu”* Land Forces Academy, Sibiu, Romania
3. *The Multidimensional Impact on Society of Cyber Attacks Targeting the Energy Critical Infrastructure Sector*, **Anca DINICU**, **Romana OANCEA**, **Ghiță BÂRSAN**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
4. *The Impact of Emerging and Disruptive Technologies on Security*, **Ion OPRÎȘOR**, Presidential Administration of Romania
5. *Emerging and Disruptive Technologies*, **Ion-Alexandru PLĂVICIOSU**, Academy of Romanian Scientists, Bucharest, Romania
6. *Impact of Weather Change Technologies on Global Security*, **Olena SHEVCHENKO**, **Kira HORIACHEVA**, “Taras Shevchenko” National University of Kyiv, Ukraine
7. *Prediction of the EDT Trends – National and Supranational Activities*, **Mladen VIHER**, **Marijan PALJEVIĆ**, **Dalibor GERNHARDT**, Croatian Defence Academy, Centre for Defence and Strategic Studies, Zagreb, Croatia

### PANEL 3: ECONOMIC IMPACT OF EMERGING AND DISRUPTIVE TECHNOLOGIES

**Chairpersons:** Brigadier General (ret.) **Mircea UDRESCU**

Colonel (ret.) Engineer **Liviu COȘEREANU**, PhD

Professor **Sorin PÎNZARIU**, PhD

**Place:** Applied Informatics III. Cyber Security Lab

Room: 48; Building: D; 2nd Floor

1. *Could Virtual Currencies Replace Classic Money and Influence the Activities of Banks?*, **Alexandru-Cosmin DUMITRU**, “Carol I” National Defence University, Bucharest, Romania
2. *The Potential of Virtual Currencies to Contribute to the Welfare of Individuals and the Global Economic Development*, **Alexandru-Cosmin DUMITRU**, “Carol I” National Defence University, Bucharest, Romania
3. *Impact of Disruptive Technologies on Defence*, **Teodor FRUNZETI\***, **Liviu COȘEREANU\***, **Tiberius TOMOIAGĂ\*\***, \*Academy of Romanian Scientists, Bucharest, Romania, \*\*Military Equipment and Technologies Research Agency, Bucharest, Romania
4. *The Banking Financial System as a Critical Infrastructure of the Current and Future Society*, **Laurențiu Mihail GRIGORE**, “Nicolae Bălcescu” Land Forces Academy, Sibiu, Romania
5. *The Transpersonal War – Constituent of the Hybrid War*, **Aliodor MANOLEA**, “Hyperion” University, Bucharest, Romania
6. *Emerging Technologies and National Security: the Impact of IOT in Critical Infrastructures Protection and Defence Sector*, **Petrișor PĂTRAȘCU**, “Carol I” National Defence University, Bucharest, Romania
7. *Emerging Technologies: Innovation, Demassification, Effectiveness, Revolutions in Military Affairs*, **Mircea UDRESCU**, **Eugen SITEANU**, Academy of Romanian Scientists, Bucharest, Romania
8. *Hybrid Emerging and Destructive Technologies with Implications on National and European Security and Sovereignty*, **Mircea UDRESCU**, **Eugen SITEANU**, Academy of Romanian Scientists, Bucharest, Romania

