



**Military
University
of Technology**

**INTERNATIONAL CONFERENCE
ON MILITARY SCIENCE**



Monday 3rd March 2025

19:00 – 21:00 Icebreaker at Training and Conference Center

Tuesday 4th March 2025

Military dormitory no. 7

08:30 – 09:00 Registration

09:00 – 09:15 Opening ceremony

09:15 – 11:30 Panel Military Mechatronic Systems – Part I

09:15 – 09:30 UAVs Countermeasures
Aurelia Adamczak, Wiktoria Weber (MUT – Poland)

09:30 – 09:45 Feasibility of using a 4x4 hybrid platform for military use
Robert Nicolae Agafitei, Ionuț Cătălin Florica (MTA – Romania)

09:45 – 10:00 Mixed reality in the military training process
Jerzy Kaczorowski, Adrian Wiśniewski, Maria Rychwicka, Michał Zarzycki (MUT – Poland)

10:00 – 10:15 Features of the use of fiber-optics FPV drones and the main methods of combating them
Maksym Hryshchuk, Yurii Zhuravskiy (KZMI – Ukraine)

10:15 – 10:30 Improving human-machine interaction in unmanned operations by optimizing interferences
Michał Machno (MUT – Poland)

10:30 – 10:45 Aerodynamic design of a high-lift system for a supercritical airfoil
Corina- Maria Țoca (MTA – Romania)

10:45 – 11:00 Flight simulation and structural analysis of a quadcopter
Maciej Pajunk, Norbert Supeło, Tomasz Pacana, Waclaw Woszczyk, Kasjan Pawelec (MUT – Poland)

11:00 – 11:15 Development of a Micro-turbojet Test Rig for Investigating Effects of Alternative Fuel
Botond Kis (NUPS – Hungary)

11:15 – 11:30 The use of reverse engineering in the process of developing missile design documentation
Bartosz Zasowski, Mikołaj Zelga (MUT – Poland)

11:30 – 12:00 Coffee break

12:00 – 15:15 Panel Military Mechatronic Systems – Part II

12:00 – 12:15 Wing Design and Winglet Influence on Induced Drag in a Fixed-Wing Tactical UAV
Gabriela-Giorgiana Rusu, Daniel Măriuța (MTA – Romania)

12:15 – 12:30 The Flight On-board Computer of the “LIKWIDATOR” single-stage sounding rocket
Albert Skolmowski, Maria Mondzik, Bernard Siodłowski (MUT – Poland)

12:30 – 12:45 Modern innovation – smart drones with AI for target selection and aerial photo analysis using AI
Volodymyr Lepen, Yurii Korniiichuk (KZMI – Ukraine)

12:45 – 13:00 Design of a stand for field repairs of composite aircraft structures
Aleksandra Kaźmierczyk (MUT – Poland)

13:00 – 13:15 2D Aerodynamic Characterization of a High-Lift device Configuration for NACA SC(2)-0412 Supercritical Airfoil
Corina-Maria ȚOCA, Daniel MĂRIUȚA (MTA – Romania)

13:15 – 13:30 Conceptual design of a power plant designed for an aircraft to reach the speed corresponding to Mach 3.5
Aleksandra Zarubajko (MUT - Poland)

13:30 – 13:45 Developing an unguided "low-drag" type aviation bomb compatible with the MAU-12 ejector rack assembly
Mihai Macovei (MTA – Romania)

13:45 – 14:00 Analysis of the influence of water sucked into the inlet on the operation of an aircraft turbine engine
Karolina Rachwał (MUT – Poland)

14:00 – 14:15 The importance of atmosphere analysis in enclosed spaces on military ships
Gabriela Grosu, Andreea Voicu (RNA – Romania)

14:15 – 14:30 Ground station for the single-stage LIKWIDATOR sounding rocket
Adrian Panasiewicz, Filip Sudak, Mateusz Rowicki (MUT – Poland)

14:30 – 14:45 Advancements in UAV, UAS, and Drone Technologies: Applications and Future Trends
Vasil Agov, Georgi Bogdanov, Ivan Mitev (NMU – Bulgaria)

14:45 – 15:00 Treatment of waste water from ships
Theodor-Gabriel Cretu, Teodora Larisa Petrachi (RNA – Romania)

15:00 – 15:15 The DMA method and its application in studying the dynamic mechanical properties of composite materials
Karol Głogowski (MUT – Poland)

15:15 – 16:00 Lunch at Training and Conference Center



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Military University of Technology—Warsaw, Poland



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Wednesday 5th March 2025

Wednesday 5th March 2025	
08:00 – 10:30	Panel: Modern technologies in military logistics systems – Part I
08:00 – 08:15	Adaptation of Imported Military Equipment to Polish Conditions: A Case Study of MRAP Cougar 4x4 Wojciech Kolasa (MUT – Poland)
08:15 – 08:30	Modern technologies in military logistics systems Apostol Angelov, Hristina Naydenova (NMU – Bulgaria)
08:30 – 08:45	Challenges of managing supplies in contested areas Róża Małysa, Mateusz Mazur (MUT – Poland)
08:45 – 09:00	Revolutionizing Military Logistics: The Impact of AI and Modern Technology Pantelis Pantelidis, Maria Toutsis, Vasilios Vasilikos (HAA – Greece)
09:00 – 09:15	Blockchain Technology for Ensuring Security in Military Logistics and Supply Chains Sławomir Krzysztof Przybyszewski (MUT – Poland)
09:15 – 09:30	Study on the Optimization of Cargo Loading on Transporters Constantin Darius Guiu, David Richard Laszlo, Mihail Sebastian Bana (MTA – Romania)
09:30 – 09:45	The future of last-mile delivery: innovations and trends Oksana Hnat (MUT – Poland)
09:45 – 10:00	Innovating Military Logistics: Emerging Technologies and Their Strategic Implications Vasilios Dimitriadis, Nikolaos-Ermis Vlassopoulos, Pinelopi Kyriakopoulou (HAA – Greece)
10:00 – 10:15	Virtual simulations and modeling Joanna Karabin (MUT – Poland)
10:15 – 10:30	Barrier Information System for People with Disabilities on the premises of the University of Defence David Vejvoda, Petr Plíva, Zuzana Holotňáková, Veronika Stupňáková, Vejvoda Tomáš, Ambrožová Erika, Válková Milena (UD—Czech Republic)
10:30 – 11:00	Coffee break
11:00 – 15:00	Panel: Development trends in supporting Armed Forces
11:00 – 11:15	Evaluation of the effectiveness of using a rifle scope trainer in the shooter training process Marcin Wysocki (MUT – Poland)
11:15 – 11:30	Types of explosives used in the naval military Valentin-Alexandru Misiuc, Georgian Cheta (RNA – Romania)
11:30 – 11:45	Acoustic Recognition of UAVs Jakub Szadura, Maciej Henzel (MUT – Poland)
11:45 – 12:00	Exploiting ICMP for covert data trafficking: analysis, implementation, and detection Dominik Havel (UD – Czech Republic)
12:00 – 12:15	Trends in Development Supporting Armed Forces: Civil and Territorial Defense Sylvia Ziółkowska (WSKZ – Poland)
12:15 – 12:30	Internet of military things Illia Polishchuk, Yurii Kornichuk (KZMI – Ukraine)
12:30 – 12:45	Implementation of Drone Swarms in Military Operations Róża Małysa, Mateusz Mazur (MUT – Poland)
12:45 – 13:00	Breaking Boundaries: The Future of Amphibious Armoured Transporters Alexandra-Maria Văduva (MTA – Romania)
13:00 – 13:15	Flight plan optimization in next generation flight management systems Mateusz Rowicki, Julia Żelazowska (MUT – Poland)
13:15 – 13:30	Machine Learning for Building Detection Vítězslav Rout (UD – Czech Republic)
13:30 – 13:45	Defence expenditure of NATO countries in the third decade of the 21st century Maciej Pielaszkiwicz (MUT – Poland)
13:45 – 14:00	Examination of the introduction of the probe-and-drogue air-to-air refuelling system in the Hungarian Defence Forces Dániel Németh (NUPS – Hungary)
14:00 – 14:15	Acquisition of necessary production technologies in the context of rebuilding the production capacity of heavy armoured vehicles by the domestic arms industry Filip Matyjas (MUT – Poland)
14:15 – 14:30	Leveraging UAV Copter Frame as a Directional Antenna to Improve Courier Drone Navigation Daniel Andrei Avram (MTA – Romania)



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Wednesday 5th March 2025

11:00 – 15:00	Panel: Development trends in supporting Armed Forces
14:30 – 14:45	GIS application in artillery operations and fire support Alžběta Svobodová (UD – Czech Republic)
14:45 – 15:00	Usage of drones on the battlefield. History and present Andrzej Kisielewski, Miłosz Nowakowski (MUT – Poland)
15:00 – 16:00	Lunch at Training and Conference Center
Thursday 6th March 2025	
08:30 – 09:30	Final ceremony – aula in building 135
09:45	Group photo – in front of the main building of MUT
10:00 – 15:00	Trip - Wilanów Palace
15:00 – 16:00	Lunch at Training and Conference Center



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