



MaTeDaS 2024

THURSDAY, 10.10.2024

Section 1

Title of Abstract

09:00 – 09:20	Peter Jurči Faculty of Materials Science and Technology in Trnava Slovak University of Technology in Bratislava	Self-Lubricating Nanocomposite Cr₂N-Ag Thin Films for Tooling
09:20 – 09:40	Jaroslav Pokluda Faculty of Special Technology Alexander Dubček University of Trenčín	Mechanical Behaviour of Titanium Scaffolds Produced by Additive Manufacturing
09:40 – 10:00	Marcin Marciniak The Faculty of Mechanics and Technology in Stalowa Wola, Rzeszow University of Technology	Examination of the Internal Surface of a Firing Chamber of armament elements
10:00 – 10:20	Michal Klášterecký TESCAN GROUP, a.s. T1	Empowering Innovation in Materials Science with TESCAN Solutions
10:20 – 10:40	Mikuláš Kevély KVANT spol. s r.o.	Company presentation
10:40 – 11:00	Jakub Horák Měřicí technika Morava s.r.o.	Innovative Instrumentation for Advanced Material Testing

Poster Section

Title of Abstract

11:20 – 12:00	Lenka Dobšáková Faculty of Military Technology University of Defence	Method of Heat Sinks Testing Based on Cooling Curves
11:20 – 12:00	Tomasz Galek The Faculty of Mechanics and Technology in Stalowa Wola, Rzeszow University of Technology	Computer Aided Positioning of Uneven Samples in X-ray Diffraction Measurements
11:20 – 12:00	Karol Łysiak The Faculty of Mechanics and Technology in Stalowa Wola, Rzeszow University of Technology	Simulation and Experimental Validation of Orbital Laser Welding of Aluminum Alloy Tubes
11:20 – 12:00	Jakub Kaščák Faculty of manufacturing technologies with a seat in Prešov, Technical University of Košice	Integrating VR and AR into Computer-Aided Manufacturing: A Framework for University-Level Engineering Education
11:20 – 12:00	Tomáš Dvorák Institute of Materials and Machine Mechanics, Slovak Academy of Sciences	Investigation of the Impact of Dual-Beam Laser Welding on the Structural Characteristics and Mechanical Properties of DSS 2507 Weld Joints
11:20 – 12:00	Martina Juglová Military Research Institute, State Enterprise	Ballistic Resistance of Laminates Based on Aramid and UHMWPE Fibres
11:20 – 12:00	Olena Zhytlukhina Comenius University in Bratislava, Faculty of Mathematics, Physics and Informatics	Delta-T Noise, a New Tool for Revealing Temperature Distribution in Superconducting Films

Section 2

Title of Abstract

12:00 – 12:20	Jaromír Záruba EVPÚ a.s.	Utilization of Computer Vision in Defence Technologies
12:20 – 12:40	Jindřich Viliš Faculty of Military Technology University of Defence	Comparative Analysis of Metal Components Manufactured by WAAM Technology for the Strike Face Layer of Ballistic Protection
12:40 – 13:00	Piotr Bieniek Military Institute of Armament Technology Rzeszów University of Technology	Experimental and Simulation Studies of the Deformation of the Base Plate of the M98 Mortar

Section 3

Title of Abstract

14:00 – 14:20	Róbert Janík Faculty of Industrial Technologies in Púchov Alexander Dubček University of Trenčín	Effect of DCSBD Plasma Treatment on Surface Properties of Aluminum Alloys and Un-vulcanized Rubber Blends
14:20 – 14:40	Miroslav Janošek Faculty of Military Technology University of Defense	Possibilities for Cooperation between Helicopter Pilots and Unmanned Aerial Vehicle Operators
14:40 – 15:00	Matouš Uhlík Comtest FHT, a.s.	Quasi-static and dynamic characterization of additively manufactured bi-material component
15:00 – 15:20	Paweł Żurawski The Faculty of Mechanics and Technology in Stalowa Wola, Rzeszów University of Technology	Tribological Analysis of Manganese Phosphate Coatings on Steel Pistons for Internal Combustion Engines
15:20 – 15:40	Peter Gabštur Faculty of manufacturing technologies with a seat in Prešov, Technical University of Košice	Modification of Components Using Generative Design Tools
15:40 – 16:00	Martin Šimonyi Letecké opravovne Trenčín, a.s.	Company presentation

