



Brasov, October, 6

Onsite presentations, Transilvania University rectorate, studio 181

10:00-10:20 Development and Application of Ultra-Precision Ceramic Bearings - *Li Songhua*, Shenyang Jianzhu University, China

10:20-10:40 Surface Quality and Material Removal Mechanisms in Internal Grinding of Silicon Nitride Ceramic Bearings - *Wang He*, Shenyang Jianzhu University, China

10:40-11:00 Innovative Approaches in Metal Milling - *Bogdan Popa, Gheorghe Oancea*, Transilvania University of Brasov, Romania

11:00-11:20 Research on Using a Willow Structure for Product Remanufacturing - *Alexandru Diaconescu, Sebastian Marian Zaharia, Alin Pop, Gheorghe Oancea*, Transilvania University of Brasov, Romania

11:20-11:40 From Sustainability Measurement to Decision Support in Industrial Supply Chains: The SustainSCM Approach - *Aylin Pupo Perez, Gheorghe Oancea, Luminita Parv*, Transilvania University of Brasov, Romania

11:40-12:00 Innovative Maturity Models for Industry 4.0/5.0: A Synthesis of Evolution, Validation Gaps, and Applicability to Emerging Economies - *Dayron Reyes Dominguez, Marta Infante Abreu, Luminita Parv*, Transilvania University of Brasov, Romania

12:00-12:20 From FDM Manufacturing to Structural Validation: A Comparative Study of PLA and PETG Components - *Maria Madalina Fagadau, Maria Luminita Scutaru*, Transilvania University of Brasov, Romania

12:20-12:40 Dynamic Modelling and Optimization of a Flywheel for Regenerative Braking Energy Recovery - *Maria Alexandra Dimache, Maria Luminita Scutaru, Sebastian Radu*, Transilvania University of Brasov, Romania

12:40-13:00 Present and Future of the Research Group Nanomaterials and Corrosion (NANCORR) - *Julia Claudia Mirza-Rosca, Maria Jesus Reyes-Rodriguez*, Las Palmas de Gran Canaria University, Spain

15:00-15:15 Influence of Laser Shock Peening on AISI 316L Stainless Steel Welds - *Edit Roxana Moldovan, Liana Sanda Baltes, Alexandru Pascu, Mircea Horia Tierean*, Transilvania University of Brasov, Romania, *Julia Claudia Mirza-Rosca*, Las Palmas de Gran Canaria University, Spain, *José Luis Ocaña Moreno*, Madrid Polytechnic University, Spain

15:15-15:30 Laser cladding surface reconditioning of marine vessel components - *George Ciprian Iatan, Dan Cristian Cuculea, Mircea-Horia Țierean, Alexandru Pascu*, Transilvania University of Brasov, Romania

15:30-15:45 Optimization for Shielding Gas Atmosphere for Laser Welding Titanium Gr II" - *Dan Cristian Cuculea, George Laurentiu Ardelean, Alexandru Pascu*, Transilvania University of Brasov, Romania

15:45-16:00 Screw-driven ElectroHydrostatic Actuator – SEHA - *Szabolcs Lazar, Mircea-Viorel Dragoi*, Transilvania University of Brasov, Romania

Online, <https://bbb.unitbv.ro/rooms/jgq-ynd-bq9-ufx/join>

16:00-16:15 Modular Machine Vision for Industrial Automation - *Toni Marian Perju, Mircea-Viorel Dragoi*, Transilvania University of Brasov, Romania

16:15-16:30 New Generation of Biomaterials: High Entropy Alloys - *Miguel Lopez-Rios*, Las Palmas de Gran Canaria University, Spain

16:30-16:45 Experimental Characterization and Three Node Thermal Modeling of a Thermoelectric Peltier Cell - *Miguel Ferrer-Pareja, Carlos Sanchez- Morales*, Las Palmas de Gran Canaria University, Spain