MSN - WECM'24 - PhDsF24

Workshop Programme

	Monday - May 27, 2024	
Faculty of Mechanical Engineering - Aula A1		
9:00-10:00	Registration	
10:00-10:30	Opening Ceremony	
10:30-11:00	Invited Lecture 1 Chairman: S. Samborski FILIP GORSKI - Poznan University of Technology, Poland Individualized 3D Printed Orthopaedic and Prosthetic Devices Using AutoMedPrint Technology: Methodologies and Examples	
	Session 1 - Mechanical Engineering Chairman: S. Samborski, D. Kostyla	
11:00-11:15	Ilmars Blumbergs Recent Advances in Nanocoatings of Magnesium Alloys	
11:15-11:30	Paolo S. Valvo Nonlinear analysis of soft elastic membranes using the position-based finite element formulation	
11:30-11:45	Lukasz Rzepka Repeatbility of measuring head for CNC machine in relation to calibration artifacts	
11:45-12:00	Kuba Roslaniec Stability of Thin-Walled Composite Structures with Closed Sections Under Compression	
12.00-12.30	Coffee Break	
12:30-13:00	Invited Lecture 2 Chairman: Z. Suchorab FARIDA KHARCHENKO - Sumy National Agrarian University, Ukraine Declogging of blocked holes of perforated sifting surfaces of separation equipment	
	Session 2 - Interdisciplinary Chairman: Z. Suchorab, A. Wilczyńska	
13:00-13:15	Marian Bartoszuk The importance of material model parameters in simulation studies of the cutting process	
13:15-13:30	Magdalena Zukowska Automation of the design and evaluation of lower limb orthoses adapted for use in long-term rehabilitation processes	
13:30-13:45	Wiktoria Łokczewska Influence of outdoor conditions on energy efficiency of heating system with forecast control	
13:45-14:00	Katarzyna Mróz Application of selected machine learning methods for selected features prediction and identification from biological neural networks	
14.00-15.00	LUNCH - restaurant "Lanczomania"	
15.00-15.30	Invited Lecture 3 Chairman: P. Valvo PANAYIOTIS TSOKANAS - KU Leuven, Belgium Interlaminar fracture in asymmetric specimens: an open topic	
	Session 3 - Interdisciplinary Chairman: P. Valvo, A. Zielonka	
15:30-15:45	Anna Badora Indoor microclimate in selected school facilities	
15:45-16:00	Michal Staniszewski Comparison of YOLO Machine learning algorithm in automated recognition of testacea amoebas in activated sludge	
16:00-16:15	Martyna Wawrzyk. Comparative analysis of the spectra length method and envelope method in TFBG spectra demodulation	
16:15-16:30	Ghizlene Boussouar Study of the thermal performances of a solar air collector	
16.30-17.00	Coffee Break	
17.00-18.00	Poster Session - PS	

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9:00-9:30	Invited Lecture 4 Chairman: R. Rusinek TOMASZ PAWLAK - 3D Phoenix, Poland	
	Incremental technologies - alternative manufacturing methods	
	Session 4 - Mechanical Engineering Chairman: R. Rusinek, M. Sowa	
9:30-9:45	Daniele Fanteria, Silvio Sanvenero Modelling strategies for FE analysis of impacts on composite laminates	
9:45-10:00	Danyil Melnyk Analysis of multistable composite shell: numerical simulation and experimental exploration	
10:00-10:15	Aleksander Czajka Acoustic emission application in damage characterization of the lap joint composite laminates	
10:15-10:30	Michal Kuszneruk Comparison of the ecological performance of a diesel-hydrogen dual-fuel engine	
10:30-10:45	Mateusz Klepka Working process of diesel engine fuelled with canole oil and hydrocarbon in the gas phase	
10:45-11:00	Tomasz Kusiak Numerical modelling of the bimetallic rod rolling process in a CNC skew rolling Mill	
11.00-11.30	Coffee Break	
11:30-12:00	Invited Lecture 5 ANNA GEBARSKA - SMARTTECH3D, Poland 3D scanners as a basic tool for a modern engineer	
	Session 5 - Interdisciplinary Chairman: D. Fanteria, A. Czajka	
12:00-12:15	Yaryna Posuniak Creating a new quality of social space through 'Baobab' in Lublin.	
12:15-12:30	Edyta Woţiaś A simplified method for determining potential heavy metal leached from sediments of stormwater and combined sewer systems – importance for public health	
12:30-12:45	Jakub Kisała NiFe/Cu/NiFe thin films exhibiting the phenomenon of giant magnetoresistance depending on the direction of the external magnetic field	
12:45-13:00	Jakub Wankiewicz The influence of the addition of hemp shives on the properties of clay aggregate	
13:00-13:15	Łukasz Wójcik Forecasting waste volume in remanufacturing using modern machine learning methods	
13:15-13:30	Jan Newada-Wysocki Architectural analysis of selected hospitals in the context of rehabilitation of people injured as a result of war operations	
13:30-14:00	Closing Ceremony	