Thursday 21.11.2019

12.00 - 19.00	Registration, Dom Dziennikarza Hotel	
14.00 – 15.00	**Lunch**	
15.00 – 15.15	**Opening of Conference and Welcome Speeches**	
15.15 – 15.45	*Special Lecture – Zbigniew Suchorab*	
15.45 – 16.15	*Special Lecture – Dariusz Majerek*	
16.15 – 16.30	Technical break	
16.30 – 17.30	**Session I - room A**	
	Grzegorz Łagód, Dariusz Majerek	
	A. Smagała K. Kęcik	Nonlinear model and simulation of a rolling bearing
	M. Rogala J. Gajewski M. Ferdynus	Numerical analysis of the thin-walled structure with different trigger locations under axial load
	M. Mohammed G. Łagód A. Piotrowicz W. Cel J. Zaburko J. Drewnowski	FEM analysis of two-core photonic crystal fibre coupling characteristics Modeling sequencing batch reactor operational conditions depending on oxygen concentration
17.30-19.00	**Session II – Poster session I (room B)**	
	Jakub Gajewski, Paweł Lonkwic	
P – 1	K. Falkowicz K. Szklarek	Analytical method for projecting the buckling form of composite palates with a cut-out
P – 2	J. Jonak M. Siegmund	FEM 3D analysis of rock cone failure range during pull-out undercut anchors
P – 3	Sz. Molski P. Lonkwic H. Ruta T. Krakowski	Critical points by using stress active analysis of structure points
P – 4	P. Brzyski P. Kosiński M. Nadratowska	Thermal bridge occurrence in straw-bale timber frame walls
P – 5	J. Kujawska H. Wasąg	Reduction of excessive heavy metals accumulation in drinking water with natural zeolites
P – 6	Z. Pavlík M. Pavlíková M. Záleská G. Łagód Z. Suchorab Ł. Guz	Life cycle assesment of the use of sewage sludge as Portlnad cement replacement
P – 7	W. Macek M. Szala M. Kowalski, J. Gargasas, A. Rehmus-Forc A. Deptuła	Shot peening intensity effect on the bending fatigue strength of S235, S355 and P460 steels
P – 8	R. Rutkowski R. Iwańkowicz	Assembly management in the shipyard using a welding database
P – 9	O. Orynycz K. Tucki A. Wasiak R. Mruk	Computer modelling of automobile engine performance as the source of implications for automobile technology management
P – 10	J. Caban A. Nieoczym W. Misztal D. Barta	Study of the operating parameters of a plate conveyor used in the food industry
P – 11	K. Czyż	Speech recognition APIs in the context of using English as a second language

	M. Derkacz J. Smołka E. Łukasik M. Skublewska-Paszkowska	
P – 12	J. Słoniec	Influence of IT outsourcing on selected groups of stakeholders (original research)
P – 13	J. Słoniec A. Kaczorowska	Supporting the decision-making process to introduce it outsourcing in the organization
P – 14	P. Stączek	Modeling of transverse shrinkage of injection molded-parts using experimental methods and fuzzy logic theory
P – 15	B. Będkowski P. Dukalski T. Jarek T. Wolnik	Numerical model for thermal calculation analysis of the wheel hub motor for electric car veryfied by laboratory tests
P – 16	S. Korga M. Barszcz Ł. Zgryza	The effect of the 3D printout filling parameter on the impact strength of elements made with the FDM method
19.00	**Dinner**	

Friday 22.11.2019

8.00 – 9.30	Breakfast	
8.30 – 18.00	Registration	
9.30 – 10.00	*Special Lecture - Dariusz Czerwiński*	
10.00 – 10.15	Technical break	
10.15 – 11.45	**Session III – room A**	
	Grzegorz Litak, Nicolas Meier	
	J. Vrabel T. Skrucany L. Bartuska J. Koprna	Movement analysis of the semitrailer with the tank-container at hard braking - the case study
	K. Urbanowicz A. Bergant H. F. Duan	Simulation of unsteady flow with cavitation in plastic pipes using the discrete bubble cavity and Adamkowski models
	K. Stryczniewicz W. Stryczniewicz R. Szczepaniak	Modelling hydrodynamic characteristics of the underwater glider based on Computational Fluid Dynamics
	M. Uliczka I. Smykla	A comparative analysis of methods used for the determination of aircraft aerodynamic characteristics
	K. Siadkowska R. Raczyński M. Wendeker	Numerical analysis of the rotor in the co-simulation methodology
11.45 – 12.15	**Coffee break**	
12.15 – 13.45	**Session IV – room A**	
	Sylwester Samborski, Jakub Szabelski	
	G. Piecuch M. Madera T. Żabiński	Diagnostics of welding process based on thermovision images using convolutional neural network
	T. Żabiński G. Piecuch R. Żyła S. Prucnal	Milling process diagnosis using computational intelligence methods
	M. Kulisz I. Zagórski J. Korpysa	Surface quality simulation with neural networks in AZ91D Mg alloy milling
	J. Kuben P. Račková O. Šimon M. Zajac	Modelling of oil tribotechnical data
	G. Winiarski M. Szala T. Bulzak Ł. Wójcik	Analysis of producing flanged hollow forging with the use of extrusion with a movable sleeve process
14.00 – 15.30	**Lunch**	
15.30 – 17.15	**Session V**	
	Jolanta Słoniec, Arkadiusz Gola	
	D. Rybarczyk A. Milecki	Object recognition system using detachable-antenna with RFID passive tags
	S. Skulimowski M. Badurowicz M. Barszcz J. Montusiewicz	Design and optimization methods for interactive mobile VR visualization
	A. Deptuła J. Drewniak W. Macek	Application of decision–making parametric structures in the analysis of a compound planetary gear
	A. Radomska-Zalas A. Perec A. Fajdek-Bieda	IT support for optimisation of abrasive water cutting process using the TOPSIS method

	W. Urbańczyk P. Buła	Change management versus digital transformation in the it company for optimal adaptation to the needs of future technologies
	M. Wawrzyk M. Plechawska-Wójcik	IT applications in athlete's mental training with the EEG biofeedback method
17.15 – 18.45	Session VI – Poster session II (room B)	
	Branislav Sarkan, Mirosław Szala	
P – 1	A. Malec Z. Suchorab Ł. Guz C. Caserta	AI-aided e-nose calibration
P – 2	T. Lindner D. Wyrwał T. Kapłon	Positioning of the robotic arm using Reinforcement Learning Policy Gradient algorithm
P – 3	K. Skiba	Designing and FEM simulation of the helicopter rotor and hub
P – 4	Z. Czyż	Helicopter main rotor aerodynamic simulation using CFD method
P – 5	T. Łusiak A. Novak M. Bugaj	Numerical analysis and experimental studies of aircraft wing models
P – 6	P. Suchorab M. Iwanek	Water losses analysis based on FEFLOW FEM simulation and EPANET hydraulic modelling
P – 7	T. Jurek M. Iwanek	Gas network improvement proposal using numerical simulation
P – 8	J. Chmiel L. Dorobczyński	Digital processing of electrochemical signals generated in conditions of cavitation in liquids
P – 9	A. Surowiec W. Rzymowski	Fractal dimension in the time series analysis
P – 10	M. Awtoniuk M. Daniun D. Komarchuk S. Syrotyuk	Predictive modelling for air temperature and humidity in a mushroom production process
P – 11	Sz. Molski P. Lonkwic H. Ruta T. Krakowski	Evaluation of structure stability with the use of remote load
P – 12	J. Zaburko J. Szulzyk-Cieplak	Information security risk assessment using the AHP method
P – 13	A. Żelazna J. Gołębiowska	Life Cycle Assessment as a tool for the selection of solar hot water system
P – 14	B. Ambrożkiewicz N. Meier Y. Guo G. Litak A. Georgiadis	Recurrence-based diagnostics of rotary systems
19.30	**Gala dinner**	

Saturday 23.11.2019

9.30- 11.00	**Session VII - Poster session II (room B)**	
	Arkadiusz Gola, Monika Kulisz	
P – 1	B. Šarkan A. Kuranc Ľ. Kučera	Calculations of exhaust emissions produced by vehicle with petrol engine in urban area
P – 2	A. Rouibah D. Benazzouz R. Kouider	Influence of performance parameters on the choice of tower solar power plants: Real Case Study in Algeria.
P – 3	J. Jonak R. Karpiński A. Machrowska P. Krakowski M. Maciejewski	A preliminary study on the use of EEMD-RQA algorithms in the detection of degenerative changes in knee joints
P – 4	L. Łatka P. Kustroń T. Rydza	Robotic welding of thin sheets to reduce welding deformations
P – 5	M. I. Ansari A. Kumar D. Barnat-Hunek G. Łagód	Static response of FGM porous rhombic conoidal shell
P – 6	A. Urzędowski D. Wójcicka - Migasiuk J. Styczeń	Optimization of civil structures design process with BIM application
P – 7	M. Niechciał D. Rybarczyk J. Buśkiewicz	Modelling the monopedal robot
P – 8	M. Plechawska-Wójcik S. Skulimowski D. Podstawka W. Plak P. Piętal	Analysis of human physiological reactions in various conditions of psychomotor activity
P – 9	D. Wyrwał T. Lindner T. Kapłon	Autonomous navigation for indoor mobile robot based on ROS
P – 10	J. Palo J. Caban M. Kiktová Ľ. Černický	The comparison of automatic traffic counting and manual traffic counting
P – 11	M. Kirichenko-Babko Y. Danko D. Majerek	Selection of the optimal unit of analysis in assessing the structure of terrestrial arthropods assemblages
P – 12	R. Babko T. Diachenko Y. Danko J. Zaburko J. Szulżyk-Cieplak	The structure of higher aquatic vegetation in the genetic series of floodplain reservoirs
P – 13	A. Bojanowska J. Lipski	The use of data by smart systems for price forecasting in the context of building customer relationships on the Lublin real estate market
P – 14	M. Szala M. Awtoniuk	Neural modelling of cavitation erosion process of 34CrNiMo6 steel
11.00 – 11.30	**Coffee break**	
11.45 – 13.45	**Tour – Kazimierz Dolny**	
13.45 – 15.00	**Lunch**	